Textile Consumer™

Published by Cotton Incorporated *Volume Forty-One* *Spring 2007*

The Chinese Supply Chain for Cotton

As the Chinese economy has become more market-oriented in recent years and since China joined the World Trade Organization in 2001, Chinese mill demand for cotton has grown rapidly. This growth is reflected throughout the supply chain, with increases in installed textile machinery, accelerated yarn, fabric, and apparel production, and growing consumer demand. Given all of these drivers for cotton growth, the Chinese supply chain may have the potential for still more expansion in cotton consumption.

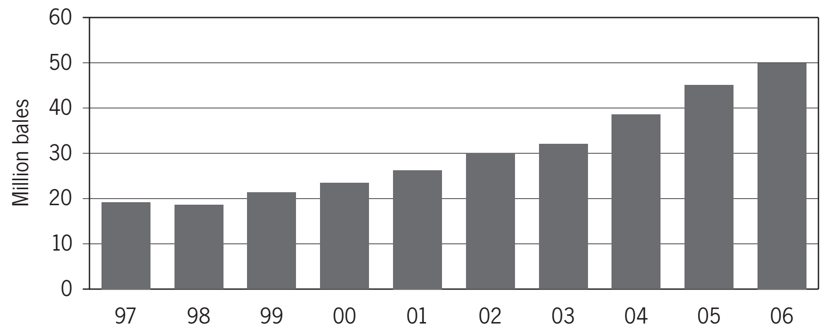
Cotton Demand Understated?

China remains the largest mill consumer of cotton in the world, using an estimated 50 million bales in 2006/07. Mill demand has mushroomed over the last decade, rising an average 9.6% per year, while cotton mill demand in the rest of the world expanded less than 1% per year. As a result, the decade saw China's share of global cotton use jump from 22% to 41%. These phenomenal and unprecedented growth rates understandably have been questioned by many as overstated or unsustainable. However, analysis by Cotton Incorporated shows that the current level of mill demand is justified and that demand is likely to expand further in coming years, owing to upstream and downstream supply-chain pressures.

(continued on page 2)

Cotton Consumption in Chinese Textile Mills

1997 through 2006



Source: USDA.

Environmentally Friendly Apparel: The Consumer's Perspective

As "environmentally friendly" claims and products have increased in the marketplace, consumers have become more aware of eco-friendly apparel. However, the increase in awareness does not translate into increased importance or changed purchase intent among consumers. Both Cotton Incorporated's research and industry studies indicate that when deciding to buy apparel, consumers continue to consider other factors, such as price, more important than environmental impact.

Cotton Incorporated's Lifestyle Monitor™ in 2006 surveyed 4,000 U.S. consumers aged 16 to 70; the survey was conducted via telephone by Bellomy Research. In addition, 2,800 U.S. consumers aged 18 to 54 were surveyed on specific issues in March and December 2006; the survey was conducted via the Internet by Bellomy Research.

Awareness Increases as Action Declines

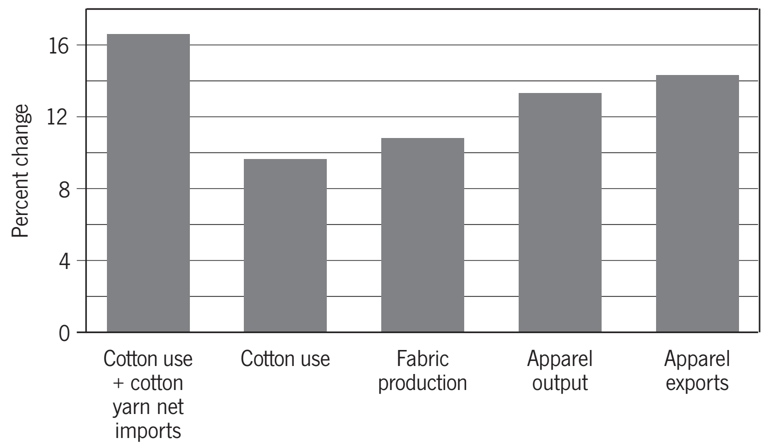
Consumers' awareness of environmentally friendly products has increased in the past few years, as more products are labeled with "green" terminology. In a December 2006 survey, one third of consumers said they were more aware of organic apparel and home textiles "today" than "a year ago." However, the choice to actively seek out environmentally friendly clothing remains restricted to a small niche group of consumers. When asked how much effort they put into finding environmentally friendly clothing, only 5% of consumers said they put a lot of effort into looking, statistically the same share as in a March 2006 survey. In addition, half as many consumers (15%, down 16 percentage points in nine months) said they would be bothered if they pur-

(continued on page 3)

Mill Capacity

Mill demand for cotton depends on having the equipment in place to process the raw fiber. Measuring and tracking growth in investment in equipment and in the installed capacity of textile machinery — particularly spinning positions—can yield insight into how much fiber Chinese mills are capable of processing into yarns and whether that capacity is growing. At the start of the supply chain, China's fixed-asset investment in new textile and apparel equipment and plants surpassed 183 billion yuan (or $22.9 billion) in 2006, reflecting 28% growth from 2005. These growth rates exceed the average annual expansion of mill demand for cotton, suggesting that textile investment will continue to support expanding mill demand.

Average Annual Growth Rates in China's Cotton Supply Chain, 1997 through 2006



Sources: USDA and China National Bureau of Statistics.

The Pull of Downstream Demand

Further along the supply chain, various demand drivers can pull cotton through the pipeline. Production of yarn, cotton fabric, and apparel are indicators of demand for cotton. At the end of the supply chain, final demand for Chinese textiles and apparel is measured by domestic retail demand and exports. Since 1997, China's constant annual growth rate for apparel exports has been 14.3%, faster than the growth in any other segment of the supply chain, indicating latent demand to accelerate growth in the upstream segments. Although China has reported domestic retail apparel sales for only two years, volume climbed 21.8% from 2005 to 2006, faster than either exports or upstream supply-chain segments.

In 2006, China produced 17.8 billion apparel items — roughly three items for every person on the planet.

Apparel output, the next upstream component in the supply chain, similarly saw fast growth over the last decade. Production of garments climbed an annual average of 13.3%, driven by the robust export and retail demand. In 2006, China produced 17.8 billion apparel items — roughly three items for every person on the planet. For the first quarter of 2007, apparel output climbed 20.5% over the same period last year. This rate was faster than growth in the upstream segments and in exports, but slower than downstream growth in domestic retail sales, as the percentage of China's apparel output moving into the Chinese retail market, rather than to export, has started to grow.

Further upstream, growth in garment manufacturing is driving fabric production. Over the last decade, cotton fabric production climbed an average of 10.8% annually, faster than growth in upstream cotton mill demand, but slower than growth in downstream components. In turn, cotton mill use climbed an average of 9.6%. At first blush, the relatively slower growth in cotton demand over the last decade could suggest a loss in cotton's share of apparel exports and sales in China. However, when China's cotton use and net trade in cotton yarn and thread are combined, the average annual growth over the last decade reaches 16.6%, higher than the downstream growth rate for apparel exports, implying that cotton has increased share in apparel output and exports over the decade.

Conclusion and Forecast

Over the last decade, mill demand for cotton clearly has been unable to keep up with faster growth in other segments of the Chinese supply chain. As a result, China's imports of cotton yarn and thread have climbed nine of the last ten years, reaching 882,000 tons in 2006, making China the world's largest importer of cotton yarn and thread. Early forecasts suggest Chinese mill demand may reach 52.6 million bales in 2007/08. Although this is likely to be the world's fastest growth, it will still lag the growth in downstream segments of China's cotton supply chain, suggesting that China could import a record volume of cotton yarn again in 2007, contributing to robust cotton mill usage in yarn-exporting countries.

Cotton's share of Chinese apparel exports to several key markets has climbed in recent years. In particular, cotton's share of Chinese exports to the United States climbed 11 percentage points over the last decade and is poised to reach a new record in 2007, reflecting consumers' continuing affinity for cotton apparel. As the end of the Chinese cotton supply chain has grown faster than upstream segments over the past decade, the effect of continued growth in consumer preference for cotton apparel could continue to reverberate throughout the Chinese cotton supply chain.

Environment-Friendly Apparel *(continued)*

chased an item they believed to be environmentally friendly and later discovered that the claim was incorrect.

Ironically, as environmental claims have become more common and shoppers have become more aware, consumer concern about environmental issues in their purchase decisions has declined. The majority of consumers are concerned about some environmental issues, such as child labor (67%) and water quality (64%); however, from March to December 2006, consumer concern about issues such as food additives and fabric treated with dyes declined. Significantly more consumers said they were concerned about rising prices at retail than the environmental friendliness of their food or clothing.

Relative Importance Remains Low

Consistently, the majority of consumers are most concerned about price when shopping for clothing,

> ***National research conducted by Frank About Women indicates that when women are deciding to buy apparel, the most important factors they consider are price, quality, and style. Most women say they don't want to change their lives, sacrifice quality, or pay more for green products.*** —franklyspeaking, vol. 13

while only a small share consider environmental issues to be important. According to Cotton Incorporated's Lifestyle Monitor™, environmental friendliness has remained the least important factor in consumers' apparel purchase decisions for over a decade. When purchasing apparel, 87% of consumers consider price to be the most important factor, followed by fabric content (51%), and laundering instructions (50%). Fewer than a third (30%) consider environmental friendliness to be important, down significantly from 1995 (by 6 percentage points). Separate research by the NPD Group confirms the importance of factors such as price among apparel shoppers, finding that price is a key purchase motivator (43%), following style (62%) and comfort (44%).

Environmental Issues of Concern to Consumers

Surveyed in March 2006 and December 2006

Issue	% Responding 3/06	% Responding 12/06	Point Change
Child labor practices	66.0	66.7	+0.7
Rising prices at retail	*	64.9	*
Water quality	66.1	64.1	–2.0
Loss of rural farm land	49.9	49.6	–0.3
Pesticides to grow food crops	48.8	48.1	–0.7
Rising sea levels due to global warming	44.9	44.2	–0.7
Preservatives and additives in food	47.4	43.2	–4.2
Genetically modified plants for use in food	42.4	39.9	–2.5
Clothing or fabric treated with dyes, chemicals & bleaches	25.4	19.4	–6.0

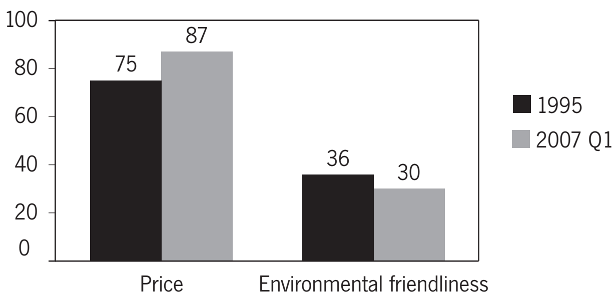
Source: Cotton Incorporated's 2006 Attitudinal Research. *Not asked in March 2006.

Consumer Confusion

Perhaps the decline in importance of environmental friendliness to consumers is due to their confusion over the profusion of "eco-friendly" claims being made at retail. For example, only one third of consumers correctly understand the terms "renewable" and "sustainable." However, consumers do relate to "natural" products, including natural fibers. According to the Lifestyle Monitor, whether or not consumers consider environmental friendliness as a purchase driver, cotton is their preferred fiber. Additional research shows that consumers consider cotton to be the safest fiber for the environment, with 66% calling it "extremely safe." Consumers even say they are willing to pay more for natural fibers such as cotton, and this willingness to pay more is significantly higher among consumers who consider the environment when shopping for clothing (72%) than among shoppers overall (62%).

> ***"All other components of the value equation being equal, price is often the deciding factor, particularly in consumer electronics, household appliances, sporting goods, outdoor grills, and of course trendy apparel."***
>
> —Marshal Cohen, Why Consumers Do What They Do (2006)

Percent of Consumers Who Consider Price or Environmental Friendliness Important When Purchasing Apparel



Source: Cotton Incorporated's Lifestyle Monitor™.

Conclusion

Although consumers are more aware of environmentally friendly apparel, those who consider it important to look for and buy such products remain a niche market. Factors such as price continue to be the driving force in most consumers' apparel purchases. However, whether or not they care about environmental friendliness, consumers continue to prefer natural fibers such as cotton.

Cotton Incorporated

World Headquarters
6399 Weston Parkway
Cary, NC 27513
Tel. (919) 678-2220
Fax (919) 678-2231

New York
488 Madison Avenue
New York, NY 10022-5702
Tel. (212) 413-8300
Fax (212) 413-8377

Los Angeles
110 East 9th Street, Suite A-792
Los Angeles, CA 90079
Tel. (213) 627-3561
Fax (213) 627-3270

Mexico City
Av. Insurgentes Sur 1605, Piso 9
Col. San José Insurgentes 03900
México D.F.
Tel. 52-55-5663-4020
Fax 52-55-5663-4023

Osaka
Osaka Kokusai Building
27th Floor
3-13, Azuchi-Machi 2-chome
Chuo-ku, Osaka, 541, Japan
Tel. 81-6-266-0707
Fax 81-6-266-0710

Singapore
250 North Bridge Road
36-02 Raffles City Tower
Singapore 0617
Tel. 65-6337-2265
Fax 65-6337-3572

Shanghai
Unit 2309 & 2310, Plaza 66
1266 Nanjing Rd (W)
Shanghai, 200040 China
Tel. 86-21-6288-1666
Fax 86-21-6288-3666

www.cottoninc.com

Textile Consumer™ is published by Cotton Incorporated as a service to the textile and retailing industries.