

Agricultural Outlook Forum '99

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

Pete Burr, Stephen MacDonald, Leslie Meyer, and Carol Skelly  
Agricultural Economists, USDA

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

The world cotton situation for 1998/99 is characterized by falling production, consumption, and trade. However, concern has focused on falling consumption, and world prices have fallen to levels not seen since the early 1990's. World consumption is forecast at 84.6 million bales in 1998/99, 3.8 million below its year earlier level, the largest annual percentage decline (4.2 percent) since the early 1970's. World production in 1998/99 is estimated 6.7 million bales below its year earlier level, at 84.7 million. Higher world ending stocks are expected for the fifth consecutive year in 1998/99, 500,000 bales higher than a year earlier at 41.6 million bales, or 49 percent of world consumption.

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

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

Foreign cotton area rose slightly in 1998/99, up 1 percent to 28.5 million hectares. However, foreign production is estimated lower nonetheless, down 1.7 million to bales to 71 million. Foreign yields fell on average during 1998/99 since production declines were concentrated in countries where irrigated production and high yields predominate, and larger crops were recorded in countries with some of the lowest yields in the world.

Increased foreign area was led by India's 300,000 hectare gain as declining Indian stocks in 1997/98 fueled higher prices, driving area there to its highest ever. Australia's area increase was the second largest of any country in 1998/99 as favorable pricing opportunities against New York futures coincided with favorable water supplies. Timely precipitation and low grain prices discouraged wheat plantings in favor of cotton across an unprecedented amount of dryland area, and Australia's total cotton area is estimated to have risen 100,000 hectares, or nearly 25 percent. At 540,000 hectares, Australian area marked its fourth consecutive annual increase to a new all-time high. Finally, with increases in South Africa, Zimbabwe, and a variety of countries in West Africa's Franc Zone, cotton area in Sub-Saharan Africa rose 200,000 hectares from the year before, its fifth consecutive increase. With this increase, Sub-Saharan Africa's area reached a record 4.3 million hectares, surpassing the 4 million hectare record set in 1971.

Area fell 100,000 hectares in China, and nearly 100,000 hectares in Egypt, as government policy in each country helped reduce the attractiveness of cotton production. Adverse weather helped drive Sudan's area about 100,000 hectares lower as well, and the adverse economic events of the

last year contributed to lower area in Argentina and Paraguay.

Foreign production in 1998/99 is estimated lower than the year before as lower production in China, Egypt, Pakistan, and other countries offset larger crops in India, Australia, and Turkey. According to China's State Statistical Bureau's initial estimate, China's 1998/99 crop totaled about 19.8 million bales, 1.3 million below the previous year. Yields fell from the previous year's record high, but were the second largest ever. Xinjiang continued to account for an ever larger share of China's cotton crop, and its high yields supported national average yields despite the impact of the summer's floods in southeastern growing regions. The Egyptian government introduced several reforms in 1998/99--including reduced pesticide subsidies for farmers, liberalization of land rental rates, and reduced purchase prices--and the crop is estimated to have fallen nearly one-third, a 500,000 bale decline, due to lower area and the effects of excessive heat on yields. Weather and insect problems continued to weigh on Pakistan's yields, and Pakistan's 1998/99 crop was nearly 400,000 bales lower than the year before.

### Foreign Consumption, Trade, and Ending Stocks

The economic slowdown triggered by the Asian financial crisis has taken a heavy toll on foreign cotton consumption in 1998/99. At 74.2 million bales, foreign consumption for the year is estimated to have fallen 3.9 percent, the largest such drop of the post-World War II era. With this 2.8-million-bale decline, foreign cotton consumption is now forecast to be at its lowest since 1985.

According to Oxford Economic Forecasting, world economic growth is estimated at barely 2 percent in both 1998 and 1999, substantially lower than average 3.2 percent world GDP increases of the preceding four years. Southeast Asia is expected to improve in 1999, and suffer only a 1-percent decline in GDP, compared with its 6.7 percent contraction in 1998. Deterioration is expected for the transition economies, where average GDP growth is expected to go from -2.3 percent in 1998 to -7.3 percent in 1999, as the Asian crisis's delayed impact hits Russia. Similarly, a Brazilian economic contraction in 1999 is expected to bring total Latin American GDP growth to its lowest in four years. Finally, Japan's economy is expected to contract for the second consecutive year in 1999.

As a result, reduced consumer demand in Southeast Asia, Japan, Russia, and Brazil appears to be offsetting what to date has been relatively robust consumer demand in the United States and Western Europe. Textile exports that would otherwise be going to Japan, Russia, and Brazil have in effect been diverted to other markets, and textile products that would have otherwise met domestic needs in Southeast Asia have moved onto export markets, further heightening the competition in markets that can still import.

Consumption in both China and Turkey is expected to be 1 million bales lower than the year before under the impacts of slowing domestic economies, poor growth in major textile export markets, and increased competition from other textile exporters. China's calendar 1998 textile and apparel export value fell 7.3 percent from the preceding year, and a successful implementation of the on-again, off-again spindle-reduction campaign China has pursued for many years reportedly led to the destruction of millions of cotton spindles during calendar 1998.

India's consumption is forecast nearly 600,000 bales below the year before due both to its own slowing economy and to difficult competition in world textile trade from East and Southeast Asian exporters. Domestic economic problems associated with the aftershocks of the Asian financial crisis have reduced expectations for economic growth and cotton consumption in Russia and Brazil, with respective year-to-year declines in consumption of 350,000 and 150,000 bales.

Foreign cotton imports are also expected to decline in 1998/99, down 2.6 million bales to 24.1 million. Not surprisingly, the countries with the largest expected consumption declines are those with the largest expected declines in imports. China's imports are forecast 1.2 million bales lower than the year before; Turkey's imports, 1.1 million bales lower; and Brazil's and Russia's each about 400,000 bales lower. Smaller increases in imports are foreseen for India, Pakistan, Bangladesh, and Southeast Asia.

As foreign consumption slows more than exports in 1998/99, foreign stocks are expected to increase. Virtually all of the anticipated 1-million-bale increase in foreign stocks is expected to occur in India. The combination of slowing consumption, rising production, and increased imports is expected to lead to a 1.2-million-bale increase in India's stocks, and the highest ending stocks-to-use ratio there since 1985. Lower stocks are forecast for China for the first time since 1993/94, but only a 250,000-bale decline. Egypt's cotton stocks are forecast nearly 400,000 bales lower, accounting for about half of the 250 percent increase in stocks that occurred between 1995 and 1997.

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

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

U.S. cotton production in 1998/99 is currently estimated at 13.8 million bales, compared with last season's 18.8-million-bale crop. This season's U.S. production decline was the result of lower planted area, harvested area, and yield. Planted area of 13.4 million acres was 3.5 percent below the preceding year due to more attractive alternative crops and adverse weather at planting time, especially in the Southwest and West regions. Upland area totaled nearly 13.1 million acres while the extra-long staple (ELS) acreage expanded to 330,000 acres. In addition, this season's drought conditions forced producers to abandon 20 percent of the area planted, a much larger than normal abandonment. Estimated harvested area of 10.7 million acres reflects a 23-percent reduction from 1997/98. And despite the loss of lower-yielding dryland acres, the national yield of 618 pounds per harvested acre is 8 percent lower than a year ago.

Upland production is estimated at 13.37 million bales this season, with an average yield of only 612 pounds per harvested acre. With U.S. production substantially below last season, each of the four cotton regions produced a smaller crop than in 1997/98, the result of lower area and yields in three of the four regions. Only the Southwest planted more upland acreage in 1998/99 than in 1997/98. However, excessive heat and drought conditions in this region caused a record 41 percent abandonment rate, leaving the Southwest's harvested area at a historical low 3.4 million acres. As a result, a larger percentage of the Southwest crop was under irrigation in 1998/99 which bolstered the region's yield to 510 pounds per harvested acre.

In the Delta, cotton planted area, at 3.2 million acres, continued its 3-year decline as competing crop prices took acreage out of cotton once again in 1998/99. And with yields significantly below the previous season, upland production in the Delta reached only 4.2 million bales, the lowest in 10 years. In the Southeast, 1998/99 planted area was above the 5-year average at 3.1 million acres. However, weather problems also affected yields in this region, forcing production to fall to 3.7 million bales, the lowest in 4 seasons. North Carolina was the only exception, however, as cotton area, yield, and production were higher than last season. In the West, upland area fell below a million acres for the first time since 1967/68 as a result of weather problems at planting time. In addition, yields fell to 943 pounds per harvested acre for an upland crop of only 1.8 million bales for the region, the lowest in over 25 years.

Meanwhile, ELS cotton production is estimated lower this season at 430,000 bales. The decline in the ELS crop is attributable to a decrease in both harvested area and yields. Harvested area totaled 237,000 acres while the ELS yield averaged 873 pounds per harvested acre. With ELS production reduced over 100,000 bales this season, California continues to increase its dominance of the ELS crop, accounting for 80 percent of the 1998/99 production.

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

U.S. cotton mill demand is expected to decline in 1998/99 despite the continued strength in the retail market for cotton products. Much of the consumer demand, however, has been filled with less expensive imported textile products from many countries still struggling with recent economic crises. As a result of these textile imports, U.S. mills have been forced to curtail production to alleviate the buildup of inventories.

U.S. cotton mill use is projected to fall nearly one million bales this season to 10.4 million, 8 percent below 1997/98's 50-year high. Upland mill use is expected to approach 10.3 million bales while ELS consumption is projected to reach 110,000 bales. During the first 5 months of 1998/99, U.S. mills used 4.3 million bales of cotton, about 9 percent below the comparable period for 1997/98. And despite seasonal slowdowns seen in recent data from the Department of Commerce, the seasonally adjusted annual rate of cotton consumption has averaged over 10.5 million bales for the August through December period.

Slower growth in the U.S. economy, reduced U.S. supplies, and the rising textile imports, which have widened the cotton textile trade deficit, will help moderate mill use this season. And despite lower manmade fiber prices, declines in cotton mill use have been exceeded by decreases in manmade fiber usage. As a result, cotton has averaged nearly an 80-percent share on the cotton spinning system during the first 5 months of 1998/99, compared with 78.5 percent for the entire 1997/98 season.

U.S. cotton textile imports, textile exports, and the net trade deficit all rose in calendar 1998. Cotton textile imports increased nearly 20 percent and approached 6 billion pounds, or the equivalent of 12.5 million bales of raw cotton. On the other hand, U.S. cotton textile exports in 1998 gained over 10 percent reaching approximately 2 billion pounds, or the equivalent of 4.2 million bales of cotton. And as a result, the cotton textile trade deficit has risen substantially for the second consecutive year to a new record of more than 8-million-bale equivalents of raw

cotton. In total, U.S. consumers purchased the equivalent of over 19 million bales of cotton in calendar 1998, which indicated a rise of 1.5 pounds in the per capita consumption of cotton to 34 pounds, the highest in 55 years.

#### U.S. Exports, 1998/99

Like mill consumption, U.S. cotton exports have been restrained this season. U.S. exports are projected to fall 44 percent from last season's 7.5 million bales to only 4.2 million, the lowest level since 1985/86. Upland exports are forecast at 3.9 million bales while ELS shipments are expected to reach 300,000 bales in 1998/99. The reduction is attributable to the decline in the U.S. crop, which has left exportable supplies at a minimum, and to very weak worldwide import demand for cotton.

In addition, other major cotton exporters are generating strong competition for limited markets as foreign stocks outside China are projected to increase once again this season. In other words, the stocks of nearly all of the U.S.'s major competitors and most of our customers, are estimated to rise collectively by more than one million bales. And by the end of this season, these stocks are expected to be the highest since 1974/75, no doubt a major reason why demand for U.S. cotton is at a 10-year low.

During the first half of 1998/99, U.S. cotton exports totaled about 2.8 million bales, or a shipment average of 106,000 bales per week. With two-thirds of the forecasted exports already shipped, U.S. exports for the last half of the season need to average only 56,000 bales per week. Meanwhile, commitments (shipments plus outstanding sales) at the halfway point stood at nearly 4 million bales, or 95 percent of the forecast. However, sales beyond the 4.2-million-bale level are needed as some sales are traditionally "rolled over" to the new season. In addition, these remaining export sales will have to be made without the support of the "Step 2" competitiveness program, which expired in mid-December.

#### U.S. Imports and Ending Stocks, 1998/99

With the expiration of "Step 2" and the continued price gap between the U.S. quote and the A-index, the required 10-week count for triggering the "Step 3" import quota is approaching. The first quota is expected to open about March 1 with a quota quantity of approximately 200,000 bales. But despite the possibility of numerous quotas triggering, the likelihood of raw cotton imports of only about 350,000 bales is projected for the 1998/99 season. These raw cotton imports are largely the result of the small U.S. crop which was lacking in certain qualities of cotton needed by U.S. mills.

Despite projections of total demand for U.S. cotton to fall over 22 percent from 1997/98 to 14.6 million bales, demand remains above the reduced crop and stocks are expected to decline from beginning levels. Even including the projected imports, stocks at the end of 1998/99 are forecast to be only 3.4 million bales. Although the actual stock level is below the previous season, the ratio of ending stocks to total use has in fact risen from about 21 percent to over 23 percent this season, and, accordingly, prices to date have fallen.

The combination of the current low prices and low yields will reduce 1998/99 market revenue per acre to its lowest level in over 10 years, but government payments (including contract payments) will provide an average of almost \$120 per planted acre--before crop loss payments are factored in. Government outlays for the cotton program, which tend to rise as prices fall, will exceed \$1.5 billion for the current fiscal year. With the marketing loan differential running at about 10 cents per pound, most of this year's upland cotton production of 13.4 million bales is likely either to enter the loan or receive a loan deficiency payment (LDP). As of early February, nearly 5.0 million bales had entered the loan and nearly 6.0 million bales had earned an LDP.

### **World Cotton Outlook for 1999/2000**

World ending stocks are expected to rise in 1999/2000 as production continues to exceed consumption. The outlook is for larger world production--at 86 to 88 million bales--led by a rebounding U.S. crop, and a similar gain in consumption--to 85 to 87 million bales. At the midpoint of these ranges, world ending stocks--even after excluding China--are expected to climb to their highest share of consumption since the mid-1980's.

#### **Foreign Production for 1999/2000**

Foreign cotton production for 1999/2000 is expected to decline by 1 to 2 million bales as smaller crops in China, India, Turkey, Mexico and Australia offset increases in Uzbekistan and the African Franc Zone.

An expected decrease of more than 1 million bales in China's cotton production--to around 18.5 million bales in 1999/2000--accounts for most of the anticipated drop in 1999/2000 foreign production. The Chinese government continues to implement policies designed to lower cotton area and production through reductions in procurement prices. However, many officials are pessimistic about the government's efforts since cotton still remains one of the best cash-earning crops in many parts of China. India's cotton output in 1999/2000 is also expected to be lower based on reduced area as many growers switch to alternative crops due to weakening returns this year as production soars and consumption contracts. Similarly, lower area in Turkey is likely to result from the current depressed conditions in the Turkish textile industry. Cotton area in Mexico is likewise expected to respond to weak demand and competition from competitively priced U.S. cotton. And marginal decreases in Australia's production are projected, as normal rainfall would reduce the potential for dryland cotton.

Two major foreign cotton-producing regions, Central Asia and the African Franc Zone, are likely to increase cotton production next year, despite the current low level of world cotton prices. With area unchanged based on government-set targets, Uzbekistan's cotton production is expected to rebound from this year's weather-reduced crop. Production in the African Franc Zone, where investment in cotton production will maintain area, is also likely to benefit from a return to normal yields.

#### **World Consumption and Trade in 1999/2000**

World cotton consumption is forecast to rise 1 to 2 percent from its year earlier level in 1999/2000 as world economic activity improves late in calendar 1999 and during 2000. However, at 85 to 87 million bales, world cotton consumption is still forecast at one of its lowest levels of the decade. Most of the expected continued problems with consumption can be ultimately traced to sluggish economic growth. During the last 25 years, cotton consumption has failed to grow when world GDP growth was below 2.3 percent. (The correlation is clearest when GDP for the calendar year occupying the latter part of the cotton marketing year is used: e.g., GDP in calendar 1998 is relevant to cotton consumption in marketing year 1997/98).

Currently, a modest upturn in economic activity in the year 2000 is foreseen. The U.S.'s phenomenal consumer demand growth is expected to weaken through 1999, picking up only slightly in 2000. Western Europe's consumer demand is expected to be relatively steady through this period. And there is a great deal of uncertainty about the outlook for Japan as it enters the eighth year of its post-"bubble" slowdown. Largely depending on expectations for Japan, various macro-economic forecasters expect either little change or a slight improvement in average economic conditions in developed countries.

For developing countries, the outlook is much better. A more optimistic outlook through 2000 is appropriate given recent events: improving stock markets in developing East and Southeast Asian countries, the return of South Korea's credit rating to investment grade, and the beginning of increased imports across several countries. GDP growth in Asian developing countries is expected to rise substantially in 1999 compared with 1998--albeit GDP growth will simply be less negative in Southeast Asia, but even there a strong upturn is likely in 2000. Little change is expected in China.

Several factors are expected to restrain global consumption growth. One is possible continued inventory adjustments. As a speaker at last year's Outlook Forum noted, changing economic conditions can amplify effects on fiber demand due to changing stockholding through the textile marketing chain. This has probably been a factor in 1998/99's extraordinary consumption decline, and lagged effects could continue in 1999/2000. Another factor is competition from low polyester prices. Price declines for polyester in most Asian markets reported by Cotton Outlook have exceeded the similar year-to-year decline in the A-index, and appear to be reaching new lows. As a result of these offsetting factors, expected world consumption gains in 1999/2000 are forecast at the long-term growth rate of 1 to 2 percent.

Just as 1999/2000 world consumption is not expected to rebound completely from 1998/99's large decline, world trade is not expected to completely recover from this year's losses. The circumstances that led to two of the largest import cuts--China's and Turkey's 1-million-bale import contractions--are unlikely to reverse, and the decline in Brazil's exchange rate is likely to lead to a still smaller share for imports there. Other importing countries are likely to increase imports slightly, however, and world trade is likely to again equal about 30 percent of world consumption, or about 26 million bales.

## **U.S. Cotton Outlook for 1999/2000**

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

Preliminary estimates for 1999 U.S. area suggest an increase to about 13.5 to 14 million acres, including about 275,000 acres of ELS cotton. And with average abandonment and normal yields, a U.S. cotton crop of 17 to 18 million bales is indicated, including 550,000 to 600,000 bales of ELS cotton. The mid-point of this range, 17.5 million bales, is more than 3.5 million bales above the 1998/99 weather-plagued crop. However, these estimates are at best an indicator of direction, given the uncertainties surrounding producers' planting intentions and yield variabilities across the Cotton Belt.

U.S. planted acreage is expected to rise marginally in all regions. Cotton area is likely to increase despite the current very low cotton price levels because of depressed prices for alternative crops, concerns about aflatoxin in corn, and the safety net provided by the cotton marketing loan program. December cotton futures fell below 60 cents per pound on February 11, its lowest level since November 1993; however, a comparison of the ratios of cotton prices to corn and soybean prices for the past several years shows that alternative crop prices are also extremely low. The results of a long-term research program by USDA's Economic Research Service on changing producer responses to prices under the 1996 Farm Act indicates that shifts from other commodities to cotton due to relative prices will more than offset the negative effect of current low cotton prices.

Cotton planted acreage in the Southeast and Delta is expected to reverse its recent pattern of decline due to shifts in acreage from other crops, especially corn. Last year's heavy corn price discounts due to aflatoxin infestations in the Delta have generated renewed interest in cotton. In the Southwest, reduced plantings of Pima cotton are likely to be offset by a gain in acres from grain sorghum. And in the far West, upland cotton acreage is likely to about equal last year's weather-reduced level. Some upland cotton acres will shift to Pima cotton in California, due to relatively stable prices and good yields.

#### U.S. Mill Use, 1999/2000

On the demand side, U.S. GDP is expected to grow more slowly in both 1999 and 2000 than it has in recent years. As a result, slower growth in retail cotton consumption, coupled with increased cotton textile imports, will likely result in mill use exhibiting little change in the upcoming season. U.S. retail cotton consumption could exceed 20-million-bale equivalents in 1999/2000 with only modest growth. However, as in the current season, much of this growth will likely be satisfied with textile imports. An offset to some of the growth in textile imports will be provided by the expected increase in cotton textile exports, largely attributable to NAFTA and CBI gains. Given the effects of ongoing trade liberalization, cotton textile trade will likely continue to expand and play a major role in the quantity of cotton demanded by U.S. mills.

Based on current indications, U.S. cotton mill use in 1999/2000 is likely to range somewhere between 10 and 10.5 million bales, about unchanged from 1998/99. However, the recently released GDP data for 4th quarter 1998 was a pleasant surprise to many, the highest quarterly growth in over 2 years. And if growth continues near this level, retail demand for cotton may rise further, which in turn could push mill use higher than currently projected.



## U.S. Exports and Ending Stocks, 1999/2000

With higher production, the U.S. is potentially a larger exporter in 1999/2000; but, relatively weak world demand, some export competition from China, and continued large stocks in foreign countries outside China are major factors that will limit U.S. exports from returning to the shipment level of 1997/98. Exports in the range of 5 to 6 million bales are consistent with the world projections outlined here. The mid-point of this range, 5.5 million bales, would be 30 percent above the current season's projection but well below the 5-year average of approximately 7 million bales.

At 5.5 million bales, the U.S. share of world trade would rise above this season's 17.5 percent to about 21.5 percent, but would remain below the 25-percent average of the early 1990's. Under the standard assumption of no policy changes, this analysis assumes no revival of Step 2. The lack of Step 2, the prospect of continued low imports by China, continued exports by China, and rebounding production in Uzbekistan and the Franc Zone together suggest that the U.S. share of world trade should be below its average of the early 1990's.

And despite the projected increase in U.S. exports in 1999/2000, larger production gains are likely to push U.S. stocks higher. Based on these projections of cotton supply and demand, and the likelihood of negligible or no imports during the marketing year, U.S. stocks could rise nearly 2 million bales by the end of 1999/2000. The gain in stocks would imply nearly a one-third ratio of stocks relative to total use, well above this season and the highest in over 10 years.

So you might ask, "What does all this mean for cotton prices or farm income?" As you know, USDA and its employees are prohibited by law from public forecasts of cotton prices, but perhaps just as important as prices are the net income prospects. Based on the scenario presented here, there may be some good news on the horizon. This season, the cotton producer's income from the marketplace was severely reduced by the combination of low prices and low production. Only program payments, in place under the current farm legislation, kept producers' net income per acre above the recent low of the 1995 season. And for next season, current projections for net income for cotton are somewhat positive due to a projected return to normal yields, coupled with the promise of marketing loan benefits if low prices should continue. Although not expected to reach the peaks of recent years, a rebound after two years of decline will be welcomed by all segments of the cotton industry.