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## **USDA PERSPECTIVE ON THE OUTLOOK FOR COTTON**

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### **World Cotton Situation for 1997/98**

The world cotton situation for 1997/98 is characterized by higher production, consumption and ending stocks when compared with the preceding year. Near-record world yields are expected to result in production of 91.0 million bales, an increase of 2 percent from 1996/97. Estimated consumption of 89.3 million bales, while slightly higher than last year, is limited by the economic problems that have developed in Southeast Asia, Korea and Brazil. The excess of production over consumption is anticipated to raise ending stocks over 5 percent, or 2.0 million bales from the beginning level. World prices have responded predictably--the A-index has fallen 12 cents since the beginning of the marketing year.

### **Foreign Cotton Situation for 1997/98**

#### **Foreign Area, Yield and Production**

Current estimates reflect an increase in 1997/98 foreign cotton production of 2 percent to 72.0 million bales. The gain is the result of rising yields, which have more than offset a 1-percent decrease in cotton area.

Total foreign area fell an estimated 300,000 hectares, due mainly to decreases in China and Pakistan. China's area reduction was a substantial 5 percent, about 200,000 hectares, as more land was used for food production and farmers continued to switch to more profitable and less labor intensive crops. In Pakistan, prices rose last year and disease problems, as well as improved returns for sugar and rice, reduced area 10 percent, or 300,000 hectares. These area reductions were partially offset by increased plantings in the African Franc Zone, Central Asia, South America and Australia.

Significant increases in production are anticipated in Central Asia and South America. Central Asian production is expected to increase 11 percent or 810,000 bales. Uzbekistan's production alone accounted for an increase of 650,000 bales, 6 percent higher than the previous season, due both to improved weather and crop management techniques. A bumper harvest is expected in Argentina, as higher area and yields are expected to result in a 29-percent increase in production--reaching 2.1 million bales. Brazil's production is benefitting from shifts in area to regions with

more mechanized, higher-yielding farms and is expected to rise 45 percent.

These production gains will be partially offset by reduced production in India and Pakistan, attributable to both lower area and weather problems. Area was down an estimated 4 percent on the Indian subcontinent and heavy late-season rains in the Punjab area reduced yields, for a combined reduction of nearly 1.3 million bales in production for the two countries.

#### Foreign Consumption, Trade and Ending Stocks, 1997/98

Foreign consumption is expected to rise slightly in 1997/98 from a year earlier to just under 78.0 million bales. The economic disruption in Southeast Asia has overshadowed an otherwise promising year--expected growth in cotton consumption outside the United States is now a negligible 0.5 percent. Positive factors in 1997/98 include generally favorable economic growth in developed countries, increased textile production in China, soaring Mexican cotton consumption, and the first upturn in Russia's cotton consumption since the 1980's. However, financial problems in South Korea, Southeast Asia and Brazil have reduced expectations for foreign cotton consumption in a number of ways.

Projected world GDP growth in calendar 1998 has weakened modestly in the last few months, from 2.8 percent expected last October to 2.6 percent in January. On the other hand, the economies of Korea, Indonesia, and Thailand are all expected to contract in calendar 1998--in stark contrast to the 6-10 percent annual expansion of the preceding decade. Together with the Philippines and Malaysia, consumers in these 5 countries consumed about 4 million bales of cotton in the form of textile products in 1996/97, according to the International Cotton Advisory Committee, and will almost certainly consume less in 1997/98. However, even a significant temporary decline in local demand for cotton products in these countries would not necessarily translate directly into reduced mill use of cotton in the region since the cotton products no longer demanded locally could be exported.

Probably the most important factor slowing foreign mill use of cotton in 1997/98 is the cost of capital in the region. With many economic institutions in the region paralyzed, both domestic financing and trade financing has become temporarily unobtainable for some industrial firms in Southeast Asia and Korea. USDA's forecast for 1997/98 cotton consumption by textile mills in Southeast Asia and Korea assumes these liquidity problems will ease through the rest of 1998, an assumption supported by the recent signs of stability throughout much of the region. Mill consumption in Southeast Asia and Korea in 1997/98 is forecast 15 percent below a year earlier, in total, a 900,000-bale reduction.

The region's imports of raw cotton are expected to decline by an even larger amount, and world cotton trade is expected to decline in 1997/98 compared with a year earlier. Imports by Southeast Asia and Korea are expected to decline by more than 1.1 million bales in 1997/98, cutting the region's ending stocks. In Brazil, a decrease of almost 900,000 bales is likely due to a combination of increased production, reduced consumption and government policies

constraining imports, while growing cotton supplies and new import policies in China are expected to cut China's imports by 1.4 million bales.

Foreign ending stocks are forecast to rise 1.8 million bales in 1997/98 compared with 1996/97. Although foreign imports are expected to fall, foreign beginning stocks and production are estimated higher in 1997/98, while exports are lower, and consumption is up only negligibly. At 34 million bales, foreign ending stocks in 1997/98 are forecast to reach their highest since 1985/86.

## **U.S. Cotton Situation for 1997/98**

### **U.S. Area, Yield and Production**

U.S. cotton production in 1997/98 is currently estimated at 18.98 million bales, virtually identical to the 1996/97 crop of 18.94 million and the second largest cotton crop on record. Cotton prices had declined early in calendar 1997, making alternative crops more attractive to some cotton producers. As a result, U.S. cotton area declined 5.6 percent from 1996 to 13.8 million acres. Upland area in 1997/98 decreased to nearly 13.6 million acres, while the ELS acreage slipped to 252,000 acres. Despite the reduction in cotton plantings, a lower than normal abandonment of 4 percent in 1997/98 kept harvested area above that of last season. In 1997/98, cotton harvested area approached 13.3 million acres, compared with 12.9 million during 1996/97, offsetting an estimated decline of 21 pounds in the national average yield to 686 pounds per harvested acre.

Upland production is estimated at 18.4 million bales this season, with an average yield of 679 pounds per harvested acre. While the U.S. upland crop size is similar to that of last season, three of the four regions produced less cotton in 1997/98; only the Southwest produced more cotton than in 1996/97. In the Southwest, upland production reached 5.5 million bales this season, 1 million above last year, as a much smaller abandonment provided more harvested acres without sacrificing yield. Southwest yields averaged slightly below 500 pounds per harvested acre in both 1996/97 and 1997/98.

Meanwhile, the production declines in the other three regions resulted from either lower harvested area or lower yield. In the Delta, lower area was partially offset by an improvement in yields. Nearly 5.8 million bales of upland cotton were produced in 1997/98, 300,000 below the year before. However, yields of nearly 900 pounds per harvested acre in Mississippi and Arkansas helped push the Delta's average yield to 813 pounds, compared with 748 pounds a year earlier. In the Southeast, production totaled 4.1 million bales, 500,000 below 1996/97. Although harvested area was similar to the previous season, an 83-pound drop in the region's average yield to 645 pounds accounted for the crop decline. In the West, decreases were smaller with production dropping 150,000 bales from 1996/97. A 40-pound increase in the region's yield to 1,184 pounds could not offset the total effect of the decline in area.

ELS cotton production is estimated slightly higher this season at 537,000 bales. The rise in the ELS crop in 1997/98 was the result of higher yields which were partially offset by lower area. While total ELS acreage decreased in 1997/98, California continued to expand its acreage and accounted for three-fourths of the area and production.

#### U.S. Domestic Mill Use, 1997/98

The outlook for U.S. cotton demand points higher in 1997/98 as U.S. mill use is supported by increases in domestic cotton consumption at the retail level and textile exports. The strong economy and consumer preference for cotton products are continuing trends supporting retail cotton consumption; domestic consumption (mill use plus net textile trade) rose nearly 10 percent in calendar 1997 after three years of stability, raising per capita cotton consumption to 32 pounds, the highest in 50 years.

Total fiber use by domestic mills has also risen this season, but cotton use has increased faster than that of manmade fibers. During the first part of 1997/98, cotton's share of fiber use on the cotton system has averaged nearly 79 percent, up nearly 1 percentage point from last year and the highest in 30 years. In 1997/98, U.S. cotton mill use is expected to reach 11.5 million bales, 3 percent above 1996/97, as abundant supplies of cotton are available at competitive prices to satisfy demand. Upland mill use in 1997/98 is estimated at about 11.4 million bales, while ELS consumption is projected to reach 110,000 bales. Based on the first 5 months of data from the Department of Commerce, the seasonally adjusted annual rate of cotton consumption has averaged above 11.5 million bales.

Textile imports, textile exports and the net textile trade deficit all rose in calendar 1997. Textile imports increased 20 percent to the equivalent of 10.5 million bales of raw cotton. At the same time, U.S. cotton textile exports increased by a like percentage, reaching the equivalent of 3.75 million bales of raw cotton, aided by the success of textile trade agreements such as CBI and NAFTA. After remaining relatively stable for the three preceding years, the cotton textile deficit jumped to a new record in 1997 of 3.2 billion pounds, or the equivalent of 6.7 million bales of raw cotton.

#### U.S. Exports, Ending Stocks and Prices, 1997/98

U.S. exports are estimated at 7.3 million bales for 1997/98, which constitutes a strong 27.8 percent share of world trade. Upland cotton exports of 6,875,000 and ELS cotton exports of 425,000 bales are expected. The competitiveness of U.S. cotton, especially in the first half of the season, has been enhanced by a number of factors, including relatively large beginning stocks, weak competition from the Central Asian cotton-producing countries, and the rapid growth of cotton consumption in Mexico, which imports U.S. cotton almost exclusively.

U.S. exports have also been affected by several government program provisions--the Step 2 payment to exporters, the GSM-102 credit program and the reduction in the CCC loan period

from 18 to 10 months under the 1996 farm legislation. Step 2 payments averaged about 1.4 cents per pound from August 1 to February 1, but the payment rate rose to 4.5 cents on February 19. Step 2 payments to exporters are made as of the date of shipment and are unknown at the time of sale, making them a less effective tool than in the past for improving price competitiveness. However, in the context of the current rising spread between U.S. and foreign prices, the potential for Step 2 payments provides an incentive for continued sales, and a disincentive for cancellations, of U.S. export contracts. In addition to Step 2, the availability of GSM-102 credit for Korea is sustaining U.S. market share which otherwise would have declined with the Asian currency crisis.

The effect of the loan period change has become more evident recently with falling prices---the price received by farmers has fallen about 7 cents per pound during the harvest period. During the period 1980-1995, when 18-month loans were available, the percent of production placed under loan increased as market prices fell closer to the loan rate. Analysis of this pattern suggests that at current prices with an 18-month loan, loan placements might total one-fourth to one-third of the total upland cotton production, or roughly 4.5-6.0 million bales. As of February 10, only 3.5 million bales have entered the CCC loan, suggesting that total loan placements may not reach the bottom of the historical range; thus, proportionally more cotton is being actively marketed by producers. On the other hand, at the current AWP level of less than 55 cents per pound, the Commodity Credit Corporation has begun to pay a portion of the carrying charges accrued on loans placed early in the season, and this may make the loan a more desirable short-term option.

Larger estimated U.S. mill use and exports are not anticipated to offset larger cotton supplies, with the result that ending stocks are projected to rise marginally, from 4.0 million to 4.2 million bales. This season's stocks-to-use ratio of 22.3 percent will be nearly identical to that of last year. The average price received by farmers has fallen from about 67 cents in August 1997 to 62.6 cents in mid-January 1998. U.S. prices have responded to falling world prices which have, in turn, resulted from an accumulation of foreign stocks and the uncertainties surrounding the Asian cotton situation.

### **World Cotton Outlook for 1998/99**

The preliminary outlook for the world in 1998/99 shows production down, consumption up marginally, and world ending stocks significantly lower. Global production is expected to respond to the current reduced level of world cotton prices and consumption will continue to be limited by lower GDP growth stemming from the Asian financial crisis. World trade is estimated down marginally due mainly to lower projected import demand by China.

## **Foreign Cotton Outlook for 1998/99**

### **Foreign Area, Yield and Production**

The decline in prices during the marketing year to date will probably influence price expectations for the coming year, and a slight decline in foreign area is likely. In total, foreign area could range from 27.5 to 28.5 million hectares as virtually every producing country either reduces or, at best, maintains area compared with 1997/98. In China, increased grain prices this year suggest higher returns for competing crops, while producers in some regions of India may switch crops following weather-reduced yields and quality during 1997/98. Uzbekistan has signaled its intention of maintaining its area at 1.5 million hectares for the fourth consecutive year, and area in Pakistan is likely to remain near 3.0 million hectares, also for the fourth consecutive year.

Foreign yield prospects are also weaker on average compared with 1997/98 in part due to reduced area and yield in China. China's reported yields were record-high in 1997/98, surpassing even 1984/85 by 4 percent. While regional shifts in production and better management of insect problems suggest China's yields could be trending up, weather was also unusually favorable in some regions. More normal weather patterns are likely to prevail in China in 1998/99, and a sixth consecutive yield increase is unlikely.

Foreign production could drop between 2 to 3 percent compared with a year earlier in 1998/99. Compared with 72 million bales in 1997/98, foreign production is likely to range between 69 and 71 million bales in 1998/99. Lower production is likely in China due to large cotton supplies and rising grain prices, while falling world prices during the first half of 1997/98 suggest that Australia's crop could decline as well.

### **Foreign Consumption, Trade and Ending Stocks**

Foreign consumption is likely to increase for the fourth consecutive year in 1998/99, but much depends of the future impacts of this winter's Asian crisis. Foreign consumption could range between 77.5 million and 79.5 million bales. If Southeast Asia recovers quickly from its current liquidity problems, then the region's lower exchange rates provide a good basis for increased exports of textile products. Some of these exports could come at the expense of competitors with stronger exchange rates, but global consumption of textiles could also be higher as lower production costs in Southeast Asia and Korea help trim textile prices. One problem that will continue through 1998 and beyond is reduced purchasing power by consumers in Southeast Asia, so some textile capacity originally aimed at domestic Southeast Asian consumers will be reoriented towards exporting and some will be dismantled. However, GDP growth is expected to rebound in most of Asia in 1999, and domestic consumption of textiles in the region would also be expected to rise.

Even if the liquidity problems in Asia continue to hamper textile exports from the region during

1998/99, generally good economic growth prospects can be expected to sustain cotton mill use in other regions. Both Japan and the European Union are expected to have faster GDP growth than the year before in 1998, and again in 1999. Russia's mill consumption of cotton would be expected to increase again in 1998/99 and, if Southeast Asian mills continue to lag in 1998/99, then China's consumption could continue rising. Increases are also expected in Brazil and Mexico.

In the longer run, the labor and capital resources freed up by the failure of businesses producing for the Southeast Asian domestic market could be largely utilized by export-oriented enterprises. The increased cost of capital in much of Asia will increase the cost of capital-intensive facilities like synthetic fiber plants, helping reduce the region's expected capacity for fiber production. Even in the short run, some unprofitable plants may be shut down as their owners' ability to bear these losses is reduced. Thus, in the long run, investment will tend to shift to the production of goods appropriate to the region's current resource endowments and capable of earning an adequate return in foreign exchange. This suggests that textile production, and cotton spinning, could increase at a faster rate than that observed during the first half of the 1990's.

Foreign imports would be supported in 1998/99 by increased consumption and stockbuilding associated with rebounding economies in Korea, Southeast Asia, and Brazil, but world trade could shrink slightly if China continues its efforts to replace imported cotton with domestic staple. Foreign exports are likely to rise in 1998/99 as competing exporters work off the stocks accumulated during 1997/98. In Central Asia and Africa's Franc Zone, 1997/98 crop gains are likely to move disproportionately into stocks during 1997/98 rather than exports, and by 1998/99 the export pace can be expected to improve. Similarly, exports of Australia's record 1997/98 crop have been disrupted by Asia's financial problems, and delayed shipments could mean larger exports in 1998/99.

Foreign ending stocks would be expected to fall in 1998/99 due to lower production and increased consumption.

## **U.S. Cotton Outlook for 1998/99**

### **U.S. Area, Yield and Production**

U.S. 1998 cotton planted acreage is likely to decline for the third consecutive year. USDA's survey of producers' planting intentions will be published March 31; our current subjective estimate is that area will be down nearly 1.0 million acres to 12.9 million. Reductions in planted acreage are attributable to the current price levels of cotton and alternative crops, but also to continued structural adjustments by producers to the new policy environment.

Cotton area in 1995 reached its highest level in 40 years at 16.9 million acres as a result of historically high cotton prices combined with very weak prices for corn and soybeans and a 0-



percent government acreage reduction program. However, high production costs and low yields from weather and insect damage reduced producers' net returns despite a continued price uptrend. Poor results from the 1995 crop and higher competing crop prices cut 1996 plantings by 14 percent from the previous year.

It appears that regional changes in planted acreage in 1996 and 1997 responded to the producer's net income from the previous year's cotton crop, or lagged net returns, and the expected price of cotton and its relationship to that of competing crops, primarily corn and soybeans. The current December cotton futures price is 4-5 cents lower than it was at this time last year. The soybean-cotton price relationship has been relatively stable since 1996, but corn prices fell in comparison to cotton in 1997 and have risen again in early 1998.

Viewed regionally, Southeastern area was almost unchanged in 1997 but is likely to decline about 250,000 acres this year to 2.9 million due to lower returns from last year's crop and higher corn prices. In the Delta, area also dropped in 1997, despite stable returns from the 1996 crop. Anecdotal evidence suggests that producers are shifting away from cotton due to its greater risks from higher production costs. If so, the trend away from cotton will intensify in 1998 with the current lower cotton prices and higher corn prices---plantings are projected to be 3.0 million, down 450,000 from 1997. Similarly, planted area in the far West is shifting to lower-cost options, especially permanent crops, although some of the loss in upland cotton will be offset by higher Pima cotton acreage in California. Western area of 1.35 million acres, including Pima, is projected.

The Southwest shows sharply higher net returns from the 1997 crop. This is attributable to historically low levels of acreage abandoned due to weather problems and good yields, which have more than compensated for declining prices. Acreage is likely to be higher this year in south Texas, where wet conditions hindered planting last year, lower in east Texas and roughly equal to last year in the High Plains. Planted area of about 5.65 million acres, down about 100,000 from last year, is expected.

With average growing conditions, production ranging from 16.5-17.5 million bales is anticipated, including about 550,000 bales of Pima cotton. The mid-point of the range, 17.0 million bales, is nearly 2.0 million bales below 1997/98 production. Of course, these estimates are at best an indicator of direction, given the uncertainties surrounding producers' planting intentions and the extreme variability of production yields.

#### Probability of U.S. Imports, 1998/99

The prospect of lower U.S. area and production raises the question of whether the U.S. might import cotton in 1998/99, as it did in the summer and fall of calendar 1996. Special import quotas are authorized whenever the lowest U.S. price, usually Memphis, as quoted for the Cotlook A-index minus the A-index minus the previous week's Step 2 payment exceeds 1.25 cents per pound for 10 consecutive weeks; when Step 2 is active, as it is now, this effectively

means the Memphis-A differential must rise for 10 consecutive weeks. Each week's import quota permits imports of one week's domestic mill consumption, or about 200,000 bales, with a window of 90 days to purchase and 180 days to enter the U.S. from the date the quota opens.

Experience indicates that, if Step 3 is open, the U.S. is likely to import substantial quantities of cotton only if U.S. shortages occur in the context of more plentiful foreign supplies. This is because the cost to mills of importing foreign cotton is equivalent to an average 7-8 cent differential between the U.S. and foreign price quotations, basis northern Europe. An additional foreign discount, probably 2-3 cents more, is needed to offset the mills' costs of storing large import shipments and spinning unaccustomed varieties, for a total spread of at least 10 cents per pound. The cotton imported during the summer and fall of 1996 was purchased when the Memphis quote exceeded the A-index by 7.5-15 cents per pound, and many import transactions probably occurred at the upper end of that range. Such large differentials are usually associated with tight U.S. stocks and, if anticipated early on, would tend to limit exports before inducing imports.

#### U.S. Cotton Mill Use, 1998/99

U.S. cotton mill consumption during 1998/99 is projected to expand slightly from 1997/98. The preliminary estimate for U.S. mill use next season is 11.7 million bales, about 2 percent above the 1997/98 estimate and twice the percentage growth presently projected in foreign cotton consumption. The U.S. mill use projection is based on the premise that GDP growth will slow to a rate of 2.5 percent in calendar 1998, compared with 3.8 percent in 1997, that U.S. retail demand for cotton textiles will rise about 6.5 percent, and that both textile imports and textile exports will reach new records. As a result, per capita domestic consumption of cotton could rise an additional pound from the 1997 level to 33 pounds.

Textile trade agreements such as NAFTA and CBI have changed the landscape of U.S. cotton textile trade over the last decade. Since NAFTA's inception in 1994, more semi-processed products are being shipped to other NAFTA/CBI countries for assembly, before returning to the United States as an imported product. In 1993, for example, the United States exported slightly less than 1 billion pounds of cotton in the form of textiles. At that time, 15 percent of the total went to Asian countries while 65 percent were shipped to other North American countries. In just four years, U.S. cotton textile exports have climbed to a record 1.8 billion pounds with most of the increase going to the North American region. Shipments to NAFTA/CBI countries have risen consistently and in 1997 accounted for 80 percent of all U.S. cotton textile exports.

Likewise, U.S. cotton textile imports have continued to expand. In 1993, the United States imported nearly 3.6 billion pounds of cotton in the form of textiles and nearly two-thirds came from Asian countries while less than one-fifth came from other North American countries. However, in 1997, cotton textile imports soared to 5 billion pounds but the percentage coming from Asia declined to one-half. On the other hand, cotton textile imports from NAFTA/CBI countries have expanded, accounting for over one-third of the total. In fact, Mexico has been the

largest supplier to the United States since 1995, and when combined with Canada, accounted for about 20 percent of U.S. cotton textile imports in 1997.

#### U.S. Cotton Exports and Stocks, 1998/99

U.S. cotton exports are expected to decline to around 6.2 million bales in 1998/99, down 15 percent from the current year. Exports will be constrained by limited U.S. supplies due to reduced production, by the anticipated build-up in foreign stocks outside China during 1997/98, and by projected lower import demand, especially by China. As noted earlier, foreign beginning stocks are likely to rise substantially, especially in Central Asia, the African Franc Zone and Australia, indicating increased early-season competition; at the same time, foreign production is expected to decline proportionally less than the U.S. For these reasons, the U.S. share of world trade is projected at just below 24 percent, compared with nearly 28 percent this marketing year.

Based on these projections of supply and use, U.S. ending stocks would fall to a level of 3.3 million bales, or about 18.5 percent of total use, a relatively tight stocks-to-use ratio.