



Foreign Agricultural Service

**GAIN Report**

Global Agriculture Information Network

Voluntary Report - public distribution

Date: 4/8/1999

GAIN Report #CH9017

# **China, People's Republic of**

## **Cotton**

### **Chemical Fibers Report**

### **1999**

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#### **Report Highlights:**

**After a boom that has lasted almost two decades, China has become one of the world's largest producers of chemical fiber. China's chemical fiber industry is poised for even greater growth in the future. Consumption of chemical fiber has grown rapidly, and has now overtaken cotton. Consumption has also outstripped production, resulting in increased imports. Most imported chemical fibers are used to manufacture clothing which is subsequently re-exported.**

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Includes PSD changes: No  
Includes Trade Matrix: No  
Unscheduled Report  
Beijing [CH1], CH

## General Summary

After a boom that has lasted almost two decades, China has become the world's largest manufacturer of chemical fiber. China's chemical fiber industry is poised for even greater growth in the future. Consumption of chemical fiber has grown rapidly, and has now overtaken cotton. Consumption of chemical fiber has also outstripped production, resulting in increased imports. Most imported chemical fibers are used to manufacture clothing, which is then re-exported. [Note: the term chemical fiber is used throughout this report, since the Chinese industry classifies rayon and acetates separately from synthetic fiber, but classifies all man-made fiber as chemical fiber].

## Production

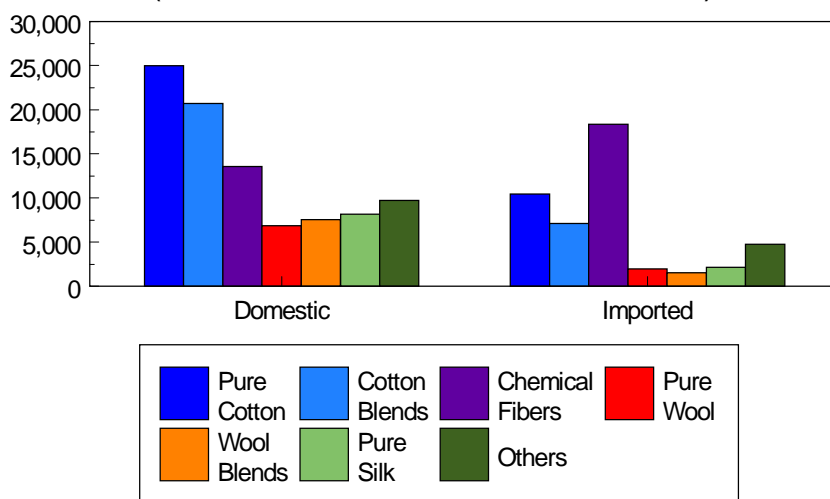
China's chemical fiber industry was established in the 1970's in order to fill a perceived shortage of domestic cotton. Since 1980, China has built twenty large facilities to produce chemical fibers and their raw materials in eastern coastal provinces, using materials, equipment and technology imported from Germany, Japan, the United States, Britain, France, Italy, Switzerland and the Netherlands. These plants boast production capacities of 20,000 MT to 250,000 MT. According to the State Statistical Bureau (SSB), total chemical fiber production reached 5.1 MMT in 1998, up 8.1 percent from 1997, making China the world's largest producer of chemical fibers. Chemical fiber now accounts for 35 percent of China's yarn production and 50 percent of its total textile output.

Production is expected to continue to grow to meet rising domestic and foreign demand.

The chemical fiber industry has received substantial state support due to its role in earning foreign exchange. In 1997 textile exports as a whole generated US\$25.6 billion in foreign exchange earnings, accounting for 58.17 percent of China's foreign trade surplus. Though valuable as a source of foreign exchange, China's textile industry as a whole has suffered considerable losses. The exception to this rule has been the chemical fiber industry,

which in 1994 posted a 64.9 percent increase in profits. This led the state to further increase investment in the production of synthetic fibers and their raw materials. Though the sector began to suffer losses in 1996, it has remained more profitable than the rest of the textile industry. For example, according to the State Textile Administration, total textile exports were down by 6 percent in 1998. Cotton textile exports dropped by 9.94 percent, while chemical fiber textile exports declined by only 1.77 percent. In 1997, chemical fiber and textile exports accounted for 33 percent by value of China's total textile exports. Most recently, the government's campaign against smuggling has allowed some recovery to take place, with the chemical fiber industry rebounding much more quickly than other sectors. Textiles are smuggled into China by companies who acquire permits and avoid paying duty by claiming that the textiles will be re-exported once they have been processed. Once the product enters the country however, it is diverted into domestic markets where it competes with

**Fabric Distribution In China's Garment Industry**  
(10,000 meters, as of November, 1998)



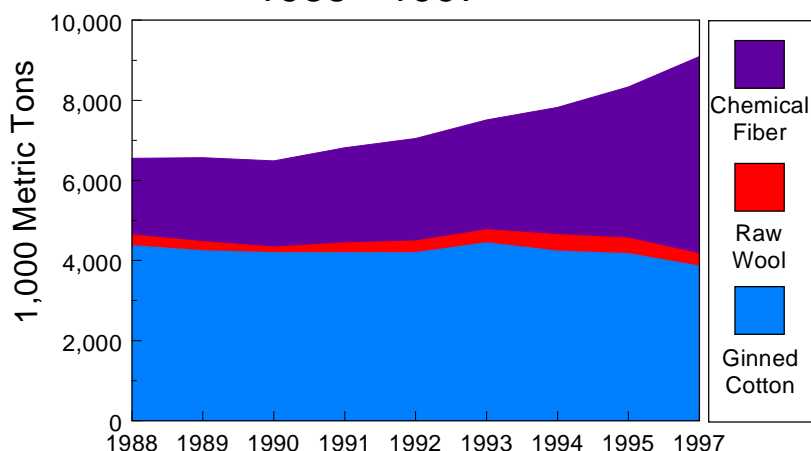
domestic product. Reports indicate that the Chinese government plans to change the system of administering the duty-free status by refunding the duty after the product is re-exported, rather than waiving it at the time of import.

The Chinese government is committed to supporting the development of the chemical fiber industry. At the seventh Beijing International Conference on Chemical Fibers in May, 1998, the government laid out its priorities for the industry. Chief among these was developing the raw materials industry, with the goal of increasing domestic production capacity so as to supply 85 percent of demand (as compared with 70 percent at present). The government also hopes to adjust the structure of the industry, placing greater emphasis on large and medium sized enterprises.

## Consumption

Roughly 70 percent of chemical fibers produced in China go into the textile industry for the manufacture of fabric. The textile industry's use of chemical fibers has expanded rapidly, and in 1997 exceeded its use of cotton for the first time. Textile use of synthetic fibers is segregated into production for domestic markets and production for export markets. Low-quality synthetics and synthetic blends are produced largely for the domestic market, while high-quality synthetic fabrics are either exported or used to manufacture garments for export. This division carries over into the sourcing of chemical fiber: high-quality products for export are typically manufactured from imported fibers and fabrics, while the lower quality products for domestic use are manufactured from domestically produced synthetics.

China's Mill Use of Fiber, by Type  
1988 - 1997



While apparel use accounts for the bulk of chemical fiber and fabric consumption, non-apparel uses are growing quickly. Demand for chemical fiber for industrial uses, such as car interiors, and for interior decoration, has grown at an average rate of 10-15 percent per year in recent years. The China National Textile Corporation (CNTC) predicts that the ratio of apparel, decorative and industrial use of chemical fibers will be 60:25:15 by the end of the century.

## Trade

Growth in China's chemical fiber and textile industry has been rapid but uneven. As a result, China is now in the position of being both one of the world's largest exporters of finished textile products, and one of the largest importers of yarn and raw materials. In fact, the fastest growing facet of the textile industry is the re-processing trade, in which imported fiber and fabrics are manufactured into apparel and re-exported. In 1997 alone, the export value of the processing trade grew by 91.8 percent.

Chemical fiber textile exports have grown in importance, and now constitute the single largest component of China's textile export industry. In 1998, exports of chemical fiber textile and apparel totaled US\$15.7 billion, compared to US\$13.4 billion for exports of cotton textiles and apparel. Not surprisingly, the Chinese government has implemented policies to encourage textile exports, including both natural and chemical fibers. Specifically, they provide favorable VAT rebates for textile exports. Early last year (January 8, 1998), a decision was made at a joint conference held by the State Economic and Trade Commission and CNTC that China would raise the textile export tax rebate from 9 percent to 11 percent. At the beginning of 1999, the government announced a further increase in the VAT rebate on textile products to 13 percent. The implementation of the new VAT rebate rate is estimated to add four billion Yuan (US\$500 million) to the export value of textiles this year. The vice-minister of the State Commission of Economics and Trade, Shi Wanpeng, has said that the increase in the VAT rebate was intended to halt the decline in textile exports.

China is also a major importer of chemical fibers and the raw materials needed to produce them. In 1997, China imported 2 million MT of chemical fiber, while exporting only 190 thousand MT. Imports currently account for roughly 30 percent of China's chemical fiber consumption. Shortages are especially acute for acrylic. Annual consumption stands at some 400-500 thousand MT, while domestic production amounts to a mere 50 thousand MT. The leading exporters of chemical fiber raw materials to China are Taiwan, South Korea and Japan. These countries account for, respectively, 34 percent, 22 percent and 12 percent of China's imports of chemical fiber. Imports of raw materials from Southeast Asian countries have increased dramatically since the onset of the Asian financial crisis, as import prices fell below domestic production costs. Some provinces have imported excessive amounts of chemical fibers, causing the domestic market for chemical fibers to remain sluggish in recent years. As a result, large stocks of domestically produced chemical fiber have accumulated and prices continue to fall. Development of acrylic production in particular, has been undermined by the effects of the Asian financial crisis, which caused the cost of imported acrylic to drop. Imports of synthetic fabric for further manufacture are also substantial, amounting to US\$6-7 billion per year over the past four years. High-quality imported fabrics are used primarily to feed the growing export trade, as only a small fraction of the imported material appears in domestic markets. In recent years, high-quality fabric apparel and accessories exports have risen to account for a total of 70 percent of the value of textile exports.

Despite the problems of the domestic industry, imports of chemical fibers and their raw materials are expected to remain strong in the future. Cotton imports are tightly restricted through a quota system that limits both the volume and the number of importers allowed to import raw cotton. Chemical fibers and fabrics however, face no such restrictions. Although tariffs for chemical fiber and fabrics remain higher than cotton, those imported for processing and re-export can enter the country duty-free. The government also gives preferential treatment to imports of raw materials used in manufacturing chemical fibers. The government implemented a round of tariff cuts on all chemical fiber materials and products in 1997, and then making further cuts for textiles in general, in January, 1999. (Note: tariffs on chemical fibers vary widely. For detailed information see the attached table).

## Tables

**Table 1. Fabric Distribution**

China's Fabric Distribution In the Garment Industry (as of Nov., 1998)				
(10,000 Meters)				
Fabric Type	Domestic Fabric Production	Imported Fabric	Total Fabric Quantity	Domestic Supply Capacity Rate
Pure Cotton	24,987.1	10,471.4	35,458.5	70.47%
Cotton Blends	20,719.9	7,128.3	27,848.2	74.40%
Pure Wool	6,873.7	1,985.6	8,859.3	77.59%
Wool Blends	7,578.0	1,536.5	9,114.5	83.14%
Pure Silk	8,180.0	2,170.0	10,350.0	79.03%
Linen and Blends	525.7	8.2	533.9	98.46%
Chemical Fiber	13,585.9	18,349.6	31,935.5	42.54%
Others	9,227.0	4,750.0	13,977.0	66.02%
Total	91,677.3	46,399.6	138,076.9	66.40%
Source: China Garment Industry Association's Survey, "China Textile News", November 11, 1998				

**Table 2. Mill Use of Fiber**

China's Mill Use of Cotton, Wool & Chemical Fiber						
CY 1988 - 1997 (1,000 Tons)						
Year	Ginned Cotton	Percent of Total Mill Use	Raw Wool	Percent of Total Mill Use	Chemical Fiber	Percent of Total Mill Use
1988	4,372.94	66.7%	293.01	4.5%	1,891.68	28.8%
1989	4,244.24	64.6%	255.53	3.9%	2,067.95	31.5%
1990	4,193.79	64.6%	171.13	2.6%	2,125.51	32.7%
1991	4,194.79	61.5%	275.15	4.0%	2,346.16	34.4%
1992	4,195.79	59.5%	319.61	4.5%	2,532.82	35.9%
1993	4,443.01	59.1%	352.08	4.7%	2,719.31	36.2%
1994	4,240.03	54.2%	439.36	5.6%	3,148.49	40.2%
1995	4,170.00	50.0%	420.06	5.0%	3,750.00	45.0%
1997	3,864.02	42.5%	336.12	3.7%	4,900.00	53.8%
Source: Almanac of China's Textile Industry, 1996. No official data are available since 1994. 1995 and 1997 chemical fiber data were from the Seventh Beijing International Conference on Man-Made Fibers held on May 26, 1998; and the cotton and wool data were estimated by Post.						

**Table 3. Production of Major Fibers**

China's Major Fiber Production (1988 - 1998) (1,000 Metric Tons)						
Year	Ginned Cotton	Percent of Total Fibers	Raw Wool	Percent of Total Fibers	Chemical Fiber	Percent Of Total Fibers
1988	4,149	73.0%	236.0	4.2%	1,301.2	22.9%
1989	3,788	68.6%	253.5	4.6%	1,478.2	26.8%
1990	4,508	70.3%	256.0	4.0%	1,648.2	25.7%
1991	5,675	72.4%	256.0	3.3%	1,910.4	24.4%
1992	4,508	65.6%	255.7	3.7%	2,111.2	30.7%
1993	3,739	59.7%	259.3	4.1%	2,268.7	36.2%
1994	4,341	58.5%	279.2	3.8%	2,803.3	37.8%
1995	4,768	56.2%	307.3	3.6%	3,411.7	40.2%
1996	4,203	50.7%	333.4	4.0%	3,754.5	45.3%
1997	4,603	47.7%	326.3	3.4%	4,716.2	48.9%
1998	4,400	44.8%	320.0	3.3%	5,100.0	51.9%
Source: State Statistic Year Books (1989-1998) and Almanac of China Textile Industry (1993-1996). 1998 cotton and chemical fiber data are from SSB's Statistical Communiqué of the PRC on the 1998 National Economic and Social Development released on February 26, 1999. 1998 wool datum is Post estimate.						

**Table 4. Tariff rate and VAT on imported man-made fiber, thread, yarn and fabric**

HS CODE	PRODUCT	TARIFF RATE M.F.N.	TARIFF RATE GENERAL	VAT RATE
5401. 1010	Sewing thread of synthetic filaments, not for retail	20	70	17
5401. 1020	Ditto, for retail	20	90	17
5401. 2010	Sewing thread of artificial filament, not for retail	13	35	17
5401. 2020	Ditto, for retail	13	90	17

5402. 1010 thru 1090	Synthetic filament yarn (other than sewing thread), not for retail, including synthetic monofilament of less than 67 decitex of nylon or aramides	18	70	17
5402. 2000	Ditto, but high tensity yarn of polyesters	20	70	17
5402. 3111 thru 3190	Textured yarn of nylon, aramides or others	14	80	17
5402. 3211 3212 3213 3219	Textured yarn of nylon, aramides or others	15	80	17
5402. 3290	Ditto, of polyester or others	15	70	17
5402. 3310	Ditto, of elastic filament	22	90	17
5402. 3390 thru 3990	Ditto, of polypropylene , polyurethane or other	17	70	17
5402. 4110 thru 4190	Ditto, of nylon, of aramides or others	16	70	17
5402. 4200	Ditto, of polyester	18	70	17
5402. 4300 thru 4990	Ditto, of polypropylene polyurethane or other	20	70	17
5402. 5110 thru 5190	Ditto, of nylon, of aramides or other	16	70	17
5402. 5200 thru 5990	Ditto, of polyester, polypropylene, polyurethane or other	20	70	17
5402. 6110 thru 6190	Ditto, of nylon, of aramides or other	18	70	17
5402. 6200 thru 6990	Ditto, of polyester, polypropylene, polyurethane or other	20	70	17

5403. 1000 2000 3100 3200	Artificial filament yarn, including artificial monofilament of less than 67 decitex, not for retail	14	35	17
5403. 3310	Ditto, of viscose rayon	15	40	17
5403. 3390 thru 4900	Ditto, and of cellulose, and others	14	35	17
5404. 1000 9000	Synthetic monofilament of 67 decitex or more and of cross-sectional dimension not exceeds 1 mm; strip of synthetic textile materials width not exceeding 5mm	22	80	17
5405. 0000	Artificial monofilament of 67 decitex or more and with cross-section not to exceeds 1mm, strips of artificial textile materials of an apparent width not exceeds 5mm	17	80	17
5406. 1000	Synthetic filament yarn, for retail	20	90	17
5406. 2000	Artificial filament yarn, for retail	17	90	17
5407. 1010 thru 4300	Woven fabrics of synthetic filament yarn, including woven fabrics obtained from materials of HS Code lines of 5404	36	130	17
5407. 4400	Printed, other woven fabrics containing 85% or more textured polyester filament	33	130	17
5407. 5100 5200 5300	Unbleached, bleached, dyed or of yarns of different colors	36	130	17



5407. 5400	Printed, other woven fabrics containing 85% or more polyester filament	33	130	17
5407. 6100 6900 7100 7200 7300	Containing 85% or more non-textured polyester filament, synthetic filament, unbleached, bleached, dyed or of yarns of different colors	36	130	17
5407. 7400	Printed, other woven fabrics containing 85% or more synthetic filament, mixed mainly or solely with cotton	33	130	17
5407. 8100 8200 8300	Unbleached, bleached, dyed or of yarns of different colors	36	130	17
5407. 8400	Printed & other woven fabrics	33	130	17
5407. 9100 thru 9300	Unbleached, bleached, dyed or of yarns of different colors	36	130	17
5407. 9400	Printed	33	130	17
5408. 1000 thru 2390	Woven fabrics of artificial filament yarn, including woven fabrics obtained from materials of HS Code lines of 5404	34	130	17
5408. 2410 thru 2490	Ditto, of yarns of viscose rayon, cellulose acetate and other woven fabrics	31	130	17
5408. 3100 thru 3300	Unbleached, bleached, dyed or of yarns of different colors	34	130	17
5408. 3400	Printed	31	130	17
5501. 1000	Synthetic filament tow of nylon or other polyamides	17	70	17

5501. 2000	Ditto, of polyesters	18	70	17
5501. 3000	Ditto, of acrylic or modacrylic	13	35	17
5501. 9000	Ditto, of others	18	70	17
5502. 0010	Cellulose diacetate filament tow	12	40	17
5502. 0090	Other artificial filament tow	11	35	17
5503. 1000	Synthetic staple fibers, not combed or otherwise processed for spinning; of nylon or other polyamides	17	70	17
5503. 2000	Ditto, of polyesters	18	70	17
5503. 3000	Ditto, of Acrylic or modacrylic	13	35	17
5503. 4000	Ditto, of polypropylene	17	70	17
5503. 9000	Other	18	70	17
5504. 1000	Artificial staple fibers, not combed or otherwise processed for spinning; of viscose rayon	9.6	35	17
5504. 1000 9000	Ditto, others	11	35	17
5505. 1000	Waste, including noils, yarn waste and garnetted stock of synthetic fibers	14	70	17
5505. 2000	Ditto, of artificial fibers	11	70	17
5506. 1000	Synthetic staple fibers, of nylon or other polyamides	17	70	17
5506. 2000	Ditto, of polyesters	18	70	17
5506. 3000	Ditto, of acrylic or modacrylic	13	35	17
5506. 9000	Ditto, other	18	70	17

5507. 0000	Artificial staple fibers	10	35	17
5508. 1000	Sewing thread of synthetic staple fibers	22	90	17
5508. 2000	Sewing thread of artificial staple fibers	18	70	17
5509. 1100 1200	Yarn of synthetic staple fibers, single and multiple yarns, not for retail	20	90	17
5509. 2100 thru 9900	Yarn of synthetic staple fibers, single and multiple yarns, not for retail	22	90	17
5510. 1100 thru 9000	Yarn of artificial staple fibers, not for retail	18	70	17
5511. 1000 2000	Yarn of man-made staple fibers for retail	22	90	17
5511. 3000	Of artificial staple fibers	18	90	17
5512. 1100 thru 9900	Woven fabrics containing 85% or more of synthetic staple fibers,	34	130	17
5513. 1110 thru 3900	Woven fabrics containing less than 85% of synthetic staple fibers	34	130	17
5513. 4100 thru 4900	Of polyester staple fibers & other woven fabrics	31	130	17
5514. 1110 thru 3900	Woven fabrics containing less than 85% of synthetic staple fibers, mixed mainly or solely with cotton, weighing exceeding 170g/m2	34	130	17
5514. 4100 thru 4300	Ditto, of polyester staple fibers	31	130	17
5514. 4900	Other woven fabrics	34	130	17
5515. 1100 thru 9900	Other woven fabrics of synthetic staple fibers	34	130	17

5516. 1100 thru 1300	Woven fabrics of artificial staple fibers	31	130	17
5516. 1400	Ditto, printed, containing less than 85% of artificial staple fabrics, mixed mainly or solely with man- made filaments	28	130	17
5516. 2100 thru 2300	Ditto, unbleached, bleached or dyed.	31	130	17
5516. 2400	Ditto, printed	28	130	17
5516. 3100 thru 3300	Ditto, unbleached, bleached or dyed.	31	130	17
5516. 3400	Ditto, printed, containing less than 85% of artificial staple fabrics, mixed mainly or solely with wool or fine animal hair	28	130	17
5516. 4100 thru 4300	Ditto, unbleached, bleached or dyed.	31	130	17
5516. 4400	Printed	28	130	17
5516. 9100 thru 9300	Ditto, unbleached, bleached or dyed.	31	130	17
5516. 9400	Printed	28	130	17