Commodity Spotlight

World Cotton Market: A Decade of Change

With the 2000 U.S. cotton harvest nearly complete, the spotlight has shifted from supply indications to demand expectations. Record global cotton consumption is forecast this season, continuing the rebound from 1998's decline in the wake of the Asian financial crisis. Although consumption by U.S. cotton mills is forecast to weaken slightly this season as a result of rising textile and apparel (clothing) imports, the United States is expected to export an above-average share of raw cotton to the world market. The result is a more robust market outlook as U.S. and world cotton stocks are expected to become tighter in the 2000/01 marketing year (August-July).

As the global cotton economy enters the first decade of the 2000's, global consumption of cotton is once more on the rebound. World cotton consumption had stagnated in the 1990's due to slow global economic growth during the early part of the decade, the collapse of the Soviet Union's textile industry, soaring polyester consumption in the late 1990's, and the Asian financial crisis which sent a shock wave through the Asian-dominated textile industry. Cotton consumption was particularly stagnant in China and Pakistan, the two leading sources of increased consumption during the 1980's. However, during 1999/2000 and 2000/2001, China and Pakistan once again lead the world in consumption growth, polyester consumption gains have slowed, and Russia's textile industry is beginning to recover. For now, world cotton consumption seems to be on an upward path, benefiting U.S. exports.

U.S. Cotton Crop Up in 2000

Despite drought conditions this summer in many U.S. cotton producing areas and the subsequent 13-percent loss in planted area, U.S. all-cotton production in 2000 is currently forecast at 17.5 million 480-pound bales, 3 percent above 1999. Although 1999 production problems were fresh in cotton producers' minds earlier this spring, the outlook for profitable alternatives was limited. The cotton marketing loan program—which supplied a significant portion of producers' incomes in 1999—also provided an incentive for U.S. farmers to plant additional area to cotton in 2000. Favorable springtime weather allowed producers to plant 15.5 million acres of cotton this year, the second-largest U.S. cotton area in nearly four decades and 4 percent more than in 1999.

The U.S. national average yield in 2000 is estimated at 622 pounds per harvested acre, above 1999 but below the 5-year average. With beginning stocks at 3.9 million bales, the latest production projection places total supplies for the 2000 season at 21.5 million bales, 2 percent above a year earlier. Total demand for U.S. cotton is also projected to climb this season, with higher exports more than offsetting slightly lower domestic mill use (projected at 10.0 million bales). U.S. cotton exports are forecast to increase significantly in 2000 to 7.6 million bales, 13 percent above last season. Smaller crops in Central Asia and West Africa—the principal U.S. competitors—and an improved outlook for world mill use are factors expected to boost foreign demand for U.S. cotton this season.

The U.S. cotton industry is beginning the new decade with a second consecutive year of growing export volume and export share, just as it was 10 years earlier. But during this time, the U.S. and global cotton markets have experienced profound changes. A decade ago, for example, China and Japan were the leading importers of U.S. cotton, but in 2000/01 Mexico and Turkey are expected to be the most important markets for U.S. cotton.

Continued growth of U.S. cotton textile and apparel imports has also placed tremendous pressure on the U.S. cotton textile industry, forcing some participants to limit output, relocate, or close. At the same time, however, more U.S. cotton is contained in these finished imported products than ever before, due largely to the North American Free Trade Agreement (NAFTA) and the Caribbean Basin Initiative. These agreements have provided a "home" for U.S. raw cotton and cotton products used in apparel manufacturing—an outlet that might otherwise not have been available. This trend is likely to continue into the foreseeable future.

Income Growth & Liberalization Fuel Changes

The shift in U.S. trade patterns since 1990 illustrates changes that have occurred in global markets during the last decade. Another example is the trend—which predates the 1990's—toward increased textile production and apparel exports by lower income countries, and the associated decline of cotton fiber use by textile mills in wealthier markets. In 1990, Japan, the

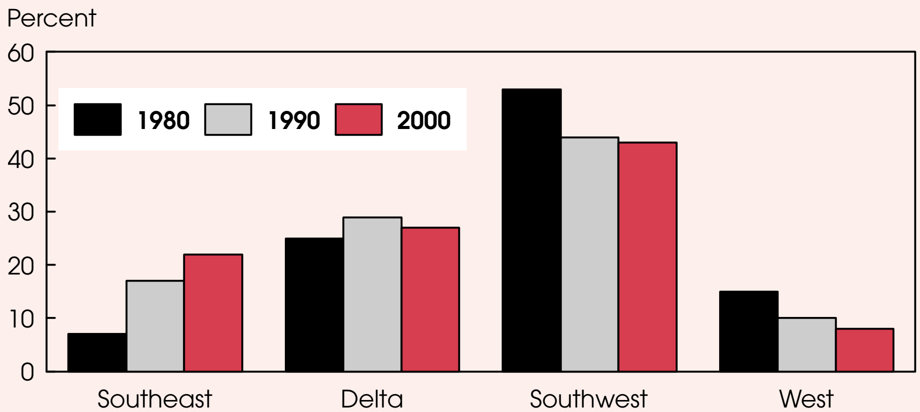
Commodity Spotlight

Cotton Production Climbs In Southeastern States

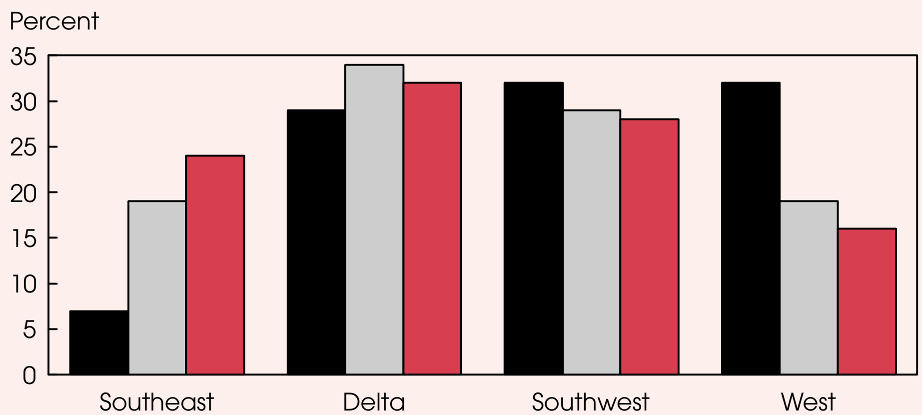
In addition to changes in the global market, significant regional shifts have occurred in U.S. cotton area and production over the last two decades. In the 1980's, nearly 70 percent of U.S. cotton area was located in the Southwest and West where land and water were plentiful. However, recent water concerns in these regions, and success of the boll weevil eradication program in the Southeast have led to dramatic gains in area and production in the Southeast. The share of total upland cotton area in this region has tripled since the 1980's. As a result, the share of U.S. cotton area in the Southwest and West has declined from about 70 percent in 1980 to less than 50 percent in 2000.

The Southeast has shown equally impressive growth in its share of U.S. cotton production, particularly in relation to the West. In the 1980's, the Southeast accounted for 7 percent of upland cotton production, while the West contributed 32 percent. Since then, the two regions have moved in opposite directions. In 2000, the latest estimates indicate that the Southeast share of production is approaching 25 percent of the total while share in the West has declined to just over 15 percent.

Southeast Is Steadily Increasing Its Share of U.S. Cotton Area . . .



. . . And Its Share of Production



Economic Research Service, USDA

European Union, and the Newly Industrialized Countries (NIC's) of South Korea, Taiwan, and Hong Kong accounted for 17 percent of world cotton fiber consumption. By 1999/2000, their share had dropped to 10 percent.

Among wealthier countries, the United States is an exception to the general shift away from cotton fiber use for domestic textile production, with output climbing by 16 percent between 1990 and 2000. The expanding U.S. economy and consumer promotion—under the world's only significant cotton promotion program—contributed to the gain by driving up consumer demand for cotton products by 60 percent in the 1990's. Nearly 60 percent of the 20-million-bale U.S. demand for clothing and other products is met by imports. But free trade with Canada and Mexico provides new opportunities for U.S. textile exports, sustaining textile production despite rising imports.

NAFTA enabled U.S. textile mills to indirectly capture a growing share of U.S. consumer demand for apparel by creating trade and investment partnerships with Mexico, where apparel production and exports to the U.S. have soared. Specifically, U.S. mills have used raw cotton to produce capital-intensive intermediate textile products—such as fabrics—for export to Mexico. Mexico, in turn, produces more labor-intensive apparel products and re-exports them to the U.S. under preferential market access not available to Asian apparel product exporters.

The Caribbean and Central America enjoyed similar trade preferences during the 1990's, and Canada, Mexico, and the Caribbean Basin accounted for almost 60 percent of the increase in U.S. cotton product imports during the 1990's. Mexico's use of raw cotton has also grown significantly, and Mexico is now the world's largest cotton importer and the largest customer for U.S. cotton exports.

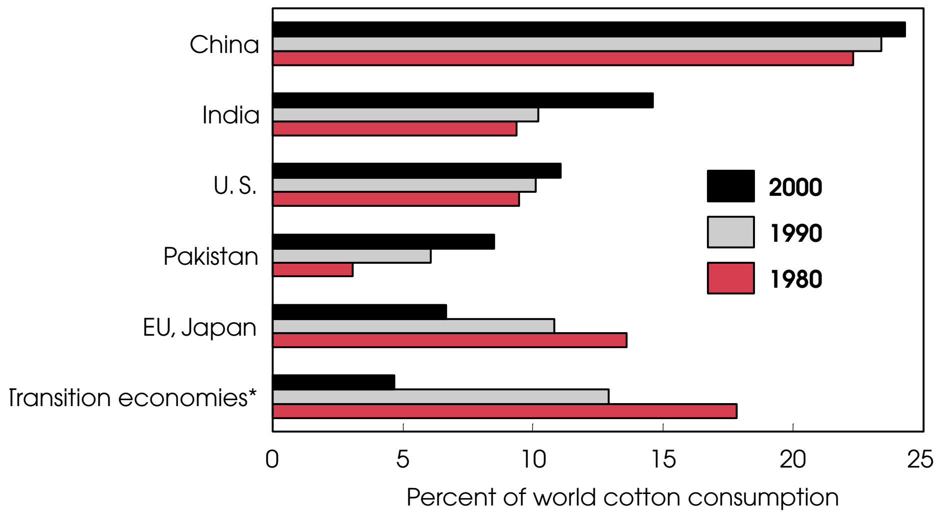
Market reforms in other parts of the world, such as India, Latin America, and the former Soviet Union (FSU) have also had a large impact on cotton production and consumption in the last decade. Debt problems and economic contraction throughout much of the developing world during the 1980's—and the contrasting stellar growth of export-oriented NIC's—led to economic reforms in India and much of Latin America in the 1990's.

In India, cotton consumption soared as domestic economic growth—and textile exports—responded positively to reforms. During the 1990's, India's cotton consumption rose 4.6 million bales, and raw cotton production rose 3.2 million bales. As a result, India's share of world cotton use rose from 10 percent in 1990 to 15 percent in 1999. In 2000/01, India's consumption is expected to continue rising, but production is expected to be unchanged from the year before, in part due to insufficient rain in Gujarat—traditionally India's leading cotton producing state.

Although cotton consumption also rose in Latin America in response to economic liberalization, the removal of policies that formerly protected cotton growers from competition led to declining production during the 1990's. Latin America's production fell as much as 3.2 million bales during the 1990's, while consumption rose 2.5 million bales. A more limited degree of liberalization in Central Asia, following the breakup of the Soviet Union, also resulted in lower cotton production—down 4.6 million bales between 1990 and 2000. Central Asia's production has stabilized since 1996, but a 500,000-bale decline from the previous year is foreseen in 2000/01 due to an unprecedented drought in the region.

In Russia, economic reforms during the 1990's drove cotton textile production down 85 percent. Russia's transition from centralized planning has taken a severe toll on its textile industry, reducing it from the world's fourth largest cotton consumer in 1990 to 39th in 2000/01.

South Asia's Share of Global Consumption Grows As Transition Economies' Share Shrinks



*Newly Independent States of the former Soviet Union, and Eastern Europe.

Economic Research Service, USDA

China Liberalizes Cotton Sector

China undertook a program of general economic reform during the 1980's. With the opening of its economy to trade, China more than doubled its share of world clothing exports and became the world's largest cotton producer. Despite these developments, the liberalization of cotton production in China is actually quite recent. In 1999/2000—more than a decade after liberalizing production of other crops—China sanctioned direct sales by cotton farmers to textile mills, and dropped the price floor that had guaranteed government procurement prices at a level well above world prices during much of the 1990's. China experimented with similar reforms to the cotton market in the early 1990's, but a sharp contraction of output in China's leading producing region forced a reversal in 1993.

Lower procurement prices, a crackdown on smuggling chemical fibers, an improving Chinese economy, and an expanding world economy with higher textile exports led to a surge in China's cotton consumption in 1999/2000. China's rebound during 1999/2000 was extraordinary: a 3-million-bale increase in consumption in 1 year completely offset the 2.7 million bale decline that had stretched out over the previous 7 years. Government figures on China's yarn output and continued increases in textile exports suggest cotton consumption will continue to grow in 2000/01. During the first 8 months of 2000, China's clothing exports rose 38 percent from a year earlier, and its cotton fabric exports rose 28 percent on a net basis. At 22.5 million bales, China's 2000/01 cotton consumption is forecast at a record-high level for the second consecutive year.

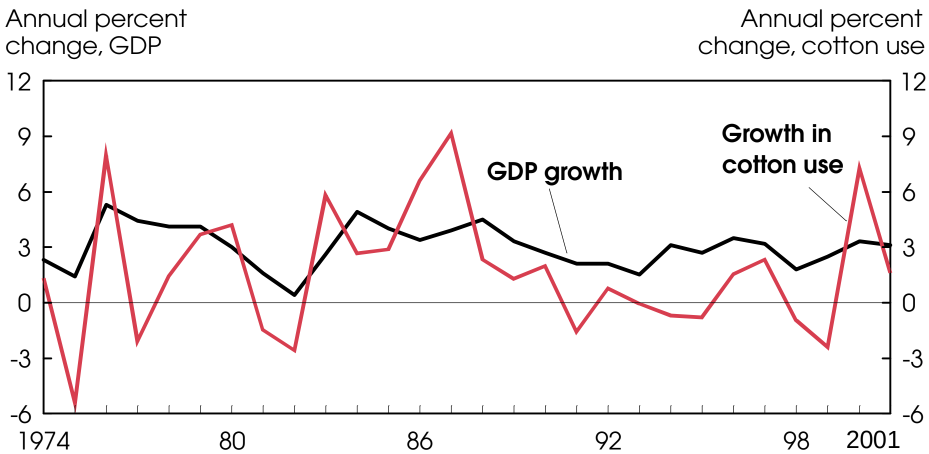
To sustain this consumption, China's government has auctioned about 5 million bales through the newly formed China National Cotton Exchange. Most of this cotton was from government stocks. China's inventory levels were a closely guarded secret for many years, and much uncertainty remains. Through October, the government has continued to release cotton through auctions to control prices driven upward by growing textile industry demand. China may also be seeking to minimize government stocks ahead of WTO accession—when import competition may make the release of high priced government stocks problematic—so it is unclear what the current willingness to release stocks indicates about future stock and trade policies.

In contrast to the decline in production during China's earlier cotton market reforms, China's crop is forecast slightly higher in 2000/01 than in 1999/2000. China's cotton producers correctly foresaw that early-season 2000/01 price strength would be sustained through to harvest. Also, weather has been relatively favorable, and the use of genetically modified cotton in eastern China helped avoid the substantial losses to bollworms that had plagued provinces like Shandong and Hebei in the early 1990's. At 18 million bales, China's 2000/01 crop is forecast 400,000 bales above its 1999/2000 level.

The question for the rest of 2000/01 is whether rising consumption and falling stocks will necessitate large imports. China's cotton imports are currently forecast to match its exports, and any change in China's net trade position has important ramifications for the rest of the world.

Commodity Spotlight

Growth in World Cotton Use Rebounded as Global GDP Recovered From 1997 Asian Crisis



GDP = gross domestic product. August-July marketing year for cotton (e.g., 1998 = 1997/98 marketing year).
GDP forecast for 2000 and 2001; cotton forecast for 2000/01.

Economic Research Service, USDA

Textile Export Competition From China & Pakistan

Unlike China, Pakistan's textile industry—the world's fourth largest—experienced growth throughout most of the 1990's. But compared with the 1980's, when cotton consumption grew 178 percent, growth was a relatively sluggish 24 percent between 1990 and 1998. On the other hand, Pakistan's cotton production actually fell during 1990-98, as disease forced abandonment of high-yielding varieties early in the 1990's. and recurring insect problems and poor weather continued to depress cotton production.

The textile industry suffered a further blow as obligations under World Trade Organization membership halted export restraints on raw fiber—ending the domestic industry's preferential access to locally produced cotton. However, rebounding production since 1998 has spurred the reopening of formerly shuttered textile enterprises, and further investment has again increased industry capacity. A 1-million-bale increase in cotton consumption over 2 years is now expected for 2000/01, a 14-percent gain.

About two-thirds of Pakistan's textile output is exported, and during July-September 2000 Pakistan's yarn exports were about 20 percent higher than a year earlier. Similarly, China's 17-percent rise in cotton consumption over the last 2 years is translating into significant competition for textile industries in other countries. China accounts for about 20 percent of the nearly $200 billion worth of clothing annually exported around the world, and its exports are undoubtedly increasing faster than world demand. China alone supplied nearly three-quarters of Japan's January-July 2000 textile and apparel import growth (up 18 percent overall from the year before), and about 50 percent of Korea's import growth. Partly due to these increased shipments from China, Korea's 2000/01 beginning yarn stocks are reportedly 50 percent above the 1999/2000 level, and cotton mill consumption there is likely to shrink.

Competition from lower income countries is also expected to reduce mill consumption in Taiwan, as local firms shift spinning to subsidiaries in Vietnam and China. India and Southeast Asian countries are expected to consume more cotton domestically and increase textile exports in 2000/01—due in part to depreciating currencies in these countries. But lower cotton consumption is foreseen for the industries of Japan, Eastern Europe, the United States, and much of the European Union as textile exports from developing Asian countries continue to rise.

Rebounding Cotton Prices Benefit Southern Hemisphere

Low cotton prices earlier this season have reduced expected cotton production in some regions, including West Africa and Mexico, but price movements since then have provided opportunities for Southern Hemisphere producers. World cotton prices have rebounded sharply since their lows in December 1999—up 40 percent as of September 2000—while prices of production alternatives such as corn or soybeans have been relatively stagnant.

The response to this opportunity is record expected production in Australia, and a crop in Brazil that is forecast 17 percent above the previous year. Since 1996, Brazil has had the largest production gain of any major cotton producing country, and its expected crop of 3.4 million bales is more than two and a half times the 1996 level. Although the size of Brazil's crop is similar to 1990/91 levels, changes to the industry over the past decade have been substantial. Brazil's economic reforms during the 1990's have reduced harvests in the states of Parana and Sao Paulo during the first half of the decade, but there has been a surge in mechanized crop production in Mato Grosso and northern Bahia since 1996.

World gross domestic product (GDP) is likely to expand by 4.1 percent in 2000 and 3.4 percent in 2001—well above the 2.8-percent average of 1995-99. But world cotton consumption in 2000/01 is expected to increase by a more modest 1.6 percent from the previous year. If stable economic growth is maintained, the long-run outlook for cotton consumption should improve.

While world cotton consumption is again growing, and growing in some familiar locations, the world textile market has changed, and the U.S. is exporting to different customers than it did 10 years ago. In the coming decade, reform of world textile and apparel trade under the WTO in 2005 and continued expansion of clothing output by developing country exporters suggest further changes ahead. AO

Stephen MacDonald (202) 694-5305 and Leslie Meyer (202) 694-5307
stephenm@ers.usda.gov
lmeyer@ers.usda.gov