

# Problem and prospectus of SME sectors in India & China with special reference to Chemical, Pharma and Textile Industries

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**Abstract:** The SMEs are playing a strategic role in economic growth and development of the country through their contribution to the creation of wealth, employment and income generation. The Chemical, Pharma and Textile Industries are the leading segment in the SME sector.

China and India are two of the largest agrarian economies in the world accounting for the bulk of the world's poorest people. There are many resemblances in their preliminary conditions, as well as broad policy orientation. Both countries with similar levels of living with wide geographical differences, and economic and social diversities. Both countries embarked on the course of planned economic development roughly around the same time, after being led to political freedom by two of the most influential political leaders of the 20<sup>th</sup> century, Mao and Gandhi. Both countries opted at almost the same time, for the heavy industrialisation policy as the quickest route to sustained economic development. However, China sought to follow the 'Soviet model' very closely than India, and China was virtually closed to external economic interaction until the late 1970s. The Indian economy, on the other hand, was largely in the private sector (with a well-developed indigenous entrepreneurial class and the institutional framework of a market economy) in which the state sought to increasingly influence the rate and pattern of economic development.

For the Indian and Chinese economy textiles & chemical segments plays a major role. These SMEs segment are exposed to the competitive pressures either directly from the market place or indirectly passed on from their higher ups in the chain. However, with SMEs enthusiasm, flexibility and innovative drive they are mainly focusing on improved production methods, penetrative marketing strategies and management capabilities to continue and build up their operations & growth. The global chemical industry, is one of the fastest growing sectors of the manufacturing industry. Despite the challenges of escalating crude oil prices and demanding international environmental protection standards now adopted globally, the chemicals industry has still grown at a rate higher than the overall-manufacturing segment. In the economic life of India & China, the Textiles Industry has an overwhelming presence. Apart from providing one of the basic necessities of life, the textiles industry also plays a pivotal role through its contribution to industrial output, employment generation and the export earnings of the country.

## Overview of Chemical Industries in SME sector in India

The backbone of the Indian industrial and agricultural development is chemical industry which forms the and provides building blocks for downstream industries. In India the Chemical industry is one of the oldest industries. The industry has grown at a speed outperforming the overall growth of the industry. Growing interdependence of economies due to increasing international trade is resulting in a chemical industry that is highly globalised in terms of production and supply.

Chemicals are a part of every aspect of human life, right from the food we eat to the clothes we wear to the cars we drive. Chemical industry contributes significantly to improving the quality of life through breakthrough innovations enabling pure drinking water, faster medical treatment, stronger homes and greener fuels. The chemical industry is critical for the economic development of any country, providing products and enabling technical solutions in virtually all sectors of the economy.

The Chemicals Industry consists of both small and large scale units. Due to the fiscal concessions granted to small sector in mid-eighties led to establishment of large number of units in the Small Scale Industry sector. For the economic development of the country the Chemical industry is critical, providing products and enabling technical solutions in virtually all sectors of the economy. The fastest growing segment in the chemical industry is Specialty Chemicals. These are high value, low volume chemicals known for their end-use applications and/or have performance enhancing properties. There is immense potential for increasing consumption within the country as well as India become a reliable supplier of such quality chemicals to the world. In India compared to United States, Europe and even China, there is comparatively very low usage of specialty chemicals. Increasing the careful usage of such chemicals will not only help in the growth of this important segment of the chemical industry but also facilitate overall economic growth. The Indian Chemicals Industry comprises both small and large-scale units. With the shift in emphasis on product innovation, branch building, market orientation and environmental friendliness, this industry is increasingly moving towards greater customer orientation. Even though India enjoys an abundant supply of basic raw materials, it will have to build upon technical services and marketing capabilities to face global competition thus they are able to increase its share of exports.

As the Indian economy was a protected economy till the early nineties, very little large-scale R&D was undertaken by the Chemical industry to create intellectual property. To successfully counter competition from the international chemicals industry domestic industry would, therefore, have to make large investments in R&D. India has a number of scientific institutions. Country's strength lies in its large pool of highly trained scientific manpower. India also produces a large number of fine and specialty chemicals, which have very specific uses and are essential for increasing industrial production. These find wide usage as food additives and pigments, polymer additives, anti-oxidants in the rubber industry, etc.

The specialty chemicals industry, consisting of approximately fifty segments including construction chemicals, electronic chemicals, polymer additives, textile chemicals and oil field chemicals. The market is concentrated largely in the US, Europe and Japan but future growth is expected to come from the emerging Asian markets. The high growth rates in these economies are ushering in prosperity and improved life style which mandate a greater usage of productivity and performance enhancing materials.

The Dyestuff sector is one of the important segments of the chemicals industry in India, having forward and backward linkages with a variety of sectors like textiles, leather, paper, plastics, printing inks and foodstuffs. The textile industry consume the largest quantity of dyestuffs. From being importers and distributors in the 1950's, it has now emerged as a very strong industry and a major foreign exchange earner. India has emerged as a global supplier of dyestuffs and dye intermediates, particularly for reactive, acid, vat and direct dyes. India accounts for 7% of the world production.

**Chemical fertilizers and pesticides** played an important role in the "Green Revolution" during the 1960s and 1970s. Over the last five years Indian exports of agrochemicals have shown an impressive growth. The key export destination markets are USA, U.K., France, Netherlands, Belgium, Spain, South Africa, Bangladesh, Malaysia and Singapore.

India is one of the most dynamic generic pesticide manufacturers in the world with more than 60 technical grade pesticide being manufactured consisting of large and medium scale enterprises and more than 500 pesticide formulators spread over the country. India is the 4<sup>th</sup> largest producer of agrochemicals after USA, Japan and China. The government is promoting research on the use of alternative and safe pesticides by using neem seeds. A country programme entitled "Development and production of Neem products as Environment Friendly Pesticides" is being undertaken by the Department of Chemicals & Petrochemicals with the financial assistance of United Nations Development Programme (UNDP).

**Petrochemicals** are produced from various chemical compounds, largely from hydrocarbons derived from crude oil and natural gas. Among the various fractions produced by distillation of crude oil, petroleum gases, naphtha, kerosene and gas oil are the main feed stocks for petrochemical industry. Ethane, propane and natural gas liquids obtained from natural gas are the other important feedstock used in the Petrochemicals industry. Petrochemical industry plays very important role in economic growth and development of the manufacturing sector. The value addition in the petrochemicals industry is higher than most of the other industry sectors. The Petrochemical industry, which entered in the Indian industrial scene in 1970s, registered a rapid growth in the 1980s and 1990s. Petrochemical industry mainly comprise of synthetic fiber/yarn, polymers, synthetic rubber (elastomers), synthetic detergent intermediates, performance plastics and plastic processing industry. Today, petrochemical products permeate the entire spectrum of daily use items and cover almost every sphere of life like clothing, housing, construction, furniture, automobiles, household items, agriculture, horticulture, irrigation, packaging, medical appliances, electronics and electrical etc.

Basic Chemical sub-sector of the Indian Chemical industry is one of the old industries in the world as well as in India. The firms in this industry are mainly producers of the intermediate goods that are used by various other industries including leather, textile, paints, plastics, rubber, and other chemicals. This industry is expected to be highly developed since it acts as backbone for many other industries.

The wide and diverse spectrum of products can be broken down into a number of categories, including inorganic and organic (commodity) chemicals, drugs and pharmaceuticals, plastics and petrochemicals, dyes and pigments, fine and specialty chemicals, pesticides and agrochemicals, and fertilizers. Import and Export of chemicals in India during the recent years has increased substantially. Though earlier the exports were to countries of South East Asia, Africa, this is now changing. Indian Chemicals have markets in countries such as USA, UK, Germany, France, Japan, etc.

Growth of small organisation is influenced by the background/resource of the entrepreneur, the nature of the firm, and the strategic decisions taken by the owner/manager. Entrepreneurs of the small businesses are the sole strategic decision makers and their close control supports easy translation of entrepreneurial vision into action. The major determinants of growth of SMEs are ability, need and opportunity. Small business entrepreneurs show different motives and also have different attitude and behaviour towards growth.

Indian Chemical industry generates around 70,000 commercial goods ranging from plastic to toiletries and pesticides to beauty products. It is regarded as the oldest domestic sector in India and in terms of volume it gives a sense of pride to India by featuring as the 12 largest producer of chemicals. Indian Chemical industries amounts to 12.5% of the entire industrial output of India and 16.2% of India's entire exports. Under Chemical industries some of the other rapidly emerging sectors are petrochemical, agrochemical, and pharmaceutical industries.

#### **Overview of Chemical Industries in SME sector in China**

The chemical industry is the third largest in China, after textiles and machinery. The Chemical industries accounts for 10% of the country's GDP, as well as between 35% to 40% of the global demand growth for chemicals. China's chemical industry is the second largest consumer, after the US for basic chemical products - fully 45% of the total for Asia. However, despite all this growth, China has a net chemical deficit with the world market and is heavily dependent on imported materials. This dependency has been affected by price trends in the world market caused by heavy international demand for raw materials, petroleum and other chemical inputs. China joined the World Trade Organization in 2001, which committed it to cutting tariffs on chemicals. In coming years, this could expose weaknesses in various parts of the domestic chemical manufacturing center.

The massive globalization and consolidation strides taken by the industry with the requirement of heavy capital investment that brings in more competition and the overall focus of the industry to meet the environmental challenge. The processes applied in the Chinese chemical industry and their defining global standards thereby ensuring leadership in exports as well as attracting significant FDI in the industry. The industry's dynamics like competition, infrastructure and the regulatory policies with the reporting requirements deployed on the industry. A complete section on the affect of the REACH agreement, which came in to effect from June 1, 2007, for the Chinese Chemical Industry. The report also profiles some of the leading players in the industry who have earned the reputation and pride for the Chinese Chemical Industry globally and have placed China at the top of the pecking order.

Chinese companies producing large variety of commoditised chemicals such as vitamins and pharmaceutical products. Many international specialty chemicals companies have stopped producing these products because of their lower margins. However, growth in these areas is strong in China and may provide the foundation for the development of more specialised products in years to come. The vast majority of domestic companies are small firms producing usually one, sometimes two products, for consumption locally; almost all of these are lower-end products, supplied with either no or negligible supporting services - the source of most value in the industry. While their output may technically fall into the specialty category, the nature of their business has more in similar with commodity producers. Every segment of the specialty chemicals sector, there is a divide between a domestic sector feeding the lower end of the market and a foreign-invested part supplying the higher end. For foreign companies, production in China has largely been developed to supply demand within the country, with sourcing from China being a relatively minor element of the business, except to buy commodity inputs for more sophisticated products.

Most of the chemical producers in China are small and manufacture just one or two products. In the long term, the sector will not be able to support so many businesses, making eventual consolidation likely. In the shorter term, the sheer number of these businesses will keep the industry highly competitive, although it may not prevent prices for many lower-end products being highly volatile. Foreign companies occupy much of the higher end of the market. In the medium term, and maybe beyond, they are unlikely to see their dominance eroded to any sizeable degree due to their strengths in services and support — the principal source of added value in the sector. Stronger enforcement of existing environmental and other regulations reflects a growing concern on the part of the government to clean up the industry and improve health and safety standards. Compliance will be more of an issue for domestic companies than for foreign ones, which have built in higher standards from the start. China offers some potential for specialty chemicals research and development, although the emphasis is more likely to be on the development, application and customisation of products than basic research.

Specialty chemicals are going to play a key role in the development of China's manufacturing industries over the next decade and beyond. To date, much of the country's economic success has stemmed from taking full advantage of low-cost inputs of labour, land and in some cases raw materials. However, for China to continue developing strongly, manufacturers, especially domestic ones, are going to have to look at improving the quality and sophistication of their products, and the underlying processes by which they are made. It is here that specialty chemicals will play a key role. Specialty chemicals are those additives and ingredients at the higher end of the chemicals value chain, which tend to be used in relatively small amounts on the basis of some performance-improving property, and which often require supporting services to ensure that their application produces the desired result. They comprise everything from dyestuffs and pigments, through the active ingredients in pharmaceuticals and cosmetics, to the materials used to produce integrated circuits and computer chips.

Many domestic companies focus relentlessly on reducing costs — for example by looking to increase capacity — rather than investing in the development of product support services. As a result, margins in the sector, particularly for domestic companies, are likely to fall further. Only a consolidation of the industry and an emphasis on developing skills and processes aimed at delivering not just performance-improving products but the support in customising and effectively applying these products will see this trend reversed.

#### **Overview of Pharma Industries in SME sector in India**

The development of the pharmaceutical industry in India is a relatively recent phenomenon. It was during the 1950s and 1960s that the pharmaceutical sector started developing, and was a result of western pharmaceutical giants working with the Indian public sector. However, even this arrangement could not cater to India's domestic needs. The Indian pharmaceutical sector has come a long way, from being a small player in the 1970s, to becoming a prominent provider of healthcare products; meeting almost 95% of the country's pharmaceutical needs today. Moreover, in order to ensure access to drugs, the government set prices at affordable levels, thereby not providing sufficient incentive, causing a situation in terms of a crisis in healthcare. The Indian pharmaceutical industry has emerged as a key science based industry in the last four decades. Typically spread across the western and central regions of the country, the industry is now emerging as a key growth sector for several southern states.

The Indian pharmaceutical sector has come a long way, from being almost non-existent before 1970 to a prominent provider of healthcare products at present. The Pharmaceutical industry has grown from mere US \$0.3 billion turnover in 1980 to about US\$21.73 billion in 2009-10. The country now ranks 3 in terms of volume of production (10 per cent of global share) and 14<sup>th</sup> largest by value (1.5 per cent of global share). The Indian Pharmaceutical Industry today is in the front rank of India's science-based industries with wide ranging capabilities in the complex field of drug manufacture and technology. It ranks very high in the third world, in terms of technology, quality and range of medicines manufactured. From simple headache pills to sophisticated antibiotics and complex cardiac compounds, almost every type of medicine is now made indigenously.

The Indian Pharmaceutical Industry to become globally competitive through world class manufacturing capabilities with quality and cost efficiency of production capacity and radical up-gradation of research and development capabilities for new drugs and associated activities like clinical trials and contract manufacturing. There is need to develop world class support infrastructure both for production and research. The core strength of Indian pharmaceutical industry today is its huge export potential. The industry is making adequate returns from the domestic sales but bulk of its profits coming from the export of generics and active pharmaceutical ingredients to the developed markets. The industry has been exporting more than half of its total production. The largest export destination continues to be the US, followed by the UK, Germany, South Africa, and Russia.

Many pharmaceutical firms have already established themselves as leading API manufacturers and generic players in the US and European markets. Thus the Indian firms have made their presence felt in developed markets and continue to maintain the quality of its APIs and generic formulations. More than 50 per cent share of exports is by way of dosage forms. Indian companies are now seeking more Abbreviated New Drug Approvals (ANDAs) in USA in specialized segments like anti-infective, cardio vascular and central nervous system groups. India currently exports drug intermediates, Active Pharmaceutical Ingredients (APIs), Finished Dosage Formulations (FDFs), Bio-Pharmaceuticals and Clinical Services to various parts of the world.

#### **Key Strengths of Pharma Sector:**

1. Low cost of innovation/manufacturing/Capex costs/expenditure to run a cGMP compliance facility.
2. Low cost scientific pool on shop floor leading to high quality documentation.
3. Proven track record in design of high tech manufacturing facilities.
4. Excellent regulatory compliance capabilities for operating these assets.
5. Recent success track record in circumventing API/formulation patents.
6. About 95 per cent of the domestic requirement being met through domestic production.
7. India is regarded as a high-quality and skilled producer in the world.
8. It is not only an API and formulation manufacturing base, but also as an emerging hub for: Contract research, Bio-technology, Clinical trials and Clinical data management.
9. The country has the distinction of providing quality healthcare at affordable prices.

The trigger for the development of the generics market in the US came in the form of legislative action initiated in the first half of the 1980s. The Drug Price Competition and Patent Restoration Act of 1984 created opportunities for marketing of generics or the so-called abbreviated new drug applications (ANDAs). The Hatch-Waxman Act established the ANDA approval process, which allows lower-priced generic versions of previously approved innovator drugs to be brought into the market.

Similarly Europe is emerging as a key market and a potential growth driver. The governments in Europe are trying to reduce healthcare costs by embracing generic drug companies. India has had a unique position among the countries in the developing world for it has a strong generic pharmaceutical industry, which has been able to provide medicines at prices that were amongst the lowest in the world. Much of the credit for this development goes to the Patents Act that India has enacted from time to time. Strengthening of patent laws has helped India in increasing the investments by foreign firms in the Indian market.

The Pharmaceutical industry in India is the world's third-largest in terms of volume and stands 14th in terms of value. The demand for pharmaceutical products in India is significant and is driven by many factors like low drug penetration, rising middle-class & disposable income, increased government & private spending on healthcare infrastructure, increasing medical insurance penetration, changing demographic pattern and rise in chronic lifestyle-related diseases; adoption of product patents, and aggressive market penetration driven by the relatively smaller companies. The Pharmaceutical industry in India meets more than 70% of the country's demand for bulk drugs, drug intermediates, pharmaceutical formulations, chemicals, tablets, capsules, orals and injectables.

### **Overview of Pharma Industries in SME sector China**

The pharmaceutical industry is one of the leading industries in People's Republic of China. The Chinese healthcare system is experiencing unprecedented change and growth. As government-led healthcare reform aims to establish a more transparent, tightly controlled and patient-oriented system, pharmaceutical companies, distributors and hospitals forced to go through dramatic changes, which, while challenging, could bring unprecedented opportunities. As part of this healthcare reform, approximately 30 percent of the basic government healthcare organizations have implemented the national essential drug list (EDL) system and another 60 percent are in the process of implementing the system. Because the system involves a structured bidding process, the average drug price has decreased by 25 to 30 percent. With the development of basic healthcare organizations, including community healthcare centers (CHCs) and rural healthcare service stations, the pharmaceutical industry is poised for rapid growth. Pharmaceutical companies should seize the opportunities before them by improving their sales. China's drug distribution market is also experiencing change in the form of rapid integration. Mergers and acquisitions have resulted in a top tier of powerful, large distributors. Facing heavy market pressures and numerous regulations, these distributors will be challenged to successfully optimize their distribution capabilities in an expanding network while, at the same time, explore innovative value-added services in response to shrinking profits. Hospitals will also be affected, as rationalized drug prices will lead to sharp revenue declines for them. As a result, they should focus on service management improvements and new sources of revenue. Dramatic changes are taking place within China's healthcare ecosystem due to healthcare reforms, expansion of government investment in healthcare and remarkable growth in healthcare demand – sparked partly by the improvement of urban and rural living standards. All these changes are further impacted by flourishing growth in the rural market, improvements in healthcare affordability and operation of the EDL system.

The backbone of the China's pharmaceutical Industry are Generic drugs. China is becoming a strategic player in the pharmaceutical market, both as a consumer country and as a growing and upgrading industrial platform. Chinese pharmaceutical market has made remarkable development, and its scale has increased rapidly. Growth prospects in China's pharmaceutical industry are promising. Most of the rise in domestic production is coming from increased manufacture of generic and non-branded drugs and vitamins, produced both to feed rising domestic demand and for export. Domestic production is mostly of bulk and commodity products — including aspirin, paracetamol and penicillin. Foreign companies dominate the branded market in China, with their output largely produced in joint ventures with Chinese partners.

While the government is keen to encourage the development of the domestic pharmaceuticals sector, weak intellectual property protection and fierce price competition between companies making largely the same range of generic products has contributed to declining profitability in the last few years. This is making it hard for companies to afford or justify long-term investments in research and development. While various foreign companies in the sector have established research facilities in China, few domestic businesses have invested significantly in researching or developing new drugs.

### **Overview of Textile Industries in SME sector in India**

The history of textiles in India dates back to the use of mordant dyes and printing blocks. The diversity of fibres found in India, intricate weaving on its state-of-art manual looms and its organic dyes attracted buyers from all over the world for centuries. India saw the building up of textile capabilities, diversification of its product base, and its emergence, once again, as an important global player. The Indian Textiles Industry has an overwhelming presence in the economic life of the country. Apart from providing one of the basic necessities of life, the textiles industry also plays a pivotal role through its contribution to industrial output, employment generation, and the export earnings of the country. The textiles sector is the second largest provider of employment after agriculture. Thus, the growth and all round development of this industry has a direct bearing on the improvement of the economy of the nation.

The textile industry in India occupies a unique position in our economy contributing to nearly a third of the country's export earnings. This industry includes manufacturers, suppliers, wholesalers and exporters of Cotton Textiles, Handloom, and Woolen Textiles etc. From the production of textile machinery and equipment, dyes and raw materials to the delivery of finished textiles, fabrics and garments, the textile industry in India has the vast potential for creation of employment opportunities. The number of textiles manufacturers, suppliers, wholesalers and textiles exporters in India has increased rapidly after independence. Today, handloom and cotton textiles exports in India is counted among the most important sectors.

India is the second highest producer of cotton after China contributing world textile production. In case of jute, India is the largest producer of world jute production. In case of silk, India is a distant second to China, contributing the world production. The cotton textile industry is one of the most important sectors that affect the economy of the country as a major chunk of Indian population is dependent on this sector for their livelihood. Although this sector is very critical, only a few studies have been carried out to appreciate the effectiveness of this sector in the post-liberalization period, as liberalization has changed the whole economic scenario of the country. India's textile industry is also significant in a global context, ranking second to China in the production of both cotton yarn and fabric and fifth in the production of synthetic fibers and yarns. It can be inferred that one out of every six Indians is directly or indirectly associated with this industry. This industry offers one of the most basic needs of the people i.e., clothing and helps in improving the quality and standard of life. From the production of raw input to the delivery of the finished products with substantial value addition at each and every stage of processing, it has a distinctive position as a self-reliant industry of the Indian economy. Its vast potential for creation of employment opportunities in the agricultural, industrial, organized and decentralized sectors and rural and urban areas, particularly for women and the disadvantaged is noteworthy. The industry has a great advantage of availability of low-cost enormous network of skilled human resource, flexibility in production processes and long experience with US and European Union. The low-wage structure in India has also caused a shift in production of textiles from developed countries to India.

Textile industry offers one of the most basic needs of the people i.e., clothing and helps in improving the quality and standard of life. From the production of raw input to the delivery of the finished products with substantial value addition at each and every stage of processing, it has a distinctive position as a self-reliant industry of the Indian economy. Its vast potential for creation of employment opportunities in the agricultural, industrial, organized and decentralized sectors and rural and urban areas, particularly for women and the disadvantaged is noteworthy.

The Governments, both Central and State, play a major role in the development of the Textile sector in India. The Government's role extends to a range of activities such as price support to cotton and jute, incentives for investments in technology up-gradation and modernisation, setting up of world class Integrated Textile Parks, implementation of Technology Mission on Cotton, Jute and Technical Textiles, development of mega clusters for powerlooms, handlooms and handicrafts, development of handlooms, handicrafts, sericulture and wool sub-sectors by implementing a number of schemes, implementation of welfare schemes for handloom weavers and handicrafts artisans and promoting skill development of textile workers in collaboration with the industry. The Government is also providing a number of incentives for export of textile products. A large network of Government Offices, public sector enterprises, textile research associations, textile design and educational institutions various textile industry associations, Export Promotion Councils etc. provide a robust institutional framework for the development of the textile sector. During the post- quota period, India's competitors, viz, Bangladesh, China, Pakistan and Vietnam could achieve higher export growth rate than India due to their better competitiveness. One of the major strategies adopted to increase exports is to tap new markets. As part of this strategy, mega textile shows have been held to capture new markets in Japan, South Asia, Australia, Latin America and South Africa.

The textiles and clothing industry are dominated by small, fragmented and non-integrated units with the exception of spinning sector. The spinning segments production is dominated by large units and has been able to undergo significant modernization at a rapid rate. In recent years, a trend towards consolidation and integration with the value chain upstream along with modernization in segments like garments has been witnessed. The ginning, weaving and processing sectors, on the other hand, lags behind as regards modernisation. Within the weaving sector, increasing dominance of the powerloom sector is being witnessed over the years. The garments sector is undergoing significant expansion and modernization process in recent years and this opportunity has been created through de-reservation. This industry covers a wide range of activities ranging from generation of raw materials such as jute, wool, silk and cotton to greater value added goods such as ready made garments prepared from different types of man made or natural fibers. Textile industry provides job opportunity to over 35 million individuals thus playing a major role in the nation's economy. It has 4 per cent share in GDP and shares 35% of the gross export income besides adding 14% of value addition in merchandizing sector.

**Overview of Textile Industries in SME sector in China**

The Textile Industry is a recognized national precious stone in China. Archaeological studies suggest that the first textile, different from furor skins sewn together, was felt(non-woven cloth produced by condensing and pressing woolen fibers). The locations where textile was first used are believed to be: Egypt, India, Turkey and China. Since ancient years, China was a key player in the textile market. During the Shang Dynasty (1766 BC and 1122 BC), Chinese produced and wore vivid silk tunics and ankle-legth skirts. In the Han Dynasty (220-265 CE), China started trading textile with remote buyers. The trade emerged along the Silk Road and achieved its peak between the 5th and 12th centuries CE, reaching lands as distant as Rome and Iran. The Chinese textile production and trading strongly influenced the development of the textile industry in Medieval Europe. Through Modern times, England, Italy, France, Spain, Germany and Scandinavia developed sophisticated clothing markets. Until the nineteenth century, China was the world's largest and most advanced economy. In the textile industry it was not different. China was a large, advanced textile producer. In the industrial revolution, textile production was mechanised leading to mass production and assembly line organization. Sewing machines emerged in the 19th century reshaping clothing production. During this period, Europe, especially England, achieved great efficiency gains and Chinese competitiveness lagged behind. In the end of last century, the textile industry was shaped by the effects of globalization. China has become a dominant exporter, attracting manufacturing facilities from many different sectors and geographies. Textile producers located not only in developed countries but also low income countries relocated facilities to China.

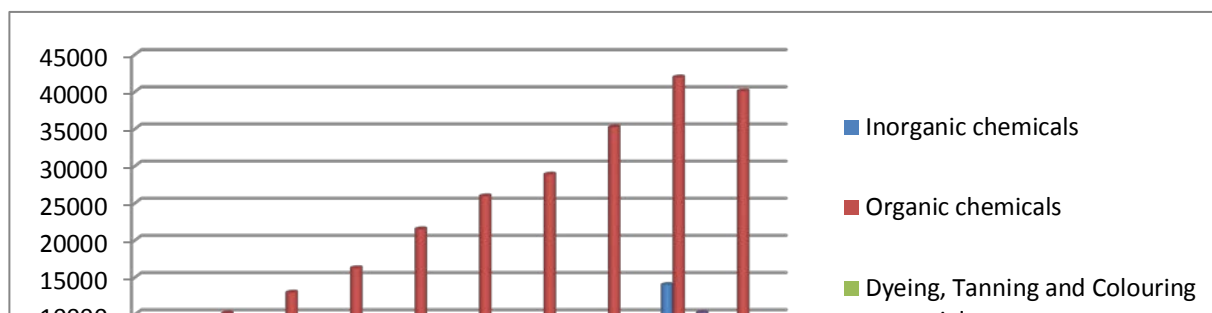
The competitiveness of China resulted in a shift in the textile production. Especially producers located in developed countries struggle to compete in the global textile industry and gradually are put out of business. Long before China opened its market, other developing countries presented similar competitiveness and threatened producers in developed markets. These producers and governments of developed countries feared loosing the market for the textile volumes produced domestically. In order to avoid or limit the negative impact that developed economies could suffer, in 1974 it was introduced the Multi Fibre Arrangement (MFA); also know as Agreement on Textile and Clothing (ATC). This policy intervention was created to protect domestic industries in major developed countries, which alleged that producers in developing countries were applying dumping. MFA imposed quotas on the year amount of textile that developing countries could export to developed markets from 1974 through 2004. It was set to expire on 1st January 2005. In the meantime, producers in developed countries had time to improve its efficiency and recover its competitiveness. However, they never managed to match the required competitiveness to remain in the market. China, as a developing country, also had to export according to the limits pre-defined in the MFA. For this reason, after the economy reform in 1979, China could enjoy only to some extent the benefits its competitiveness in the textile market.

**Prospects of chemical industries in India**

The chemical industry provides tremendous scope for Small and Medium Enterprises as well as to big players to grow because of the increasing demand of chemical products within the country and in international market. In fact global companies are also looking at India for future business deals as the country provides good quality of products and services. Government is taking measures to promote chemical sector and helping finance to improve infrastructural facilities for Small and Medium Enterprises. The Indian government with a special focus on modernization, takes an active role in promoting and advancing the domestic chemical industries. India is becoming favoured destination for global and regional chemical & pharma majors due to its manufacturing capabilities and low labour cost. In the private sector, numerous organizations, work to promote the growth of the industry and the export of Indian chemicals.

Groupwise Chemical Exports from 2001 to 2008										
Products	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2009-10	2010-11	2011-12
Inorganic chemicals	1259	1946	1949	2871	2431	3629	3317	4540	14008	5106
Organic chemicals	7624	10190	12975	16269	21504	25950	28870	35241	41940	40097
Dyeing, Tanning and Colouring material	2436	2943	3112	3111	3750	4562	5327	6556	7570	6753
Pesticides	1356	1487	1746	2096	2791	2877	5969	8611	10275	9098

source - <http://chemicals.nic.in/chem1.htm>



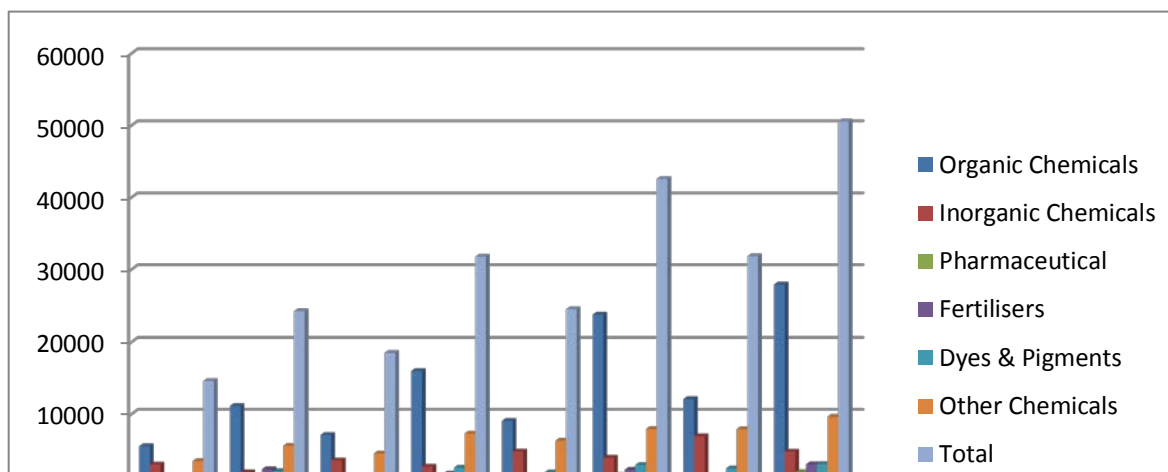
**Problems of chemical industries in India**

The major challenges faced by Chemical Industries in India are quest for feedstock and knowledge management. Traditionally naphtha-based crackers have been providing feedstock to the industry. Today, they are being replaced by new gas-based crackers. India and China will pose a stiff competition to the Middle East due to the vibrant exports and large unexplored reserves of oil and gas. Indian government is acting as a facilitator by setting up LNG terminals and acquiring equity interests in overseas proven oil reserves. This will fuel rapid growth in chemical industry. The government is also engaged in the formulation of a National Policy on Pharmaceuticals and mega-industrial chemical estates.

**Prospects of chemical industries in China**

China's continuing economic expansion, and in particular growing demands from the government to increase productivity and product quality, the general prospects for the chemical sector is good. So while growth is assured for the sector, its size and nature will depend upon a range of variables, the most important of which will be the rate at which the industry consolidates and the degree to which environmental and intellectual property rules are enforced. While active pharmaceutical ingredients represent the biggest single segment of the Chinese specialty chemicals, the domestic industry is particularly strong in the areas of textile chemicals and dyestuffs — unsurprising given China's position as the world's leading textiles producer. Exports are an important part of the synthetic dyestuffs segment, with more than one-third of the 700,000 tons produced a year sent abroad.

China's growing Trade in Organic & other Chemicals from 2002-05 (US\$ Million)								
	2002		2003		2004		2005	
	Export	Import	Export	Import	Export	Import	Export	Import
Organic Chemicals	5568	11156	7131	16006	9092	23846	12112	28020
Inorganic Chemicals	3030	1949	3595	2729	4840	3961	6944	4815
Pharmaceutical	790	1130	918	1392	1100	1572	1364	1959
Fertilisers	350	2354	800	1763	1309	2288	1011	3051
Dyes & Pigments	1390	2088	1526	2583	1927	2975	2483	3081
Other Chemicals	3490	5626	4557	7316	6312	7960	7939	9652
Total	14618	24303	18527	31789	24580	42602	31853	50578
*Calculated by C&EN								
Source:customs General Administration of the people's Republic of China								



**Problems of chemical industries in China**

Strengthening environmentally sound management of chemicals, The Chinese government has been very active in promoting legislation on the environmental management of chemicals and strictly implementing the environmental management registration of new chemical substances and imported and exported toxic chemicals. China has revised a series of administrative regulations, e.g. “the Measures on Environmental Management of New Chemical Substances”, and “the Catalog of Toxic Chemicals Strictly Restricted from Import and Export”, strengthened environmentally sound management of chemicals, and conducted a survey of pollution sources with a focus on persistent organic pollutants and mercury.

Number of changes and challenges that are reshaping the global chemical industry, opening the door for China to become an industry leader. To speed up their own development, Chinese chemical companies can leverage the best practices of Western companies—adopting some, and adapting others to their local needs. This is particularly important today, as the Chinese industry seeks to meet market demands for new chemicals while, at the same time, managing cost pressures from soaring wages and commodity price inflation. Opportunities abound, and Chinese companies are well positioned to capture them by accelerating their development cycle and preparing for tougher competition with Western players.

**Prospects of Pharma industries in India**

Rising levels of population and incomes, plus the arrival of new products, will continue to grow the domestic market. The U.S. continues to be an attractive market for Indian Pharma Companies, despite the challenges of price erosion and the launch of “authorized generics” by innovator companies. Indian companies have acquired over \$1 billion worth of pharmaceutical companies overseas in the past year and a half and should increasingly look more aggressively at countries like Brazil, Russia and the Commonwealth of Independent States, and Japan, where the markets are mature and remunerative, despite some regulatory hurdles. “The three strategic drivers for accelerating growth of the pharmaceutical industry in India are intellectual property rights-its implementation in letter and spirit; liberal drug pricing policies; and regulatory as well as labor law reforms,”. The draft National Pharmaceuticals Policy 2006 states that the government is committed to making India’s laws and policies relating to IPR, including data protection, fully compliant with TRIPs provisions. Also, new rules are being framed under the Patents Act 1970 amendments introduced from April 1, 2005, for product patents, and these will be brought into law soon. “Under these rules, it would be the endeavor of the government to simplify procedures and shorten the timelines of various approvals,”. The growing generics business of the pharma industry is expected to be the largest driver of growth in future too, with a large portion of patented drugs losing their patent privilege in the next few years.

Growth in Indian Pharmaceutical Industry						
Export and Domestic Growth from 2006 to 2010 (Rs. in crore)						
Year	exports	growth%	domestic	growth%	total	Growth%
March 2006	21230	23.23	39989	17.17	61219	19.21
March 2007	25666	20.89	45367	13.45	71033	16.03
March 2008	29354	14.37	50946	12.3	80300	13.04
March 2009	39821	35.66	55454	8.85	95275	18.65
Mar 2010	2154*	5.86	62055	11.9	104209	9.38

\*Provisional  
 Ministry of Chemicals & Fertilizers, Department of Pharmaceuticals,  
 Government of India ( Annual Report 2011-12)



### **Problems of Pharma industries in India**

India's traditional lucrative export markets is becoming a little less secure, for a number of reasons. Generic prices have not been rising in the U.S. Also, new competitive threats have arrived, such as authorized generics produced by major drug producers, new mid-sized players, Chinese and Eastern Europe manufacturers, and fully integrated generics firms, which are less reliant on Indian "back-end" businesses.

India's new patents regime is already producing changes in terms of greater commitment to discovery research within the industry, although a major shift for Indian firms away from reverse engineering will not be seen for three to four years. Rising levels of population and incomes, plus the arrival of new products, will continue to grow the domestic market.

### **Prospects of Pharma industries in China**

The Government has been implementing a large reform in the healthcare system to upgrade the quality and coverage of healthcare assistance of Chinese people. Multiple strategies are promoted, both on the demand and on the offer side. A key issue in this process is related to the transformation of the Chinese pharmaceutical industry: the Government is planning to build an innovative system, led by research-based companies. Integration of local firms with international companies has been encouraged; new specific measures were issued to stimulate foreign investments, improving the market access.

China is an important sales market for the internal, booming demand. As a result of demographic changes, improved life standards, government actions. Upgrading health care behaviours and consumptions, Chinese people are changing their attitude towards Traditional Chinese Medicine practices. Western medicines are considered more effective, especially as for life-saving drugs are concerned, antibiotics most of all. The Chinese pharmaceutical industry has been one of the most interesting target for foreign investors. Large multinational groups from North America, Western Europe, and Asia were attracted to China, as a result of a more friendly and favourable business and institutional environment. Operating in the Chinese market is still considered high-risky, time-consuming and expensive compared to other emerging markets due to stringent regulations concerning safety and efficacy. China is the frontier to develop applied research programs many multi national companies have established research centres in China. The strategic idea is to leave good R&D departments in the country of origin to develop basic programs. The implementation phases and applied research activities are carried out in China, to reduce time for drug improvement and to cut costs. The core phases related to market entry of a new drug are left in the West, partly because of stringent rules of trials required by the U.S and European agencies. All other, subsequent, trials and market extension activities are developed in China, where skilled labour workforce, talented scientists and leading University research centres are available. Technological innovation achievements in the Chinese pharmaceutical market are remarkable. Government were invested in innovation medicine in the form of "significant new drug", attracting also non-public funds into the sector. More than 50 state-level technical centers were built up in the form of "Industry-University-Institute" Cooperation programs. Considering the industrial sectors involved in patenting in China, from 2000 to 2008, pharmaceutical has been the industrial sector that applied the highest number of patents.

### **Problems of Pharma industries in China**

Competition and rivalry among foreign firms and Chinese companies is going to be strongly affected by the changing landscape in proprietary technology. At the moment, foreigners hold the monopoly in many proprietary technologies.

Due to the rapid development of the Chinese pharmaceutical market, both local and multinational pharmaceutical enterprises have made efforts to expand their presence in the market, which has lead to increasingly fierce competition. Pharmaceuticals (pharmaceutical companies) in China are facing challenges are – (a) Diversified procurement models in different regions magnify the complexities of sales and market access, (b) Increased challenges to growth: Steep competition and higher regulations on drug manufacturing and management make it more difficult to increase market share. © Downward pressure on pricing: Pressures on retail pricing and reforms to procurement processes will result in margin erosion (d)Development of new markets: The healthcare reform will lead to new opportunities in rural markets, including growth in TCM opportunities.

### **Prospect of Textile Industries in India**

India is one of the few countries that encompass the entire supply chain in close proximity, from diverse fibres to a large market. It is capable of delivering packaged products to customers comprising a variety of fibres, diverse count sizes, cloth of different weight and weave, and panoply of finishes. This permits the supply chain to mix and match variety in different segments to deliver new products and applications. This advantage is further enhanced by cost based advantages and diverse traditions in textiles.

Government of India approved 100 per cent FDI in the textile and apparel sector. Therefore the textiles industry in India is experiencing a vital increase in collaboration between global majors and domestic companies. The textiles industry in Tirupur contributes around 80 per cent of India's hosiery exports. Thus, the Government of India granted the city the status of Town of Export Excellence. The organised apparel segment is expected to grow at a compound annual growth rate (CAGR) of more than 13 per cent over a 10-year period.

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



Country-wise analysis indicates that EU remains the top destination for Indian textile export followed by USA also textile export from India to China and Turkey has increased. Apart from the above traditional markets for Indian textiles and clothing products, in the last few years Latin American countries, South Africa, East European countries and East Asian Countries, are emerging as promising destinations and potential markets for Indian textiles and clothing products due to concerted policy focus in promoting Indian textiles and clothing in new and emerging markets. Rising wages and cost of living in countries closely competing with India in the international market in the textiles and clothing sector provides a vast opportunity for India to capitalise.

**Strengths of Textile Industries** of the Indian Textile sector are strong and diverse raw-material base including cotton, jute, silk, wool, man-made fibres and other speciality fibres. High competency in cotton textiles and India is the second largest producer of cotton in the world. In India Production of raw cotton has increased from 140 lakh bales in 2000-01 to 295 lakh bales in 2009-10. Consumption cotton has increased from 173 lakh bales in 2000-01 to 250 lakh bales during 2009-10. India is the second largest producer of man-made fibre, largest producer of jute and handloom cloth and 2nd largest producer of silk. India's strong presence in the entire textile value chain from raw material to finished goods. In India spinning industry is globally competitive, average cotton spinning cost is lower than all countries including China. Even though in India the labour advantage is gradually reduce, adequate skilled man-power at a competitive rate still available. Unique strength in traditional handlooms and handicrafts. Varied design-base in India. There are extensive institutional support base present in the form of Central and State Government offices, Textile Research Associations, Textile Industry Associations, Textiles and Fashion Technology Training Institutions, Export Promotion Councils etc. Highly supportive government policy regime and very strong entrepreneurial base.

**Opportunities of the Textile are** promising domestic market due to high growth in GDP and per capita income. Favourable demographic structure with high income proposition of working population. Phasing of the quota regime and consequent improvement in market access of textile industry. Most developed countries will see continued decline of their Textile and Garment industry this will create fresh opportunity for exports of developing countries including India. Further, in the next 10 years, China's Textile and Garment export growth rate is projected to slow down because of rising costs and increasing domestic demand. The export space that is likely to be ceded by China is open to India as well as other asian countries. Supportive policy regime of the government increasing plan expenditure and generous incentives for investment and modernisation. Huge untapped potential for the development of technical textiles. Rising wages and cost of living in countries closely competing with India in the international market in the textiles and clothing sector provides a vast opportunity for India and get advantage. High spending on infrastructure and socially inclusive programmes by the Government.

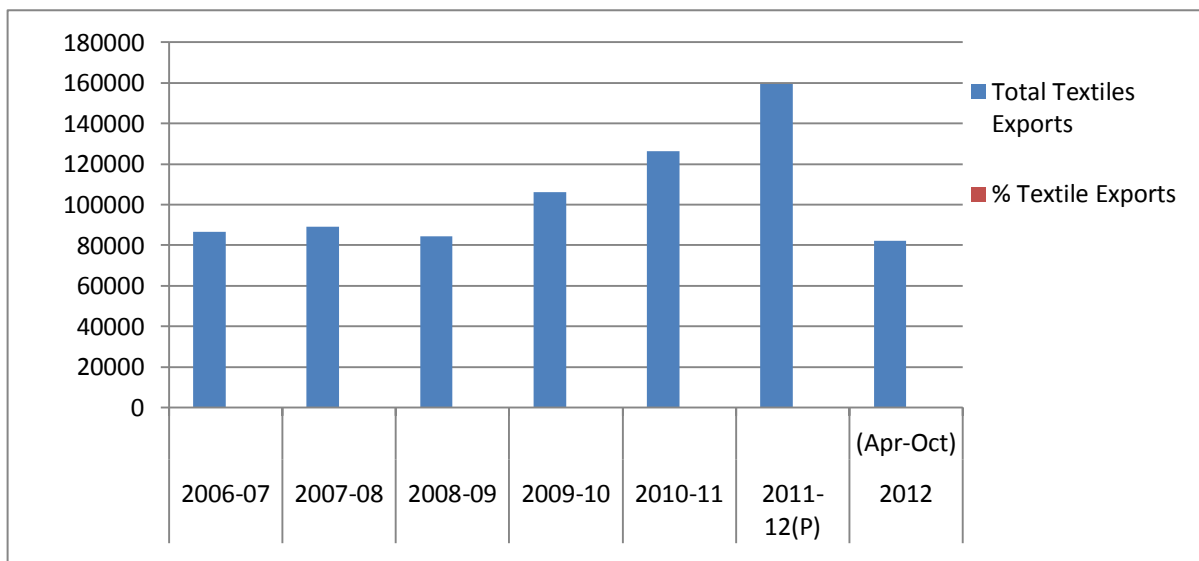
**Production of Cloth from 1995 to 2012 in India  
( Qty. in Million Sq. Mtrs. )**

Financial Year	Cotton Cloth			Blended Cloth			100% Non Cotton Cloth			Total Qty.	Growth rate
	Qty.	Growth rate	% Share	Qty.	Growth rate	% Share	Qty.	Growth rate	% Share		
1995-1996	18900	12%	60%	4024	13%	13%	8536	14%	27%	31460	12%
1996-1997	19841	5%	58%	4888	21%	14%	9569	12%	28%	34298	9%
1997-1998	19992	1%	54%	5751	18%	16%	11153	17%	30%	36896	8%
1998-1999	17949	-10%	50%	5699	-1%	16%	11896	7%	33%	35543	-4%
1999-2000	18989	6%	49%	5913	4%	15%	13724	15%	36%	38626	9%
2000-2001	19627	3%	49%	6348	7%	16%	14358	5%	36%	40333	4%
2001-2002	19769	1%	48%	6288	-1%	15%	15334	7%	37%	41390	3%
2002-2003	19296	-2%	47%	5877	-7%	14%	16289	6%	39%	41462	0%
2003-2004	18849	-2%	44%	6078	3%	14%	18007	11%	42%	42933	4%
2004-2005	20578	9%	46%	6025	-1%	13%	18388	2%	41%	44991	5%
2005-2006	23873	16%	49%	6299	5%	13%	18655	1%	38%	48826	9%
2006-2007	26225	10%	50%	6882	9%	13%	19582	5%	37%	52689	8%
2007-2008	27205	4%	49%	6888	0%	12%	21183	8%	38%	55276	5%
2008-2009	26898	-1%	50%	6766	-2%	12%	20534	-3%	38%	54198	-2%
2009-2010	28790	7%	49%	7769	15%	13%	22438	9%	38%	58996	9%
2010-2011	31201	8%	51%	8135	5%	13%	21663	-3%	36%	60999	3%
2011-2012	30570	-2%	51%	8468	4%	14%	20567	-5%	35%	59605	-2%
2012-2013	28171	-8%	56%	7699	-9%	15%	14683	-29%	29%	50554	-15%

Source : Textile Commissioner, Mumbai  
[http://texmin.nic.in/ermiu/pdata/prod\\_sec\\_cloth.asp](http://texmin.nic.in/ermiu/pdata/prod_sec_cloth.asp) on 11-9-13



India's textiles exports at a glance (Principal Commodities) (Rs. In Crore)							
Item	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	2012 (Apr-Oct)
Total Textiles Exports	86702.65	89098.15	84297.85	106045.8	126281.18	159570.55	82181.63
% Textile Exports	15.16%	13.58%	12.10%	12.54%	11.05%	10.93%	10.10%
Year 2006-07 to 2008-09 Source : Department of Commerce, NIC & DGCI&S, Kolkata (P=Provisional figures)							
Year 2009-10 to 2011-12 Source : Foreign Trade Statistics of India( Principal Commodities & Countries), DGCI&S - Export figures in Rupee - Crore							



**Problem of Textile Industries in India**

The recent global slowdown has however impacted the prospects of this sector. price of the cloth was fixed by the Government below the cost of production. Similarly under the yarn distribution scheme of 1972, the Government made it obligatory on all mills to supply 50 per cent of the production of yarn to the decentralised sector at reduced rates. The high import duty on imported cotton, upward revision of the price of the indigenous cotton and heavy excise duty on cotton cloths are other detrimental factors. Another problem of the mill sector is related to the production of controlled cloths

wherein mills are incurring huge loss. The cotton textile industry of the country is thus facing both short-term and long-term problems. Short term problem Like problems of high prices, shortage of raw materials, liquidity problems due to poor sales and accumulation of huge stocks due to poor demand in the market. The long term problems of the industry include the slow pace of modernisation, outdated technology resulting into low productivity, high cost of production, low profitability and increasing sickness of mills.

Every 3 to 4 years have seen major changes in how the textile manufacturing shifted from one set of countries to the other. Initially, US & Europe textile business moved to China, India, Bangladesh, Pakistan, Sri Lanka & other Asian Countries, so much so that Bangladesh even overtook India in terms of exports due to the special status. The focus further moved to African countries and now Burma is becoming a hot spot for textile processing, as textile business is not so sustainable in many of these countries. There are no more advantages of cheap labour and other resources, like power & water, which are almost becoming on par with US & Europe. The strict regulations on pollution norms, child labour, etc are now observed in many countries, including India as major challenges.

The standard costs of production is one of the major factors in determining inter national competitiveness in global textile and apparel industries. This include key cost categories: the price of land, price of labour, hours worked, electricity and energy costs, building costs (or rent), ocean transport, land transport and taxation. Along with this equally important are delivery times and the cost of inventories held in the factory, in transit or at the warehouse. We have strong competition with Pakistan, Bangladesh and China with respect to apparel and garment manufacturing industry. In order to improve our competitiveness and thereby increase our textile exports, we have to focus on increasing labour productivity/ reducing labour costs, improving the working hours, reducing power cost, reducing transport costs and reducing the VAT rates for apparels.

High cost of raw materials and decline in the purchasing power of people due to high inflation.Slow pace of development of infrastructure, availability of power etc. High cost of meeting strict environmental standards. Unfavourable exchange rate situation.Increased competition from competing countries through exchange rate manipulation, hidden subsidies. Preferential tariff regimes for close competitors in certain major markets. Continuation of recessive trends for an extended period will cast its long shadow on textiles industry

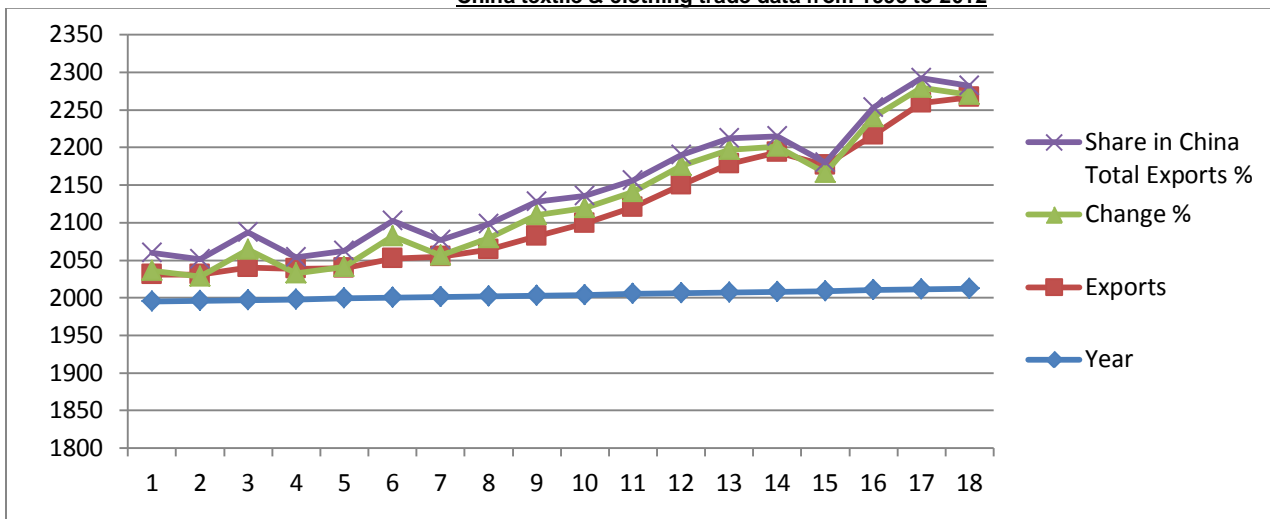
**The Weaknesses of the Textile sector** are technological backwardness especially in weaving, processing and garmenting segments. Under-developed domestic textile machinery manufacturing industry, necessitating import of modern and second-hand machinery at a large scale. Existence of huge skill deficit in the work force. Despite India being the largest producer there is a Low share in global exports. India has scale dis-advantages vis-a-vis competing countries. Weaving, processing and garmenting segments is highly fragmented. Cloth production is dominated by decentralised powerloom sector which uses obsolete technology. Low productivity of the handloom sector. Very low technology in weaving sector. India has only 2% shuttle-less looms as against the world average of 16%. Our competitors China, Pakistan and Indonesia have 15%, 9% and 9% respectively of shuttle-less looms. Inflexibility in labour laws because of which manufacturing units are not able to execute large seasonal orders. Non compliant practices by industry.

**Threats of the Textile industries** are high cost of raw materials and decline in the purchasing power of people due to high inflation. Slow pace of development of infrastructure, availability of power etc are another disadvantage. High cost involvement to adhere the strict environmental standards. Unfavourable exchange rate situation of Indian currency. Increased competition from competing countries in the course of exchange rate manipulation, hidden subsidies etc. In certain major markets Preferential tariff regimes for close competitors. As well as continuation of recessive trends for an extended period will cast its long shadow on textiles industry.

**Prospect of Textile Industries in China**

China's position in the textile industry is extremely strong and undoubtedly leads the global production. A study presented by the end of 2009 claims that, even under the negative effects of the global financial crisis, China is still the most competitive location in the world for the textile industry (China's competitiveness index for this industry was evaluated at 102.8 in 2009). During the financial crisis, while the overall decrease in Chinese exports amounted around 15%, the textile industry felt only partially the downturn effects. Textile export amounts decreased by a relatively low 7% in 2009 and it took very little time of to show significant signs of recovery. In the first 10 months of 2010, China exported more than US\$ 62 billion dollars in textile, a rise of 29% comparatively to the same period in 2009. In this same period, exports of clothes also grew, totalling more than US\$ 100, presenting an increase of nearly 20% compared to 2009. Chinese prevailing competitiveness in the textile industry is also supported by public investments and industry internal organization in China. There are cities, like Changshu City (Jiangsu province) and Dongguan City (Guangdong), which concentrate a high number of textile enterprises (2300 and 6500 textile companies respectively). Companies in these cities are co-ordinately moving to improve the industry competitiveness. In Changshu, for example, more than 50% of all integrated production textile machines meet international standards. It is an important movement, given China's accession into WTO. In addition, these textile industrial centres help to attract new companies and investors due to the existing appropriated infrastructure and business momentum.

**China textile & clothing trade data from 1995 to 2012**



(FileDate : 2011-09-21)filedate : 2013-06-03, (<http://www.ccct.org.cn/pub/s/4269/196177.html>)  
source: china customs

### **Problem of Textile Industries in China**

In global economy the key point in keeping the national competitiveness is to hold the leading position of the GVC. The core links of global apparel commodity chain (GACC) are occupied by several large magnet retailer chains, brand tycoon and MNEs which holding the core industrial technology. So on the global scale even if all trade barriers would be moved in the long run, the enterprises from developing countries are not able to enter the global market without casting the great effort in improving its position within the GVC. The leading enterprises are controlling the enterprises within the GACC by use of their capabilities in making R&D, designing, branding and market accessing. On the contrary, the enterprises which have been controlled by them are normally within the stream of high competing and low value adding process. So upgrading the positions of the enterprises and the industrial clusters in GVC should be raised to one of the most important issues. Optimising the conditions of the textile clusters. Since globalisation, small-medium-enterprises (SMEs) are difficult to achieve advantages in global competition, so that it becomes increasingly important for the SMEs to build partnership in regional scale. The practice experience of China has demonstrated industrial clustering is a feasible strategy. Previously, it has been mentioned that there are still many existing disadvantages of the Chinese textile industrial clusters. In addition, the challenges they face are aggravating since globalisation. So optimising the conditions of the current clusters should be raised to another important issue. Strengthening the innovation capabilities and establishing innovation system. China's traditional industrial clusters are generally constructed by SMEs, which are heavily lacking of the innovation ability and the establishment of innovation system. In the end of 2005, despite there are over 750 MNEs have settled their R&D centres in China, actually these enterprises have not diverted their crucial value linkages to China. The core technology lacking is the main reason for many developing countries that can only gain the least profits. Due to a period of time that China has heavily importing but superficially assimilating the foreign technology, which has resulted in technology importing are becoming a continuous process and ultimately China are increasingly dependent on foreign technology with index that shows of over 50%, however, all developed countries are less than 30%, and the U.S and Japan are now two least foreign technology dependent countries with the rate of less than 5%. If China is not going to pay increasing attention to the situation above, the Chinese division of labour in the GVC will be lock-in to the low technology involvement and the low value adding processes in a long term perspective. So, obviously, to strengthen the national innovation capabilities both in the national and in the regional level are significantly important, but, to start with, it has to be implementing in the firm level.

At the moment, the prominent problems and risks facing the operation of textile industry mainly lie in three aspects. First, the export pressure is yet to be eased fully. Although in the first two months of Q1, the industry welcomed the notablerally in exports, the growth was mainly related to non-demand factors such as low base numbers last year and massive pre-festival deliveries. On the other hand, the data concerning international macroeconomy and overseas market consumption have been read no significant recoveries, meaning that China's textile industry doesn't possess the external conditions for persistently high growth of exports. Second, the cotton issue is still highlighted. As the oversupply situation in the international cotton market remains in place, international cotton prices lack the momentum to bounce back, while domestic cotton prices in China continue to stay at high levels supported by the state purchase and reserve for cotton, which leads to a price gap of approximate 4,500 yuan/ton. Coupled with the influence from high ex-warehouse prices, long period for stock removal and instable quality of reserved cotton, cotton textile enterprises are still struggling with heavy development pressure. Third, the survival of vast micro- and small-sized enterprises still needs attention. According to a survey, currently micro- and small-sized textile enterprises are faced with obvious difficulty in development, with the rate of operation and worker return much lower than that of large-sized ones. As a result, it is a key task for textile industry to ensure the stable business of micro- and small-sized enterprises in the process of structural adjustment and transformation, in order to avoid the massive bankruptcy and the possible influence on social stability.

In the next 10 years, China's Textile and Garment export growth rate is projected to slow down because of rising costs and increasing domestic demand. The export space that is likely to be ceded by China is open to other Asian countries including India. Supportive policy regime, increasing plan expenditure and generous incentives for investment and modernisation.

### **Conclusions:-**

With consumerism and disposable income on the rise, the retail sector has experienced a rapid growth. The Indian textile industry is set for strong growth, buoyed by both strong domestic consumption as well as export demand. The Indian chemical industry can deliver on an accelerated growth phase, provided a clearly defined vision along with a strategic roadmap is developed to enable it. If this is not done, we may see the growing market increasingly being served through manufacturing done outside India. The each segments of the chemical industry have their own unique set of challenges. The industry can grow only if these individual segments overcome their challenges and move swiftly along the growth path. The industry and government will have to work in tandem to achieve the ambitious targets set for the chemical industry. Indian textile and apparel industry need to move forward with greater sense of urgency and purpose. Currently, India's total textile industry market size is only one-fourth of that of China and to bridging this gap requires concrete planning and implementation. Rising competition from Chinese imports was a cause of concern. The sector faced a lot of heat because of cheap imports from China. Besides, the slowdown in Europe and Western countries also posed a challenge and threat. As western markets are losing their appetite for imports, Chinese manufacturers are increasingly looking towards India.

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