CHAPTER I
INTRODUCTION

Economic development is a multidimensional process involving the reorganization and reorientation of entire economic and social systems. It is a complex process influenced by both economic and non-economic factors like capital stock, availability of natural resources, labor skill, technology, capital-output ratio, agricultural surpluses, foreign trade, human attitudes, social customs and traditions etc. which largely determine the pace and pattern of development process of various countries. It implies progressive changes in the socio-economic structure of a country. It involves a steady decline in agriculture’s share in gross national product and hence a corresponding increase in the share of industries, trade, banking, construction and services. Foreign trade of different goods, services and assets has been termed as a dynamic and significant factor in economic development and one of the most powerful linkages among the various economies of the world.

Industrialization is a sine qua-non of rapid economic development and a panacea for the vicious problem of economic backwardness (Mezerik, 1968). It is not only a generator of economic growth but also serves as the transformer of socio-economic institutional set-up of the economy. In less developed countries (LDCs), the industrialization and economic development are termed as synonymous. In fact, economic development is the cause and effect of industrialization. United Nations (1972) has treated industrialization as a process of economic development in which ample amount of natural resources are mobilized to develop a technically advanced diversified economic structure characterized by dynamic manufacturing sector and is capable of assuming a high rate of growth for the economy as a whole to achieve social and economic progress. By developing industries, the level of income, output and employment and thereby the growth rate of an economy can be accelerated. It also contributes to the maintenance and improvement of society’s capital assets and assisting the general improvement in social and economic welfare. In underdeveloped countries, industrialization is a process which accelerates economic growth; effects structural changes in the economy particularly in respect of resource
utilization, production functions, income generation, occupational pattern, population structure and foreign trade and also induces social changes. Hence, industrial activity contributes to economic development, but at the same time it is the product of economic development (Jones and Cockerill, 1985). It gives rise to desirable social, psychological and institutional changes (Kirk, Lee & Nixson, 1985). Industrialization is thus inseparable from sustained economic development because it is both a consequence of higher incomes and a means of higher productivity.

Of the various sectors contributing to industrial development, the textile sector is the leading sub-sector and is one of the oldest in the world. The oldest known textiles, which dates back to about 500 B.C. are scraps of linen cloth found in Egyptian caves. The industry was primarily a family and domestic one until the early part of the fifteenth century when the first factory system was established. It wasn’t until the Industrial Revolution in England in the 18th century that power machines for spinning and weaving were invented. In 1769 when Richard Ark Wright’s spinning frame with variable speed rollers was invented, water power replaced manual power. Being one of the oldest industries and a leg of ‘old economy’, the textile industry is referred to a ‘traditional industry’. However, it has undergone remarkable restructuring through decades and is still the backbone of many developing economies in terms of exports and employment.

The textile industry is a very diverse and heterogeneous industry, with its products being used by virtually everybody – private households and business alike. Its activities range from the production of raw materials (i.e. natural as well as man-made fibers) to the manufacture of a wide variety of semi-finished and finished products. Every private household regularly buys garments, bed linen or carpets.

Broadly defined, the textile industry consists of establishments engaged in spinning natural and man-made fibers into yarns and threads. These are then converted (by weaving and knitting) into fabrics. Finally, the fabrics and in some cases, the yarns and threads used to make them, are dyed and finished.
Downstream parts of the textile industry – such as the clothing industry – consume the output of more upstream parts (such as fabrics of all types and colors). The textile industry is also intertwined with the agricultural sector when it needs inputs in the form of natural fibers (such as cotton or wool), and with the chemicals industry when it comes to the wide range of man-made fibers such as nylon or polyester. Hardly any other industrial sector could do without so-called technical (or industrial) textiles, which include products which are as diverse as filters, conveyer belts, optical fibers, packing textiles, ribbons and tapes, air bags, insulation and roofing materials, etc.

In the global economy, textile industry stands out with an exceptional significance as textile and clothing are among the first manufactured products that any industrialized economy produces. In developed economies, the growth of these industries has ignited a dynamic phase of development through industrialization and growing cross-border trade. For developing countries, particularly the LDCs, this industry has become a suitable choice on the road to industrialization due to its high labor intensity, low capital needs and relatively easy-to-copy technology. It has an important share in the export earnings of these countries and provides employment opportunities to young skilled and unskilled workforce, particularly women. Developing countries account for half of world textile exports and almost three quarters of world clothing exports. It has played a crucial role in the early stage of industrialization in Britain, parts of North America and Japan and more recently in the export-oriented growth of the East Asian economies, including Hong Kong, the Republic of Korea and Taiwan which relied heavily on textile and clothing for their
exports from the 1950s to the mid 1980s. In the last two decades, several ASEAN economies and China have become large producers and exporters of textile and clothing. The major South Asian economies namely India, Pakistan, Bangladesh and Sri Lanka have also emerged as significant textile exporters in the last a few years. In the mid 1960s, developing countries accounted for nearly 15 percent of world textile exports and less than 25 percent of world clothing exports. In 2000, these shares were more than 50 percent and 70 percent respectively (USITC, 2004).

Thus, the textile sector has become the locomotive of economic development for many developing countries. Many least developed and developing countries depend on the textile and clothing sector which, in certain cases, account for more than 80 percent of total exports and more than 50 percent of total employment. For instance, textile and clothing exports together constitute 86 percent of Bangladesh’s total exports. This ratio is 80 percent for Cambodia, 74 percent for Pakistan, 57 percent for Mauritius and 56 percent for Sri Lanka. In Europe continent, Turkey and Bulgaria are largely dependent on this sector (USITC, 2004).

Indian textile industry is older than the world textile industry. India has been well known for her textile goods since very ancient times. The country has produced legends such as Dhaka muslin, which was woven very fine and light. Prior to colonization, India's manually operated textile machines were among the best in the world and served as a model for production of the first textile machines in newly industrialized Britain and Germany (Roy,1996). This traditional textile industry of India virtually decayed during the colonial regime, but it took birth in India in the early nineteenth century when the first textile mill in the country was established at Fort Gloster near Calcutta in 1818. The cotton textile industry, however, has made its real beginning with the first cotton textile mill of Bombay in 1854 by a Parsi cotton merchant engaged in overseas and internal trade. Indeed, the vast majority of the early mills were the handiwork of Parsi merchants engaged in yarn and cloth trade at home as well as in Chinese and African markets. The first cotton mill in Ahmedabad that eventually emerged as a rival centre to Bombay was established in 1861. The spread of the textile industry to Ahmedabad was largely due to the Gujarati trading class. Cotton textile industry made rapid progress in second half of the nineteenth century. By the end of the century, there were 178 cotton textile mills, but during the year
1900 the cotton textile industry was in bad shape due to the great famine. A number of mills of Bombay and Ahmedabad were closed down for long periods but the two world wars and the *Swadeshi* Movement provided great stimulus to the Indian cotton textile industry. During the period 1922 to 1937, the industry was again in doldrums and a number of the Bombay mills changed hands. However, the Second World War, during which textile import from Japan completely stopped, brought about an unprecedented growth of this industry. The number of mills increased from 178 with 4.05 lakh looms in 1901 to 249 mills with 13.35 lakh looms in 1921 and further to 396 mills with over 20 lakh looms in 1941. By 1945 there were 417 mills employing 5.10 lakh workers (Sastry, 1984).

The cotton textile industry is rightly described as a ‘*Swadeshi* Industry’ because it was developed with indigenous entrepreneurship and capital and in the pre-independence era, this *Swadeshi* Movement stimulated the demand for Indian textiles in the country. The partition of the country in 1947 somewhat affected the cotton textile industry. India got 409 out of the 423 textiles mills of the undivided India. Only 14 mills but 22 per cent of the land under cotton cultivation went to Pakistan. For a number of years since independence, Indian mills had to import cotton from Pakistan and other countries. After independence, the cotton textile industry made rapid strides under the various five-year plans. Till the fifties, a large portion of the cloth produced in the country was consumed in gray form. But over the years, the share of gray goods has been reduced considerably and the consumption has been shifting consistently towards blended, dyed and printed goods. In the 1990s, the Indian textile industry faced a severe recession in terms of employment as well as the number of operational mills/factories, which continued despite fundamental changes in tariff structure (among other policy aspects) in the mid-1980s and in 1991 (Misra, 1993).

Starting from the procurement of raw materials to the final production stage of the actual textile, the Indian textile industry works on an independent basis. The industry uses a wide range of fibers from natural fibers like cotton, jute, silk and wool to synthetic/man-made fibers like polyester, viscose, nylon, acrylic and the multiple blends of such fibers and filament yarns.

Cotton is the predominating fiber used in the Indian textile and clothing industry. Nearly 60 percent of overall consumption in textiles and more than 75 percent in
spinning mills is cotton. India is the second largest producer of cotton in the world, has the largest cultivated area of over 9 million hectares and accounts for around 20 percent (4.8 million tonnes) of global production (over 25 million tonnes). Made-ups, defined as ready-to-use home textiles products, are one of the fastest growing segments in the overall international textile trade basket. India is being increasingly recognized by the world as having core competence in this sector. The cotton/man-made fiber industry is the largest organized industry in India in terms of employment and number of units. In addition, there are a large number of subsidiary industries dependent on this sector such as manufacturing machinery, accessories, stores, ancillary, dyes and chemicals. The major cotton producing states are Gujarat, Maharashtra, Punjab and Andhra Pradesh. Punjab produces around 70 percent of the best quality cotton in India. The raw material is easily available and this has certainly facilitated the growth of this industry in Punjab. The major cotton mills are situated at Abohar, Malout, Phagwara, Amristar, Kharar and Ludhiana. Other cotton producing cities are Surat and Ahmadabad in Gujarat and Mumbai and Malegaon in Maharashtra. According to the Ministry of Textiles, the annual production of raw cotton rose from 177.90 lakh bales in 1997 to 280 lakh bales in 2007, experiencing a compound annual growth rate of 4.64 percent. Even the consumption has been increasing over the years from 195.03 lakh bales in 2004-05 to 245 lakh bales in 2007-08, by both mill and non-mill sectors. During 2007-08, India exported 65 lakh bales of cotton (EXIM, 2008). Technology Mission on Cotton (TMC) is a major developmental measure taken by the Government in this sector.

Silk is also a dominating fiber used in Indian textile industry. India is the second largest producer of silk in the world, contributing about 18 percent to the global production (EXIM, 2008). India has the distinction of producing all varieties of silk, viz; mulberry, eri, tasar and muga. The sericulture industry is concentrated in the three southern states of Karnataka, Tamil Nadu and Andhra Pradesh and to an extent in Assam and West Bengal too. Growing demand for traditional silk fabrics and exports of handlooms products drives silk demand. Silk production increased from 14.13 million kg. in 1996-97 to 18.76 million kg. in 2006-07, experiencing compound annual growth rate of 2.87 percent. In 2005-06, silk exports increased to US$ 319.78 million, an increase of 8.71 percent as compared to 1995-96 (Government of India, 2006-07).
Jute is another important fiber used by the Indian textile industry. India is the largest producer and consumer of raw jute in the world. Jute industry is one of the major industries in the Eastern region, particularly in West Bengal. There are 77 jute mills in India; 60 in West Bengal, 3 in Bihar, 3 in Uttar Pradesh, 7 in Andhra Pradesh and one each in Assam, Orissa, Tripura and Chhattisgarh. Export of jute products (including floor coverings) from India was around US $ 257 million in 2006-07, which increased to US $ 296 million during the period April – February 2007-08 (EXIM, 2008). The environmental considerations assuming importance have created new opportunities for jute which is bio-degradable, renewable and eco-friendly.

India is the seventh largest producer of raw wool in the world. Although the woolen textile and clothing industry is relatively small compared to the cotton and man-made fiber based textiles and clothing industry, yet the woollen sector plays an important role as it links the rural sector with the textile-manufacturing sector. The product portfolio is also diverse, ranging from textile intermediates to finished textiles, garments, knitwear, blankets and carpets. Indian woollen sector has also a small presence in manufacture of technical textiles, catering to the civil and defence requirements for warm clothing. This industry is principally located in the northern states of Punjab, Haryana and Rajasthan consisting of both licensed players (composite mills, combing units, worsted and non-worsted spinning units and machine-made carpet manufacturing units), and the decentralized players (hosiery and knitting, powerloom, handlooms, and hand-knitted carpets and independent dyeing and processing houses). India’s wool production increased from 44.40 million kg. in 1996-97 to 45.20 million kg. in 2005-06, having the compound annual growth rate of 0.18 percent (Government of India, 2006-07).

Under the man-made fiber category, India is one of the major producers in the world with the second largest producer of cellulosic fiber / filament yarn, third largest producer of viscose staple fiber and polyester filament yarn, fourth largest producer of polyester staple fiber, and seventh largest producer of acrylic staple fiber. The man-made fiber industry comprises fiber and filament yarn manufacturing units of cellulosic and non-cellulosic origin. The production of man-made fibers in India has shown an increasing trend in 2007-08 with a growth of around 10 percent. India also imports man-made fibers and synthetic and regenerated fibers for processing and
value addition. In the year 2006-07, India imported man-made fibers valued US $ 555 million, and synthetic and regenerated fibers worth US $ 97 million. In the year 2007-08, during the period April-February, India’s imports of man-made filament and spun yarn amounted to US $ 578 million, and India’s import of synthetic and regenerated fibers amounted to US $ 100 million (EXIM, 2008).

The Indian textile and clothing value chain consists of four stages namely ginning and spinning, weaving and knitting, processing and clothing manufacturing. Spinning is the process by which cotton or manmade fiber is converted into yarn. In case of cotton, before spinning, ginning is done to remove the seeds and impurities. Then cotton or manmade yarn is converted into woven or knitted fabrics. Processing includes bleaching, dyeing, mercerizing and printing which results in finished fabric to be used for manufacture of clothing. Clothing manufacturing is the final stage where the designing, pattern making, cutting, embellishing, stitching, finishing and packaging is done for distribution.

This industry displays a very complex sectoral dispersal matrix with hand-spun and hand-woven sector on one end of the spectrum and the capital-intensive sophisticated mill sector on the other, with the decentralized powerloom and knitting sectors coming in between. It can be broadly classified into two categories, the organized mill sector and the unorganized decentralized sector. Being a controlled sector, the organized mill sector has a complete information base on the organizational set-up, machinery installation, production pattern, employment etc. The organized sector of the textile industry represents the mills. It could be a spinning mill or a composite mill. Composite mill is the one where the spinning, weaving and processing facilities are carried out under one roof. Relatively large-scale mills that integrate spinning, weaving and sometimes fabric finishing are common in other major textile-producing countries. In India, however, these types of mills now account for about only 3 percent of output of the textile sector. About 276 composite mills are now operating in India, most owned by the public sector and many are deemed as financially “sick.”

Spinning is the most consolidated and technically efficient sector in India’s textile industry. It may largely be due to deregulation beginning in the mid-1980s. Average plant size is small and technology outdated, relative to other major producers. The decentralized powerloom/hosiery and knitting sectors form the largest section of the
textile sector. It is found to be engaged mainly in the weaving activity, which makes it heavily dependent on the organized sector for their yarn requirements. This decentralized sector is comprised of the three major segments viz., powerloom, handloom and hosiery. The powerloom sector provides a wide variety of cloth, both grey as well as processed fabrics. As on January 31, 2008, there were 20.83 lakh powerlooms distributed in over 4.64 lakh units, constituting over 60 percent of the global powerloomage. The sector also contributes around 62 percent to the total cloth production in the country and provides employment to about 50 lakh people which constitutes around 14 percent of the total employment in the textile sector and contributes 60 percent of the fabric, meant for exports. The handloom sector has been playing an important role in creating an awareness of the Indian cultural diversity and fashion, which is unique only to the Indian textile industry. The handloom cloth production was 6536 million square meters in 2006-07. In addition to the above, there are readymade garments, khadi as well as carpet manufacturing units in the decentralized sector. The clothing sector is fragmented and predominant in the small-scale sector. The clothing sector is concentrated primarily in 8 clusters, viz., Tirupur, Ludhiana, Bangalore, Delhi/Noida/Gurgaon, Mumbai, Kolkata, Jaipur and Indore. Tirupur, Ludhiana and Kolkata are major centres for knitwear, while Bangalore, Delhi/Noida/Gurgaon, Mumbai, Jaipur and Indore are major centers for woven clothing. India’s exports of ready-made garments, consisting of cotton, silk, man-made fibers, wool and other textile materials showed a marginal increase of 0.8 percent, from 2005-06 to 2006-07 (EXIM, 2008).

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, the textile industry also plays a pivotal role through its contribution to industrial output, employment generation, and the export earnings of the country. This industry has made an enormous and multi-directional contribution to the domestic economy. It accounts for a significant portion of the total industrial output of the country and plays a vital role in the country’s economy with regard to employment and foreign exchange. The industry has witnessed a phenomenal growth during the last four decades. It adds about 14 percent to the industrial production and 4 percent to GDP. It provides direct employment to about 38 million people and about 53 million people are indirectly employed. It is the second largest job-provider after agriculture. Its contribution to the
gross export earnings is about 15 percent but adds only about 1 to 1.5 percent to the gross import bill (Government of India, 2006-07). Indian textile industry contributes about 20 percent to the world spindleage of 166.36 million and 3 percent to the world rotorage of 7.81 million and has the second highest spindleage in the world after China. It has the highest loomage (including handloom) in the world and contributes about 64 percent to the 8.9 million-world loomage. Excluding handlooms, this industry contributes 42 percent of the world loomage of 4.38 million. The EU and the US are the largest textiles and clothing markets of the world along with Japan, Canada, CIS countries and UAE. India’s two-third textiles and clothing exports go to the EU and the US market (Verma, 2002).

Indian textile industry has huge potential due to its inherent strengths such as abundant raw materials, low labor cost and a thriving domestic market. This industry is as diverse as country itself having a vast pool of skilled workers; flexible production systems; a dynamic entrepreneurship together with vibrant design and creativity. The diverse structure of the industry coupled with its close linkage with our ancient culture and tradition provides it with the unique capacity to produce a wide variety of products suitable to the varying consumer tastes and preferences through latest technological inputs and design capability both within the country and overseas.

During pre-independence period, colonization brought an end to India’s glorious textile past. By 1880 the domestic market had grown to be serviced solely by British textile manufacturers. India, once one of world’s leading exporters of textiles, was then forced to become a net importer. Tariffs were imposed to make sure that British goods entered the Indian market virtually free while Indian goods were kept out of Britain’s market. This system remained in place until the Indians began the fight for independence. Gandhi was convinced that the textile sector could be a catalyst in the advancement of the Indian population by creating employment for the excess labor pool. This philosophy lay at the base of the policies followed by the government in the textile sector from independence until the late 1980s.

After independence, the government realized the significance of textile industry in Indian economy. The policy surrounding the textile sector began to change in the mid 1980’s. Inspired by Mahatma Gandhi, the Government of India (GOI) put in place numerous policies and regulations to ensure that over-mechanization did not occur
and labor-intensive textiles were produced. However, in following this ideological aim, the GOI did not realize its negative impacts in terms of decreased productivity and reduced competitiveness. It provided favorable and protective taxes and other regulations to the small-scale sector with the presumption that this sector has created more employment. Large-scale production was curtailed by imposing restrictions on total capacity and mechanization on mills. Strict labor regulations resulted in disincentives for capital investment and high production costs. From the price side, the GOI cornered the sector by imposing price restrictions. The more mechanized and the higher the capacity of the textile producing company was, the more it was discriminated by the GOI through tax policies and other regulations. Till the year 1985, development of textile sector in India took place only in terms of general policies. The reforms in the textile industry actually began with the government textile policy of 1985 where it dismantled a sector- approach to the industry. It adopted a multi-fiber orientation, flexible raw material policy and removed entry and exit barriers while emphasizing modernization and technical upgrading (World Bank, 1997). These changes, especially the institution of a modernization fund, contributed significantly in the upgradation of the textile sector. It allowed the firms that were upgraded the most to benefit from the liberalization followed in 1991. The first milestone of the Indian Government in reforming textile industry was de-licensing the textile industry in 1989 and in 1991, the Government opened the economy to greater trade and instituted incentives to encourage exports as per the Statement of Industrial Policy of 1991 and the Textile Development and Regulation Order of 1992 (Uchikawa, 1998). Aided by favorable demand conditions internationally (a spurt in cotton textile consumption in western markets and unprecedented world prices for cotton yarn) and incentives on the supply side, the domestic yarn exports boomed throughout the early 1990s. The second milestone was the far-reaching economic liberalization program of the GOI beginning in 1991 that placed a major emphasis on export-led growth. In line with the general policy of liberalization, several measures were undertaken to reduce controls and to bring greater transparency in the textile sector. Dramatic reductions in (input related) imports were constrained after economic liberalization in 1991 and also the signing of GATT led to spectacular growth in textile industry and especially in cotton yarn exports. Between 1986 and 1995, cotton yarn exports rose by 27 percent per year and textile export revenues (as a whole) grew in real terms by 12 percent annually, i.e. 25 percent faster than total merchandise
exports (World Bank, 1997). The aggressive policy that was undertaken for the rapid
development of globalization and Indian textile industry was the introduction of ‘The
National Textile Policy 2000’. This policy envisaged addressing the following issues—

- Increased global competition in the post 2005 trade regime under WTO
- Huge import volume of cheap textiles from other Asian neighbors
- High production cost with respect to other Asian competitors
- Use of outdated manufacturing technology
- Poor supply chain management and huge transit cost
- Huge unorganized and decentralized sector

Further, this policy also aimed at increasing the foreign exchange earnings to the tune
of US $ 50 billion by the end of the year 2010. It included rational projections for the
overall development and promotion of all the sectors involved directly or indirectly
with the Indian textile industry. Furthermore, this policy also envisaged the inclusion
of the huge unorganized and decentralized Indian textile sector under the organized
textile industry as the unorganized textile-manufacturing sector in India accounts for
76 percent of the total textile production.

At the same time, there are constraints relating to the fragmented industry, viz.
constraints of processing, quality of cotton, higher capital and energy costs, labor
reforms and infrastructural constraints and bottlenecks. There is lack of economies of
scale due to promotion of powerlooms at the expense of mill production, lower
productivity in various segments, lack of technological development that affects the
productivity and other activities in whole value chain, unfavorable labour laws and
lack of product diversification. Higher indirect tax laws, power and interest rates and
complicated export and import regulations also restrict our exports. India's logistic
disadvantage due to its geographical location has given it a major thumbs-down in
global trade. The country is located at distant place from major markets as compared
to its global competitors like Mexico, Turkey and China, which are located relatively
closer to major global markets of US, Europe and Japan. As a result, high cost of
shipments and longer lead-time coupled with lack of infrastructure facility may prove
to be major hindrances. But for the holistic growth and development of this sector, the
government has implemented various schemes for the textile industry.
The Textile Workers’ Rehabilitation Fund Scheme came into force with effect from September 15, 1986, with the objective of providing interim relief to textile workers that became unemployed due to the permanent closure of any particular portion of, or the entire textile unit. The relief under the Scheme is available only for three years on a tapering basis and would not extend beyond the date of superannuating of any worker. The assistance under the Scheme is available to eligible workers only for the purpose of enabling them to settle in other gainful employment. Under this scheme, the workers earning wage equivalent up to Rs. 2500/- per month or less in respect of eligible textile mills closed before 01.04.1993 or wage equivalent up to Rs. 3500/- per month or less in respect of eligible textile mills which are closed on or after 01.04.1993 will be eligible for the benefit of the scheme. A closed textile unit means: (i) A unit licensed or registered under the Industries (Development & Regulation) Act, 1951, or with the Textile Commissioner as a medium scale unit on the day of its closure; (ii) The unit has obtained the requisite permission for closure from the appropriate State Government, under section 25(O) of the Industrial Disputes Act, 1947, or, alternatively, an Official Liquidator was appointed under the Companies Act, 1956, for the purpose of winding up of the unit. (iii) The unit was closed down on or after 6th June 1985. Till 30-09-2007, Rs. 204.22 crore was disbursed to 85975 workers.

The Indian textile industry suffered from severe technology obsolescence and lack of economies of scale, which in turn diluted its productivity, quality and cost effectiveness, despite distinctive advantages in raw material, knowledge base, and skilled human resources. It became essential that the textile industry should have access to timely and adequate capital, at internationally comparable rates of interest in order to upgrade the level of its technology. To enhance its overall long-term viability, sustain and improve its competitiveness in the domestic as well as international market and to provide necessary impetus to the modernization of textile industry and Jute industry, the Government launched Technology Upgradation Fund Scheme (TUFS) for Textile and Jute Industries, w.e.f. 01.04.1999 for a period of 5 years, i.e., up to 31st March 2004 which was subsequently extended up to 31.03.2007, i.e., till the end of Tenth Five Year Plan. The scheme has been modified and extended w.e.f. 01.04.2007 up to 31.03.2012, i.e., till the end of Eleventh Five Year Plan. It provided a reimbursement of five percentage points on the interest charged by the
lending agency on a project of technology upgradation. It also provided coverage of 5 percent exchange fluctuation (interest & repayment) from the base rate on foreign currency loan (FCL). It has also given 15 percent credit linked capital subsidy for the SSI textile and jute sector, 20 percent credit linked capital subsidy for the powerloom sector, 5 percent interest reimbursement, plus 10 percent capital subsidy, for specified processing machinery, 25 percent capital subsidy on purchase of the new machinery and equipment for pre-loom & post-loom operations, upgradation of handlooms and for quality control equipment for handloom production units. The entire range of imported second hand machinery will now be ineligible under the scheme for any benefit except automatic shuttleless looms with the value cap of Rs. 8.00 lakh per machine. Other investments such as energy saving devices, effluent treatment plant, in-house R&D are eligible for benefits of the scheme only upto 25 percent of the cost of machinery. Funds allocated during tenth plan were of the order of Rs. 1270 crore. The Industrial Development Bank of India (IDBI), the Small Industries Development Bank of India (SIDBI), and the Industrial Finance Corporation of India Ltd. (IFCI) are the nodal agencies for the Non-SSI textile sector, SSI textile sector and Jute sector, respectively. However, in 2005, 13 additional nodal banks have also been notified under TUFS for determining eligibility & releasing subsidy for cases financed by them. For the monitoring and review of the scheme, an Inter-Ministerial Steering Committee (IMSC), under the chairmanship of the Secretary (Textiles), has been constituted. This committee normally meets on a quarterly basis. A Technical Advisory cum Monitoring Committee (TAMC) under the Chairmanship of the Textile Commissioner has also been constituted to interpret and to clarify technical issues raised by any of the nodal agencies, regarding the eligibility of any unit or machinery under this scheme. To make the Scheme user-friendlier, nearly 200 amendments have been made since its launching. Rs. 27449 crore have been disbursed under this scheme till 2007 (Government of India, 2007-08). It has been observed that the effort to modernize the industry under TUFS allows old machineries with certain residual life, which will consequently lead to the cycle of obsolescence continuing. Besides, TUFS focuses on machineries and equipment but not on the upgradation of technology as such.

Cotton accounts for more than 75 percent of the total fiber consumption in spinning mills, and more than 56 percent of the total fiber consumption in the textile sector. In
order to improve the production, productivity and quality of cotton in the country by bringing the entire gamut of Research and Development, Marketing and Processing of cotton under one umbrella through a mission approach, Government of India has launched Technology Mission on Cotton (TMC) in February, 2000. The mission consists of 4 Mini Missions (MM) with specific objectives of:

- MM I - Research
- MM II - Dissemination of technology to farmers
- MM III - Improvement in marketing infrastructure
- MM IV - Modernizing of ginning and pressing factories

Indian Council of Agricultural Research (ICAR) and the Ministry of Agriculture are the Nodal Agencies for Mini Missions I & II respectively. The Ministry of Textiles is the Nodal Agency for Mini Missions III & IV. Mini Mission III relates to the improvement in the marketing infrastructure, and includes the revival of dormant market yards, improvement in existing market yards, and the setting up of new market yards. Technology Mission on Cotton aimed to address the issues of raising productivity, improving quality, and reducing the cost of production, which would provide the much-needed competitive advantage to the textile industry, along with ensuring attractive returns to cotton farmers. Mini Mission IV aims at the modernization of ginning and pressing factories, to improve the quality of cotton by reducing contamination and ensuring better prices to the growers. For the installation of new bale presses and HVI/MVI laboratories, an additional incentive of Rs 7 lakh and Rs. 4 lakh, respectively, has also been allowed during the Xth Plan. The initial target for MM-III was the development of 111 market yards (51 in IXth Five Year Plan & 60 in Xth Five Year Plan). This has further been increased to 250, in June 2005. The initial target of MM-IV was the modernization of 500 Ginning & Pressing (G & P) factories (150 in IX Five Year Plan and 350 in Xth Five Year Plan). This has further been increased to 1000 G & P factories, in June 2005. Rs. 150 crore were allocated for the Xth Plan (2002-07). The Cotton Corporation of India Ltd. (CCI) is the implementing agency for the Technology Mission on Cotton.

The Scheme for Integrated Textile Parks was launched in August, 2005, by merging the Apparel Parks for Export Scheme (APE) and the Textile Centre Infrastructure Development Scheme (TCIDS). The primary objective of the scheme is to provide the
industry with world class infrastructure facilities for setting up of textile units in clusters. The Scheme for Integrated Textile Parks aimed at creation of 25 new textile parks of international standards in potential growth centres before 2007-08. Under the SITP, an amount of Rs. 625.00 crore has been provided by the Government of India (GOI) for the development of these Parks. The Scheme is being implemented through Special Purpose Vehicles (SPVs). Industry Associations/ Groups would be the main promoters of the Integrated Textile Parks (ITPs). The Infrastructure Leasing & Financial Services (ILF&S) has been appointed as the Project Management Consultant (PMC) for implementing the Scheme. The PMC will be responsible for the speedy implementation of the Project in a transparent and professional manner.

Government has been pursuing various policies for different textile products. Jute Industry occupies an important place in the national economy. It is one of the major industries in the eastern region, particularly in West Bengal. The production process in the Jute Industry goes through a variety of activities, which include cultivation of raw jute, processing of jute fibers, spinning, weaving, bleaching, dyeing, finishing and marketing of both raw jute and its finished products. The Jute Manufactures Development Council (JMDC), Kolkata is implementing the Incentive Scheme for the Modernization of the Jute Industry by providing 15 percent / 20 percent on the capital invested for upgradation / modernisation of cess paying jute units. The National Centre for Jute Diversification (NCJD), Kolkata is implementing various programmes for the promotion and diversification of jute products through the following schemes:

- Jute Service Centre Scheme (18 Centres and 5 Extension Centres are in operation).
- Jute Raw Materials Bank Scheme (32 Banks are in operation)
- Market Support Scheme
- Product Development Scheme
- Design Development Scheme,
- Micro Finance Scheme for individuals and NGOs
- Jute Entrepreneurs Assistance (Capital Subsidy) Scheme
- North East Development Scheme

Jute Manufacturers Development Council (JMDC) has implemented some schemes which are as follows:
JMDC Incentive Scheme for Modernization of the Jute Industry came into effect from July 8, 2002. The scheme is aimed at facilitating capital investment for the upgradation and/or modernizing technology in the jute industry by providing 15 percent / 20 percent incentive on the amount invested either from the entrepreneurs’ own resources or through bank financing. External Market Assistance (EMA) Scheme, which came into effect from April 1, 2002 for two years, was subsequently extended for three years up to March 31, 2007. The maximum EMA benefit that was allowed to any particular beneficiary is Rs.2.50 crore (2004-05), Rs.1.25 crore (2005-06) and Rs.0.20 crore (2006-07). The assistance under the scheme was also available on Jute Geo-textiles, Hessian and Sacking, and Made-ups (Government of India, 2007-08).

Central Silk Board (CSB), a statutory body, was constituted through Central Silk Board Act, 1948 for the development of silk industry. Various developmental programmes and projects have been formulated by the CSB like Catalytic Development Programme for mulberry sector, tasar sector, eri sector, muga sector and post cocoon sector. Similarly for the development of woollen textile industry, Integrated Wool Improvement Programme was started by the Government through the agency of the Central Wool Development Board (CWDB), Jodhpur. The programme has two components: improvement of wool fiber and quality processing of wool. The powerloom sector plays a pivotal role in meeting the clothing needs of the country. In order to strengthen and promote the growth of powerloom sector, various schemes have been implemented, including 20 percent Credit Linked Capital Subsidy Scheme for powerloom sector under Technology Upgradation Fund Scheme (TUFS), modernization and strengthening of powerloom service centres, support to computer aided design centres, Group Workshed Scheme, Group Insurance Scheme for Powerloom Weavers. Similarly, various developmental and welfare schemes have been implemented for the handloom sector. These include Deen Dayal Hathkargha Protsahan Yojana, Integrated Handloom Training Project, Handloom Export Scheme, Marketing Promotion Programme, Mill Gate Price Scheme, Workshed-cum-Housing Scheme, Weavers’ Welfare Scheme, Thrift Fund Scheme, New Insurance Scheme for Handloom Weavers, Integrated Handloom Cluster Development Programme, Mahatama Gandhi Bunkar Bima Yojana, Health Insurance Scheme, Handloom Mark Scheme. Handicrafts constitute another important segment of the decentralized /
unorganized sector of our economy. To help crafts persons achieve direct access to market, Government has implemented various schemes like *Baba Saheb Ambedkar Hastshilp Vikas Yojana*, *Design & Technical Upgradation Scheme*, *Marketing & Support Services Scheme*, *Export Promotion Scheme*, *Training & Extension Scheme Research & Development Scheme*, *Bima Yojana for Handicraft Artisans*, *Special Handicrafts Training Programme*, *Workshed Scheme*, *Credit Guarantee Scheme*, *Artisan Credit Card Scheme* and *Facility Centre Scheme* (Government of India, 2007-08).

It has been observed that the Government has tried to undo some of the injustices done against the textile and garment sector historically in the recent years through its various schemes but still there are many steps left to unshackle the industry.

For more than four decades, the textile sector was governed by special regimes: the Short Term Cotton arrangement (1961), the Long Term Cotton Arrangement (1962-1973) and the Multi-Fiber Arrangement (1974-1994). Finally, seven years of complex and difficult negotiations at the Uruguay Round resulted in the Agreement on Textile and Clothing (ATC) to phase out Multi-Fiber Arrangement (MFA) in January 2005.

During the early 1950s, the penetration of Japanese cotton textiles into the United States market became intensive. In order to regulate the inflow of these textiles, the US administration persuaded Japan to accept voluntary export restraints (VERs). The US-Japan VERs dealt with cotton textile exports from Japan, which represented a departure from the rules laid down by GATT (Krishna and Tan, 1998). Similar restrictions were also imposed by the UK administration on textile exports from Hong Kong, India and Pakistan for three years from 1950 to 1962. This prompted West Germany and Canada to seek similar voluntary export restraints. The voluntary export restraints were then legalized and an international agreement under the sponsorship of the GATT through the Short Term Arrangement regarding trade in cotton textiles, which covered the period from September 1961 to August 1962, came into existence (Keesing and Wolf, 1980).

The sixth round of GATT negotiations called the ‘Kennedy Round’ held in 1962, with 62 countries attending, brought in the Long Term Arrangement (LTA) regarding trade in cotton textiles. The LTA was signed under the auspices of the GATT (replacing the
1-year Short Term Arrangement). The LTA was renegotiated several times. It lasted for 12 years from 1962 to 1974. As the imports of other fiber based textiles and garments started increasing by the early 1970s, the LTA was replaced by Multi-Fiber Arrangement (MFA) (Hamilton, 1990).

Multi-Fiber Arrangement came into existence in 1974. The MFA, as the name suggests, extended restrictions on trade to wool and man-made fibers in addition to cotton. This arrangement passed through four stages: MFA-I, MFA-II, MFA-III, MFA-IV.

MFA-I (1974-77) was negotiated in 1973 under American Advocacy and implemented with effect from January 1974, which also included non-cotton textile products that were not included earlier. The coverage of product items was widened to include tops, yarns, piece goods, made-ups, apparels of cotton, wool and man-made fibers or blends thereof. It envisaged the setting up of a Textile Surveillance Board (TSB) to examine disputes and make recommendations to the Textile Committee of GATT. It promised an increase in export earnings for developing countries, with due considerations of market disruption that might occur owing to excessive imports to the developed countries. In such cases, the developed countries were empowered to restrain the levels of exports, based on past exports, allowing for some positive growth rates as well. These could be done by bilateral consultations and these did apply to handlooms.

The European countries had shown most protectionist attitude during MFA-II (1978-81) when the coverage as well as level of quantitative restrictions was quite deep and 90 percent of non-jute textile exports faced some kind of restraints. The major change made in MFA-II was the introduction of “reasonable departures” clause. In this clause, trading partners could mutually agree to depart from the general terms of the MFA in particular elements in particular cases. As the departures were mostly restrictions and were of a continuing nature, this was detrimental to the export performance of the developing countries.

MFA-III (1982-85) was more restrictive than MFA-II in terms of coverage and rate of growth. MFA-III adopted some additional restrictions on large exporters termed as “Surge mechanism” which limited the growth of medium-sized exporters like India.
Under MFA-III, U.S.A. concluded 41 bilateral agreements with its major suppliers restricting growth of exports of specific type of textile and clothing and also enforced “Call system” under which it restricted imports from the non-quota countries. It gave more provisions to the developing countries to be compensated for the safeguard measures. Textile and apparel were treated as two distinct sectors and quotas were worked out accordingly. However, this worsened the situation as regards Indian textile and apparel exports, as most bilateral agreements signed consisted of rigid features on category ceilings, growth rates, carry over, carry forward, and swing provisions.

MFA-IV (1986-94), the latest in series, was concluded in July 1986 and for the first time; it included silk, linen and jute to the existing fibers in an attempt to control trade of all items of textiles. It was basically purported to include all conceivable fibers plugging the possible “loopholes”, which allowed growth of imports of textile and clothing under previous agreements. With the inclusion of all natural fibers in MFA, the developed countries eliminated the possibility of getting trade diverted into non-MFA products. During this stage, there was increasing resentment across the world against the MFA, since it had allowed the developed countries to export among themselves without restrictions and to safeguard against all low-price export. Even the consumers of developed countries were at loss, as they had to pay unnecessarily high prices due to these quotas (Gokhale and Katti, 1995).

The MFA violated the principles of the multilateral system in several ways:

1. It violated the Most Favoured Nation principle
2. It applied quantitative restrictions rather than tariffs
3. It discriminated against developing countries
4. It was non-transparent (Nordas, 2004).

The MFA was conceived as a temporary expedient to provide ‘breathing space’ to the domestic industries of developed countries for adjusting to new sources of competition. Although the principal aim of the MFA was introduced to secure a substantial increase in export earnings for developing countries, the system was ultimately methodically abused and had become an unbridled charter of protectionism (Bagchi, 2001).
In April 1994, the Uruguay Round concluded with the signing of the Marrakesh Agreement, establishing the World Trade Organization (WTO). Developing country concerns were addressed in the Agreement on Textile and Clothing (ATC). The Agreement was signed in 1994 simultaneously with the GATT-UR General Agreement generating great expectations among developing countries, especially those with comparative advantages in textile and clothing and exports, which were constrained by the MFA system. WTO came into force in 1995. It created special interim rules to govern trade in textiles and apparel among WTO countries and provided for the gradual elimination of quotas on textiles and apparel established by the United States, the EU, Canada and Norway under MFA. The quota system under the MFA violated GATT’s nondiscrimination obligation and contradicted GATT’s general principle of abolishing quantitative limits. The objective of the ATC was thus to bring trade in textiles and clothing under GATT discipline. The major components of the ATC agreement were: a) the designation of a “product coverage” or “list of products” subject to MFA restrictions, out of which the importing countries could select the items to gradually integrate into GATT-WTO rules, b) the “integration program” in three stages: 1995-1997, 1999-2001 and 2002-2004, c) a “quota liberalization system” also in those three stages, and d) a mechanism of “transitional safeguards”.

The WTO 1995 agreement required countries to integrate textile and apparel products into GATT 1994 in four steps over a 10-year transition period ending on January 1, 2005. While doing so, countries were required to eliminate any quotas on such goods and could not establish new quotas on the integrated products, except as provided under GATT rules. For quotas that were not eliminated in one of the first three stages of integration, the ATC required importing countries to increase the base annual growth rates applicable to each such quota, which were specified in the bilateral MFA agreements in place in 1994.

The ATC provided a detailed list of products to which it applied. The list was based on the Harmonized Commodity Description and Coding System Nomenclature (the so-called HS), and defined particular products at the six-digit level of the HS. Each importing member was required to notify and integrate products from the list covered by the Agreement.
The first phase of the liberalization process started on January 1, 1995 with a 16 percent minimum trade integration and an increase of the quota growth rate to 16 percent. The second phase started at the beginning of 1998 with a specified minimum trade integration rate of 17 percent and an increase of the quota growth rate to 25 percent higher than the previous stage rate. The third stage started on January 1, 2002 with 18 percent minimum trade integration rate and an increase of the quota growth rate to 27 percent higher than the second stage rate. Finally, all remaining products were integrated at the end of the transition period on January 1, 2005. At each of the first three stages, products were to be chosen from each of the following categories: tops and yarns, fabrics, made-up textile products and clothing. In actual practice, under MFA bilateral agreements, there existed a wide range of quota growth rates, the average being between 3 percent and 5 percent. Moreover, the selection of products for integration was determined by the importing country. Within the quota-restrained countries, the ATC made a special provision for less developed countries (LDCs), small suppliers and new industrializing economies (NIEs). The provision was in the form of trade concessions.

In order to supervise the implementation of ATC, to examine all measures taken under this Agreement and their conformity with ATC, and to take actions specifically required of it by this Agreement, the Textiles Monitoring Body (TMB) was established. The ATC established a two-step procedure for the resolution of disputes arising from violations of its provisions. Any unresolved issue was first to be reviewed by TMB before it could be referred to the Dispute Settlement Body for the establishment of a panel. In addition, for oversight of implementation of the ATC at
multilateral level, the Agreement provided for the WTO Council for Trade in Goods (CTG) to conduct a major review before the end of each stage of the integration process. CTG was required to take appropriate decisions to ensure that the balance of rights and obligations embodied in the Agreement were not being impaired. The agreement also contained a specific transition safeguard mechanism that could be applied at any stage to products not yet integrated into GATT. Action under the mechanism could be taken against individual exporting countries. It was to be demonstrated by an importing country that a sharp and substantial increase of imports from an individual country would cause serious damage or threaten its domestic industry (Article 6 of the ATC on transitional safeguards).

The world textile trade was integrated by the end of 2004 as a result of the process of gradual phasing out of the tariff barriers by WTO. The quota removal provides both an opportunity and threat. It is an opportunity because the market will no longer be restricted; there are huge non-quota markets like Switzerland, Japan, Middle-East etc. There may be product development and diversification like work wears, institutional wear, night wear, ethnic garments, protective clothing etc. Increased disposable income and purchasing power of Indian customer will also open new market development. Emerging retail industry and malls provide huge opportunities for the apparel, handicraft and other segments of the industry. Greater foreign direct investment and investment opportunities are available. Strategic alliances with large retailers and garment manufacturers are available in the United States, Europe and East Asia. Manufacturing bases could be relocated in India with buy-back arrangements. Phasing out of trade barriers by WTO has also posed some serious threats. There are threats from our competitors, particularly the textile export-led economies like China, Pakistan, Bangladesh to de-stabilize our export and local markets. Free trade agreements like North American Free Trade Agreement (NAFTA), African Growth and Opportunity Act (AGOA), Caribbean Basin Initiative (CBI) etc. are taking place. There is duty-free access to members of European Union, increasing the share of low cost countries like Sri Lanka, Vietnam, and Cambodia etc. Elimination of quota system will lead to fluctuations in export demand. There is decreasing cotton productivity and labour productivity as well as slow pace of reforms in infrastructure and high import tariffs. International labour and environmental laws may also restrict our exports. Our own market may be flooded with cheap imports of
garments. The producers may also not be able to make balance between price and quality.

In order to withstand the competition both in international and domestic markets and to accelerate our export growth, there is need to identify the strengths on the positive side of the textile industry. Indian textile industry is an independent and self-reliant industry. Abundant raw material availability helps industry to control costs and reduces the lead-time across the operation. India is one of the largest producers of cotton in the world and is also rich in resources of fibers like polyester, silk, viscose etc. Availability of low cost and skilled manpower provides competitive advantage to industry. In 2002, the average cost of labour in clothing industry in India was the lowest, i.e. $0.38 per hour as compared to China ($0.68 per hour), Sri Lanka ($0.48 per hour) and Bangladesh ($0.39 per hour) (USITC, 2004). India is highly competitive in spinning sector and has presence in almost all processes of the value chain. Indian garment industry is very diverse in size, manufacturing facility, type of apparel produced, quantity and quality of output, cost, requirement for fabric etc. It comprises suppliers of readymade garments for both domestic and export markets. India is one of the largest exporters of yarn in international market and contributes around 25 percent share of the global trade in cotton yarn. India is a growing economy and has potential domestic and international market. Industry has manufacturing flexibility that helps to increase the productivity. In order to increase India's exports in competition with its competitor, China, it is crucial for the Industry and the Government to address the limitations by taking steps to reduce the production costs, expanding weaving and processing capacities (our major growth drivers), providing reliable and affordable power and efficient management of supply chain.

Need of the Study

Textile and clothing has been one of the most important primary sectors en-route to industrial development of many countries in the world. It is one of the major global industries used by many developed nations as an entry to industrialization and as a way to move from poverty to prosperity. Although a considerable number of the developed countries have protected their domestic textile industries with tariff and quantitative restrictions such as the ones implemented under the Multi-Fiber Arrangement (MFA) over decades, still the growth of textile-clothing imports from
the developing economies to the high income developed economies have been significant. Elimination of MFA and advent of freer trade in textiles since 2005 provided further support to the developing economies to raise their exports. As the exports would be quota-free, the increase in exports of textile products would be based on market considerations, namely product attributes, pricing, promotion such as advertising, brand building and other sales promotion means and physical distribution, its cost and logistics decisions. The exporting countries may have to face a number of restrictions which may come in many forms such as non-tariff barriers based on environmental health and labor standard related issues. Exports of textile products of under-developed countries may not increase much due to formation of regional trade arrangement, which implies higher degree of liberalization among the regions as compared to rest of the world, for e.g., EU, NAFTA and initiation of anti-dumping and countervailing measures by developed countries. The onset of globalization of trade and economic liberalization within the country has posed new challenges and opportunities for the Indian textile industry. As part of ATC under the WTO framework, all the quantitative restrictions (quotas) on exports and imports have ceased to exist from January 1, 2005. Such integration of markets will provide several opportunities as well as threats to Indian textile industry also (Kathuria and Bhardwaj, 1998). It is an opportunity since the market access is unlimited and unrestricted. It is a threat since minimized assured quantities, hitherto available for exports under quotas are not available. In such a highly competitive environment, only those companies with strong fundamentals and conscious of several market compliances alone can survive. There is a likely emergence of “outward processing” concept by manufacturers in advanced countries in their attempts to counteract the textile suppliers from countries like India which could be termed as dislocation of production. WTO has rated India's prospects as amongst the best, second only to China. In terms of the WTO’s report on The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing, it was predicted that the most substantial changes would be that China and India would increase their market shares dramatically, when the EU obeys the regulations of the ATC to remove the quotas system. India’s export market share for textiles to the EU would increase from 9 percent to 11 percent and the market share for clothing products from India would increase from 6 percent to 9 percent. On the other hand, the WTO report pointed out
that the market share of textiles imported from India to the United States and Canada would rise from 4 percent to 15 percent (Nordas, 2004)

With this background, the present study proposed to estimate the impact of WTO on India’s textile industry for the period 1985-86 to 2006-07. The study has been undertaken with the following specific objectives:-

1. To study the growth of Indian textile industry at aggregate and disaggregate levels
2. To examine trends in partial factor productivity and total factor productivity in the industry
3. To study and compare the performance of India’s textile exports during pre-WTO sub-period and post-WTO sub-period and structural changes therein
4. To study the direction of India’s textile exports at product-group level
5. To identify the indicators of export competitiveness and factors determining it
6. To bring out the strengths and weaknesses of Indian textile industry in changing international trading environment
7. To examine the opportunities and challenges of the industry and suggest measures for improving India’s textile trade.

**Hypotheses of the Study**
In the light of the above mentioned objectives, the study attempted to test the following hypotheses:

1) Indian textile industry grew at a higher rate during post-WTO sub-period as compared to pre-WTO sub-period.
2) Partial and total factor productivity (TFP) of Indian textile industry increased during post-WTO sub-period.
3) Commodity diversification has been taking place in India’s textile exports.
4) India’s textile exports have diversified to a number of markets during post-WTO sub-period.
5) India’s export competitiveness at the global level has increased during post-WTO sub-period.
6) Exchange Rate, Productivity and Profitability have significant impact on export competitiveness of Indian textile industry.
Plan of Study

The study has been organized into seven chapters including the present one which introduced the topic, outlined objectives and plan of the study.

Second chapter reviews the empirical work related to the topic.

Third chapter concentrates on the data base and methodology used in the study.

Fourth chapter studies the growth and productivity performance (partial as well as total) of Indian textile industry and its two groups- ‘Textiles’ and ‘Textile Products’ for the period 1985-86 to 2005-06.

Fifth chapter analyses the changes in composition of India’s textile exports at product-group (HS two-digit) level and product (HS four-digit) level, involving 149 products in all. It also studies changes in direction of India’s textile exports at product-group level.

Sixth chapter analyses the indicators of competitiveness of India’s textile exports and factors determining it.

Seventh chapter brings out conclusions and policy implications.