



# INTERNATIONAL COTTON ADVISORY COMMITTEE

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## THE WORLD COTTON OUTLOOK: CONSUMPTION FINALLY RISING\*

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The world cotton industry has finally emerged from a five-year period of falling prices during which daily values of the Cotlook A Index fell from more than \$1.10 per pound in 1994 to 44 cents at the end of 1999. Not since the 1950s has the Cotlook A Index fallen for more than two consecutive seasons, and despite the upturn since January, 1999/00 will be the fifth consecutive year in which average prices have fallen. The Cotlook A Index averaged 58 cents per pound last season. However, even with prices rising now, the 1999/00 average Cotlook A Index is estimated at 53 cents, and the 2000/01 average is forecast to rise to 62 cents. Despite the strengthening of world demand, increased exports from the USA will probably keep the A Index lower than the average since 1973/74 of 74 cents per pound.

The market in 2000/01 may be characterized by a near-balance of economic forces, with stronger world demand and the potential for increased imports by China (Mainland) offsetting expanded export availability from the USA and Uzbekistan and leading to the first rise in average prices in six seasons. World cotton production is forecast at about 88 million bales in 2000/01, approximately the same as this season. World consumption has been in a range between approximately 84 and 88 million bales since the mid-1980s but is finally rising to 90 million bales this season. World cotton ending stocks are falling this season, and a decline to just 38 million bales is forecast for 2000/01, the lowest level of stocks since 1994/95. Cotton consumption is expected to reach a record 92 million bales in 2000/01, and the world stocks-to-use ratio is expected to fall to 0.40, the lowest since 1994/95. The stocks-to-use ratio is already expected to decline from 0.51 in 1998/99 to 0.46 in 1999/00.

Reflecting improved health in the cotton economy, world exports are rising from 24 million bales last season to 26 million this season and a forecast of 28 million in 2000/01. Exports by the USA next season are estimated at 30% of world exports, the highest proportion since 1990/91. Exports by China (Mainland) are estimated at 1.4 million bales this season, double last season's level, and China (Mainland's) exports may remain significant through next season. However, imports by China (Mainland), essentially zero this season, may rise in 2000/01.

### Rising Consumption

World cotton use rose at an annual average rate of about 2% from the 1950s until the mid-1980s, and reached 84 million bales during 1986/87. Consumption was still at only 86 million bales ten seasons later, and is just now rising to 90 million bales. Faster world economic growth, lower cotton prices relative to polyester, and policies in China (Mainland) encouraging the disposal of stocks are contributing to the rise in world use.

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\* Paper presented to the 76<sup>th</sup> Annual Convention of the American Cotton Shippers Association, May 25-27, 2000, The Ritz-Carlton, San Francisco. The International Cotton Advisory Committee is an association of 43 governments of countries with an interest in cotton. The Secretariat of the Committee publishes information related to world cotton production, supply, demand and prices, and provides technical information on cotton production technology. Detailed statistics are found bimonthly in *COTTON: Review of the World Situation*, \$150 per year. A monthly outlook by fax is also available for \$250 per year or on the Internet for \$200 per year. Access to the latest estimates of world cotton supply and use by the Secretariat is also available on the Internet for \$1,500 per year.

The IMF estimates world economic growth at 2.5% in 1998, 3.3% in 1999 and 4.2% this year; the forecast for 2001 is 3.9%. The slowing of world economic growth in 1998, linked to the devaluation of currencies in Asia, contributed to the largest percentage decline in world cotton use in 25 years during 1998/99. Conversely, the near-doubling of the rate of world economic growth between 1998 and this year is contributing to increases in consumer purchases of fiber products.

From August 1994 through July 1999, the Cotlook A Index was above Cotlook quotes for U.S. polyester by an average of 10 cents per pound. However, in 1999/00, the average Cotlook A Index has been 3 cents under the average quote for U.S. polyester, a relative shift of 13 cents per pound or 22% of the current price of cotton. Cotton's share of world fiber mill use fell from about 50% in the 1980s to 42% in 1998. Government policies in China (Mainland), India and Indonesia favoring the use of chemical fibers account for much of the change in world fiber market share, but high prices of cotton relative to chemical fibers were also a factor. With lower cotton prices over the last several years, cotton's market share held at 42% in 1999, rather than continuing downward, and may even be rising in 2000.

By region, cotton's share of fiber mill use at the retail level rose in 1999 in Central Europe and the former USSR, in North America and in Japan. Cotton's share was stable in Western Europe but continued lower in developing countries as a group. The rise in cotton's share of end-use consumption in Central Europe and the former USSR is aided by increased use in Russia linked to greater purchases of cotton products by the government for medical facilities and the military. Cotton consumption per capita in the USA rose approximately one pound to 35 pounds in 1999, with all the growth accounted for by textile imports. U.S. net domestic consumption rose to 20 million bales in 1999, equal to 22% of all cotton grown. Japanese cotton consumption rose in 1999 but was still lower in absolute terms than in 1996. Nevertheless, cotton's share of fiber consumption at the end-use level rose in Japan.

#### China (Mainland) Stocks Falling

The third factor contributing to the rise in world cotton use this season is increased use in China (Mainland), which is itself determined primarily by government policies. Cotton use in China (Mainland) was set by government policy in the mid 1980s at 21 million bales, with actual consumption each season varying by about one million bales above or below that figure. Consumption this season is estimated at 22 million bales, 24% of the world total and up 900,000 bales from last season. Estimates of use include two components, mill use and everything else. Mill use estimates are tied to statistics on production of cotton yarn, combined with estimates of waste and fiber blend ratios. The estimate of mill use this season is 19 million bales, an increase of 1.8 million bales, or nearly 10%. A one-year increase of this magnitude reflects a government policy of encouraging consumption of surplus stocks and is being achieved through both a rise in yarn production and an increase in the cotton proportion of blended yarn production. Estimates of non-mill use in China (Mainland) are largely guesses based on magazine articles, discussions with people in China and an occasional odd statistic published about medical use or padding. Non-mill use is estimated in 1999/00 at about three million bales. The resulting estimate of total use in China (Mainland) each year is inexact but is at least approximately correct.

Because of a reduction in planted area spawned by government policies and reduced internal prices, combined with somewhat lower yields this season, 1999/00 production in China is estimated at 18 million bales, a fall of three million bales. All of the fall in output occurred in eastern and central China, while production in the far-west region of Xinjiang actually increased to an estimated 6.4 million bales. As noted by USDA, the decline in cotton area in East and Central China since 1991 has been two million hectares, and only four countries have more cotton area now than was lost in China in the past decade.

With consumption in China (Mainland) estimated at 22 million bales in 1999/00, and export commitments under the new government policy of reducing stocks at about 1.4 million bales, without imports, there will be a draw-down in ending stocks of approximately five million bales. A change in stocks of this size is likely to be internally disruptive and may prompt a review of government cotton policies. A decrease in Chinese (Mainland) production from 18 million bales this season to an estimated 17 million in 2000/01 will reduce stocks to an estimated six-year-low of 9 million bales by the end of 2000/01 and give further incentive to government officials to initiate another cycle of policy changes.

#### South Asian Consumption Outstripping Production

# SUPPLY AND DISTRIBUTION OF COTTON

May 22, 2000

Years Beginning August 1

	1995	1996	1997	1998	1999 Proj.	2000 Proj.
Million 480-Lb. Bales						
<b>BEGINNING STOCKS</b>						
<b>WORLD TOTAL</b>	<b>33.9</b>	<b>41.0</b>	<b>43.3</b>	<b>45.5</b>	<b>44.371</b>	<b>42.105</b>
CHINA (MAINLAND)	12.8	17.1	18.4	19.7	18.941	13.544
USA	2.7	2.6	4.0	3.9	3.900	4.520
NET EXPORTERS	13.6	16.6	17.9	18.6	18.111	20.629
NET IMPORTERS 1/	20.3	24.4	25.3	26.9	26.261	21.476
<b>PRODUCTION</b>						
<b>WORLD TOTAL</b>	<b>93.5</b>	<b>90.0</b>	<b>92.1</b>	<b>85.6</b>	<b>88.0</b>	<b>87.6</b>
CHINA (MAINLAND)	21.9	19.3	21.1	20.7	17.9	17.0
USA	17.9	18.9	18.8	13.9	16.9	19.3
INDIA	13.3	13.9	12.3	12.4	12.6	12.4
PAKISTAN	8.3	7.3	7.2	6.8	8.3	7.1
UZBEKISTAN	5.8	4.9	5.2	4.6	5.3	5.1
TURKEY	3.9	3.6	3.8	4.1	3.9	3.9
OTHERS	22.5	22.1	23.6	23.1	23.1	22.9
<b>CONSUMPTION</b>						
<b>WORLD TOTAL</b>	<b>85.5</b>	<b>88.8</b>	<b>88.7</b>	<b>87.4</b>	<b>90.3</b>	<b>91.6</b>
CHINA (MAINLAND)	20.7	21.6	21.6	21.1	22.0	21.6
INDIA	11.8	13.2	12.3	12.7	13.3	13.8
EU, C. EUR. & TURKEY	11.0	11.5	11.8	10.8	11.4	11.6
USA	10.6	11.1	11.3	10.4	10.0	9.8
EAST ASIA & AUSTRALIA	9.9	9.6	8.8	9.2	9.6	9.9
PAKISTAN	7.1	7.0	7.1	7.0	7.3	7.6
BRAZIL	3.8	3.7	3.7	3.9	3.9	4.1
CIS	2.0	1.9	2.0	2.0	2.3	2.5
OTHERS	8.6	9.3	9.9	10.2	10.4	10.7
<b>EXPORTS</b>						
<b>WORLD TOTAL</b>	<b>27.4</b>	<b>27.8</b>	<b>27.1</b>	<b>24.4</b>	<b>26.4</b>	<b>28.8</b>
USA	7.7	6.9	7.5	4.3	6.4	8.7
UZBEKISTAN	4.3	4.8	4.8	4.1	4.1	4.6
FRANCOPHONE AFRICA	2.8	3.3	3.8	3.9	3.9	4.2
AUSTRALIA	1.4	2.4	2.6	3.0	2.6	2.9
GREECE	1.3	0.9	0.9	1.1	1.1	1.3
ARGENTINA	1.2	1.3	1.0	0.8	0.4	0.4
CHINA (MAINLAND)	0.0	0.0	0.0	0.7	1.4	0.5
<b>IMPORTS</b>						
<b>WORLD TOTAL</b>	<b>26.8</b>	<b>28.1</b>	<b>26.4</b>	<b>25.1</b>	<b>26.4</b>	<b>28.5</b>
EAST ASIA & AUSTRALIA	9.8	9.2	8.2	9.0	9.5	9.7
EU, C. EUR. & TURKEY	6.8	7.4	7.8	6.9	7.2	7.0
SOUTH AMERICA	2.3	2.9	2.7	2.2	2.0	2.1
CIS	1.0	0.9	1.3	1.1	1.5	1.5
CHINA (MAINLAND)	3.0	3.6	1.8	0.3	0.1	0.9
<b>TRADE IMBALANCE 2/</b>	<b>-0.6</b>	<b>0.3</b>	<b>-0.8</b>	<b>0.6</b>	<b>0.0</b>	<b>-0.3</b>
<b>STOCKS ADJUSTMENT 3/</b>	<b>-0.3</b>	<b>0.7</b>	<b>-0.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>ENDING STOCKS</b>						
<b>WORLD TOTAL</b>	<b>41.0</b>	<b>43.3</b>	<b>45.5</b>	<b>44.4</b>	<b>42.1</b>	<b>37.9</b>
CHINA (MAINLAND)	17.1	18.4	19.7	18.9	13.5	9.4
USA	2.6	4.0	3.9	3.9	4.5	5.3
NET EXPORTERS	16.6	17.9	18.6	18.1	20.6	20.7
NET IMPORTERS 1/	24.4	25.3	26.9	26.3	21.5	17.2
<b>ENDING STOCKS/USE 4/</b>	<b>0.42</b>	<b>0.42</b>	<b>0.41</b>	<b>0.38</b>	<b>0.40</b>	<b>0.41</b>
<b>COTLOOK A INDEX 5/</b>	<b>85.61</b>	<b>78.60</b>	<b>72.20</b>	<b>59</b>	<b>53*</b>	<b>62*</b>

1/ Includes Brazil, China (Mainland), Colombia, Greece, Mexico, Turkey and traditional importers

2/ The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports.

3/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated

4/ World-less-China (Mainland) ending stocks minus China net exports, quantity divided by world-less-China consumption

5/ U.S. Cents per pound. Not a model result for 1998/99. The estimates for 1999/00 are based on net China (Mainland) trade and world-less-China (Mainland) ending stocks to use.

\*/ 95% confidence interval extends 15 cents above and below the point estimate

An important structural change in the world cotton market during the 1990s was an increase in imports by countries that had traditionally been net exporters of cotton. For instance, Brazil, Mexico and Turkey became important cotton importers, even though each continues to produce cotton. In each case, national policies and economic conditions led to a rapid expansion of cotton mill use and the need to import cotton. The same pattern seems to be occurring in South Asia. Cotton production in India reached 14 million bales in 1996/97 but has been lower each season since. Meanwhile, consumption has been rising and is forecast at nearly 14 million bales by 2000/01. 1999/00 is the second consecutive season in which Indian consumption is greater than production, and imports by India are expected to reach 900,000 bales, the highest since the 1950s and early 1960s. Indian imports in 2000/01 are forecast at 1.4 million bales.

Indian cotton area fell 6% to 22 million acres in 1999/00, and a similar percentage decline to 20 million acres is forecast for 2000/01. The ratio between prices paid to farmers for cotton and food crops fell from 1.0 in 1995/96 to .90 in 1997/98 and .80 in 1998/99; the same ratio is falling again in 1999/00. Indian cotton area is highly correlated with the ratio between prices of cotton and food grain. Consequently, cotton area is likely to continue down, despite industry attempts to encourage expanded production. Indian yields are below the world average, and disease and resistance to pesticides in North India are preventing a sustained improvement in the national average yield.

As with India, Pakistan is importing a substantial amount of cotton this season, and continued imports are likely in 2000/01. 1999/00 production in Pakistan is estimated at 8.3 million bales, the highest since 1995/96 and up 1.5 million bales over last season. The rise in production is occurring despite a 7% drop in planted area, with yields this season proving to be the highest since the record set in 1991/92. Reduced incidence of the leaf curl virus, pest pressures and damaging rains in September and October, compared with previous years, and government attention to input supplies contributed to the improvement in yields this season. Boosted by a weaker exchange rate and lower domestic cotton prices, 1999/00 cotton consumption in Pakistan is estimated at 7.3 million bales, modestly above the 1993/94 record. Still, Pakistan will have a surplus of cotton, and exports are rising from zero last season to an estimated 900,000 bales this season.

However, the special conditions that lead to high yields in 1999/00 are not expected to be repeated next season, and 2000/01 production in Pakistan is estimated at 7 million bales, equal to the average between 1992/93 and 1999/00. Area is expected to rise, but lower yields are likely. Meanwhile, with the stronger world economy and competitive exchange rate, mill use of cotton in Pakistan is expected to grow and Pakistan could be a net importer in the new season.

#### Rising Cotton Use

Production in Turkey is estimated at four million bales in 1999/00 and the same again in 2000/01, essentially the same as in the four previous seasons. Production in the irrigated region of eastern Turkey is gradually rising while production in central Turkey falls and the Izmir region in the West is unchanged. Because of better consumption in Russia and Europe, 1999/00 cotton mill use in Turkey is estimated at 5.3 million bales, 700,000 bales above the 1998/99 level, and use in 2000/01 is estimated at a record 5.5 million bales. Cotton use in the EU and central Europe is estimated at 6.4 million bales this season, up slightly from 6.3 million 1998/99 and 6 million in 1997/98.

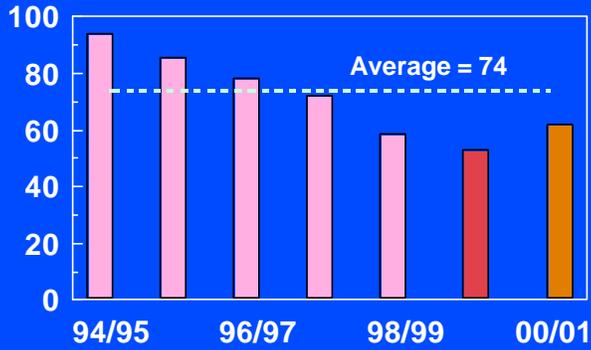
Reflecting improving regional and world economies and stronger competitive positions for export-dependent textile industries following currency devaluation's, mill use of cotton in East Asia is rising an estimated 6% to 9.7 million bales this season. Mill use is falling in Japan where the strengthening of the yen since last year is hurting competitiveness, but increased consumption is occurring in the Republic of Korea, China (Taiwan), Indonesia and Thailand. Indonesian cotton use is estimated at a record 2.3 million bales.

Australian production is estimated at 3.2 million bales, only 4% lower than last season despite lower prices because of fixed investments in irrigated land. Australian exports are estimated at 2.6 million bales, accounting for more than one-fourth of East Asian mill use.

1999/00 consumption in Brazil is estimated at 3.9 million bales, including nearly 2.8 million of domestic production and one million bales of imports. Even with the decline in world cotton prices, the extension of roads and other infrastructure to western Brazil is resulting in substantial increases in production.

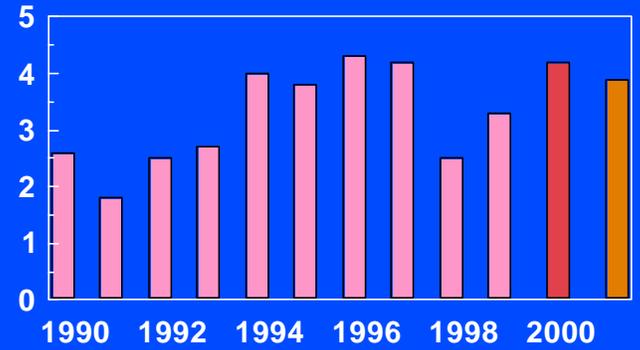
## AVERAGE COTLOOK A INDEXES

U.S. Cents per Pound



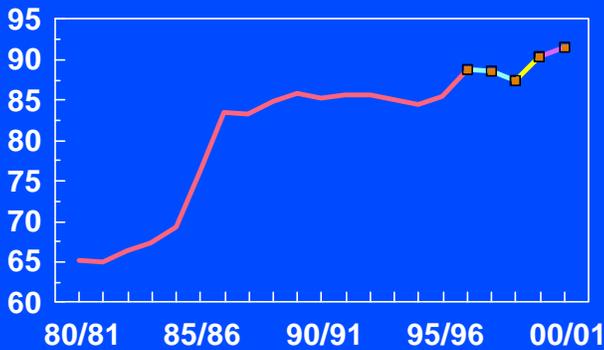
## WORLD GDP GROWTH

Annual % Change



## WORLD COTTON USE

Million Bales



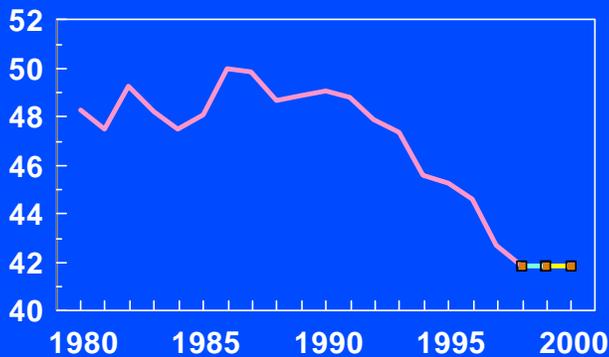
## FIBER PRICES

U.S. Cents per Pound



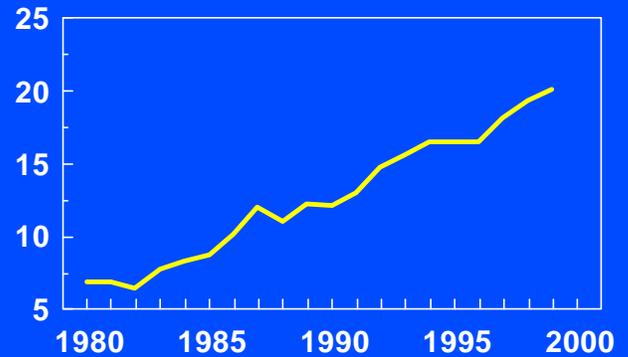
## COTTON'S MARKET SHARE

Percent of End Use



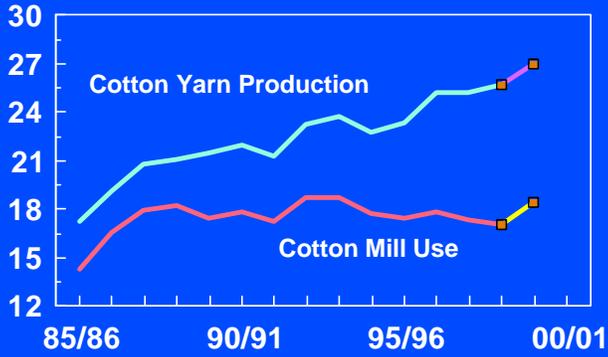
## U.S. RETAIL CONSUMPTION

Million Bales



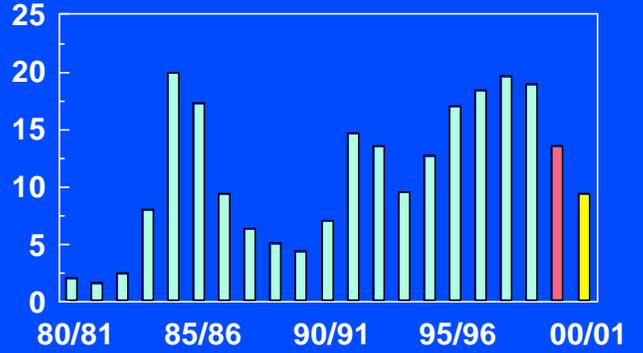
### CHINA (MAINLAND)

Million Bales



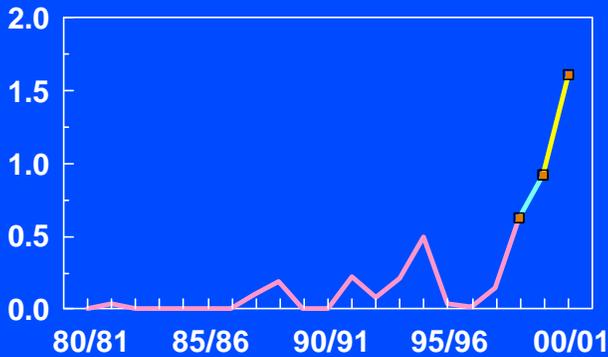
### STOCKS: CHINA (MAINLAND)

Million Bales



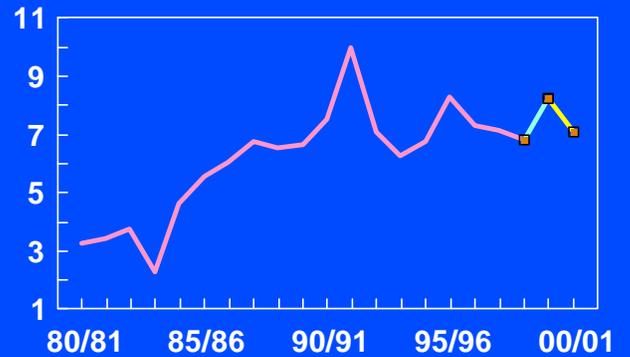
### INDIA COTTON IMPORTS

Million Bales



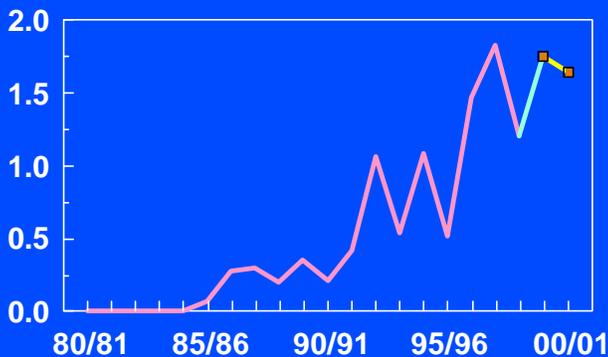
### PAKISTAN PRODUCTION

Million Bales



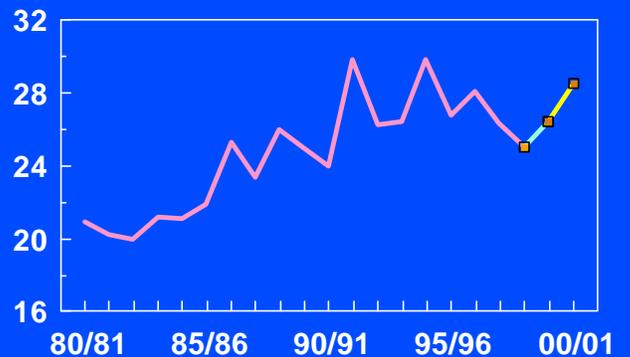
### TURKEY IMPORTS

Million Bales

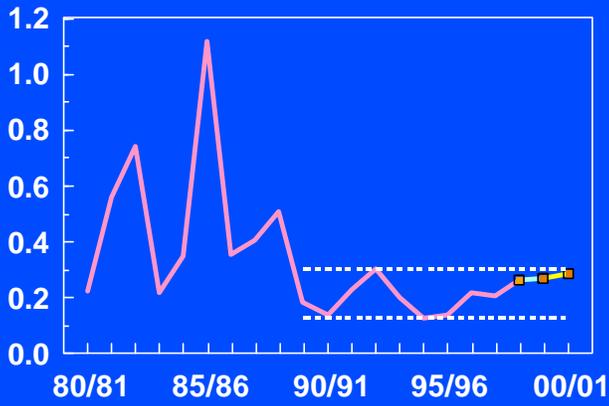


### WORLD IMPORTS

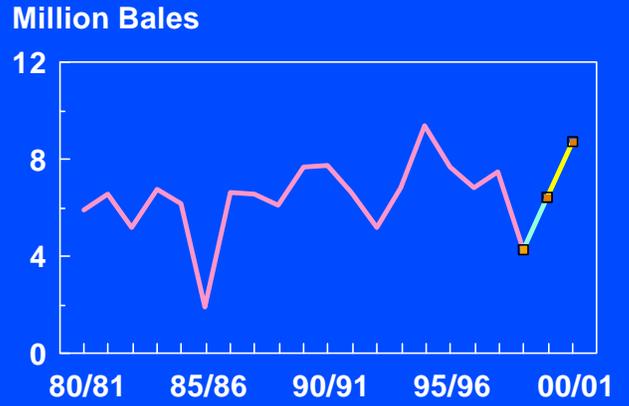
Million Bales



### U.S. S/U RATIO



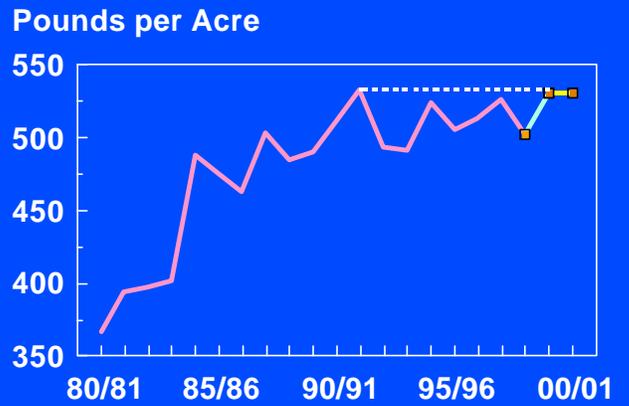
### U.S. EXPORTS



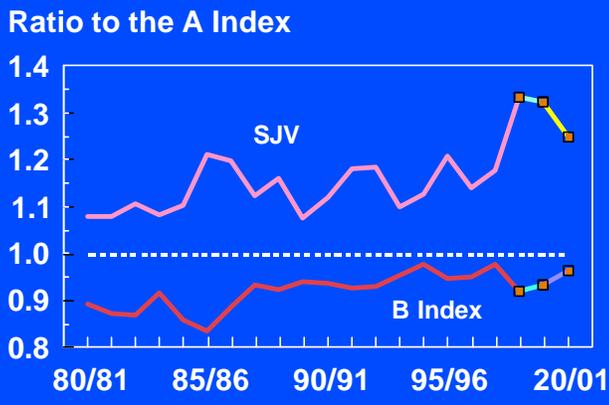
### UZBEKISTAN EXPORTS



### WORLD COTTON YIELD



### COTLOOK QUOTES



## Exportable Supplies Expanding

U.S. cotton disappearance is determined by the available supply. The four million-bale increase in U.S. production during 1999/00 is providing ample supplies for an increase in U.S. exports this season to an estimated 6.4 million bales. Even with the increase in exports, U.S. ending stocks are still rising in 1999/00, and with production expected to expand again in 2000/01, U.S. exports are forecast at nearly nine million bales. A shift in the location of mill use from the USA to other countries in the Western Hemisphere, with finished products returning to the U.S. for retail sale, is helping to boost exports of cotton.

The forecast increase in U.S. exports is based on the size of the U.S. supply. Exports will rise to prevent U.S. ending stocks from exceeding about 16 weeks of use. U.S. ending stocks in 1999/00 are estimated at 4.5 million bales, 27% of exports plus mill use. Since 1988/89 after the drawdown in U.S. stocks following the change in U.S. cotton policies and implementation of the marketing loan program, the U.S. ending-stocks-to-use ratio has never exceeded 30%, or 16 weeks, of use. Even the one example of a rise in stocks to 30% of use was a special case that occurred in 1992/93 after the breakup of the USSR and the shock to world trade caused by the release of stocks held in Central Asia. With Step 2 and the marketing loan working to price U.S. cotton competitively under all circumstances, the market will not allow a rise in U.S. ending stocks that would overlap the incoming crop by more than a few weeks. With 1999/00 ending stocks expected to cover about three months worth of use, any increase in available supply during 2000/01 will translate into increased export shipments.

U.S. planted area in 2000 is estimated at 16 million acres, and with average loss due to weather and yields in each state, production is estimated at 19 million bales or about the same as in 1994/95. The remarkable characteristic of U.S. production is not how large it will be but how low the estimated national yield is. The rise in CCC outlays for Upland cotton to \$2.7 billion in fiscal 2000 explains the expansion in planted area in 2000 despite five years of declining market prices. The U.S. yield rose to 700 pounds per acre in 1987/88 and has not increased from that level since. The national yield in 1999 was 620 pounds and the estimate for 2000 is 630 pounds. Part of the decline in the U.S. national yield reflects reduced cotton area in the Far West, but individual state yields are also trending lower, suggesting underlying technical causes for the failure of yields to rise. The U.S. experience with yields mirrors developments in most other countries. The world cotton yield reached 670 pounds per acre in 1991/92 and did not increase in the 1990s. As a consequence, the average cost of production per pound is higher now than one decade ago.

As with the USA, increased production in Uzbekistan is expected to lead to an increase in exports. Better weather resulted in an increase in production in Uzbekistan to an estimated 5.3 million bales in 1999/00, the highest since 1995/96. Production is expected to remain at five million bales or higher in 2000/01, allowing an increase in exports to about 4.5 million bales.

## Price Premiums Falling, Still High

The Upland price spread, defined as the difference between the Cotlook quote for SJV and the B Index, averaged 20 cents per pound through mid-May, down from 24 cents in 1998/99. The average spread between SJV and the B Index was 15 cents in the ten years prior to 1998/99, and the Upland price spread will probably continue to narrow in 2000/01.

Because of reduced production in California, the premiums above the Cotlook A Index for SJV rose in 1998/99 to 33%, or about 20 cents per pound. Through mid-May, the SJV premium in 1999/00 was averaging about 16 cents per pound, still representing about one-third of the A Index. The average SJV premium during the ten years prior to 1998/99 was 11 cents per pound. With excellent planting progress, upland production in California is expected to rise to more than two million bales this year, suggesting that the premium for SJV could shrink as the Cotlook A Index rises, and the forward quote for SJV in mid-May was 15 cents per pound above the forward A Index.

The discount for the Cotlook B Index below the A Index narrowed steadily from an average of ten cents per pound in the early 1980s to five cents in the early 1990s and to 1.5 cents on average in 1997/98. Increased demand for coarse count cotton in open-end spinning was one of the factors causing the

discount for the B Index to shrink. However, the B Index discount expanded from less than two cents to more than 4 cents in the last two seasons.

The B Index was only quoted between October through May in 1998/99, implying a shortage of coarse count cotton, but in the 20 weeks for which quotes were available, the average discount increased to 2.4 cents. Likewise, the Cotlook B Index was not quoted early in 1999/00, implying a shortage of coarse count cotton, but since November when three quotes to calculate the B Index became available, the average discount to the A Index has been 4.5 cents per pound, or 9% of the A Index. Apparently, there is an increasing concentration of coarse count cotton production available for export in a few key countries, making it difficult to develop valid quotes on which to calculate a B Index in all weeks. However, in those countries that produce coarse count cotton, production is increasing relative to medium cotton production, resulting in a widening discount for the B Index during 1998/99 and 1999/00. Of the six coarse count cotton quotes in Cotton Outlook eligible for inclusion in the calculation of the B Index, only the USA and Uzbekistan are expected to have significant quantities available for sale in 2000/01, and the discount for the B Index may narrow. Forward quotes for Uzbekistan and Orleans/Texas SLM are just one cent per pound beneath the forward Cotlook A Index.

## Summary

After more than a decade of little growth, demand for cotton is expanding to a record this season. Improved economic growth, lower cotton prices, and government policies in China (Mainland) to encourage consumption underlie the rise in world cotton use. World cotton yields are not increasing, and world production is not expected to rise. As a consequence, ending stocks are falling, helping to boost prices. The outlook over the next several years is for cotton prices to rise to average levels and probably beyond. Rising world consumption, combined with no improvement in yields, will result in lower stocks and higher prices.

A fundamental shift in policy in China (Mainland) was taken in 1997 when imports were reduced to 1.8 million bales, and with a lag for implementation, the impacts of that shift in policy are now apparent. Production in China (Mainland) is falling, consumption is rising, and exports are being allowed. But, once stocks in China (Mainland) fall below a decision threshold and mills start to complain enough, policy will change again. If not in 2000/01, then in the season after, China (Mainland) will likely again become a net importer of cotton. Increased imports will combine with reduced world stocks to help boost prices next season, and likely in the seasons following.

The increased availability of cotton from the USA, and to an extent from Uzbekistan, will dampen the rise in world prices next season. Assuming an increase in production, U.S. exports will rise to avert an expansion in ending stocks beyond the amount needed to serve the industry through November. Accordingly, U.S. exports may reach nearly nine million bales next season.