Future of Textile Industry in China

-- DU Yuzhou, Address at 2007 ITMA World Textile Forum
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Industrial Upgrading – General Trend of Development of Chinese Textile Industry. Centering on this general trend, I will elaborate on the following four viewpoints:

I. Chinese textile industry is at critical period of upgrading

II Upgrading of Chinese textile industry is the general trend of the times led by a new cycle of scientific and technological revolution in process of economic globalization

III. Upgrading of Chinese textile industry is the objective requirement from Chinese modernization drive to comprehensively build up a well-off society

IV. Chinese textile industry will take a science-led development roadmap to head for modernization, the world and the future

I. Chinese textile industry is at critical period of upgrading

Textile industry is very important in a close-knit relationship with the people’s livelihood, a highly-internationalized sector in process of industrialization in China. Textile and clothing has been playing a very prominent “pulley” role in pulling on progress of various sectors of national economy. In 2006, the fiber processing volume totaled 30.7 million tons, employing 20 million people in the whole textile industry in China. To be more exact, Chinese man-made fiber production reached 20.25 million tons, cotton yarn 17.4 million tons, and textile and clothing export came up to $147 billion; The import of various raw materials, textile chemicals and machinery added up to $31.7 billion. Moreover, there are now over 40,000 textile enterprises in number, taking into account only the above-designated scale & size of enterprises( only the companies with individual annual sales surpassing 5 million Yuan are taken count of). Of all these enterprises, the state-owned and state stock-holding companies account for 3.19%; In view of capital structure, the state capital has dropped to 5.78 % while foreign capital and the capitals from Hong Kong, Macau and Taiwan combined to represent around one-third of the total, but the export value from the latter takes up 32.21% of Chinese total textile shipment. It is noteworthy that the export delivery value(factory shipment value) of those above-scale enterprises represents 26.9% of their output sales, but accounts for 57.89% of the whole textile export. In the Input/Output Table of National Economy (2002), the impact factor of textile and clothing industry is 1.223, taking the sixth standing in 41 sectors of national economy.

With this setting, the future development of Chinese textile industry means a lot not only to Chinese modernization process, but also to the prospect of the world textile industry. To respond to the
general trend of the world textile industrial growth driven by economic globalization and new scientific and technological revolution and to the objective requirement from comprehensively building up a well-off society, Chinese textile industry is entering a critical period for upgrading itself, and will speed up the upgrading process in the 11th Five Year Plan period. By the end of this period, the initiative innovation ability will have been largely enhanced so as to turn out a good number of technologies and brands with proprietary patents and international reputation. Furthermore, the industrial structure will have been further optimized, the entire level of technology and equipment will have been raised by a large margin, the low-end primary processing capacities characterizing low efficient, highly energy-consuming and highly pollutant operation will effectively have been restrained and eliminated, and instead, the energy-reducing and environment-friendly production will have made substantial progress so that a higher-level industrial competitive advantage system characterizing quality, innovation and quick response as a core value will have taken shape to construct an industrial growth mode in line with new industrialization roadmap.

II. Upgrading of Chinese textile industry is the general trend of the times led by a new cycle of scientific and technological revolution in process of economic globalization

2.1 The new scientific and technological revolution that began in the 20th century is inducing a transformation in traditional textile industry

In the early 20th century, the two important discoveries in physics – theory of relativity and quantum mechanics, derive a series of findings such as semi-conductor, integrated circuit, laser, magnetic and super-conductor etc., laying a solid foundation for the science of information technology, led by which there came a revolution of traditional manufacturing by adopting the core technologies like micro-electronics, photoelectron and micro-photelectron-mechanics.

In the early 20th century, the chemistry science entered “molecule design” era to ignite a series of theoretical explosions with respect to synthetic chemistry, material chemistry, life chemistry, nano-chemistry etc.. Nanometer-grade parts were made possible by assembling atoms and molecules at the cross of new century, which marks a new era of material revolution in the evolution of human society.

In the mid-20th century, from the successful construction of DNA double spiral modal, people have gradually learned biological heredity system in the molecular level to induce an important breakthrough in gene science. Thus, life science and bio-technology have greatly been pushed forward to result in a green revolution.

The revolution of new science and technology is drawing a series of transformation in textile industry. Digitalization and smartization of productive tools have changed human-machine relationship as can been proved by the fact that soft and flexible operation in the course of production take place of traditional mass production, IT makes it possible for industrial company to combine with network economy. What’s more, the interactive influence of the globalized way of life and production, coupled with the new-type correlation between producer and consumer, all pushes forward the integration of material originality and cultural creativity. As a consequence, the new added value out of the products creativity rises in the industrial growth while its dependency on raw material in traditional way of growth is reduced. With the pushing-on effect of the green revolution, the transformation in textile industry will continuously weed through the old to bring forth the new. In a word, new science and technology will make traditional textile industry take a thorough change into a rebirth, fresh in humanistic concern with regard to raw material, energy, and environment.
2.2 Global economic integration speeds up the structural adjustment of textile industry around the world

Economic integration could reduce the resistance, lower the costs for the transnational flow of production factors, and improve the TFP (Total Factor Productivity) of textile industry significantly. Among different countries, the traditional vertical linkage structure of products began to change according to the differentiation of products and the division of production process, leading to a more diversified and complicated relation of interdependence obviously.

In the new international industrial structure, it not only provides an opportunity for the developed countries to transfer their labor-intensive process abroad, to upgrade the innovation superiority on the high-end industrial chain, but also bring a challenge to the subsequent advantage in developing countries. For those developing countries, in the new global structure, they, with their comparative advantages, can not only cash in on a chance to carry on the transfer of labor-intensive processing, but also utilize the global collocated resources and knowledge overflow, realizing a transnational development markedly; meanwhile, they are facing the challenges brought by the higher innovation capacity and the monopolistic market of the developed countries.

The globalized industrial structure has always been in a highly competitive dynamic process, in which the countries, in different level of development and with different resource, have the chance to win, or confront the risk to lose at the same time. The key lies in the attitude they took toward the economic globalization: open or conservative.

In 2001, both developed and developing countries carried on a structural adjustment on the consumption of fiber products and export, and the fiber industry in developed countries has been adjusted since 2000, which presented a new characteristic of the globalized industrial structure.

<table>
<thead>
<tr>
<th>2001</th>
<th>Population %</th>
<th>Fiber Consumption %</th>
<th>Import Value of Fiber Products %</th>
<th>Export Value of Fiber Products %</th>
<th>Export Value of All Products %</th>
<th>Growth Rate of the Total Export Products (1980-2001) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed Countries</td>
<td>14.82</td>
<td>43</td>
<td>64.3</td>
<td>35.47</td>
<td>63.64</td>
<td>203</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>85.18</td>
<td>57</td>
<td>35.7</td>
<td>64.53</td>
<td>36.36</td>
<td>222</td>
</tr>
</tbody>
</table>

The fiber processing amount increased by 32% from 2000 to 2006 in developed countries, and the trade value of fiber products rose by 45%.

2.3 To integrate into the globalization system more extensively, to learn the new technology more comprehensively, are essential elements to accelerate the textile industrial upgrading in China.

By the end of 2001, the entry of WTO was an epoch-making milestone for China to promote the market-oriented reform and the integration of globalization. Although the textile industry in China embarrassed several regional trade protection and conflict in the global market, after all, the comparative advantages could be released after entering the WTO. At the same time, China's textile industry has always emphasized the utilization of the superior benefit of expanding opening-up, the speeded development of advanced productivity, and persuaded some local enterprises and governments to focus on industrial upgrading and the construction of modern enterprise system.

Source: China Textile Network Company
Due to the large-scaled technological transformation and the improvement of TFP for five years, the employees of the above-designated size enterprises, the net value of fixed assets increased by 39.5% and 67.9%, respectively. Within these six years, the newly-introduced international advanced equipments reached 23.184 billion USD, the sales, total profit and labor productivity increased by 183.8%, 199%, and 78.72%, respectively.

Unit: 100 million USD

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export of Textiles&amp; Apparel</td>
<td>543.23</td>
<td>630.18</td>
<td>804.84</td>
<td>973.85</td>
<td>1173.35</td>
<td>1470.85</td>
</tr>
<tr>
<td>Growth Rate</td>
<td>2.41%</td>
<td>16.01%</td>
<td>27.72%</td>
<td>21.01%</td>
<td>20.69%</td>
<td>25.14%</td>
</tr>
<tr>
<td>Exported Price Index (Last year: 100 )</td>
<td>99.01</td>
<td>93.36</td>
<td>103.36</td>
<td>104.41</td>
<td>107.61</td>
<td>110.14</td>
</tr>
<tr>
<td>Growth Rate of the Exported Equivalent Weight</td>
<td>3.43%</td>
<td>24.26%</td>
<td>23.57%</td>
<td>15.90%</td>
<td>12.16%</td>
<td>13.62%</td>
</tr>
</tbody>
</table>

The comprehensive comparative advantage of the human resources in China, in terms of quantity, quality and wage, would last for a long period. The cultivated area per agricultural population in China was only 0.3 hectares. Of them, nearly 150 million rural laborers need to be transferred, and the newly-emerged urban workforce could only reach 10 million people every year; in the next few years, four million graduates need a job in society every year. Currently, the rate of urbanization in China is only 43.9%.

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>India</th>
<th>USA</th>
<th>Mexico</th>
<th>Japan</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivated Area Per Capita (hectare/capita)</td>
<td>0.3</td>
<td>0.6</td>
<td>59.1</td>
<td>2.9</td>
<td>1.7</td>
<td>4.5</td>
</tr>
</tbody>
</table>

China is the world's largest producer of cotton and man-made fiber, and has already finished the construction of the largest and most comprehensive textile industrial system. Moreover, the textile-related industries develop with a high speed, and the fundamental establishment has been improved continuously. 1.3 billion populations provide China an enlarging and upgrading domestic market, along with the extended stable social environment and the opening-up policy, which are beneficial to undertake the international industrial transfer for Chinese textile industry, to absorb and learn the international advanced technology, funds, talent, raw material, management experience, and to improve the industrial innovation capability by accelerating the transnational allocation efficiency. As the international competition has been intensified, and the profit of the production with low added value shrunk, to speed up the industrial upgrading is the only way. (E12)

III. Upgrading of Chinese textile industry is the objective requirement from Chinese modernization drive to comprehensively build up a well-off society

Source: China Textile Network Company
3.1 China's sustained and rapid economic development is the first impetus for industrial upgrading of China's textile industry

From 1980 to 2000, China's per capita GDP boasted an annual growth rate of 9.85%, on average. In 2000, according to the exchange rate at that time, the per capita GDP amounted to 949 US dollars, accomplishing the two strategies: fulfilling the basic needs of people and moving into a well-off life. From 2001 to the middle of this century, China's third strategy is being implemented in order to make our people's life achieve the level of that of moderately developed countries. In 2001 -2020, as the important stage of our comprehensive construction of a well-off society, basically achieving industrialization, and quadrupling per capita GDP than that of 2000 and its people's living standards to be achieved to a well-off level top the agenda of Chinese government.

With rapid economic growth, domestic consumption of clothing and consumption structure has undergone significant changes. From 2001 to 2006, per capita consumption of fiber hiked from 8 kg to 14 kg (including technical textile consumption), an increase of 75%, according to constant prices, per capita consumption expenditure of urban and rural residents increased by 124.54%, the growth of total retail sales of consumer goods and total retail sales of clothing increased by, 80.04% and 137.99%, respectively. In terms of above-designated size enterprises’ sales value, the proportion of domestic consumption rose from 67% to 75%.

China's per capita GDP reaching 1,000 US dollars heralds that the consumption structure enters into a new stage in pursuit of quality and fashion. The population of six provinces and three cities in eastern China accounts for 34.84% of total with per capita GDP 3,547.09 US dollars in 2006 and clothing consumption expenditure per capita 9.59% higher than that of other parts in China.

In the 20 high-end department stores and fashion stores in Shanghai, 1,975 brands are sold, hereinto, Hong Kong and Taiwan and foreign brands accounted for 81%; among the 1,917 brands sold in eight comprehensive department stores, foreign and Hong Kong and Taiwan brand combined constitute 50%. It is tempting to say that the escalation of demand structure of China's textile industry has become a new industrial upgrading pulling power.

3.2 China's macro implementation of the scientific development strategies and policies, a concentrated expression of an objective need for industrial upgrading of textile industry stimulated by fast and sound development of the national economy.

The overall situation of China's economic development features a fairly rapid economic growth, improved quality and efficiency, enhanced structure coordination as well as the increasing benefits for customers. Meanwhile, Chinese government has been working hard to resolve the problems that may result in overheated economy from a too quick growth, such as, excessive growth of investment, relatively inadequate consumption, trade surplus and overstock of foreign exchange accumulation. Some of these issues will inevitably arise in the development; some are institutional problems, furthermore, some are related to the income distribution gap between urban and rural area, resources and environmental problems are also included.

The overall domestic and international situation shows that China's development is at a new historical turning point. On the basis of scientific and profound analysis of the new opportunities and challenges of economic globalization, China strives to research new tasks and new contradictions emerging from the industrialization, urbanization, marketization and internationalized development of the situation and make more efforts to promote scientific development. China already takes

Source: China Textile Network Company
changing the economic development approach and improving the socialist market economic system as a key to a fast development of the national economy.

China's textile industry will remain its ever irreplaceable historical status in China's scientific development period. In 2002, the coefficient of textile industry's influence is 1.198, garment industry 1.23, ranking the fourth of the 17 major categories in the national economy.

Among the 20 million workers of textile industry in China, 75% of which are rural labors. With expanding scale and escalating demand, China's textile industry enjoys a huge market space. At present, China is proud of its quarter share in international export market and still has stamina to maintain a moderate growth rate, which will be conducive to ease the pressure on employment and expand domestic consumption demand. meanwhile the textile industry can generate more domestic and international markets for over 700 million tons of natural fibers every year, which bears a great significance on the Chinese urbanization and strengthening agriculture, improving their lives and promoting the construction of new rural.

However, to complete the new historical mission, China's textile industry is definitely facing unprecedented challenges. Fundamental change of long-term extensive development is not overnight thing. Internationally, China's textile industry is facing more intense competition with focus gradually on new challenges of transnational production mode of advanced productive forces in terms of innovation; domestically, this industry is faced with greater restraint of low-end extensive development in implementation of the scientific strategy. The synthetical influence caused by adjustment of exchange rates, interest rates, tax rate and the increased cost of labor wages, "reducing energy saving" campaign and environmental protection as well as social responsibility, coupled with long-term weak research and brand consciousness constitutes acute challenges for the textile industry in China. Only by adhering to the policy of accelerating industrial upgrading unswervingly, can China hail a fast and sound development at a new historical starting point.

3.3 The establishment of opening up long-term strategies of China economy will bring new opportunities for industrial upgrading in the textile industry.

Since the accession to the WTO, China not only has realized its commitments on market access, tariff reduction commitments (average import tariff has been reduced to 11%), but also actively promoted a new round of negotiations on WTO free trade. The reach of China and the international bilateral or regional FTAs has been constantly expanding, and China's trade surplus and foreign exchange reserves both remain large, and these are beneficial to China's textile industry to expand the import of advanced international technology, advanced equipment, and outstanding talent and to attract new advanced manufacturing enterprises, for research institutions to accelerate industry technical transformation and enhance innovation capability. All of these are of great significance. From the first 6 years of the new century, China's textile machinery manufacturing industry has made significant progress and development, foreign capital and Hong Kong, Macao and Taiwan enterprises represent 38.05 % for the capital, 31.34% for sales and 64.3% for the value of export delivery. Advanced foreign manufacturing enterprises in China pushed the progress of domestic machinery and accessories plant realized a win-win situation.

The long strategy helps enterprises to reach the international level, and is conducive for the Chinese textile enterprises in the developing countries and developed countries to have extensive cooperation to enhance the ability of transnational allocation of resources of Chinese enterprises. Also, it is conducive for the Chinese market system to improve, and for various economic sectors of different ownerships to head for a common development so as to push forwards in depth reform in

Source: China Textile Network Company
the financial, fiscal and taxation system, government functions. It is conductive to further strengthen the fundamental role of the market in the allocation of resources and the macro-control to be more scientific.

IV. Chinese textile industry will take a science-led development roadmap to head for modernization, the world and the future

4.1 Raising industry innovation capability will be the main theme of industrial upgrading.

China's textile industry will reform into an innovative, resource-saving and environment-friendly industry relying on innovation capability. Through the combination of innovative capacity and comparative advantages, China’s textile industry will realize the increase of the labor productivity. For the entire industry, to enhance the contribution of science and technology and to enhance the contribution of the famous brands to the economic growth have been set the as the two most important goals of "11th Five-Year" development planning.

-- On the improvement of the contribution of science and technology:
In accordance with the "11th Five-Year Plan" for the development of the industry, organizing related research, including 28 process technology, materials technology, environmental technology, information technology and basic research of textile industry. Try to achieve breakthrough progress, including the research of 10 complete sets of equipments of modern technology. Strengthen the public service for SME. Establish pilot industrial innovation platforms in 135 famous industrial clusters to spread the knowledge of the modern technology and management. Strengthen product development, quality testing, information system building, training and education, modern logistics and e-commerce, developing markets, opening up and cooperation with the other services. The promotion of scientific management of the enterprises, efficiency of regional industry and industry organizations, quality, innovation, rapid response capability would also be of great importance.

-- On the contribution of famous brands:
Although the manufacturing level of China’s textile industry can meet various requirements and international standards in variety and quality, because of the lack of innovation, the core value of the brand, the domestic products stay in a basic, low-end market position in the domestic market. And in international trade, ‘made-in-China’ is mainly in low value-added processing status of basic OEM. The value of a brand derives from the material value of utility and cultural aesthetic value of creativity. As a kind of social wealth, it is a result of the process of production, distribution, exchanging, consumption and social life in interactive performance. It embodies the value of the credibility during social process. It closely relates with material production, social life, and the cultural patterns. In this way, promoting brand contribution is of great significance to enhance the China’s textile industry into a value-added industry and to enhance the international competitiveness of the products. It is also an important qualification of China's textile industry to join the globalization and constantly improve the level of cooperation and improve international competitiveness. Therefore, we must strengthen the combination of the material production and non-material production. In the current situation that international brands accelerate the process of localization, we need to accelerate the process of internationalizing local brands.

4.2 improve China's textile industry’s open economy standard.

Source: China Textile Network Company
In the new century and in new stage, China’s textile industry will continue to expand international exchanges and cooperation. We will strengthen the communication with industry organizations, wholesale and retail trades, bilateral and multilateral communication, resolve trade friction, seeking complementary advantages, upholding the principle of win-win cooperation, investment promotion, technology, brand, production, trade, exhibition, transnational procurement, international marketing, human resource, education, information and other aspects of cooperation with the whole world. We will upholding the principle of the WTO and jointly safeguard the new order of world textile’s economy. China National Textile & Apparel Council will provide advisory services to Chinese and foreign enterprises in all kinds of cooperation and investment to help foreign enterprises come to China and help Chinese enterprises to go global.

4.3 strengthening industry self-regulation
China’s textile industry will strengthen self-discipline to implement the scientific development, to build a harmonious society, to meet the need of industrial upgrading. Currently there are four major elements:

- Quality
- Intellectual Property Protection
- Social responsibility
- Domestic market and the international trade order

China’s textile industry will adhere to the scientific concept of development, and go hand in hand with peers around the world under the WTO rules in common pursuit of the new prosperity of world textile industry!