THE UNITED STATES AND WORLD COTTON OUTLOOK

Stephen MacDonald, James Johnson, Leslie Meyer, and Carol Skelly
U.S. Department of Agriculture

Introduction

The world cotton situation for the current season, 2002/03, is characterized by sharply lower production and rising consumption. World stocks are forecast to fall nearly 9 million bales to about 38.0 million, their lowest level since 1995/96. World prices have risen about 10 cents per pound for the period August 2002-January 2003, compared with the average for 2001/02. As a result, the 2003/04 marketing year will start from a position of tighter stocks and a more optimistic price outlook than the recent past several seasons. World production is likely to rise sharply but not enough to offset lower beginning stocks. With demand continuing to rise, world stocks are projected to fall further.

World Cotton Situation, 2002/03

World Cotton Production, 2002/03

World cotton output realized its largest decline in more than a decade in 2002, down 10.7 million bales to 87.6 million bales. This 11-percent decline follows a similar drop in world prices—the A-Index’s average for the year fell more than 15 cents in 2001/02, its largest decline in more than a decade.

Production declined the most in the United States in 2002/03, down 3.2 million bales. But, production declined nearly as much in China, down 2.9 million bales. Australia’s 2002/03 output is 1.7 million bales lower compared with last year, largely reflecting a severe contraction in irrigation supplies and low soil moisture for dryland planting. India’s crop is down 1 million bales in response to last year’s low prices. Better weather and reduced insect pressure raised India’s yields in 2002, but area was down more than 10 percent.

Area planted to cotton in China declined about 13 percent from the year before in 2002/03, a widely expected response to a decline in procurement prices of about 30 percent during the year before. However, area did not decline as much as initially anticipated, and yields were also more favorable than foreseen early in the season when weather problems were widely reported. Continued increased use of Bt cotton in eastern provinces probably accounted for some of the yield improvement, and favorable harvest weather may also have been a factor. Very favorable yields have also been reported for Xinjiang. With a 3-percent increase in yields on average, China’s 2002/03 cotton crop was only 10 percent below its 2001/02 level, and at 22 million bales was China’s second largest crop since 1991/92.
In total, production in Central Asia and West Africa’s Franc Zone declined about 1 million bales. Central Asia’s crop shrank about 500,000 bales as yields dropped from 2001/02’s high levels in Uzbekistan and Kazakhstan, and as Turkmenistan experienced additional problems managing its economy. Production in the Franc Zone fell 600,000 bales from the year before as area dropped in response to lower international prices in 2001/02, weather problems cut yields in some countries, and conflict in Cote d’Ivoire cut production there.

World Cotton Consumption, 2002/03

World cotton consumption is forecast at 96.8 million bales for 2002/03, another record and a 2.4-percent increase from the preceding year. Consumption is supported by economic recovery, favorable prices for cotton relative to manmade fibers, and rapid expansion in China. China’s consumption is rising 1.0 million bales to an estimated 27.0 million bales this season, or 28 percent of the world’s total. China’s mills are benefiting from lower domestic cotton prices, the liberalization of world textile trade, and rising demand by Chinese consumers.

Cotton consumption is also forecast to rise in Pakistan (+500,000 bales), India (+325,000), and Turkey (+250,000). Together with China, these countries account for 92 percent of the world’s gain over 2001/02. Higher consumption is also forecast for some less developed central and south Asian countries, including Uzbekistan, Bangladesh, Thailand, and Vietnam. In the developed economies of Asia, Europe, and the United States, cotton use is stable or marginally below last season. Mexican cotton consumption is also flat, due to the strength of the peso and to the erosion of Mexico’s trade advantages under NAFTA, as U.S. textile quotas are liberalized for other countries.

The Impact of China on World Trade

The end of the 2002/03 season will mark the first time in eight years that China has not carried surplus stocks. China’s stocks rose to a peak of 23.0 million bales at the end of 1998/99, accounting for nearly half of world stocks. Beginning in September 1999, China instituted a series of reforms to liberalize prices and privatize distribution. While the success of these reforms has been mixed, they have brought internal Chinese prices closer to world prices, thereby stimulating consumption and limiting incentives to overproduce. Growth in domestic use has exceeded production, affording the government an opportunity to sell excess stocks at auction. The China National Cotton Exchange sold 13.6 million bales of mostly old-crop cotton between October 1999 and the end of January 2003.

The elimination of surplus stocks in China has raised the sensitivity of the world cotton outlook to changes in Chinese cotton supply and demand. For 2002/03, China’s import demand is forecast to increase by a factor of five to 2.25 million bales, or 7.5 percent of the world’s total imports. The uncertainty, as well as the magnitude, of this forecast affects the outlook for world cotton trade. For example, China is believed to have purchased about 1.2 million bales from all sources to date this marketing year, or more than half of its total projected imports. Substantial additional purchases are deemed likely during the second half of the season due to strong
consumption and limited domestic supplies, but will also depend on the government’s import policies. China joined the WTO at the end of calendar 2001, but has issued import licenses in a more restrictive and less transparent manner than anticipated by the international cotton trade. USDA’s 2002/03 import forecast assumes that the government will distribute sufficient quotas to maintain an adequate pipeline to China’s textile mills.

**World Ending Stocks and Prices**

The combination of lower world production and higher consumption is forecast to reduce world stocks nearly 20 percent to just under 38.0 million bales. The stocks-to-use ratio of 39 percent is the lowest since 1994/95. The growing tightness in world supplies is affecting both producing and consuming countries, as available supplies are drawn out of net exporting countries while importing countries reduce stocks held at mills. China and the U.S. account for just over half of the world’s stock reduction; foreign countries outside of China account for the remaining 4.0 million bales. Diminished supplies are reflected in the rising A-index, which has averaged 52 cents per pound through the end of January, more than 10 cents above the average for the 2001/02 season.

**U.S. Cotton Situation, 2002/03**

**Area and Production**

As planting time approached for the 2002 crop, U.S. cotton futures prices had risen slightly from the lows during the fall of 2001. However, cotton prices were still more than 25 percent below a year earlier. Meanwhile, futures prices for competing crops—like corn and soybeans—were only about 5 percent lower, which made these alternatives attractive enough to pull area away from cotton.

Despite favorable springtime weather, producers planted only 14.0 million acres of cotton in 2002, 11 percent below 2001 and the smallest area since 1998. In addition to the relative attractiveness of alternative crop prices, the uncertainty of the 2002 farm legislation—in particular the possibility of the inclusion of the Grassley-Dorgan Amendment on payment limitations—likely kept some acreage intended for cotton in an alternative crop. Upland cotton area in 2002 totaled 13.7 million acres, 1.8 million lower than in 2001. Meanwhile, extra-long staple (ELS) acreage fell about 10 percent to 243,600 acres as stocks more than doubled from the previous season as a result of the record ELS production in 2001.

Similar to U.S. planted area, cotton harvested acreage in 2002 also declined from the year before. In 2002, harvested area was 12.4 million acres, 10 percent below 2001 and the second lowest in a decade. This resulted in a national abandonment rate of 11 percent or 1.6 million acres for 2002, below the previous 2 seasons.

U.S. cotton production in 2002/03 is estimated at 17.1 million bales, compared with the record 20.3 million bales produced in 2001/02. The production decline is attributable to both lower area and a decrease in the national average yield. The U.S. yield is estimated at 663 pounds per
harvested acre, 6 percent below last season’s 705 pounds but the second highest in the last 5 years. Upland production is currently estimated at 16.5 million bales with an average yield of 651 pounds per harvested acre, below 2001/02 but above the 5-year average. Meanwhile, the ELS crop is projected at 649,000 bales, 7 percent below the 2001 record crop but still the fourth largest on record. Reduced area was somewhat offset by a second consecutive season with a record ELS yield that is estimated at 1,286 pounds per harvested acre.

Compared with last season, 2002/03 regional upland cotton production was lower in three of the four regions of the Cotton Belt. In the Southeast region, the cotton crop is estimated at only 3.3 million bales, the lowest in 9 years, as a result of drought conditions during much of the growing season that reduced the average regional yield to 495 pounds per harvested acre—the lowest yield since 1986/87. In the Delta, production fell dramatically from 2001/02’s record of 6.9 million bales to a projected 5.8 million due to lower area. However, a near-record yield of 803 pounds for the region kept 2002/03 Delta production above the recent 5-year average.

In contrast to the Southeast and Delta regions, upland production in the Southwest region rose in 2002/03 from the year before. For the Southwest, the upland crop is estimated at 5.3 million bales this season, nearly 18 percent above 2001/02. In addition to the largest harvested area for the region in 3 years, a record yield of 534 pounds per harvested acre boosted the output to its highest in 5 years.

In the West region, upland area declined to less than 750,000 acres this season, the smallest planted area to upland cotton in over 55 years. However, a record yield here helped keep production above 2 million bales in 2002/03, a level that has been breached only once in the last 3 decades. In 2002/03, the upland yield in the West reached 1,356 pounds per harvested acre, more than 100 pounds above the previous 5-year average. Similar to upland cotton, ELS production in the West region is projected lower in 2002/03, the result of less acreage as yields—like upland—were at record levels. California continues to dominate ELS production and is expected to account for about 90 percent of the ELS crop in 2002, the average for the last 2 seasons.

**Domestic mill use**

Domestic mill use of cotton is expected to stabilize in 2002/03, after declining nearly 14 percent last season. Mill use is forecast at 7.6 million bales, down 100,000 bales from 2001/02. Last season’s collapse—which resulted in the closure of over 100 textile and apparel plants during 2001—resulted from a combination of factors, including the gradual erosion of the domestic apparel industry, the 2001 economic recession, and the strength of the U.S. dollar. For 2002/03, stronger economic growth, cheaper cotton prices, and a weaker dollar will allow the remaining mills to operate at close to full capacity.

U.S. retail use of cotton is anticipated to rise 8 percent in 2002/03 to 21.0 million bales, after two consecutive years of decline. The increase in end use is about offset by higher textile imports. U.S. cotton textile and apparel imports during the first 11 months of 2002 reached 7.8 billion pounds, 3 percent more than for the entire 2001 calendar year. On a regional basis, however,
these imports have varied. Although U.S. imports from the NAFTA and CBI regions should be near those for 2001, imports from Asia and other regions expanded significantly. The U.S. cotton textile import share from NAFTA has declined for 3 consecutive years and accounted for about 20 percent of the 2002 total. In contrast, imports from Asia contributed more than 50 percent of the total, their largest share since 1997. While this shift in trade is partly responsible for the reduction in U.S. mill use in recent years, it also has contributed to the recent increases seen in U.S. raw cotton exports.

Exports and Ending Stocks

USDA is forecasting total 2002/03 exports of 10.8 million bales, down slightly from last year’s 75-year high of 11.0 million bales. Exports are supported by a U.S. exportable supply that is the second largest in 35 years and a tight foreign supply-demand situation. Sales and shipments in the early part of the season lagged behind last year’s pattern, but cumulative sales reached nearly 8.4 million bales by the end of January and are now on track to meet the forecast. Weekly exports will have to be quite strong, averaging about 245,000 bales per week for the second half of the season, to achieve the forecast total of 10.8 million. However, foreign demand is robust and import demand is likely to rise in China and India; at the same time low exportable supplies in Australia and the disruption of trade from West Africa will depress competition.

Whereas total U.S. cotton exports are expected to be lower than last season, ELS cotton exports are estimated to rise to a record level of 525,000 bales. Large U.S. supplies combined with large Step 2 payments have helped sustain U.S. exports. An abundant world supply has kept pressure on ELS prices this year while upland prices have recovered, resulting in some substitution of ELS for high-grade upland cotton.

U.S. ending stocks are forecast at 6.2 million bales this season, 17 percent below 2001/02 but similar to the stocks at the end of the 2000/01 season. At this stock level, the U.S. would hold about 16 percent of global stocks, similar to the previous 2 seasons, but double the level of the late 1990s. However, the U.S. stocks-to-use ratio would decline from last season’s 39.7 percent to the lowest in 3 years at 33.7 percent for 2002/03. Upland stocks are estimated at 5.8 million bales, while ELS stocks are expected to surpass 350,000 bales—the largest ever recorded.

Farm Income

Gross cotton farm income from the 2002 crop is forecast to decline from $7.4 billion the preceding year to $6.6 billion, due mainly to lower production. Gross market receipts are estimated at $3.9 billion compared with $3.75 billion for the 2001 crop despite a 16-percent drop in production because of higher prices. The upland cotton farm price averaged 40.5 cents per pound from August-December 2002, compared with 29.8 cents for the 2001/02 season. Farm program income is forecast to fall nearly $1.0 billion to $2.7 billion for 2002, as marketing loan benefits are reduced by a higher adjusted world price. Net returns above variable costs are stable at $178 per planted acre.
World and U.S. Outlook for 2003/04

Projections for the 2003/04 marketing year are highly uncertain, due to the unpredictability of weather and the complex economic factors that affect supply and demand. USDA’s projections are based on normal weather conditions and an assumption of current policy.

World production for 2003/04 is forecast at 95.0 million bales, an 8.5-percent increase from the current season. Foreign cotton production, including an increase of 2.0 million bales in China, accounts for almost all of the global increase. World consumption is forecast to rise 1 percent to 97.8 million bales and, again, all of the gain is forecast to occur in foreign countries. Tighter stocks in major consuming countries will boost world trade and, with robust exportable supplies, the U.S. is likely to maintain its recent very competitive share of the world export market. World stocks are forecast to decline about 2.5 million bales, including a significant reduction in U.S. stocks.

Foreign Cotton Outlook

Foreign cotton production is expected to recover in 2003/04, rising more than 7 million bales, to 78 million. World cotton prices have risen substantially in the last year, with the A-Index in January 2003 averaging 31 percent above its January 2002 level. Other crop prices have improved as well on world markets, but in some major cotton producing countries, local cotton prices have improved relatively more. A return to normal weather will also help boost production in some countries, particularly Australia, and the outlook for falling soybean prices during 2003/04 suggests greater interest in planting cotton in South America.

The largest gain is expected in China, where production could easily rise 2 million bales. A recent Ministry of Agriculture survey reported farmers intended to increase cotton area by 17 percent. This would be a substantially larger response to prices than farmers have exhibited in the years since the end of guaranteed government procurement in 1999. Prices received by farmers rose 25 percent from the previous year, according to preliminary data for 2002/03. This, and other less robust reports of planting intentions, suggests China’s output could be about 24 million bales in 2003/04.

Output in India could rise between 600,000 and 1.2 million bales as farmers respond to improving prices and the good yields achieved during 2002/03. While India’s crop fell in 2002/03, reduced insect pressure helped create favorable yields, and farmers expected returns in 2003/04 have been boosted by both the price and yield improvement they’ve experienced in 2002/03. Bt cotton, which was legally introduced in 2002/03, will also be more widespread, further boosting yields. In developing countries, Bt cotton generally realizes better yields as well as reducing input needs, and India is no exception. While some press reports indicate disappointing yields for some farmers planting Bt cotton in India, most studies using certified seed indicate substantially higher yields.

Australia’s crop could rise substantially assuming precipitation returns to a more normal pattern there before November 2003. While a portion of Australia’s dramatic reduction in area planted
in 2002/03 was in response to prices, reduced irrigation supplies and dryland soil moisture was much more important. If Australian precipitation continues to lag, other Southern Hemisphere producers will have an even greater incentive to respond to this year’s price gains, and the aggregate USDA world production forecast would be almost the same.

In South America, the beneficial effect of the current increase in cotton prices will be further bolstered by an expected decline in soybean prices. Brazil would account for most of the gains for South America, although Argentina’s area could increase from its current extremely low level if greater financial stability can be achieved this year.

World cotton consumption in 2003/04 is expected to grow 1.1 percent from the year before, slightly below the long-term average growth rate foreseen by USDA over the next 10 years. World economic growth in 2003 and 2004 could be above average, although the danger of oil price shocks is likely to continue for at least a short time. According to the International Monetary Fund, world economic growth averaged 3.5 percent annually over the decade leading up to 2002. In 2001 and 2002, growth fell below 3 percent, but is forecast above 3.5 percent in 2003, and above 4 percent in 2004.

However, the rebound in world cotton prices experienced to date is likely to dampen the impact of world economic growth on cotton consumption. World cotton consumption has been boosted by a plunging A-Index in recent years. As noted earlier, January 2003’s A-Index was up 31 percent from a year earlier. Thus, despite a potentially strong economic outlook, world cotton consumption is expected to increase at a below average rate.

With little change expected in U.S. mill use, foreign mills are forecast to account for the entire 1-million-bale increase in global consumption. In recent years, China’s consumption has been growing at least 1 million bales annually, but China’s growth is expected to slow in 2003/04, and China is not expected to account for the entire gain. After 3 years of double-digit percentage gains, China’s cotton consumption growth is estimated to fall below 4 percent in 2002/03, and dip to about 2 percent in 2003/04. Outside of China, increased mill use is likely to be concentrated in developing Asian countries, with lower mill use possible in some developed countries.

**U.S. Area, Production, and Supply**

U.S. planted area in 2003 will once again be influenced by a number of factors, including price prospects for cotton and alternative crops, weather during planting, the cotton marketing loan program, and the potential effect of counter-cyclical payments reducing revenue risk.

As planting time for the 2003 crop approaches, U.S. cotton prices are stronger than a year ago, but so are prices for competing crops. The weighted upland cotton farm price has averaged 40.5 cents per pound during the first 5 months of 2002/03, but remains below the loan rate. As cotton prices rise, higher market returns are being offset by lower marketing loan benefits. In contrast, prices for competing crops—like corn, sorghum, and soybeans—are higher than their loan rates and suggest that planting incentives for these alternatives are stronger than a year ago.
Last season, U.S. cotton planted area was 14.0 million acres and the general consensus within the industry is that cotton acreage will increase in 2003. Earlier this month, the National Cotton Council published results from its annual acreage survey that indicated cotton area in 2003 would rise by less than 1 percent to 14.05 million acres. USDA is currently projecting that cotton acreage will range from 14.0 million and 14.5 million acres. Area is likely to rise, despite attractive prices for alternative crops, due to greater certainty about farm program benefits relative to a year ago and to the role of the farm program in reducing price risk. At the end of March, USDA’s National Agricultural Statistics Service will provide its first survey-based producer intentions for 2003 crop area.

With total cotton planted area expected to rise in 2003, and applying a 10-percent abandonment, harvested area is also projected to increase from the current season’s 12.4 million acres and would range between 12.6 and 13.1 million acres. At the same time, however, yields are projected to decline closer to the 5-year average of approximately 645 pounds per harvested acre—as last season’s record yields in the Southwest and West regions are not likely to be duplicated in 2003/04.

Based on these acreage assumptions and an average yield of 645 pounds, U.S. cotton production in 2003 would range between 17.0 and 17.5 million bales. The midpoint of this range is slightly above last season and the previous 5-year average of 17.1 million bales. Coupled with the current beginning stock estimate of 6.2 million bales, total U.S. cotton supplies next season would fall below 24.0 million bales for the first time in 3 years.

**U.S. Mill Use and Exports**

For 2003/04, USDA is projecting that domestic mill use will remain at current levels or fall slightly, consistent with the long-term trend. Seasonally adjusted monthly mill use rates fell to a low of 7.2 million bales in November of 2001, responding to the effects of recession on retail use as well as constraints imposed by a strong dollar on U.S. mills’ market share. Subsequently, the monthly rates generally rose throughout calendar 2002 as mills responded to a recovery in demand and the need to replenish inventories. At the same time, the growth rate in cotton textile imports returned to its pre-recession average of 10-15 percent. While the new weakness in the dollar may dampen this growth rate slightly, net textile imports are still expected to about offset increases in U.S. cotton retail use over the next 18 months. As a result, 2003/04 domestic mill use is projected to range from 7.0-8.0 million bales.

U.S. exports are projected to rise from the current season’s estimated 10.8 million bales, and to fall in the range of 10.8-11.8 million. World supplies of cotton in 2003/04 are expected to fall short of total offtake, despite higher projected U.S. and foreign production. As world stocks tighten, exportable supplies will need to shift to consuming countries. With projected beginning stocks of 6.2 million bales, slightly larger production, and stable mill use, the U.S. will generate a large exportable surplus to move into world trade channels; thus, U.S. exports are likely to maintain their recent world trade share of more than 35 percent.
U.S. and Foreign Ending Stocks

World stocks are projected to fall 2.5 million bales to 35.4 million bales at the end of 2003/04, their lowest level since 1994/95. China’s stocks will fall by less than 1.0 million bales—special challenges in China’s marketing and distribution system are likely to prevent stocks from falling below 30 percent of total disappearance. U.S. stocks are projected to range from 4.0-5.5 million bales, down significantly from the current season’s estimated 6.2 million. At the mid-point of the range, U.S. stocks would equal about 25 percent of total use. Little change is foreseen in stocks of foreign countries other than China, mainly because these stocks are likely to have reached minimum levels at the end of 2002/03.
The U.S. and World Cotton Outlook

U.S. Department of Agriculture
Interagency Cotton Estimates Committee
February 21, 2003
Changes in World Production, from 2001/02 to 2002/03

-4  -3  -2  -1  0
mil. bales

U.S.  China  Australia  India  Af. Fr. Zn.  Pakistan
World and U.S. Consumption, 1998/99 thru 2002/03 (mil. bales)

<table>
<thead>
<tr>
<th></th>
<th>World</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>98/99</td>
<td>84.7</td>
<td>10.4</td>
</tr>
<tr>
<td>99/00</td>
<td>91</td>
<td>10.2</td>
</tr>
<tr>
<td>2000/01</td>
<td>92.2</td>
<td>8.9</td>
</tr>
<tr>
<td>2001/02</td>
<td>94.5</td>
<td>7.7</td>
</tr>
<tr>
<td>2002/03</td>
<td>96.8</td>
<td>7.6</td>
</tr>
</tbody>
</table>
Major Changes in World Consumption, 2002/03 from 2001/02

- China
- Pakistan
- India
- Turkey
- Argentina
- U.S.
China’s Import and Export Projections through 2002/03
U.S., China, and Other S/U Ratios
1997/98 to 2002/03 est.
2002 U.S. Planted Area Below 10-Year Average

mil. acres

U.S. Abandonment and Yield/Harvested Acre
1997/98 to 2002/03

Yield/HA
Aband. %
Southeast Region
Upland Cotton Area, Production, and Yield
1997/98 to 2002/03
Delta Region
Upland Cotton Area, Production, and Yield
1997/98 to 2002/03
Southwest Region
Upland Cotton Area, Production, and Yield
1997/98 to 2002/03
Far West Region
Upland Cotton Area, Production, and Yield
1997/98 to 2002/03
U.S. Cotton Textile Trade and the Trade-Weighted Exchange Rate
1997/98 to date
Cotton Textile Trade Growth Rates (by quarter since 1998)
Seasonally Adjusted Annual Mill Use Rates by month since August 2000
U.S. Textile Inventories and Shipment Value
August 2001 to date

- Inventories
- Shipments
- Inv:Shipment Ratio
U.S. Exportable Supply the Largest in 35 Years for 2001/02 and 2002/03

(exportable supply = total supply - mill use)
U.S. Export Commitments as of end-January 1995/96 through 2002/03

Export Commitments
Season Exports

mil. 480-lb. bales

95 96 97 98 99 2000 2001 2002
Factors Maintaining U.S. Exports 2002/03

- Largest exportable supply in 35 years.
- Rising foreign consumption and reduced crops world-wide.
- Marketing loan program permits competitive pricing.
### U.S. Cotton Supply-Demand Estimates

<table>
<thead>
<tr>
<th></th>
<th>2001/02</th>
<th>2002/03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beg. Stocks</td>
<td>6.0</td>
<td>7.4</td>
</tr>
<tr>
<td>Production</td>
<td>20.3</td>
<td>17.1</td>
</tr>
<tr>
<td>Imports</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Supply</td>
<td>26.3</td>
<td>24.6</td>
</tr>
<tr>
<td>Mill Use</td>
<td>7.7</td>
<td>7.6</td>
</tr>
<tr>
<td>Exports</td>
<td>11.0</td>
<td>10.8</td>
</tr>
<tr>
<td>Total Use</td>
<td>18.7</td>
<td>18.4</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>7.4</td>
<td>6.2</td>
</tr>
</tbody>
</table>
World and U.S. Spot Cotton Prices
August 1998 to date

Month

cents/lb.

A-Index
US Spot
Net Returns/Acre over Variable Costs
Program and Market
1993 thru 2002 est.
Basis for USDA Forecasts

• Normal weather and growing conditions.

• Economic recovery continues.

• Continuation of the current U.S. and foreign agricultural policies.
World Production to Rise by more than 7 MB

- Production in China will rise by about 2 million bales, due to rebounding prices.

- With slightly higher area (14-14.5 million acres), and average yields, U.S. production to rise marginally.

- Other countries will also increase production. Increases in the Southern Hemisphere may depend on return to normal weather.
### World Cotton Supply-Demand Estimates

(mil. bales)

<table>
<thead>
<tr>
<th></th>
<th>2002/03</th>
<th>2003/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beg. stocks</td>
<td>46.6</td>
<td>37.9</td>
</tr>
<tr>
<td>Production</td>
<td>87.6</td>
<td>95.0</td>
</tr>
<tr>
<td>Imports</td>
<td>29.7</td>
<td>31.6</td>
</tr>
<tr>
<td>Total Supply</td>
<td>164.0</td>
<td>164.5</td>
</tr>
<tr>
<td>Consumption</td>
<td>96.8</td>
<td>97.8</td>
</tr>
<tr>
<td>Exports</td>
<td>29.3</td>
<td>31.3</td>
</tr>
<tr>
<td>Total Use</td>
<td>126.1</td>
<td>129.1</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>37.9</td>
<td>35.4</td>
</tr>
</tbody>
</table>
Forecast Changes in World Production, 2003/04
2003/04 World Consumption Forecast to Increase 1.1%
China’s Import and Export Projections through 2003/04
### U.S. Mill Use Stable As End Use Again Rises

<table>
<thead>
<tr>
<th>Year</th>
<th>Trade Deficit (mil. bale equivalents)</th>
<th>Mill Use (mil. bale equivalents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>97</td>
<td>11.3</td>
<td>10.4</td>
</tr>
<tr>
<td>98</td>
<td>10.2</td>
<td>10.5</td>
</tr>
<tr>
<td>99</td>
<td>8.9</td>
<td>11.1</td>
</tr>
<tr>
<td>2000</td>
<td>7.7</td>
<td>11.7</td>
</tr>
<tr>
<td>2001</td>
<td>7.6</td>
<td>13.4</td>
</tr>
<tr>
<td>2002</td>
<td>7.5</td>
<td>14.3</td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The chart shows the comparison between trade deficit and mill use from 1996 to 2003.*

**Legend:**
- **Trade Deficit**
- **Mill Use**
U.S. Export Range 10.8-11.8 MB

- Surplus supplies and marketing loan will continue in 2003/04.

- Early-season competitiveness will be enhanced by low 2002/03 foreign production

- Rising foreign consumption will increase sales opportunities.
### U.S. Cotton Supply-Demand Estimates

**mil. bales**

<table>
<thead>
<tr>
<th></th>
<th>2002/03</th>
<th>2003/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beg. Stocks</td>
<td>7.4</td>
<td>6.2</td>
</tr>
<tr>
<td>Production</td>
<td>17.1</td>
<td>17.0-17.5</td>
</tr>
<tr>
<td>Imports</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Supply</td>
<td>24.6</td>
<td>23.2-23.7</td>
</tr>
<tr>
<td>Mill Use</td>
<td>7.6</td>
<td>7.0-8.0</td>
</tr>
<tr>
<td>Exports</td>
<td>10.8</td>
<td>10.8-11.8</td>
</tr>
<tr>
<td>Total Use</td>
<td>18.4</td>
<td>17.8-19.8</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>6.2</td>
<td>4.0-5.5</td>
</tr>
</tbody>
</table>
U.S., China, and Other Foreign Stocks through 2003/04
U.S. and China Share of World Stocks
1997/98 to 2003/04 proj.