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World Cotton Production to Climb Next Two Seasons *

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The World Cotton Outlook

The historically low cotton prices of 2001 are leading to reduced production and increased consumption in 2002/03. World production is estimated at 88 million bales this season, down 11 million bales from the 2001/02 record. World cotton consumption is climbing to an estimated 97 million bales, up 9 million bales (3.5%) from 2001/02, driven by the booming textile industry in China (Mainland). Consequently, world ending stocks are shrinking from 48 million bales last season to an estimated 40 million bales on July 31st 2003, the lowest since 1994/95. The Cotlook A Index is projected to average 56 cents per pound in 2002/03, up 14 cents from the 29 year-low of 2001/02.

Higher prices are expected to boost world production in 2003/04 and 2004/05, but the rise in prices and weaker-than-expected economic growth will probably slow the rate of growth of world consumption. World production is expected to increase by 10% next season and will likely be equal to world consumption, while net imports by China (Mainland) are projected to rise from an estimated 1.4 million bales this season to 2.5 million bales in 2003/04. As a result, the Cotlook A Index is expected to average 60 cents per pound in 2003/04, 4 cents higher than the level indicated for this season by the Secretariat's price model. This would be the highest average in six seasons, but still 10 cents below the 30-year average. During the last five seasons, ICAC forecasts of the average Cotlook A Index at this time of the year for the coming season were overestimated four times (by 5 to 20 cents) and underestimated once (by 3 cents in 2002/03).

The value of world cotton production is estimated at about $28 billion in 2003/04, up $4 billion from this season and $8 billion more than in 2001/02. However, the average revenue per acre, estimated at $840, will remain lower, in real terms, than before 1998/99, in spite of the significant improvement in the world average yield.

Initial projections for 2004/05 suggest that world production will climb to a record of 99 million bales, outpacing consumption by one million bales, while net imports by China (Mainland) are projected unchanged. Consequently, the forecast for the season average Cotlook A Index in 2004/05 is 59 cents per pound, down one cent from the projection for 2003/04.

Higher Prices Leading to Increased Production

Planting in the Northern Hemisphere is now largely completed, and world cotton area is expected to rise by 11% to 82 million acres in 2003/04, compared with 74 millions acres this season and equal to the twelve-year average since 1990/91.

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* Paper presented to the 79th Annual Convention of the American Cotton Shippers Association, May 22-24, 2003, Ritz-Carlton, Boston, MA, USA. The International Cotton Advisory Committee is an association of 42 governments of countries with an interest in cotton. The Secretariat of the Committee publishes information related to world cotton supply, demand and prices, and disseminates information on cotton production technology. Detailed statistics are found bimonthly in *COTTON: Review of the World Situation*, $150 per year via the Internet or $175 per year in hard copy by post. A monthly outlook is available for $225 per year via the Internet or $275 per year by fax. Access to weekly estimates of world cotton supply and use by the Secretariat is available on the Internet for $500 per year.

Domestic prices in China (Mainland) are now more than 50% higher than one year ago and above their level in early 2001. Plantings are forecast to increase by 23% this season, and, based on a 3-year average of 1,000 pounds per acre; production is projected to climb to 26.6 million bales, up 4 million bales and the second largest crop after 1984/85. During the last five seasons, ICAC forecasts of China (Mainland)'s production at this time of the year for the coming season were underestimated four times (by 1.4 to 3.3 million bales) and overestimated once (by 1.4 million bales in 1999/00).

U.S. cotton production is estimated at 17 million bales in 2003/04, the same as in 2002/03. The estimate assumes a gain of 4% in harvested area, but the national yield is estimated at 634 pounds per acre, 2% below the average yield during the last five years, because of poor weather during the early part of the season.

Production is expected to increase in India and Pakistan due to higher domestic prices. Indian output is forecast to rebound from 10.7 million bales in 2002/03 to 12.4 million bales next season. A significant increase in the area sown to Bt varieties is anticipated from the 100,000 acres sown in 2002/03. Production in Pakistan is expected to increase by 500,000 bales to 8.3 million bales.

Cotton production in Uzbekistan is forecast to decline slightly below 4.5 million bales. Cotton production in the African franc zone is forecast at 4.3 million bales, up 100,000 bales. A 100,000-bale increase is anticipated in Turkey, to 4.2 million bales in 2003/04.

Plantings in the Southern Hemisphere are anticipated to rebound to 3.1 million acres, up 30%, and assuming an improvement in yields, production is projected to surpass 9 million bales, up 2 million bales (33%). Australian production is expected to recover to 2.7 million bales, from a drought-driven 14-year low of 1.4 million bales in 2002/03. Brazilian production is forecast up from an estimated 3.7 million bales this season to 3.9 million bales in 2003/04.

Assuming recent average yields for each country, the world yield is estimated at 566 pounds per acre in 2003/04, slightly lower than during the previous two seasons. Based on these assumptions, world production is forecast at 97 million bales, up 9 million bales (9%) from this season, and the second largest crop on record after 2001/02.

During the last five seasons, ICAC forecasts of world production at this time of the year for the coming season were overestimated once (by 1.4 million bales in 1998/99) and underestimated twice (by 2 million bales in 2000/01 and 7 million bales in 2001/02) and were about right for 1999/00 and 2002/03. Forecasts of world area were overestimated during the last five seasons (by 250,000 to 5 million acres). Forecasts of word average yields were underestimated during the last four seasons.

Government measures protecting cotton producers and exporters remain in place in several countries. Direct income and price support provided to the cotton industry in 2001/02 was $4.9 billion worldwide and is estimated to decline this season to $3.5 billion. Lower levels of support are the result of lower production and higher market prices. Eight countries are offering direct income and price support in 2002/03, ranging from $1.7 billion in the USA to $7 million in Mexico. Emergency support provided in six developing countries last season is being discontinued this season. An estimated 57% of world cotton production is benefiting in 2002/03 from direct income or price support programs, 16 percentage points less than in 2001/02. The world cotton industry remains heavily distorted by government measures that sustain production and exports of producers having costs of production above market prices. The solution to the problem of subsidies lies in a successful outcome to the talks on agriculture in the WTO. Although member governments failed to meet the March 31 deadline for establishing modalities and targets in the agriculture negotiations, the agriculture talks are still targeted for completion by the end of 2004.

Consumption Growth Slowing

World cotton consumption is affected by world economic performance and fiber prices. IMF projections released in April 2003 say that the world economy will grow by 3.2% this year, substantially lower than the 3.7% forecast last September. World GDP is projected to grow by 4.1% in 2004. The IMF predicts that the U.S. economy will expand by 2.2% this year (down from 2.4% in 2002) and 3.6% in 2004. China (Mainland)'s economy is forecast to grow 7.5% in 2003 and next year.

The textile industry will be positively affected by higher economic growth. However, cotton consumption will be negatively affected by higher cotton prices. Other things equal, a 20% decline in prices can translate, on average, into a 1% increase in world cotton consumption. The sharp drop in prices in 2001 boosted world cotton consumption to an estimated 96 million bales in 2002/03, up 3 million bales. Conversely, as prices rebounded by 75% since November 2001, the rate of growth in world cotton consumption is projected to abate from an estimated 3.5% this season to 0.5% in 2003/04. Still, world consumption is rising and is projected to reach 97 million bales.

During the last five seasons, ICAC forecasts of world consumption at this time of the year for the coming season were underestimated three times (by 700,000 to 2.8 million bales) and overestimated twice (by 700,000 and 3.2 million bales). Forecasts of China (Mainland)'s consumption were underestimated during the last four seasons.

Cotton's share of world textile fiber mill use increased for the first time since 1990 to about 41% in 2001, after declining from 50% in 1986 to 40% in 2000. Prices of polyester rose sharply following the surge in crude oil prices before the war in Iraq but eased afterward. With current estimates of cotton supply and use suggesting a season average Cotlook A Index of 60 cents in 2003/04, cotton is forecast to remain price competitive with polyester. The widening spinning margin between prices of yarn and cotton paved the way for the strong increase in cotton mill use in 2002/03. As cotton prices increased faster than yarn prices in 2002, the profitability of the spinning sector is now back to the same level as in 2000.

Most of the increase in world cotton consumption at the end-use level is occurring in industrial countries, while increases in cotton mill use are taking place in developing countries. The expansion of mill use is being fueled by textile exports.

The largest source of retail level demand for cotton in the world is the USA. Net domestic consumption (mill use of cotton plus the cotton textile and apparel trade balance) in calendar 2002 reached a record of 21 million bales. U.S. consumers account for 22% of world cotton consumption, and on a whole-trade pipeline basis, the U.S. was a net cotton importer of about 4 million bales. However, U.S. mill use is headed lower because imports of cotton products are rising much faster than the rate of increase in retail sales. U.S. imports of textiles and apparel in 2002 were almost 17% higher than in 2001. U.S. mill use is estimated at 7.5 million bales in 2002/03, and declines of 5% per year are projected over the next two seasons to 7.1 million bales and 6.8 million bales.

The textile industry in China (Mainland) is fueling the increase in world cotton mill use. Total yarn output in China (Mainland) climbed from 25 million bales in 1998 to 37 million bales in 2002, up 48%. Yarn production during the first eight months of 2002/03 was 20% higher than one year before. Total cotton use, including cottage industries and other non-mill uses, is estimated to climb to 28 million bales this season, up 2 million bales from 2001/02, 8 million bales (42%) more than in 1998/99. During the same period, cotton consumption in the rest of the world increased by less than 3 million bales (4% only), to an estimated 68 million bales. In 2002, textile and apparel exports from China (Mainland) to the U.S. rose by 124%, and China (Mainland) became the top supplier to the U.S., overtaking Mexico and Canada.

The impact of SARS on retail sales and mill use in China is expected to be short-lived, and mill use is expected to climb to 28.5 million bales in 2003/04. In 2003/04, mill use in the rest of the world other than China (Mainland) is expected unchanged at 68 million bales, one million bales less than in 1999/00.

World Exports Reaching Record

World exports are projected to increase by about one million bales to a record of 30 million bales in 2003/04. Imports by China (Mainland) are projected to skyrocket to 3.2 million bales, up from an estimated 2.2 million bales this season and 500,000 bales in 2001/02. Cotton exports by China (Mainland) are expected to increase from 350,000 bales in 2001/02 to 825,000 bales this season and to decline to 700,000 bales in 2003/04. The 4-cent increase in average cotton prices projected for 2003/04 is essentially the result of rising net imports by China (Mainland). On average, an increase in China (Mainland) net imports (imports minus exports) of about 500,000 bales leads to an increase in the season average Cotlook A Index of about two cents per pound. Net imports by China (Mainland) are projected to rise to 2.5 million bales in 2003/04, up from 1.4 million bales this season and 100,000 bales in 2001/02.

ICAC forecasts of China (Mainland)'s net imports at this time of the year for the coming season were overestimated during the last four seasons.

With the Marketing Loan and Step 2 programs to guarantee price competitiveness, U.S. cotton exports will always be great enough to prevent a rise in ending stocks to more than market participants are willing to hold. U.S. exports are estimated to remain at a record of 11 million bales this year (37% of world exports), thanks to a sharp increase in shipments to China (Mainland) offsetting reductions in shipments to the rest of the world. U.S. exports are expected to decline by about 400,000 bales in 2003/04 leaving ending stocks in 2003/04 at 5.8 million bales, or 33% of use, down from 40% in 2001/02 and 34% in this season.

Little Changes in Stocks

World ending stocks are projected to remain unchanged in 2003/04. Stocks outside China (Mainland) are expected to shrink by some 500,000 bales, offsetting the expected increase in China (Mainland). The second variable of statistical significance in determining year-to-year changes in the Cotlook A Index is the ratio of stocks to use outside China (Mainland). During the 15 years between 1986/87 and 2000/01, the non-China (Mainland) stocks-to-use ratio never exceeded 45% but is rising to an estimated 54% this season. Ending stocks outside China (Mainland) are projected to decrease from 36 million bales on August 1st 2002 to 31 million bales on July 31st 2004. The stock-to-use ratio outside China (Mainland) is now expected to be 49% in 2002/03 and 50% next season.

SUPPLY AND DISTRIBUTION OF COTTON

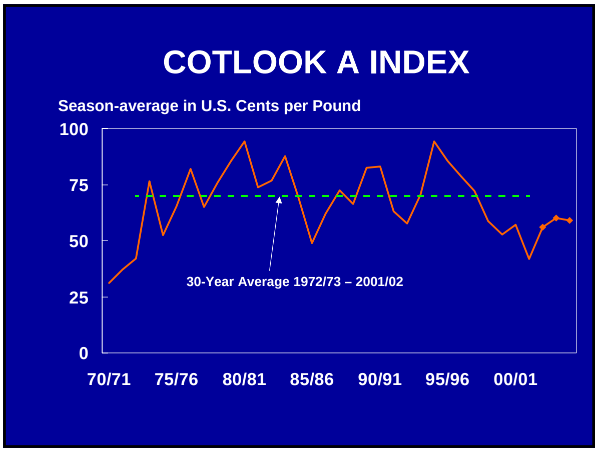
May 21, 2003

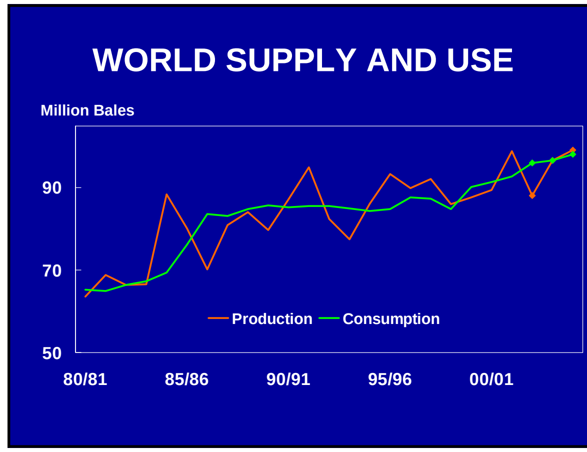
Years Beginning August 1

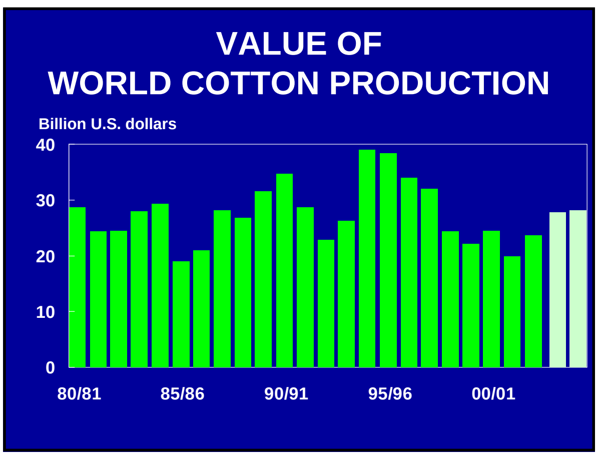
	1999	2000	2001	2002 Est.	2003 Proj.	2004 Proj.
	Million Metric Tons					
BEGINNING STOCKS						
WORLD TOTAL	**10.696**	**10.097**	**9.641**	**10.54**	**8.80**	**8.80**
CHINA (MAINLAND)	5.023	3.812	2.987	2.73	1.85	2.00
USA	0.858	0.852	0.000	1.62	1.35	1.26
NET EXPORTERS	2.749	2.763	3.095	3.82	3.36	3.20
NET IMPORTERS 1/	7.947	7.333	6.546	6.73	5.44	5.60
PRODUCTION						
WORLD TOTAL	**19.089**	**19.461**	**21.516**	**19.17**	**21.05**	**21.61**
CHINA (MAINLAND)	3.829	4.420	5.320	4.92	5.80	5.94
USA	3.694	3.742	4.420	3.75	3.71	3.77
INDIA	2.652	2.380	2.686	2.35	2.68	2.77
PAKISTAN	1.911	1.816	1.802	1.70	1.80	1.88
UZBEKISTAN	1.128	0.975	1.055	1.03	0.99	0.99
TURKEY	0.791	0.880	0.922	0.90	0.92	0.93
OTHERS	5.083	5.248	5.310	4.52	5.15	5.33
CONSUMPTION						
WORLD TOTAL	**19.655**	**19.885**	**20.199**	**20.92**	**21.04**	**21.36**
CHINA (MAINLAND)	4.700	5.200	5.600	6.10	6.20	6.36
INDIA	2.939	2.924	2.910	2.95	2.99	3.05
EU, C. EUR. & TURKEY	2.431	2.362	2.450	2.48	2.47	2.49
EAST ASIA & AUSTRALIA	2.094	2.075	2.106	2.08	2.05	2.05
PAKISTAN	1.700	1.760	1.855	2.00	2.03	2.07
USA	2.230	1.929	1.676	1.63	1.55	1.47
BRAZIL	0.852	0.871	0.860	0.85	0.84	0.86
CIS	0.561	0.657	0.673	0.68	0.70	0.74
OTHERS	2.149	2.107	2.069	2.16	2.20	2.26
EXPORTS						
WORLD TOTAL	**6.097**	**5.857**	**6.501**	**6.44**	**6.58**	**6.62**
USA	1.470	1.472	2.395	2.39	2.26	2.19
UZBEKISTAN	0.893	0.800	0.810	0.79	0.74	0.71
CFA ZONE	0.771	0.755	0.762	0.82	1.01	0.97
AUSTRALIA	0.696	0.849	0.662	0.49	0.47	0.60
GREECE	0.310	0.244	0.290	0.28	0.25	0.28
SYRIA	0.252	0.212	0.198	0.16	0.20	0.17
CHINA (MAINLAND)	0.370	0.097	0.074	0.18	0.15	0.15
IMPORTS						
WORLD TOTAL	**6.058**	**5.750**	**6.134**	**6.44**	**6.58**	**6.62**
EAST ASIA & AUSTRALIA	2.052	1.996	2.149	2.05	1.95	1.97
EU, C. EUR. & TURKEY	1.651	1.453	1.601	1.44	1.41	1.42
CIS	0.316	0.412	0.412	0.41	0.41	0.41
SOUTH AMERICA	0.526	0.316	0.259	0.30	0.43	0.48
CHINA (MAINLAND)	0.030	0.052	0.098	0.48	0.70	0.70
TRADE IMBALANCE 2/	**-0.040**	**-0.106**	**-0.367**	**0.00**	**0.00**	**0.00**
STOCKS ADJUSTMENT 3/	**0.006**	**0.074**	**-0.047**	**0.00**	**0.00**	**0.00**
ENDING STOCKS						
WORLD TOTAL	**10.097**	**9.641**	**10.543**	**8.80**	**8.80**	**9.06**
CHINA (MAINLAND)	3.812	2.987	2.730	1.85	2.00	2.13
USA	0.852	1.307	1.622	1.35	1.26	1.38
NET EXPORTERS	2.763	3.095	3.816	3.36	3.20	3.28
NET IMPORTERS 1/	7.333	6.546	6.728	5.44	5.60	5.77
ENDING STOCKS/USE 4/	**0.40**	**0.45**	**0.54**	**0.49**	**0.50**	**0.50**
COTLOOK A INDEX 5/	**52.80**	**57.20**	**41.80**	**56***	**60***	**59***

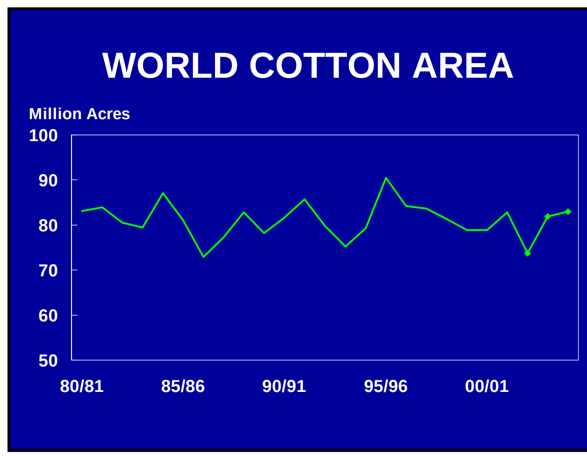
[1] Includes Brazil, China (Mainland), Colombia, India, Mexico, Pakistan, Turkey and traditional importers. [2] The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports. [3] Difference 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. The projections for 2002/03, 2003/04 and 2004/05 are based on net China (Mainland) trade and world-less-China (Mainland) ending stocks-to-use ratio.

* 95% confidence interval extends 12 cents above and below the point estimate.

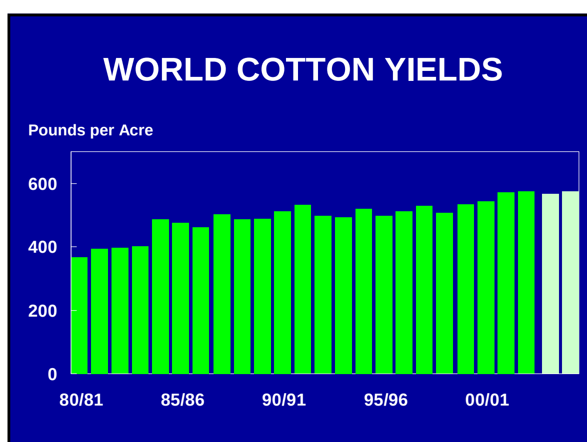

COTLOOK A INDEX
Season-average in U.S. Cents per Pound
100
75
50
25
0
30-Year Average 1972/73 – 2001/02
70/71
75/76
80/81
85/86
90/91
95/96
00/01

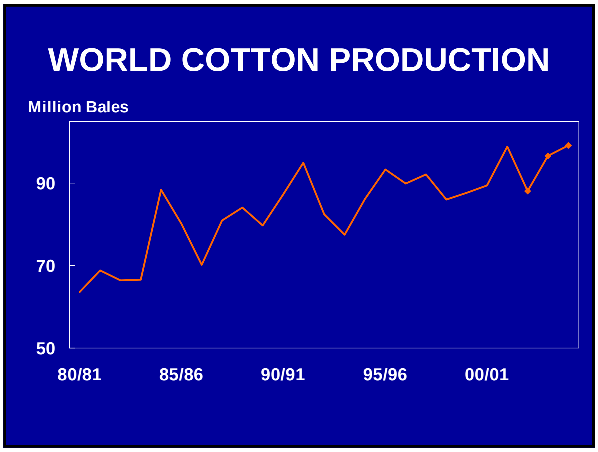

WORLD SUPPLY AND USE
Million Bales
90
70
50
Production
Consumption
80/81
85/86
90/91
95/96
00/01

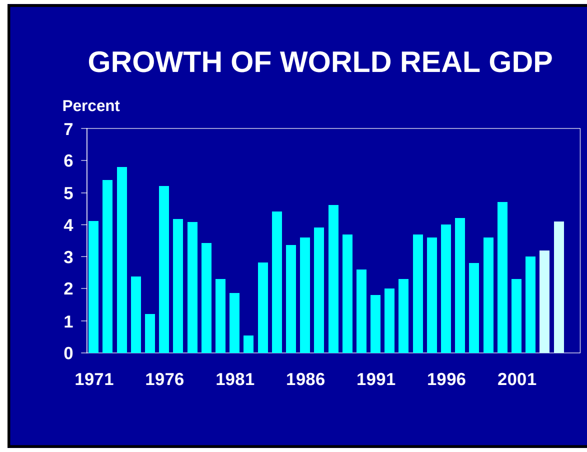

VALUE OF
WORLD COTTON PRODUCTION
Billion U.S. dollars
40
30
20
10
0
80/81
85/86
90/91
95/96
00/01

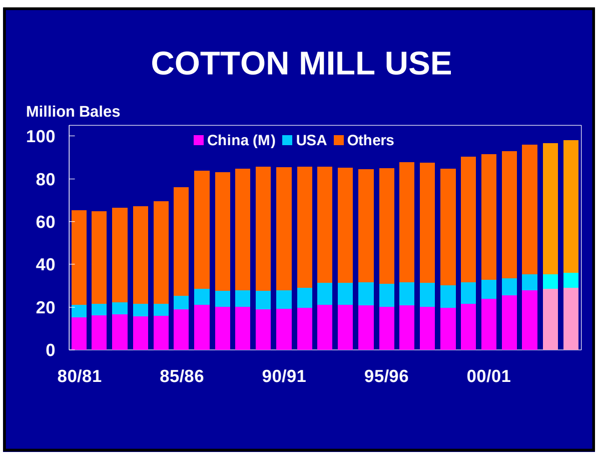

WORLD COTTON AREA
Million Acres
100
90
80
70
60
50
80/81
85/86
90/91
95/96
00/01

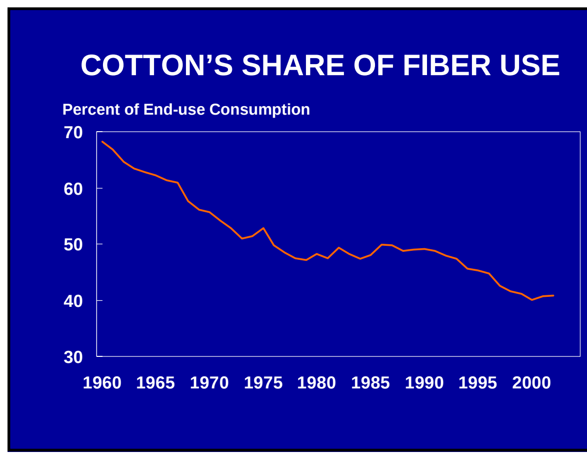

WORLD COTTON PRODUCTION
Million Bales
0
5
10
15
20
25
30
China (M)
USA
India
Pakistan
Uzbekistan
Turkey
Brazil
Australia
CFA Zone
Others
2002/03
2003/04

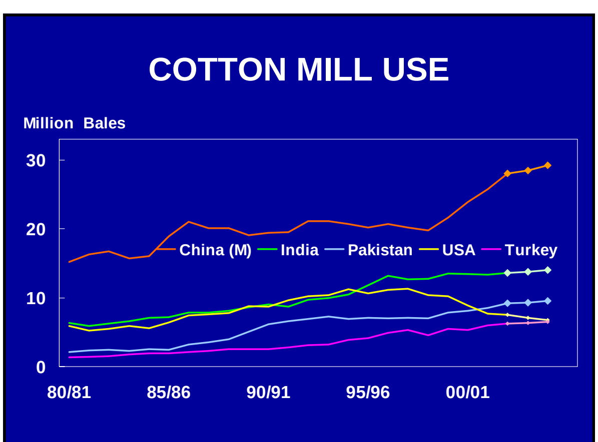

WORLD COTTON YIELDS
Pounds per Acre
600
400
200
0
80/81
85/86
90/91
95/96
00/01

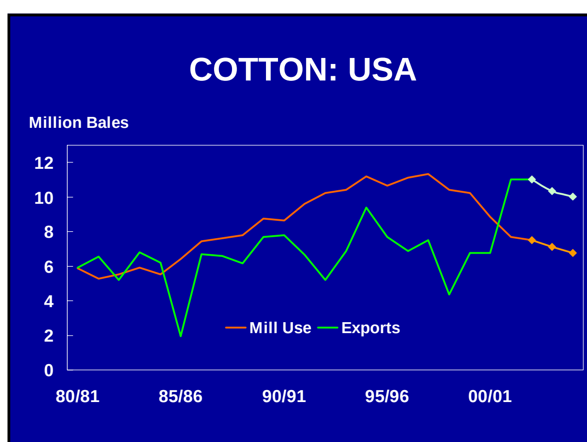

WORLD COTTON PRODUCTION
Million Bales
90
70
50
80/81
85/86
90/91
95/96
00/01

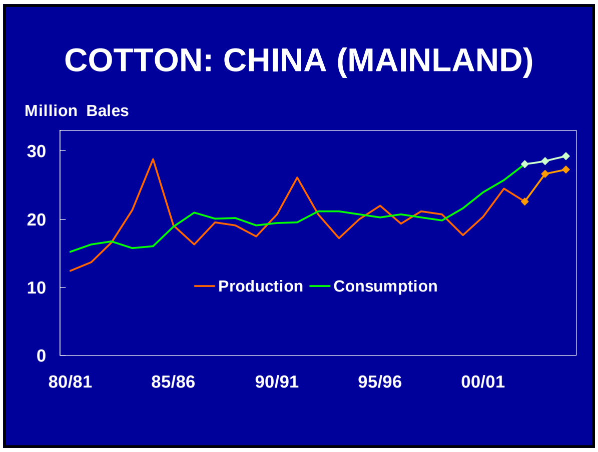

GROWTH OF WORLD REAL GDP
Percent
7
6
5
4
3
2
1
0
1971
1976
1981
1986
1991
1996
2001

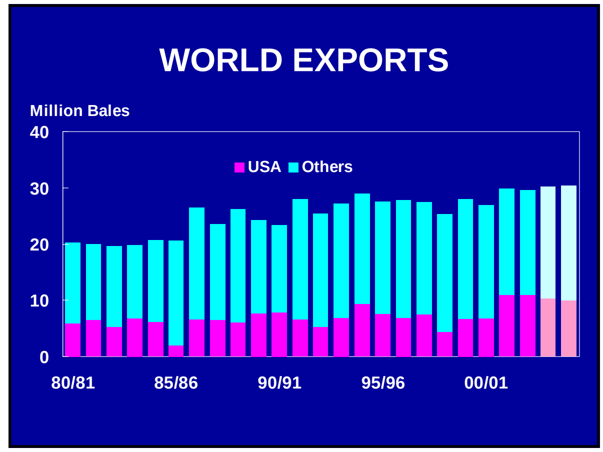

COTTON MILL USE
Million Bales
China (M)
USA
Others
100
80
60
40
20
0
80/81
85/86
90/91
95/96
00/01

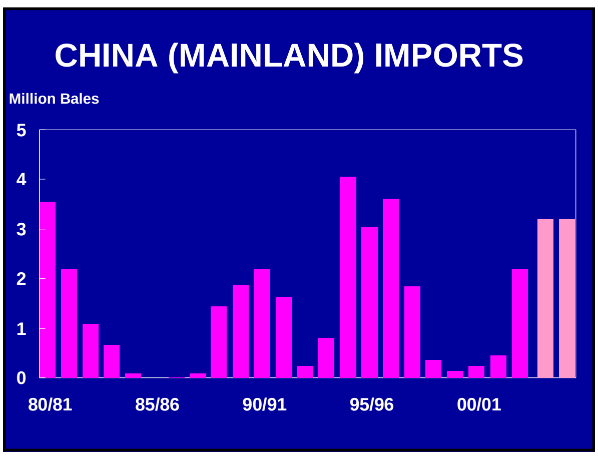

COTTON'S SHARE OF FIBER USE
Percent of End-use Consumption
70
60
50
40
30
1960
1965
1970
1975
1980
1985
1990
1995
2000

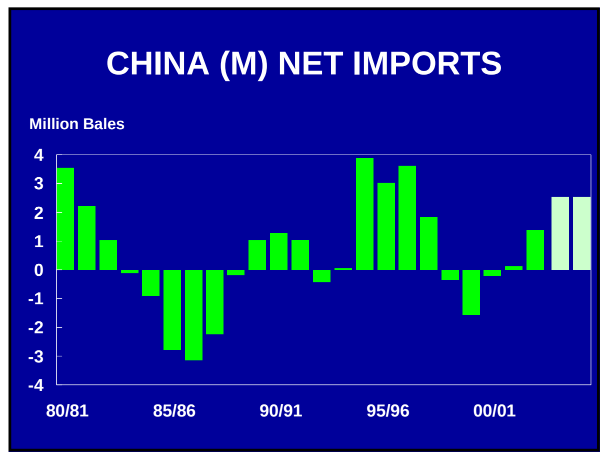

COTTON MILL USE
Million Bales
30
20
10
0
China (M)
India
Pakistan
USA
Turkey
80/81
85/86
90/91
95/96
00/01

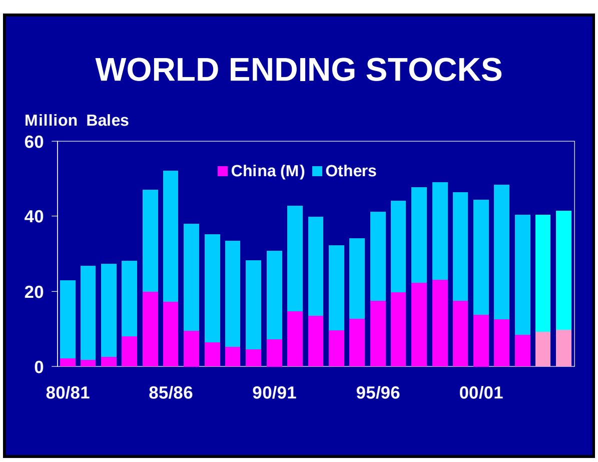

COTTON: USA
Million Bales
12
10
8
6
4
2
0
Mill Use
Exports
80/81
85/86
90/91
95/96
00/01

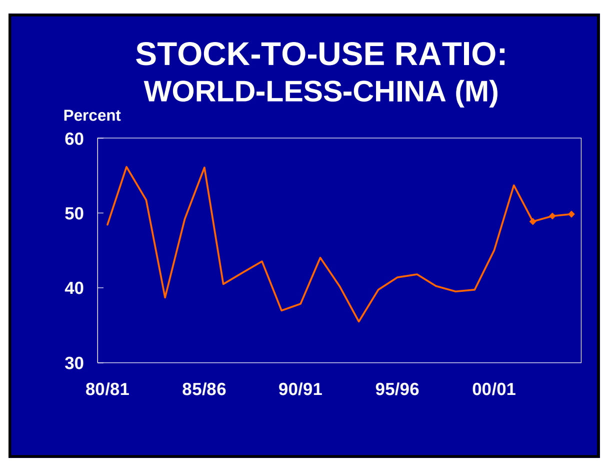

COTTON: CHINA (MAINLAND)
Million Bales
30
20
10
0
Production
Consumption
80/81
85/86
90/91
95/96
00/01


WORLD EXPORTS
Million Bales
40
30
20
10
0
USA
Others
80/81
85/86
90/91
95/96
00/01


CHINA (MAINLAND) IMPORTS
Million Bales
5
4
3
2
1
0
80/81
85/86
90/91
95/96
00/01


CHINA (M) NET IMPORTS
Million Bales
4
3
2
1
0
-1
-2
-3
-4
80/81
85/86
90/91
95/96
00/01


WORLD ENDING STOCKS
Million Bales
60
40
20
0
China (M)
Others
80/81
85/86
90/91
95/96
00/01


STOCK-TO-USE RATIO:
WORLD-LESS-CHINA (M)
Percent
60
50
40
30
80/81
85/86
90/91
95/96
00/01