



INTERNATIONAL COTTON ADVISORY COMMITTEE

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THE WORLD COTTON OUTLOOK: CONTINUED BELOW-AVERAGE PRICES*

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World cotton consumption is climbing to record levels from 91 million bales this season to forecast levels of 92 million bales next season and 93 million by 2002/03. However, the increases in consumption, which might be expected to produce an optimistic price outlook, will probably be matched by growth in world production. Production this season is estimated at 87 million bales, but the estimates for 2001/02 and 2002/03 are 93 and 94 million bales respectively. Consequently, little change in ending stocks is foreseen during the next two seasons, there may even be increases in stocks, and the ratio of ending stocks to use outside China (Mainland) is forecast to rise.

Despite the expectation that imports by China (Mainland) will have to climb because consumption is greater than production in that country and stocks are being reduced, current forecasts suggest continued below-average international cotton prices for several years. The average Cotlook A Index in 2000/01 is estimated at 59 cents per pound, and the averages for the next two seasons are estimated at 58 cents in 2001/02 and 56 cents in 2002/03. Government measures in the USA and the EU, along with expansions in cotton area in Brazil, Turkey and Australia and the use of genetically engineered varieties in China (Mainland), the USA and elsewhere are helping to sustain world cotton production despite below-average prices.

Higher World Consumption Next Two Seasons

World cotton consumption is not growing this season because of economic uncertainty in the USA and Japan, but increases of about 1% are expected during each of the next two seasons. World consumption is affected by world economic performance and fiber prices. World cotton use increased by 5% in 1999/00, largely as a result of world GDP growth of 4.8% in 2000, combined with declines in average cotton prices of 18% in 1998/99 and 10% in 1999/00.

In November 2000, the International Monetary Fund (IMF) expected world GDP growth in 2001 to remain above 4%, but with slower growth in the USA and Japan, world GDP growth is now estimated at 3.2% this year and 3.9% in 2002. While slower than in recent years, world GDP growth remains healthy and is expected to contribute to increases in world cotton use.

Research on textile fiber demand indicates that a decline in cotton prices of 20% leads to a rise in cotton use of about 1%. Cotton prices fell by more than 20% between December 2000 and the end of April

* Paper presented to the 77th Annual Convention of the American Cotton Shippers Association, May 3-5, 2001, The Cloister – Sea Island, Georgia, USA. 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.

2001, and the expected average Cotlook A Index this season of 59 cents per pound will be 19% below the average of the last 25 seasons. Further, cotton prices are falling relative to prices of polyester, especially in Asia. Using quotes for polyester published in *Cotton Outlook*, the average Cotlook A Index in 2000/01 is about 14% below the average quotes for polyester in China (Taiwan), Japan and Pakistan. With current estimates of cotton supply and use suggesting a season average Cotlook A Index of less than 60 cents in 2001/02, cotton is forecast to remain price competitive with polyester.

Consumption Rising in Developed Countries

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. As a consequence, net imports of cotton textiles by industrial countries are estimated to have increased from 25 million bale equivalents in 1998 to 27 million in 1999. In 1999, developing countries accounted for 76% of world cotton mill use and 43% of end-use cotton consumption. Industrial countries accounted for 20% of world cotton mill use and 50% of end-use cotton consumption. The transition economies in the former USSR and Central Europe make up the balance in each category.

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 2000 was about 21 million bales, an increase of 3% over 1999 and double the level of retail sales in 1986. U.S. consumers account for 22% of world cotton consumption, and on a whole-trade pipeline basis, the U.S. is a net cotton importer of about three million bales. However, US mill use is headed lower because imports of cotton products are rising approximately three times faster than the rate of increase in retail sales. The estimate for the current season is 9.2 million bales. With stronger economic growth in the USA next year, mill use may fall only marginally to nine million bales in 2001/02, and to 8.8 million bales in 2002/03. However, North American mill use is projected to remain above twelve million bales the next two seasons, with mill use in Mexico and Canada rising as fast as US mill use declines. Based on US Export Sales, mill use of cotton in Canada is estimated at 460,000 bales this year, up more than 50% in just one season because of the opening of a new yarn mill. Mill use in Mexico is estimated at 2.5 million bales this season, rising to 2.9 million over the next two seasons. Investments in textile capacity are continuing in both countries.

US Production Rising in 2001/02

US cotton production is estimated at 18.4 million bales in 2001/02, an increase of 7% over production in 2000/01. Using the USDA planting intentions report, US planted area is estimated at 15.6 million acres in 2001, the second highest since the 1950s when allotments determined planted area in the USA. Income support through the government program is obviously helping to sustain production. Genetically engineered varieties accounted for an estimated 72% of US upland cotton area in 2000, helping to reduced risks and lower production costs and contributing to the rise in planted area. Unattractive prices for competing crops are also helping to boost cotton area.

Only in 1995/96, after cotton prices had briefly reached more than \$1 per pound, was planted area in the USA larger than the forecast for 2001/02. Gains in planted area are expected in the Southeast, the Delta and the Far West. Planted area in the Southwest could decline because of rising production costs associated with energy prices.

The 2001/02 production estimate is based on the assumption that harvested area will rise by 11% because of better weather, particularly in Texas and Oklahoma. Approximately one-third of planted area was abandoned without being harvested in 2000/01 in the Southwest USA. Over the previous five years, abandonment in Texas and Oklahoma ranged between 5% and 41% of planted area. Abandonment in the Southwest of 15% is assumed for 2001/02, resulting in a national abandonment rate of 8%.

Over the last five years, the national yield in the USA averaged 648 pounds per acre, but the range was between 607 pounds and 705 pounds per acre. The rise in energy prices will affect US farmers in 2001/02. In many areas of Texas and the Delta, water itself is free, but farmers must pay the energy costs associated with pumping and distribution. The rise in energy prices since last season will mean a doubling of irrigation costs in the areas affected, meaning that much land that is normally irrigated will be grown under rainfed conditions in 2001. Further, the rise in prices of natural gas are having an impact on prices of fertilizer and the costs of diesel fuel for input applications. With prices of cotton remaining below

levels that would justify increased input applications, and with rising input costs, there is the possibility that yields in 2001/02 will be less than average. Accordingly, the 2001/02 US national yield is estimated at 613 pounds per acre, 3% below the yield in 2000/01 and 5% below the average yield during the last five years.

US exports are estimated at 7.2 million bales this year and nine million in 2001/02, leaving ending stocks this year below five million bales and stocks in 2001/02 at 5.2 million bales, equal to 29% of use. Based on export sales for the week ending April 19, 2001 and applying average proportions for the past five years, commitments of seven million running bales imply shipments of about seven million 480-pound bales. While cancellations over the next several months are inevitable, there may also be accelerated sales in response to the decline in prices.

Exports for next season are estimated as a residual. The ratio of stocks to use in the USA has fluctuated between 13% and 30% since 1988/89. With the Marketing Loan and Step 2 programs to guarantee price competitiveness, US cotton exports will always be great enough to prevent a rise in ending stocks to more than market participants are willing to hold. With production in 2001/02 estimated at 18.4 million bales, total use will have to be at least 18 million bales to prevent stocks from climbing to more than 16 weeks of shipments.

China (Mainland) Textile Exports Surging

Consumption of cotton in China (Mainland) is rising as a national policy of stock reduction remains in effect. Consumption is estimated at 23 million bales in 2000/01, up from an estimated 22 million bales during last season. Further growth to 24 million bales is expected by 2002/03. The value of textile and apparel exports from China (Mainland) expanded by 23% in 2000. However, the entire rise in China (Mainland) cotton use is linked to expanding textile exports. Assuming that the ratio of export value to quantity of fiber use held constant, all the gain in cotton use in China (Mainland) in 2000 was accounted for by the expansion in exports, meaning that retail level domestic fiber use actually fell.

2000/01 production in China (Mainland) was approximately 20 million bales, leaving a deficit of three million bales. The recovery in production in 2000/01 reflected a rise in area and a record national yield of 960 pounds per acre, 11% above the five-year average. Estimates vary, but it is possible that one-third of total cotton area in China (Mainland) was planted to genetically engineered varieties in 2000, both Monsanto and domestically developed varieties. A prospective planting survey conducted by the national statistical agency indicates that area is rising about 15% in 2001, and production in 2001/02 is estimated at nearly 22 million bales.

Monthly data indicate that imports this season will climb to 900,000 bales and exports are estimated at 500,000 bales. China (Mainland) is expected to import 1.4 million bales next season and 1.8 million by 2002/03. Even if production reaches 22 million bales again in 2001/02, the momentum behind the rise in consumption will likely carry China (Mainland) stocks lower again.

Mill Use Often Linked to Production

Consumption in India is sensitive to changes in domestic cotton production. The estimate of 2000/01 Indian production is less than 11 million bales, one million bales less than last season and nearly three million bales less than in 1996/97. The decline in production is resulting in increases in domestic prices of between 15% and 25% compared with last year. Imports rose to 1.8 million bales in 1999/00 and the estimate for this season is 1.6 million bales. These are the highest levels of imports for India since the 1950s. Indian cotton use reached 13.1 million bales in 1996/97, but as a consequence of lower production, consumption has not grown since and is estimated at 13.2 million bales this season. With higher domestic prices there will probably be an increase in area and production in India over the next two years, and consumption is estimated at 13.6 million bales by 2002/03. Because of the systemic nature of the problems affecting yields in India, a substantial rise in production to the level of consumption is not expected this decade, and India will likely be a net cotton importer in most years.

Like India, cotton use in Pakistan was constrained by a decline in domestic production during the 1990s, but with higher production last season consumption rose to 7.8 million bales. Production is again estimated at 7.8 million bales, but cotton use is apparently dropping and exports are rising. Use in 2000/01 is estimated at 7.5 million bales, rising to 7.6 million next season and 7.7 million by 2002/03.

Cotton production in Turkey has been between 3.5 and 4.1 million bales the last six seasons as increased area in the irrigated Southeast region has offset declining production in other regions because of competition with food crops. Production in 2001/02 is estimated in the middle of the range at 3.8 million bales. Exports to Russia compose a significant portion of demand for the Turkish textile industry. Mill use of cotton in Turkey reached 5.3 million bales in 1997/98, but dropped below five million bales in 1998/99 after the devaluation of the Russian rouble. Consumption is recovering to 5.3 million bales again this year, and the estimates for the next two seasons are 5.4 million and 5.5 million bales.

Textile Exports Fueling Expanded Mill Use

Cotton use in Brazil is estimated at a record of 4.2 million bales in 2000/01, demonstrating again the power of currency devaluation and macroeconomic management to spur export-led economic growth. Increased domestic cotton production is providing an expanded supply for the local industry. Between 1995/96 and 1999/00, cotton production in Mato Grosso climbed from 150,000 bales to 1.5 million, rising from a small portion of the Brazilian total to now account for more than half. Production in Mato Grosso alone is estimated at two million bales in 2000/01, and production in Brazil is estimated at 3.9 million bales. As farmers have gained experience with cotton in Mato Grosso, the state lint yield has more than doubled and was 1,400 pounds per acre in 1999/00, possibly the highest average yield in a rainfed area in the world. Over the next two seasons production in Brazil is forecast to rise to nearly five million bales and consumption will climb to an estimated 4.5 million bales, meaning that Brazil will once again be a significant exporter. Production is also recovering in Argentina and Paraguay because of higher market prices, and production in South America is estimated at 5.8 million bales in 2000/01, and six million next season.

Higher Prices Leading to Increased Area

Production in the Southern Hemisphere is estimated at 9.5 million bales in 2000/01 and about the same next season. Production in Australia is estimated at 3.4 million bales this season and the same next season. Production in Zimbabwe is estimated at a near record of 500,000 bales this season, and a gain to 600,000 bales is forecast for next season, assuming average yields.

Cotton use in East Asia and Australia is holding at the same aggregate level of the last five years of about nine million bales. Consumption in Japan is continuing downward, but there are increases in Thailand and Hong Kong.

2000/01 cotton use in the EU and Central Europe is estimated about the same as last season at 5.2 million bales and 900,000 bales, respectively. Production in Greece and Spain is estimated at 2.3 million bales this season and 2.2 million bales next season. A gradual decline in EU cotton area is expected over the next decade because of reductions in the income subsidy. EU cotton production rose from 450,000 bales in the early 1980s to a record of 2.5 million bales in 1999/00, but domestic use is still larger than production and net imports are about three million bales.

Currency Devaluation Aiding CIS Cotton Use

Consumption in the Commonwealth of Independent States is climbing to an estimated three million bales, including 1.5 million bales in Russia in 2000/01 because of higher government purchases of textile products and reduced competition from imports following the currency devaluation in 1999. The rise in cotton use in the CIS is occurring without the benefit of rising production in Central Asia. Production in Uzbekistan fell to an estimated 4.3 million bales in 2000/01, probably the smallest harvest in Uzbekistan in about four decades. Normal weather will presumably lead to increased production next season, as the government will try to maintain cotton production near five million bales per year. Production in the CIS is estimated at 6.3 million bales this season and seven million next season.

Production in Francophone Africa is estimated at 3.3 million bales this year, and even with no growth in area, production is projected to rise to four million bales next year with better yields. The availability of unused land, the provision of cotton inputs to greater numbers of farmers, and an expansion of planted area per farm family contributed to increases in area and production during the 1980s and 1990s. But an overvalued currency that reduces prices paid to farmers, disruptions to the cotton system because of privatization and agronomic problems associated with insect control are leading to long-term difficulties.

Changes in Underlying Assumptions

In observing changes in the world market, it is sometimes useful to note what is not happening, as well as what is happening. One thing that is not happening is that prices are not above the long run average of 74 cents per pound. The world cotton yield rose to 533 pounds per acre in 1991/92 and has not risen in the nine seasons since. In contrast, the world yield rose steadily from the end of World War II until 1991 and during those decades never went more than three years without reaching a new record. The reasons for the failure of the world yield to rise during the 1990s include diseases and resistance to pesticides in Asian and African countries, economic disruptions in Central Asia and changes in the government programs in the USA that reduce the incentive to raise yields. These constraints to yield increases are still operative in many countries. With population and income growth, combined with consumer preferences for cotton, pushing consumption higher, it had been thought that the stagnation in the world yield would lead to above-average prices in most years of this decade. However, prices are obviously not above average and do not appear to be headed higher soon.

The primary reason that prices are not rising is that production is climbing despite international prices that remain below average. World production is climbing because of government measures that sustain cotton production in the USA and the EU. The adoption of genetically engineered varieties and their rapid adoption are reducing farmers' risks and lowering production costs from what would otherwise prevail. The appreciation of the dollar over the last five years is raising producer prices outside the USA. And, the development of new areas in Turkey and Brazil with low cotton production costs is contributing about three million bales to the world total that would not otherwise be produced.

Another factor leading to lower cotton prices is the acceleration in polyester production capacity and the attendant decline in cotton's share of world fiber mill use. High cotton prices in the mid-1990s led directly to increased investment in fiber production capacity, and that capacity is producing polyester fiber today. The decline in cotton prices will slow the loss of market share, but because chemical fiber production is capital intensive, most of the increased capacity will remain in production even with cotton prices remaining below 60 cents per pound.

A final factor in sustained low prices is the fundamental change in government policy in China (Mainland) toward holding stocks. In a change that mirrors the decision by the USA in 1985 to shift from supply management policies that resulted in high stocks to market oriented policies that encourage exports and lower stocks, the Government of China (Mainland) has apparently decided to lower national stocks and run the cotton economy on a tighter ratio of stocks to use. The manifestation of that policy is reduced imports from levels expected in the past and a shift in the location of world stocks from China (Mainland) to the rest of the world.

As a consequence of these changes, the ratio of stocks to use outside China (Mainland) is rising, and the Cotlook A Index remains at less than 60 cents per pound even though yields are still not rising and consumption is increasing to a record level. Current estimates of cotton supply and use and net exports by China (Mainland) seem to indicate that the pressure on international prices will continue for several more seasons.

SUPPLY AND DISTRIBUTION OF COTTON

May 2, 2001

Years Beginning August 1

	1997	1998	1999 Est.	2000 Proj.	2001 Proj.	2002 Proj.
Million Metric Tons						
BEGINNING STOCKS						
WORLD TOTAL	9.443	9.930	9.875	8.87	7.93	8.12
CHINA (MAINLAND)	4.002	4.297	4.124	2.81	2.26	2.08
USA	0.865	0.846	0.858	0.85	1.04	1.14
NET EXPORTERS	3.906	4.032	4.046	4.10	3.80	3.98
NET IMPORTERS 1/	5.537	5.897	5.829	4.78	4.13	4.14
PRODUCTION						
WORLD TOTAL	20.055	18.728	18.832	18.86	20.24	20.39
CHINA (MAINLAND)	4.602	4.501	3.829	4.35	4.70	4.56
USA	4.092	3.030	3.694	3.75	4.00	3.99
INDIA	2.686	2.805	2.652	2.35	2.60	2.79
PAKISTAN	1.561	1.480	1.700	1.70	1.60	1.62
UZBEKISTAN	1.139	1.000	1.128	0.93	1.10	1.10
TURKEY	0.838	0.882	0.791	0.75	0.82	0.82
OTHERS	5.137	5.030	5.037	5.03	5.42	5.50
CONSUMPTION						
WORLD TOTAL	19.356	18.867	19.835	19.80	20.06	20.31
CHINA (MAINLAND)	4.700	4.600	4.800	5.00	5.08	5.16
INDIA	2.760	2.781	2.939	2.88	2.92	2.96
EU, C. EUR. & TURKEY	2.584	2.269	2.474	2.45	2.49	2.51
USA	2.471	2.265	2.229	2.00	1.96	1.92
EAST ASIA & AUSTRALIA	1.922	1.966	2.106	2.06	2.07	2.06
PAKISTAN	1.543	1.625	1.700	1.63	1.65	1.67
BRAZIL	0.783	0.822	0.885	0.91	0.93	0.96
CIS	0.438	0.442	0.531	0.62	0.66	0.67
OTHERS	2.155	2.097	2.171	2.25	2.30	2.41
EXPORTS						
WORLD TOTAL	5.942	5.382	6.114	6.01	6.34	6.43
USA	1.633	0.946	1.470	1.57	1.95	2.00
UZBEKISTAN	1.050	0.900	0.900	0.79	0.89	0.90
FRANCOPHONE AFRICA	0.835	0.850	0.853	0.71	0.82	0.88
AUSTRALIA	0.575	0.660	0.696	0.71	0.71	0.71
GREECE	0.187	0.230	0.294	0.29	0.24	0.22
ARGENTINA	0.220	0.164	0.080	0.09	0.08	0.06
CHINA (MAINLAND)	0.006	0.147	0.370	0.10	0.10	0.10
IMPORTS						
WORLD TOTAL	5.766	5.434	6.150	6.01	6.34	6.43
EAST ASIA & AUSTRALIA	1.793	1.953	2.044	1.98	2.12	2.03
EU, C. EUR. & TURKEY	1.694	1.403	1.604	1.49	1.54	1.52
SOUTH AMERICA	0.581	0.474	0.537	0.39	0.32	0.30
CIS	0.273	0.263	0.336	0.39	0.39	0.39
CHINA (MAINLAND)	0.399	0.073	0.030	0.20	0.30	0.40
TRADE IMBALANCE 2/	-0.176	0.052	0.036	0.00	0.00	0.00
STOCKS ADJUSTMENT 3/	-0.035	0.032	-0.034	-0.01	0.00	-0.01
ENDING STOCKS						
WORLD TOTAL	9.930	9.875	8.874	7.93	8.12	8.18
CHINA (MAINLAND)	4.297	4.124	2.813	2.26	2.08	1.79
USA	0.846	0.858	0.854	1.04	1.14	1.21
NET EXPORTERS	4.032	4.046	4.095	3.80	3.98	4.28
NET IMPORTERS 1/	5.897	5.829	4.779	4.13	4.14	3.90
ENDING STOCKS/USE 4/	0.41	0.40	0.38	0.39	0.42	0.44
COTLOOK A INDEX 5/	72.20	58.90	52.80	59*	58*	56*

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.

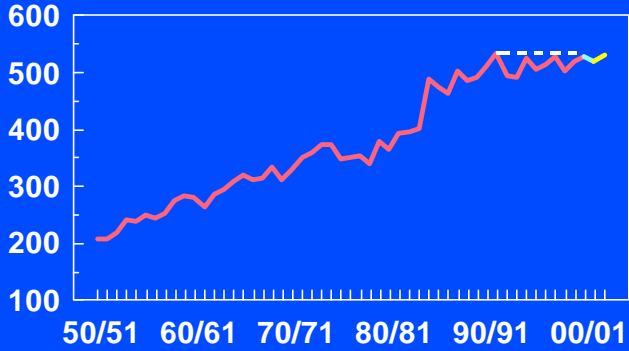
4/ World-less-China (Mainland) ending stocks minus China net exports, quantity divided by world-less-China consumption.

5/ U.S. Cents per pound. The estimates for 2000/01 and 2001/02 are based on net China (Mainland) trade, world-less-China (Mainland) ending stocks to use, and changes in NY futures prices.

*/ 95% confidence interval extends 7 cents above and below the point estimate.

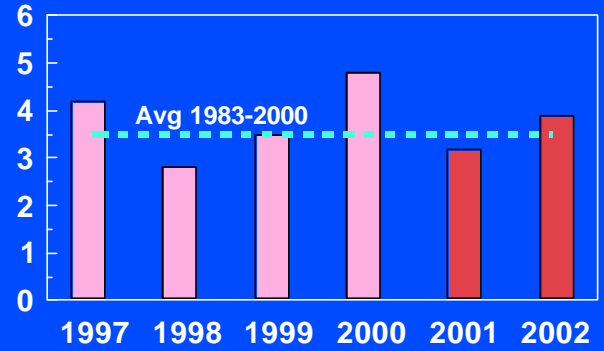
WORLD COTTON YIELDS

Pounds per Acre



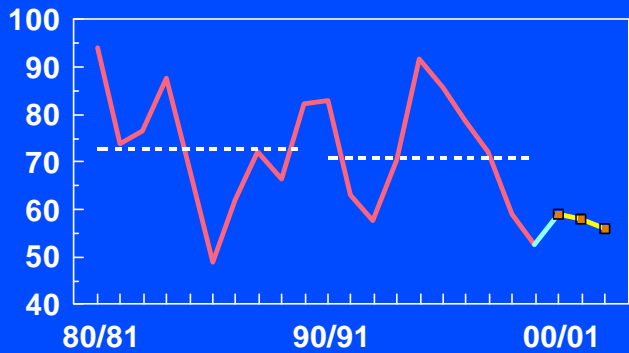
GDP GROWTH

Percent Change



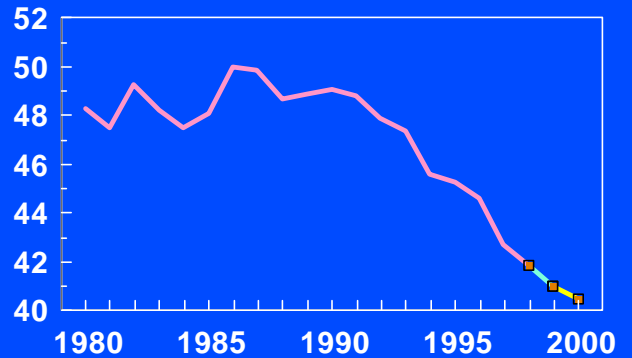
COTLOOK A INDEX

Cents per Pound



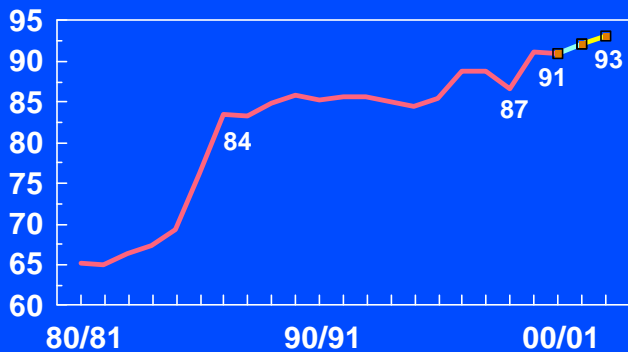
COTTON'S MARKET SHARE

Percent of End Use



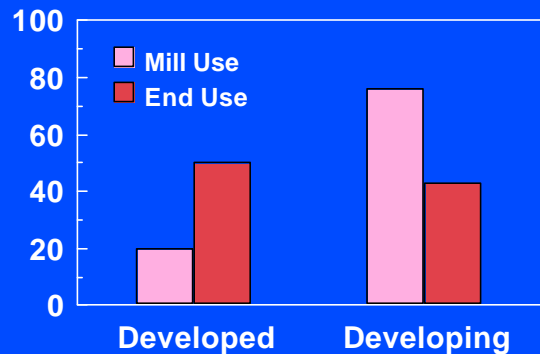
CONSUMPTION

Million Bales



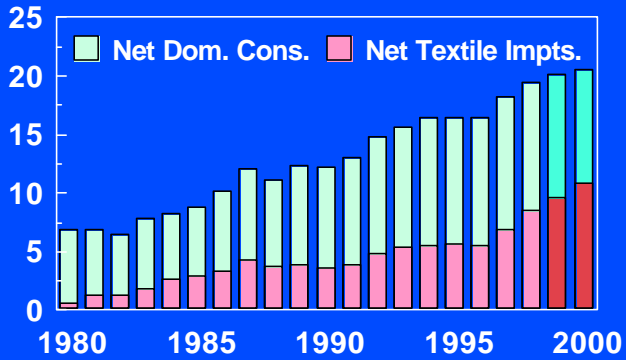
FIBER CONSUMPTION

% of World Total



U.S. COTTON CONSUMPTION

Million Bales



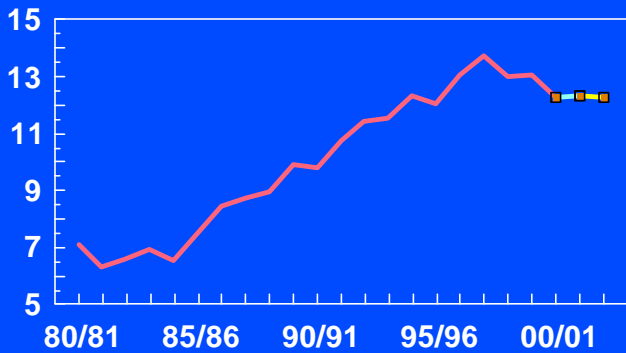
MILL USE: USA

Million Bales, SAAR



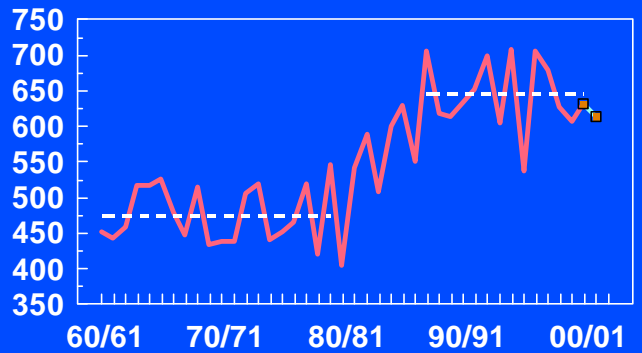
MILL USE: N AMERICA

Million Bales



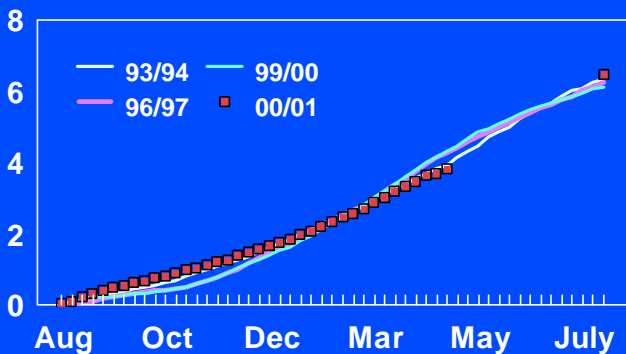
COTTON YIELDS: USA

Pounds per Acre



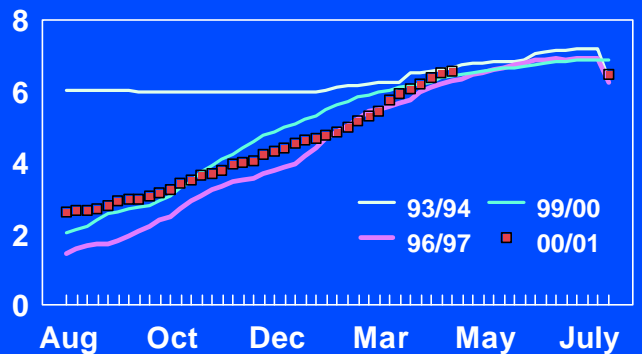
USA UPLAND SHIPMENTS

Million Bales

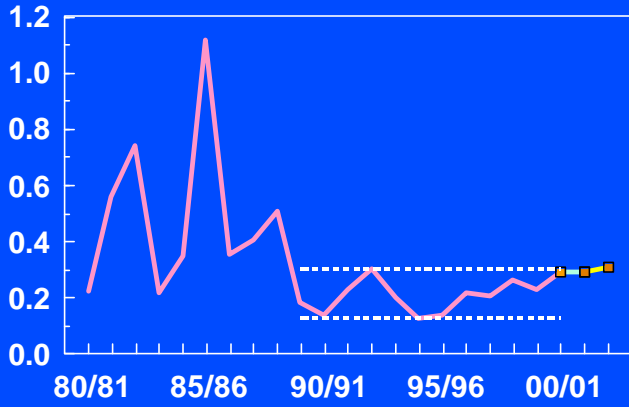


USA UPLAND COMMITMENTS

Million Bales

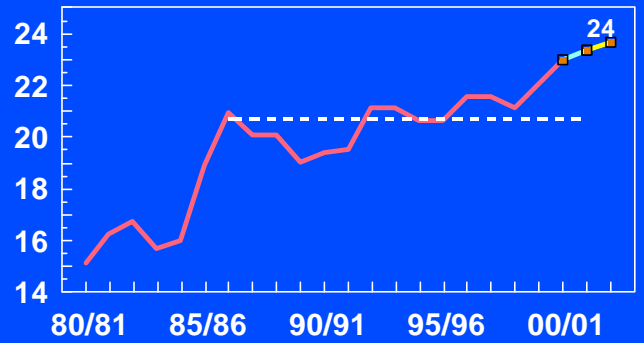


U.S. S/U RATIO



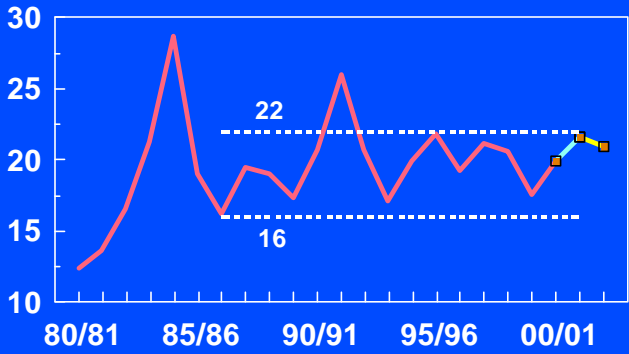
CONSUMPTION: CHINA (M)

Million Bales



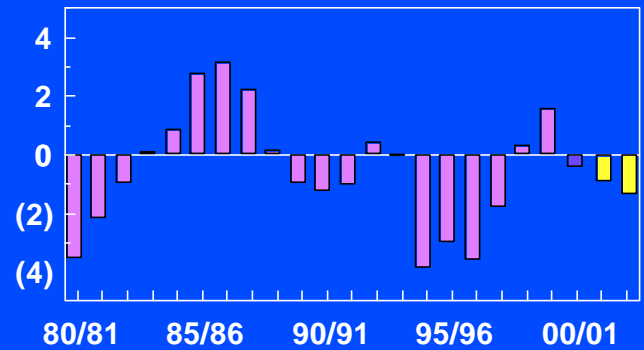
PRODUCTION: CHINA

Million Bales



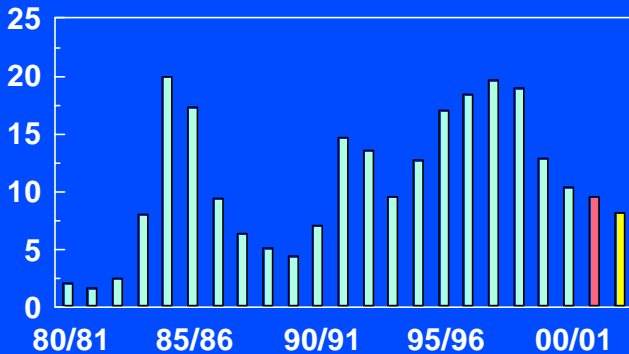
CHINA (M) NET EXPORTS

Million Bales



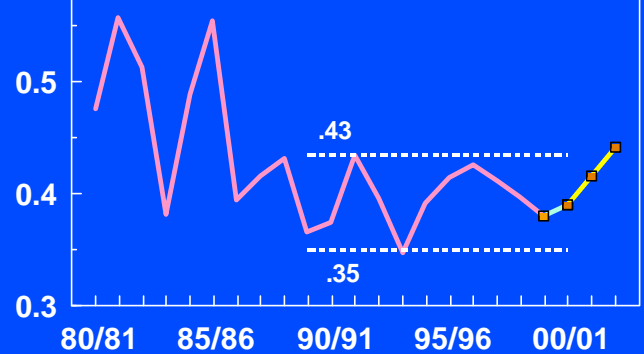
STOCKS: CHINA (MAINLAND)

Million Bales



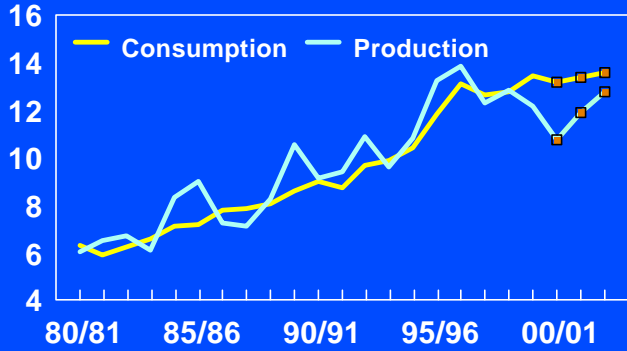
NON-CHINA (M) S/U RATIO

0.6



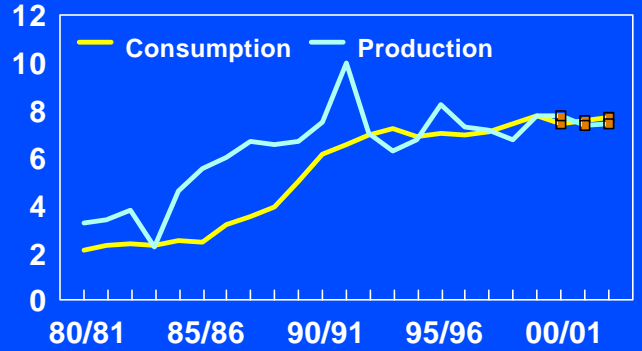
INDIA

Million Bales



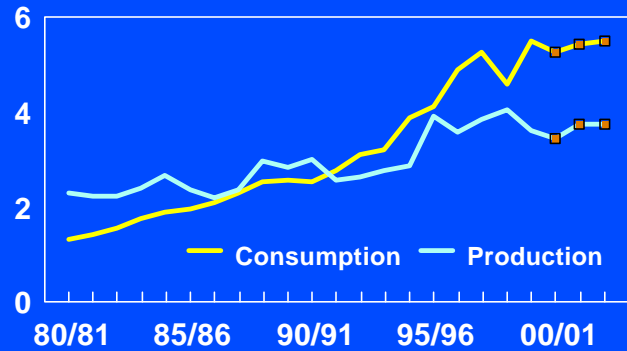
PAKISTAN

Million Bales



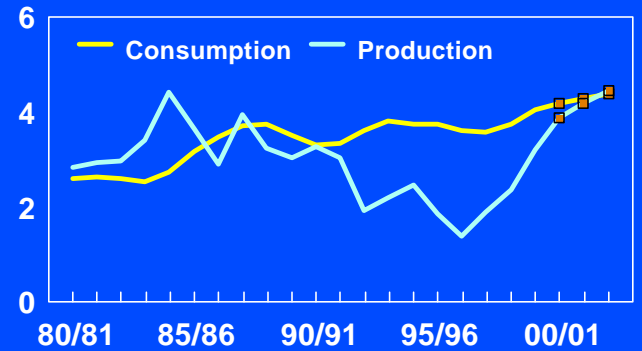
TURKEY

Million Bales



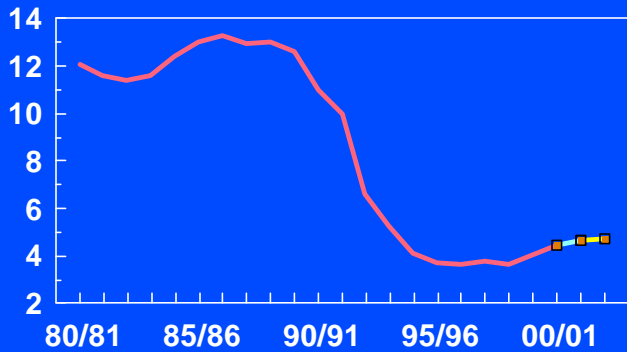
BRAZIL

Million Bales



CONSUMPTION: COMECON

Million Bales



COTLOOK A INDEX

Cents per Pound

