

## U.S. AND WORLD COTTON OUTLOOK

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### Abstract

The United States had smaller cotton area than the year before in 1996/97, as grain prices soared, but yields and production rose, as did consumption. Exports fell, and ending stocks remained virtually unchanged. Foreign cotton area and production fell in 1996/97, largely because of China, while foreign consumption grew for the second consecutive year. In 1997/98, U.S. cotton plantings are expected to range between 13.2 and 14.2 million acres, but more normal abandonment may mean a harvested area closer to the year before. U.S. cotton consumption and exports are expected to increase slightly in 1997/98, while ending stocks are largely steady. Foreign cotton production could rise slightly in 1997/98, and consumption is expected to continue to grow. In the long run, foreign production and consumption are expected to continue surpassing their negligible growth rates of the last 10 years. World trade is expected to grow slowly between 1998/99 and 2002/03, and U.S. exports will may average between 7 and 7.5 million bales annually. With domestic mill consumption rising modestly, U.S. cotton area would only need to range between 13.5 and 14.5 million acres.

### Introduction

In comparison with the half-decade of twists and turns that preceded, 1996/97 has in many respects been an uneventful year. While there have been disappointments and surprises in some countries, world cotton markets have been relatively calm compared with previous years, and compared with grains in 1996.

In one important milestone, however, the U.S. cotton crop in 1996 was the first produced under the program outlined in the 1996 Federal Agricultural Improvement and Reform (FAIR) Act. This legislation provides a more market-oriented farm program which eliminated controls and legislated targets, along with "crop specific" base acreages. The FAIR Act encourages producers to respond more to the marketplace with increased planting flexibility, relying less on the fixed government payments, which are not affected by either planted acreage or market prices. The FAIR Act is in place through the 2002 crop year.

Before discussing the likely impact of the FAIR Act in future years, we will briefly review 1996/97 in the United States and abroad, and then offer some preliminary observations on how 1997/98 might develop. In conclusion

we will review longer run prospects for the United States and the rest of the world.

### 1996/97 U.S. Cotton Situation

U.S. cotton supplies at the beginning of 1996/97 were 2.6 million bales, their lowest since the 1991 season. Cotton prices remained relatively high, but with the new farm legislation in place, competing crop prices played a vital role in the area planted to cotton in 1996. Record grain prices attracted area away from cotton as many producers took advantage of the new flexibility provisions and switched to the lower-cost grain crops. As a result, U.S. cotton area fell 16 percent from 1995 to 14.2 million acres. Upland area this season was near 14.0 million acres, down from 16.7 million a year ago. On the other hand, ELS area rose to 264,000 acres, nearly 50,000 above 1995, as high ELS prices encouraged the increased plantings. Despite the reduction in total area in 1996, the national average abandonment rate was well above last season at 10.3 percent, or approximately 1.4 million acres. With the higher abandonment, harvested area, at 12.8 million acres, was the smallest in 4 years.

Based on December estimates, U.S. cotton production in 1996 is forecast at 18.7 million bales, up from last season's 17.9 million and the third largest on record. The production rise this season is attributable to a rebound in the national average yield. The U.S. cotton yield is currently estimated at 704 pounds per harvested acre, up 167 pounds from last season and only 4 pounds from the 1994 record.

Upland production is forecast at 18.2 million bales in 1996, with the average yield estimated at 698 pounds per harvested acre. While expected production is higher in all regions this season except the Southwest, yields are much improved for each region. ELS production is forecast at 541,000 bales, 47 percent above 1995. The rise in the ELS crop is due to both higher acreage and yields. While the area jump was attributable mainly to California, yields were better than 1995 in all States except Texas. The ELS yield is estimated at 992 pounds per harvested acre, the second highest average yield on record for ELS cotton.

Total U.S. cotton supplies in 1996/97 will once again include a relatively large quantity of imported cotton, as purchases made late last season made their way into the United States early this season. Raw cotton imports are projected at 450,000 bales for the 1996/97 marketing year, up from 408,000 bales last season. Record U.S. raw cotton imports occurred in 1919/20 when 700,000 bales were recorded. During the first 3 months of this season, imports already had reached 375,000 bales, with the major suppliers including Uzbekistan, Argentina, Australia, and Mexico. However, more recent customs data indicate that the pace of imports into the United States has slowed considerably. Nevertheless, total U.S. cotton supply is projected at 21.8 million bales, 4 percent above last season.

The 1996/97 U.S. cotton demand outlook points to a back-to-back decline in total U.S. cotton offtake. Total demand is projected at 17.2 million bales, 6 percent below 1995/96 and nearly 17 percent below 1994/95. U.S. exports are responsible for the bulk of this retrenchment as foreign supplies, which have been building over the past two seasons, have become more competitive with U.S. cotton on the world market.

Relatively high U.S. prices, which aided the sale of foreign cotton to U.S. mills last summer, have also limited prospects for U.S. cotton exports early in 1996/97. U.S. exports are projected to fall 19 percent from 1995/96 to 6.2 million bales. Although ELS cotton exports are forecast to rise this season to 425,000 bales, similar to 1994/95, upland shipments are expected to decline 1.6 million bales to 5.8 million.

With the world cotton import demand near that of last season, foreign competition has eroded the United States' share of the export market. In 1996/97, the U.S. share of world trade is projected at 23.5 percent, down from 28 percent in 1995/96 and 33 percent in 1994/95. U.S. export shares to major importers also are projected to fall from last season, but the United States still is expected to supply more than half the import demand of China, Japan, Korea, and Mexico.

Based on *U.S. Export Sales* data through mid-December, 1.6 million bales of upland cotton had been shipped, compared with 2.1 million a year earlier. Total commitments (shipments plus outstanding sales) for 1996/97 also are lagging the pace set last season. Upland commitments through mid-December were 4 million bales, compared with 6.8 million in 1995/96. On the other hand, ELS shipments and total commitments are running ahead of last season's pace. Exports had reached 123,000 bales, with commitments totaling 408,000, 46 and 38 percent above 1995/96, respectively.

Meanwhile, U.S. cotton mill consumption is projected to rise in 1996/97 after experiencing its first decline in 5 years in 1995/96. The latest estimate places 1996/97 mill use at 11 million bales, up 400,000 bales (nearly 4 percent) from last season. Abundant supplies at lower prices this year, coupled with an improving outlook in retail consumer demand for cotton products both here and abroad, should provide the boost in U.S. mill consumption. However, a decline in denim production may dampen the outlook somewhat as inventories in this sector have risen recently. Upland mill use in 1996/97 is projected at 10.9 million bales, while ELS consumption is expected to reach 105,000 bales.

Based on the first 4 months of data from the Department of Commerce, the seasonally adjusted annual rate of cotton consumption averaged approximately 10.9 million bales. Actual cotton mill use for August through November 1996

reached 3.72 million bales, compared with 3.66 million a year earlier. At the same time, cotton's share of fiber use on the cotton system is near that of last season. During the first 4 months of 1996/97, cotton's share averaged 77.9 percent, similar to 1995/96's 78.1 percent.

Aiding both cotton consumption and share is the continued success of U.S. cotton textile exports. For calendar 1996, cotton textile exports are expected to rise for the 12th consecutive year while imports are anticipated to remain near the 1995 total. Textile exports for the 12 months will likely approach 3.1 million bale-equivalents (1.5 billion pounds), 12 percent above 1995. At the same time, cotton textile imports may reach 8.3 million bale-equivalents (4.0 billion pounds). With textile exports improving and imports near the 1995 level, the cotton textile trade deficit is expected to fall for the first time in 6 years to the equivalent of 5.2 million bales of raw cotton. Meanwhile, total domestic cotton consumption (mill use plus net textile trade) will likely decrease for the 2nd consecutive year, with per capita consumption declining below 1995's 30 pounds.

Based on these projections of U.S. cotton supply and demand, ending stocks for the 1996/97 season are estimated at 4.6 million bales. With U.S. stocks anticipated to jump 2 million bales from the beginning level, the ratio of stocks-to-use is projected at 26.7 percent, compared with the previous 5-year average of 20.1 percent.

### **China Cuts Area in 1996/97**

Outside of the United States and China, cotton area continued to compete well against grains in 1996/97. During 1995/96, foreign area outside China and the FSU surged 11.6 percent to 21 million hectares. In 1996/97 there was virtually no decline, despite the previous year's real decline in world cotton prices of more than 10 percent and soaring world grain prices. Virtually every important cotton producer increased its grain area in 1996/97, but only a handful planted less cotton. World cotton area is estimated 6 percent lower in 1996/97, to 33.3 million ha, but foreign area is only expected to fall 3 percent to 28.2 million.

In China, by contrast, area fell 600,000 ha to 4.8 million ha. Area fell to its lowest since 1986 as sluggish demand by textile mills coincided with China's third largest harvest ever during 1995/96, halting procurement, increasing the use of IOU's, and cutting quality premiums. China's producers began planting in 1996/97 with reduced price expectations for the first time since 1992, and acted accordingly. Yields also may have weakened, due to reduced incentives for input use, and the harvest is expected to fall 4.4 million bales to 17.5 million. China's State Statistical Bureau (SSB) issued an updated estimate in December of 18.4 million bales, about 5 percent above the current USDA estimate. Some have questioned the reliability of SSB, which will be addressed below.

India plants the largest cotton area of any country in the world, and planted only slightly less than a year ago in 1996/97. While India's grain plantings rose 1 million ha and other oilseed plantings rose 500,000 ha, cotton area fell only 150,000 ha, giving up only a small portion of the previous year's huge cotton area expansion. While cotton area shrank in northern producing areas--particularly in Punjab--in response to increases in grain, cotton plantings rose in central areas at the expense of soybeans. As a result, little change is foreseen in production, at 12.3 million bales.

### **Yields Drop in Pakistan and Central Asia**

Pakistan's area rose in 1996/97 as rebounding exports during 1995/96 led to substantially lower stocks--despite rebounding production--and strong domestic prices during 1996/97 planting. However, yields are expected to fall substantially, losing all the ground regained during the last 2 years, and then some. Apparently, leaf-curl virus was once again a problem, and heavy, widespread, and unusually early infestations of white fly damaged the crop. Despite higher area, the crop is expected to be 1.4 million bales smaller than the year before, at 6.8 million bales.

Deteriorating weather also cut production from Greece to Uzbekistan in 1996/97. In Central Asia, cooler weather than the year before delayed planting and increased reseeded compared with 1995/96, and continued lower than average temperatures in at least some parts of Uzbekistan also reduced the crop. Uzbekistan's production is expected to fall 940,000 bales to 4.8 million in 1996/97 and Turkmenistan's 550,000 bales to 600,000. Excessive late-season rains are expected to help cut Greece's and Turkey's crops more than 300,000 bales from the year before.

Economic difficulties and competing crop prices are expected to lead to smaller cotton area in South America in 1996/97, with declines foreseen in Brazil, Paraguay, and Argentina. While yields are expected to partly rebound due to more normal weather, a complete recovery from 1995/96's losses is not foreseen.

Despite contracting area in virtually all the countries mentioned above (excepting Pakistan), foreign cotton area outside of China was virtually unchanged in 1996/97 due to widespread gains in smaller producers. Higher area and yields are expected in many regions, including: Australia, Egypt, Franc Zone Africa, Spain, Sudan, and Uganda.

### **Consumption Continues Growing**

Foreign consumption is expected to rise in 1996/97, only for the second time since 1989. At 74.3 million bales, foreign consumption will be only 1 percent above the year before, but this represents a significant improvement from the average 1 percent contraction registered every year between 1989/90 and 1994/95. While importers with chronically shrinking textile industries--including the EU, Japan,

Russia, and South Korea--are expected to consume less cotton again, the declines are generally foreseen to be smaller.

China's cotton consumption also is expected to drop, down 500,000 bales to 19 million as the difficulties of China's state-owned enterprises leaves 1996/97 use struggling for at least the first part of the marketing year. While the textile industry's financial troubles and increased use of man-made fibers has cut China's share of world cotton consumption (22 percent) to its lowest since the 1970's, China remains the world's largest consumer of cotton.

India, the world's second largest consumer of cotton, is expected to increase its use 3.5 percent, giving it nearly 14 percent of expected world consumption in 1996/97. While India's consumption is expected to grow at less than half of the previous year's torrid 8 percent rate, its 400,000 bale gain will be larger than any other country's.

With China's cotton supplies at their highest since the mid-1980's, China seems to have relinquished its place as the world's largest importer in 1996/97, importing 1.3 million bales less than during the year before. World trade is expected to shrink 800,000 bales, to 26.3 million in 1996/97, as increased imports by Turkey, Brazil, and Pakistan slightly offset declines in China, Russia, Korea, and Japan.

Foreign exports are expected to rise less than 700,000 bales in 1996/97, to 20.1 million bales. While larger crops and beginning stocks are expected to permit larger exports by a number of countries, Pakistan is expected to export 1 million fewer bales than the year before. At 400,000 bales, Pakistan's exports are again forecast well below the levels considered normal before its recent problems with pests and disease. Greece is another major net-exporting country where declining exports are foreseen for 1996/97, down 300,000 bales to 900,000 bales.

Foreign ending stocks are expected to shrink in 1996/97, down about 1 million bales to 32.4 million, or 43 percent of expected foreign consumption. Lower ending stocks in India, Uzbekistan, Pakistan, and Turkmenistan--all competitors with U.S. exports--are expected. However, excluding these countries as well as China from the foreign total gives a smaller group where ending stocks are expected to continue to rise, both in absolute magnitude and as a share of consumption in 1996/97, as importers take advantage of falling prices to rebuild the stocks eroded during the past few years.

The United States began 1996/97 with perhaps its lowest share of world beginning stocks ever, leading to a price differential that did not favor exports, and to remarkably slow export sales. However, with declining production across a number of competitors, prospects are surprisingly good for export sales during the rest of 1996/97.

## **1997/98 U.S. Cotton Outlook**

The U.S. cotton outlook for 1997/98 currently points to a decline in both cotton area and production from 1996/97 as the tight stock situation experienced the last two seasons is alleviated. Inventories will be replenished by the start of 1997/98 as the third highest cotton crop on record was produced in 1996, exceeding total demand by more than a million bales.

Total U.S. cotton area in 1997 will likely range between this season's 14.2 million acres down to 13.2 million. While this may seem at first like a wide range, the flexibility provisions of the farm legislation allow decisions to be altered right up to planting time, if conditions warrant. The extent of cotton area reductions will likely vary by region but will be based on the expected returns of any alternative crops. And of course, weather also will likely play a role in the outcome of acreage planted to cotton and competing crops in 1997.

While cotton planted area may fall as much as 7 percent in 1997, a return to a lower, more normal abandonment could keep harvested acreage near that of the 1996/97 season. If the abandonment rate is near the 10-year average of 7 percent, harvested area based on the scenario presented here would range between 12.3 and 13.3 million acres in 1997/98. Yields also are projected to decline from the 1996 U.S. average of 704 pounds per harvested acre, the third highest yield on record. Preliminary yield projections for 1997/98 range between 660 and 680 pounds per harvested acre. The midpoint of this range is near the long-term trend yield while the lower end represents the 1991-96 crop year average, dropping the low in 1995.

Based on these acreage and yield assumptions, U.S. cotton production in 1997 would range between 17.0 and 18.8 million bales, with the upper end similar to the 1996 crop output. Coupled with the current beginning stock estimate of 4.6 million bales, total U.S. cotton supplies next season would range in the neighborhood of 21.5 to 23.5 million bales. The midpoint of this range would be the second highest U.S. cotton supply level in the last 30 years and would portend an ample supply for the domestic and export market even though an increase in total offtake is possible in 1997/98.

U.S. cotton exports in 1997/98 are expected to rebound slightly from the declines experienced during the previous two seasons. While a large jump in foreign production in 1995/96 provided the competitive exportable supplies this season, U.S. cotton should be in a more favorable situation in 1997/98 as the United States will be able to supply the cotton for an anticipated rise in world consumption. Early projections for U.S. cotton shipments during the 1997/98 season range between 6.3 and 7.3 million bales. Albeit perhaps a small increase from the current season's estimated shipments, this would represent an improvement in the U.S.

share of world cotton trade in 1997/98, from the current estimate of 23.5 percent for 1996/97 to between 25 and 26 percent.

Likewise, U.S. cotton mill consumption is projected to improve from 1996/97, although the rate of growth will likely be smaller than the average annual increases experienced in the early 1990's. In 1997, cotton textile exports are again expected to play a vital role in U.S. cotton mill demand. As mentioned earlier, U.S. cotton textile exports in 1996 are expected to rise for the 12th consecutive year to a new record. The continued success of U.S. cotton textile and apparel products abroad, as well as cotton's ability to continue capturing nearly one-third of the U.S. fiber market, should push U.S. mill use higher in 1997/98. Current projections are for cotton mill consumption to range between 11.0 and 11.5 million bales next season.

With plentiful supplies anticipated during the 1997/98 marketing year, total demand for U.S. cotton is expected to increase from this season. Based on the data presented here, total use would approximate projected production and range between 17.3 and 18.8 million bales in 1997/98. Based on this scenario, U.S. carryover stocks next season would likely remain near the beginning level or decline slightly. This implies a stocks-to-use ratio of about 25 percent, which reflects ample U.S. stocks to bridge the gap until new-crop cotton becomes available in the fall.

## **Global Prospects for 1997/98**

Little change is foreseen in aggregate for world cotton in 1997/98 compared with the year before. Consumption could rise slightly--for only the second time since 1990, and a smaller rise in production is possible, possibly leading to lower world and foreign ending stocks. World trade is unlikely to increase appreciably, but a more competitive United States could capture a larger trade share compared with 1996/97.

At 76 cents/pound through mid-December, the A-index is again down from the previous season's average by about 10 percent in inflation-adjusted terms. While competing crop prices are also falling--and more normal weather could improve some crops--some major producers in both the Northern and Southern Hemispheres may produce smaller cotton crops in 1997/98. But foreign production changes could net out slightly positive from the year before.

China lost its position as the world's largest producer during 1996/97, and it is questionable if it could regain that position in 1997/98. China's State Statistical Bureau (SSB) recently announced that China's 1996/97 crop was higher than widely believed, 18.4 million bales, nearly 1 million bales above their earlier estimates. Whatever the size of the crop, it is clear that last year's procurement problems were repeated, and farmers were unable to sell large amounts of cotton to the state. On the one hand, this suggests farmers

will lose enthusiasm for cotton production, resulting in a lower crop. On the other hand, grain production has soared in China, and market forces and government policy may be less encouraging for grain during 1997/98. Assuming normal weather, China's cotton crop could be little changed compared with this year.

In India, supplies are expected to be large during 1996/97, despite higher exports and consumption. Also, India's 1996 production of wheat and soybeans is forecast lower than the year before. While rice production increased in 1996, stocks are tighter and the Indian government has moved to slow exports. Relative prices will probably lead some cotton area to shift to competing crops again in 1997/98. India's area has been well above historical levels this year and last as producers respond to growing domestic demand and export opportunities, and a relatively small decline is likely, as in 1996/97. Weather is of course a key unknown, and estimates of Indian yields are prone to large revisions very late in the season. Assuming weather comparable to recent years, India's production should drop, but could still easily surpass the harvests typical during the early 1990's.

Pakistan's recovery from the disease and pest problems of the early 1990's was short-lived, suggesting 1995/96's yields were exceptionally good rather than indicative of a new norm. Short supplies during 1996/97 in Pakistan should lead to good price expectations for producers--currently NIAB-78 is priced 37 percent above year-ago levels in Karachi--supporting cotton area. Yields should rebound somewhat from what was the lowest level since the widespread application of plant protection chemicals began in the mid-1980's.

For Central Asia, like Pakistan, a return to more normal conditions suggests larger production is possible during 1997/98. In Uzbekistan, a rebound seems likely since weather played a large role in reducing the crop. Cotton area in Uzbekistan is about where the government has in the past indicated is appropriate, so little change should be expected. While yields may not rebound completely in 1997/98, they could rise considerably and still remain well below most of the 1990's. Turkmenistan is more problematic, since the production losses of the last few years are only partly weather related. With little information, it has been difficult to anticipate events in Turkmenistan, but almost invariably they have been disappointing with respect to cotton output in recent years.

Brazil has also been on a downward trend in cotton production driven by foreign competition, changes in farm credit policies, and--most recently--high soybean prices. Lower soybean prices during 1996/97 could bring some area in the Brazil's Center-South back from soybeans to cotton in 1997/98, and the crop could rebound from this year's low. But low stocks will mean imports will remain about the same.

In Turkey, a smaller cotton crop, larger wheat crop in 1996, and the government's apparent efforts to slow wheat imports, suggest competing crop prices will favor cotton in Turkey. However, Turkey's National Cotton Advisory Council has forecast area down, so it is perhaps best to assume little change in the crop.

Franc Zone Africa seems to have strongly responded to the devaluation of the CFA franc a few years ago. Cotton is a lucrative cash crop for the region and production is also supported by favorable agricultural policies in the region and reform of the region's marketing boards for cotton and other crops. An unchanged crop is consistent with earlier experiences during falling prices, although lagged impact of widespread economic reforms could mean continued growth in production and exports.

Australia's 35 percent surge in production during 1996/97--despite falling prices--was a response to weather, since 1996/97 was the first year of the 1990's that entered planting with good reservoir supplies. Lower prices will probably begin to have a larger influence there in 1997/98, and the crop is more likely to fall than increase.

Similarly, Argentina--while keeping area near the unprecedented highs of the last 2 years--could plant less cotton in response to this year's prices. Liberalization, modernization, and mechanization suggest area will stay near the new levels rather than revert to the old. Argentina's agriculture has undergone tremendous changes during the 1990's, with planted area soaring for a wide variety of crops as investors exploit Argentina's potential.

### **World Consumption Prospects for 1997/98**

The sluggishness of world consumption has been of great concern in recent years. From an industry perspective the concern is obvious, and from a forecasting perspective the concern is that early forecasts have almost inevitably proven too optimistic. But higher consumption still seems likely for 1996/97, and gains could continue into 1997/98.

In China, the positive effects of continued relaxation of credit by the central government will have to be balanced against the likely continued pressure on unprofitable state-owned firms, including textile mills. Large supplies of cotton suggest a good possibility that--as in the past--the holders of cotton in China will increasingly come to terms with the consumers, permitting a rebound in China's cotton consumption to at least begin.

This brings us back to the question regarding whether these large supplies in fact exist in China. There is a school of thought that China's actual production has been well below the figures reported by SSB and USDA. However, concrete evidence is lacking, and the reliability of the data is such that consensus estimates of consumption are possibly too low. According to China's Statistical Yearbooks, real

expenditure on clothing doubled between 1985 and 1995, which is difficult to reconcile with current estimates of virtually stagnant mill use during that period.

The real issue with respect to China is whether imports will continue declining in 1997/98, which again, however, depends on whether usable cotton stocks are as large as estimated by USDA, assuming fairly constant production. Joint-venture mills will again be the most likely major importers in China, and larger imports are unlikely.

The other major problem area for world cotton consumption during the 1990's has been Russia. Russia's cotton consumption fell more than 80 percent between 1989 and 1996, to 1 million bales, during the restructuring of Russia's political, economic, and foreign trade systems. The OECD is forecasting Russia's long-postponed rebound in GDP to begin in 1997, and by 1998 GDP there could be growing as rapidly as in the more successful Eastern European economies. Since Russia produces virtually no cotton, larger imports are likely to result.

Pakistan's consumption could continue growing, although the success of the cotton crop there will be an important factor. Even with only slight growth in consumption and a growing cotton crop, Pakistan will be hard pressed to remain a net exporter of raw cotton in 1997/98.

Turkey's imports could rise, assuming its consumption continues rising. While profitability has been more of a concern for Turkish textile producers than expected with the advent of the customs union with the EU, textile capacity has increased tremendously in recent years. Similarly, Mexico's consumption growth should continue, albeit at a slower rate, as the opportunities from NAFTA and the peso devaluation continue to make themselves felt; Brazil's economic recovery should begin to make itself felt in demand for textiles and mill consumption; and India's consumption is likely to continue growing.

These growing countries are in some respects more indicative of foreign cotton consumption trends in the 1990's than some of the other countries mentioned above. While foreign cotton consumption fell steadily during the 1990's until 1995/96, all this 4.6 million bale loss can be attributed to China, the Former Soviet Union, and Eastern Europe. Foreign consumption excluding these regions has grown at a relatively steady 1.5 percent rate every year since 1986/87, about what is expected in 1996/97.

#### **Long-run Global Outlook for Cotton**

Both foreign consumption and production growth have slowed to negligible rates during the last 10 years, and while both are expected to rebound before 2000, they could undershoot their long-term average growth of 2.2 percent per year. However, a key uncertainty in the projection is the extent to which earlier gains in cotton consumption,

associated with a shift in consumer fiber preference toward cotton, and away from synthetics, can be sustained.

At this point it is worth noting that the world economy is currently somewhat weaker than what is expected during the coming 5 to 10 years. The Financial Times has described current conditions as the weakest cyclical upturn in memory, and some measures of inflation are at nearly unprecedented lows. With a painful economic transformation in Russia, tight economic policies in Europe in anticipation of currency union, and prolonged difficulties in Japan, the world economy is currently operating well below capacity. More normal conditions would support higher rates of consumption growth than foreseen in 1996/97 and 1997/98.

In the long term, the liberalization of textile trade under the Uruguay Round Agreement and high wages will reduce cotton consumption and imports by the most developed traditional importers, such as the EU and Japan. In contrast, rapid consumption growth is expected in many developing countries and steady growth is expected to continue in major cotton producing countries. However, the pace of this structural shift will depend on the implementation of the phaseout of the Multifiber Arrangement. While it is anticipated that the most significant changes will probably be delayed until the end of the implementation period, large uncertainties remain about the timing of liberalization and shifts in garment production both to and among developing countries.

In addition to growth in consumption and imports in Southeast Asia: Russia, Eastern Europe, and China are also expected to grow between now and 2002. Russia will remain well below historical levels, remaining more comparable to Uzbekistan in the size of its mill use, although growth is expected in both countries. World trade is not likely to continue shrinking as a share of world consumption due to increased mill use in importing countries. Note that significant importers such as Brazil, Mexico, and Central America were all once exporters, and their increased demand for cotton will mean larger demand for imports rather than decreased supplies for exports.

#### **U.S. Cotton Outlook to 2002**

As a result, beyond 1997/98, the U.S. cotton outlook continues to be a positive one, although perhaps a more competitive one. For the remaining years under the FAIR Act, U.S. cotton will continue to compete with alternative crops for area here in the United States. Supply and demand changes, and the price response that these changes provide, will indicate the acreage needed in a given year. And once the fiber is produced, cotton will be competing with other fibers, like polyester, at domestic mills and on the world market in the form of raw fiber or cotton textile and apparel products.

Growth in demand will be the key to the continued success of U.S. cotton. While domestic mill use may slow from the very successful expansion in the early 1990's, a modest increase is expected to occur over the next several years. U.S. cotton textile and apparel exports will play a key role in helping to extend the growth in U.S. consumption. But, polyester also will likely remain very competitive among the manmade fibers. Nevertheless, cotton mill use is expected to rise on average 2 percent per year and perhaps surpass 12.5 million bales by the year 2002.

Likewise, U.S. cotton exports are projected to improve during this time period. With world cotton consumption anticipated to expand over the coming years, U.S. exports will likely supply a portion of the increased demand. Exports between crop years 1998 and 2002 may average between 7 and 7.5 million bales annually. At these export levels, the U.S. share of world trade would remain between 25 and 26 percent, the average during the early 1990's.

With both U.S. mill consumption and exports anticipated to rise modestly out to 2002, total use annually would average in the 18.5 to 20 million bale range. Barring any major disaster, U.S. production should easily be able to match the quantity demanded. Assuming the national yield rises near the 30-year trend of 8 pounds per season, reaching 715 pounds by 2002, U.S. cotton area during this period is not expected to change dramatically.

Based on the projections presented here, U.S. cotton area would only need to range between 13.5 and 14.5 million acres per year and production would easily reach the 18 to 20 million bales required to satisfy demand. Carryover stocks would average about 4 million bales annually, implying a 20 to 22 percent stocks-to-use ratio. This scenario would suggest that U.S. cotton supplies would be adequate, but not burdensome, and the industry would be in position to benefit if additional demand opportunities arose.