



INTERNATIONAL COTTON ADVISORY COMMITTEE

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WORLD COTTON OUTLOOK*

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Overview

The world cotton market seems to be entering another season of relative stability in 1997/98 at above-average prices with production and consumption nearly in balance at approximately 89 million bales (19.3 million tons). The forecast balance between production and consumption is not a coincidence, but reflects an underlying relationship fundamental to the world outlook. World production is being held in check by farmer's difficulties in raising yields, and growth in consumption is being stymied primarily by a tightness in cotton supplies in many markets.

Central to the outlook for prices is that 1997/98 ending stocks outside China (Mainland) are expected to remain tighter than usual relative to use. Combined with further reductions in the use of barter by exporters in Central Asia, the tightness in forecast stocks suggests that the Cotlook A Index will remain above the average maintained from the mid-1980s through the early 1990s of 67 cents per pound, and higher even than the average during the 1970s and early 1980s of 76 cents. However, cotton imports by China (Mainland) are dropping this season and are likely to fall again in 1997/98, alleviating some of the upward pressure on world prices. Current projections suggest that the Cotlook A Index will rise from an average 79 cents per pound this season to 82 cents in 1997/98.

Since 1973/74, the average change in annual averages of the Cotlook A Index has been 19%; the change estimated between 1996/97 and 1997/98 of just 4% implies a continuation of the recent period of lessened price volatility.

Worldwide, cotton consumption is rising, but by less than the rate of population growth. Consequently, per capita cotton consumption is declining, and cotton is losing market share to chemical fibers. Cotton's share of world textile fiber mill use fell from 50% in 1986 to 45% in 1995, and further erosion is likely.

The upland cotton price spread is likely to widen during 1997/98. The price spread is measured as the difference between quotes in Cotton Outlook for SJV cotton at the top of the upland category and the Cotlook B Index. Production of fine, or SJV-type, cotton is projected to fall outside China (Mainland) in 1997/98, causing the premium for SJV to be at least as high as this years average of 15% of the Cotlook A Index. The 1997/98 average SJV quote in Cotton Outlook could rise by 4 cents to 94 cents per pound.

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At the lower end of the upland category, production of coarse count, or Texas/Oklahoma type, cotton will probably increase in 1997/98, especially in Pakistan and the USA, leading to an increase in the discount for the B Index. So far in 1996/97, the Cotlook B Index has averaged 95% of the Cotlook A Index, for a discount of 5%; the average discount during 1997/98 could climb toward 10%, suggesting an average Cotlook B Index as low as 74 cents in 1997/98. The total upland price spread between SJV and the Cotlook B Index could rise from an average of 16 cents this season to 20 cents per pound next season.

Because of the likelihood of increased production of extra-fine, or ELS, cotton in Egypt and Central Asia in 1997, the price outlook in the extra-fine sector is weak, and the average quote in Cotton Outlook for American Pima may decline from \$1.22 this season to about \$1 per pound.

World Consumption Rising

World cotton mill use is rising to a record of 88 million bales in 1996/97 and further growth is forecast for 1997/98, after a decade of no growth at about 85 million bales. However, most of the growth this season is occurring in the largest cotton producing countries, including India, Pakistan and Turkey. Mill use is also rising this season in China (Mainland), but not to a record level, and North American mill use is climbing to a record, even if the US component has not yet returned to the 1994/95 record. Mill use is declining in East Asia and Europe, but gains are occurring in Africa and the Middle East. Strong economic growth, population growth and consumer preferences for cotton products are the fundamentals driving world cotton use higher. Improvements in technology are raising the proportion of total yarn production costs accounted for by cotton alone, and mill use is tending to move to regions that produce cotton. The proportion of world cotton mill use accounted for by the ten largest cotton producing countries rose from 55% in 1984/85 to 70% this season.

Signaling a fundamental improvement in the economics of the cotton industry, the difference between the Cotlook Yarn Index and the Cotlook A Index is the widest in five years this season. The Cotlook Yarn Index, a measure of export prices for 20s and 30s count yarns from Brazil, Pakistan, India, the Republic of Korea, China (Taiwan), Greece and Turkey, rose to a record of 124 (July 1982 equals 100) during 1994/95 and has fallen to an average of 117 so far this season. However, the Cotlook A Index has fallen by a greater percentage amount since 1994/95. The difference between the two indexes has widened this season, indicating that spinning margins, the basis for profitability in yarn production, have increased since 1994/95 and may be close to average. This is not proof that textile industries around the world are profitable, just that average economic conditions are better this year than they have been.

Indian cotton mill increased from 8.7 million bales in 1991/92, a period affected by slower economic growth, to 11.6 million bales in 1995/96. In 1995/96, India passed the USA as the second largest user of cotton in the world, and mill use this season is estimated at 12.3 million bales, an increase of 5%, based on data through February. The Government of India restricts exports of cotton to protect domestic textile interests, and domestic cotton prices average between 14% and 20% below international levels, contributing to the competitiveness of the Indian textile industry. About 80% of the gain in Indian cotton mill use since 1991/92 is attributable to increased exports of textile products.

Cotton use in North America is rising 5% to an estimated record of 12.6 million bales this season. Mill use in the USA is rising 2% to an estimated 10.8 million bales in 1996/97, and 4% growth to 11.2 million bales is forecast for 1997/98. After a two-year period of inventory

reduction at the textile mill, garment manufacturing and retail levels of the US economy, strong consumer sales are again translating into increased mill use. Because of expanded textile trade opportunities, cotton consumption in Mexico is rising by one-third to 1.5 million bales this season, and a further gain of 13% is forecast for 1997/98. Cotton consumption in Canada is growing from 188,000 bales in 1990/91 to an estimated 270,000 in 1996/97.

Mill use in Pakistan seems to be rising again after being slowed by domestic cotton shortages. Pakistan mill use rose by more than 10% per year during the 1980s, benefiting from government policies designed to keep domestic prices below international prices to encourage textile production and exports. However, the leaf curl virus halted the rise in production in Pakistan after 1991/92, and government policy changed at the start of 1995/96 to allow exports and imports of cotton lint without quota and tax restrictions. Mill use in Pakistan rose to 7.3 million bales in 1993/94 and reached that level again in 1995/96 after a period of adjustment and after the government allowed cotton imports to compensate for smaller domestic crops. Much of the machinery in Pakistan is obsolete, but the country still enjoys production cost advantages compared with mills in Europe and East Asia, and cotton use in Pakistan is estimated at 7.4 million bales in 1996/97 and 7.6 million in 1996/97. As reported recently in *Cotton Outlook*, the number of operating mills in Pakistan rose during 1996, and the number of operating spindles and rotors increased by 5% and 16%, respectively.

Cotton mill use in Turkey seems to be climbing every year, benefiting from rising domestic production in Eastern Turkey as a large irrigation scheme is completed and from the availability of Central Asian cotton exported through the Black Sea. Quota-free access to markets in the European Union are leading to increased mill use; as in the case of India, most of the gain in mill use in Turkey is accounted for by increases in textile exports. Mill use in Turkey is estimated at 4.5 million bales this season, up from 4.4 million last season and 2.6 million in 1990/91.

Mill use in Brazil is not rising much, having reached 3.7 million bales in 1987/88 and estimated at 3.9 million bales this season. Domestic cotton production has fallen from more than four million bales to less than two million in the past decade, and economic policies designed to fight inflation have suppressed domestic demand for all goods in Brazil. That mill use has grown at all is something of an achievement, and Brazil remains the sixth largest cotton textile industry in the world and the world's largest cotton importer this season. With an easier economic situation in the country, mill use could exceed four million bales in 1997/98.

Cotton use is falling in Japan, the Republic of Korea, Thailand and Hong Kong and in the European Union for the oft-cited reasons of high costs to import cotton, combined with high labor, land and energy costs. Of note, mill use in China (Taiwan) rose in 1995/96 and seems to be rising again in 1996/97 from 1.24 million bales to 1.35 million, perhaps because of reduced competition from textile mills in China (Mainland). Mill use is rising in Indonesia, the Philippines, and Bangladesh as well as in markets not often considered, such as Syria, Iran, Sudan, Cote d'Ivoire, South Africa and Zimbabwe.

Of particular note, cotton use in Russia and other countries in the former COMECON trading group may no longer be falling. Cotton use in the region, which includes Central Europe, Vietnam, Cuba and North Korea, dropped from 13 million bales in 1988/89 to 4.3 million last season, and the estimate for this season is four million. The loss of nine million bales of use in the COMECON group in just seven seasons is the primary reason for the stagnation in the world consumption total since 1986/87. World mill use is moving to countries which produce cotton, and it is not likely that the textile industries of Russia, Ukraine and other non-producing countries in Europe are ever going to recover to the levels of consumption recorded in the late

1980s. Nevertheless, some stability seems to have been achieved, especially in the Baltic countries, Poland and the Czech Republic. The Government of Russia is committed to helping the textile industry, and with the former COMECON region no longer subtracting from the world total, growth in the rest of the world is leading to an overall increase.

Production Problems Persist

World cotton prices were below average in the early 1990s but began rising in 1993/94 and have been decidedly above what used to be considered "high" for three seasons. Still, in what seems to be a contravention of economic principles, world production this season is 7% below the record set in 1991/92 and there is little likelihood of a substantial rise in 1997/98. The estimate of 1997/98 world production is 89 million bales, the same as this season. Among the largest producers, lower harvests are expected in China (Mainland), India and the USA, but the 1997/98 Pakistan and Uzbekistan crops may be larger than in 1996/97.

Between 1950/51 and 1991/92, the world cotton yield rose an average of 7 pounds per acre, or 2% per year, but growth was not uniform. The world yield rose only from 373 pounds per acre in 1973/74 to 401 pounds in 1983/84, an average gain of just three pounds per year for eleven years. The world yield then jumped 90 pounds per acre in 1984/85 because of record production in China (Mainland) and good yields in most other countries, and the world yield continued to climb through 1991/92, rising more than 6 pounds per acre per year for seven more years and reaching 533 pounds per acre. However, yields have fallen in the five seasons since 1991/92.

The world cotton yield is estimated at 512 pounds per acre in 1996/97, 4% lower than the record set in 1991/92. 1996/97 is the fifth consecutive year in which the world yield has not reached a new record, the first five-year period of no growth in the world yield since World War II. The decline in the world average yield since 1991/92 is reinforcing the impression that the cotton industry is in the midst of a period of slow growth in production caused by specific difficulties affecting productivity in several of the largest producing countries. Resistance to pesticides in Eastern China, the existence of the leaf curl virus in Pakistan, changes in the government program in the USA and economic difficulties in Central Asia have affected cotton yields in four of the five largest cotton producing countries during the 1990s, resulting in a tightening of the world supply. As a consequence of tighter supplies, cotton prices have remained above the long run average since 1993/94.

Among the largest producing countries, the average yield in China (Mainland) reached 800 pounds per acre in 1984/85 but has tended to decline since; the average yield in China (Mainland) was 776 pounds in 1991/92 and is estimated at 740 pounds in 1997/98. US cotton yields were flat during the 1960s and 1970s, usually between 450 and 535 pounds per acre, but rose to 706 pounds per acre in 1987/88. Over the last nine seasons, US yields have been equal to or lower than the 1987/88 yield, and the estimate for 1997/98 is 645 pounds. The national average yield in India reached a record 281 pounds per acre in 1989/90 and is estimated at 278 pounds now, seven seasons later. In Pakistan, yields climbed dramatically during the 1980s, and the national average reached 687 pounds per acre in 1991/92. However, disease and difficulties controlling insects have led to lower yields since, and the average in 1997/98 is estimated at 510 pounds. Cotton yields in the USSR peaked in the early 1970s and then tended to decline. The yield in Uzbekistan is estimated at 710 pounds per acre in 1997/98, no higher than a decade ago.

World area is falling an estimated 1% to less than 82.5 million acres in 1997/98, a reaction to the 8% decline in international prices between 1995/96 and 1996/97. World area remains near the middle of a range between 72 and 86 million acres established since 1950/51. Competition with other crops and with urban uses, combined with rising production costs, seem to be preventing a sustained increase in world cotton area, despite prices that would have been regarded as attractive just five years ago. The estimated decline in world area in 1997/98 is mainly because of reductions in China (Mainland) and India. Cotton area is rising this year in Francophone Africa, and an increase is expected in Australia. US harvested area could increase in 1997 with abundant rainfall in Texas.

Production in China (Mainland) in 1996/97 is estimated to be almost three million bales less than last season because of a reduction in planted area, and even lower production is possible in 1997/98. Cotton producers in China are discouraged by falling yields in areas affected by insect resistance to pesticides, and some producers were not able to sell seed cotton to state procurement centers, resulting in lowered plantings in 1997/98.

Good weather and increased planted area are boosting production in India in 1996/97 to an estimated 12.7 million bales. However, domestic cotton prices in India have fallen relative to prices of food grains, and a decline in Indian cotton area is forecast in 1997/98. Production in Pakistan is estimated at 7.3 million bales in 1996/97, the lowest in three seasons and 1.4 million less than in 1995/96. The leaf curl virus, first a serious problem in 1992/93, is affecting production on 60% of planted area in the state of Punjab this season, and insects are also more numerous than in recent years. An increase in area and better varieties may allow for an increase in production in 1997/98, but the continued presence of the leaf curl virus means that production in Pakistan is not likely to return soon to the 1991/92 record of 10 million bales.

Production in Uzbekistan is dropping to an estimated 4.9 million bales in 1996/97, down from 5.8 million in 1995/96. Wet weather in the spring delayed planting, temperatures were below average during the summer, and rains have been heavier than normal during the harvest period. The result will be the smallest harvest in Uzbekistan in about two decades. Normal weather will presumably lead to increased production next season, as the government plans to maintain cotton production near 5.5 million bales per year. Production in Turkmenistan is estimated at 574,000 bales in 1996/97, compared with 1.1 million last season and about two million bales in 1993/94. The decline in output in Turkmenistan is linked to a failure to supply inputs to farmers, low farm prices and poor weather; production in Turkmenistan may rise in 1997/98 with better weather, but long term production prospects are not good because of deterioration in the irrigation infrastructure. Production in Tajikistan may rise from 450,000 bales in 1996/97 to more than 500,000 bales. Production in Azerbaijan, Kazakhstan and Kirghizstan is expected to be about the same as in 1996/97.

Cotton production in Turkey reached a record 3.9 million bales in 1995/96 but fell to 3.6 million this season because of reduced area and lower yields tied to unusually heavy rains at the start of the harvest period. Even with the poor weather this year, production in Turkey is estimated at the second highest ever and is likely to rise over the next several years with the completion of an irrigation project in the East.

Production in Greece is declining to 1.4 million bales in 1996/97 because of lower area tied to a reduction in the income subsidy received from the EU and because of poor weather. Greek cotton production rose from 450,000 bales in the early 1980s to a record of two million bales in 1995/96, and even with the decline this year, production remains well above local use. Better weather should result in increased production in 1997/98.

Exports and production from Francophone Africa are rising to record levels in 1996/97, and further growth is forecast over the next several years. Average yields across Francophone Africa are no higher now than they were in the mid 1980s, but area in the twelve countries rose from 2.1 million acres in 1984/85 to 4.2 million acres in 1996/97. The availability of unused land, the provision of cotton inputs to greater numbers of farmers, and an expansion of planted area per farm family have contributed to increases in area and production over the past decade. Sound business management practices have facilitated the rise in cotton production. Production in 1996/97 is estimated at 3.7 million bales, up from 3.2 million last season. Production in 1997/98 is forecast at 3.9 million bales.

Production in the Southern Hemisphere is estimated at 6.9 million bales in 1996/97, a 7% loss compared with 1995/96. Australian area increased to a record 960,000 acres in 1996/97, the second consecutive year of increased area following the end of a drought in 1995. Production in Australia is estimated at a record 2.7 million bales in 1996/97, and further growth to 2.9 million is forecast in 1997/98 as area continues to expand. Production in Zimbabwe is estimated at 430,000 bales in 1996/97 and 480,000 in 1997/98, and production in South Africa could rise by 100,000 bales to 280,000 bales.

Production in South America is estimated at 4.2 million bales in 1996/97, a reduction of 940,000 from last season. Difficulties obtaining financing and high production costs are inhibiting growth in planted area in Brazil, where cotton output is expected to fall to 1.7 million bales in 1996/97, compared with 1.9 million last season and 2.5 million in 1994/95. A further decline in Brazilian production is forecast in 1997/98. Production is declining in Paraguay because of reduced area linked to low domestic prices and difficulties controlling the boll weevil. Production is dropping in Colombia as area shifts to competing crops. Production is falling to 1.5 million bales in Argentina in 1996/97, but cotton remains attractive relative to competing crops and a rise to 1.8 million bales is forecast for 1997/98.

China (Mainland) Maintaining Stocks

Stocks in China (Mainland) have climbed during the last three seasons under the auspices of the government's supply management program and now represent one year's worth of domestic use and nearly half of world stocks. Within the context of the Chinese economic system, large stocks are desirable as a hedge against shortages and disruptions in the distribution system and as a tool to dampen price fluctuations. Because interest is not charged on loans to state enterprises, including most textile mills and the Bureau of Cotton and Jute, stocks can be held at little cost. The warehouse capacity maintained by the Bureau of Cotton and Jute is between 11 million and 16 million bales, not counting cotton stored in Xinjiang; additional warehouses are being constructed. Of the estimated 20 million bales of stocks as of August 1, 1997, approximately 4.6 million bales may be held by textile mills and other industrial sectors as working stocks, and farmers reportedly also hold stocks in the form of seed cotton. China (Mainland) 1996/97 ending stocks are estimated to be double the level of three seasons ago, but the 1996/97 stocks-to-use ratio in China (Mainland) of 0.98 is lower than was the USA stocks-to-use ratio of 1.12 in 1985/86.

Increased imports by China (Mainland) were responsible for more than half of the rise in world prices during 1994/95 and have helped to maintain the Cotlook A Index at relatively high levels in 1995/96 and 1996/97. Changes in net trade (exports minus imports) by China (Mainland) are often the single most important factor affecting changes in season averages of the Cotlook A

Index; a rise or fall in net exports of 459,000 bales leads to a decline or increase in the season average Cotlook A Index of two cents per pound.

Because of a domestic policy which mandates the payment of above-market prices to farmers, combined with transportation difficulties, especially from the Far West where one-fourth of China's cotton is grown, an incentive to import cotton remains for those textile mills with access to capital. There is also an incentive for joint venture mills with import licenses to resell cotton to state mills, thus undermining the state cotton policy. However, cotton stocks in China (Mainland) are large enough to achieve the government's goal of maintaining stable domestic prices, and the Government of China (Mainland) is considering policies to prevent the resale of imported cotton to state-owned textile mills in order to force the purchase of domestic cotton. Therefore, net imports (imports minus exports) by China (Mainland), are expected to fall from 3.9 million bales in 1994/95 and 3 million in 1995/96 to an estimated 2.2 million bales in 1996/97 and 1.1 million bales in 1997/98 (imports of 1.4 million and exports of 230,000 bales).

The actual level of world trade in cotton by China (Mainland) depends on decisions by government officials; trade behavior in one season is not correlated with the difference between production and consumption in the same season, nor is net exports correlated with stock levels. Factors which may influence government decisions include the gap between the quantity of cotton procured from farmers by provincial cotton companies and domestic consumption, the level of stocks in the state reserve, the desirability of additional stocks, the overall balance of trade, hard currency reserves, trade relations with cotton exporting countries, and the desires of organizations within China (Mainland) to import or export. China's (Mainland) cotton policies are reviewed by the government at the start of each calendar year and again each August and September after the first surveys of production are available.

Cotton production in China (Mainland) is struggling to match consumption because of competition for planted area with other crops and insect resistance to pesticides. Consequently, China (Mainland) may remain a net importer during most seasons in the future. Production in 1997/98 is estimated at 17.5 million bales because of reduced area tied to disappointment over prices and buying terms in 1996/97, while consumption in 1997/98 is estimated at 20.7 million bales, the level planned by the National Textile Council, a quasi-government body. Cotton consumption in China (Mainland) fell to an estimated 20 million bales during 1994/95 and 1995/96 but appears to be rising this season. Yarn production in China (Mainland) is rising, following a decision by the government to lower the price paid for cotton by textile mills from about \$1 per pound to about 90 cents currently, but prices paid by mills remain higher than world levels.

Tighter Stocks Under Market-Oriented Policies

Textile economies in which governments pursue supply management policies tend to exhibit relatively high levels of ending stocks. Inventories are themselves a commodity whose size is determined by interest rates, storage charges, manufacturing needs and length of time to harvest, as well as delivery risks and speculation on price differences over time. Governments are naturally more risk averse than is private industry, and under government supply management regimes, desired ending stocks have tended to be larger than necessary. Examples include China (Mainland) with a stocks-to-use ratio this season of approximately 1.0, Egypt with a minimum farm price above the world market and ending stocks this season estimated at six months of use, and the USA in 1985/86 when stocks rose to more than nine million bales and equaled 13 months of mill use plus exports.

Prior to 1986/87, the US government cotton program sought to provide fair returns to cotton farmers and ample supplies to the textile industry by supporting prices and building stocks, and the US stocks-to-use ratio in the early 1980s averaged 0.54, or 6.4 months of use. Even after the 1985 farm bill passed, it took several years for industry and government to adjust to the new situation and time for USDA to develop the administrative rules now known as the competitiveness provisions, or Steps 1, 2 and 3. During the three seasons from 1986/87 through 1988/89, the US stocks-to-use ratio averaged 0.42, or 5 months of use. In contrast, the ratio of US ending stocks to use has ranged between 0.23 and 0.13 in seven of the last eight seasons, and was above 0.23 only in 1992/93 after the break up of the USSR and the disruption to world cotton trade caused by the surge in exports under barter terms from Central Asia; even in 1992/93, the US stocks-to-use ratio was only 0.30, lower than in all but two years of the 1980s.

The experience with market-oriented agricultural policies over the last eight seasons seems to indicate that participants in the US market are comfortable with ending stocks of between 1.6 and three months worth of use, or stocks-to-use ratios between 0.13 and 0.23. The average stocks-to-use ratio between 1989/90 and 1995/96 was 0.19. If market conditions indicate that stocks will be tighter than 13% of use, prices rise, causing use to fall and stocks to rise, as seemed to happen in 1994/95. Conversely, in seasons when stocks appear headed toward more than 23% of estimated disappearance, prices fall, stimulating an increase in exports and perhaps even mill use, resulting in a decline in stocks, as is apparently happening in 1996/97.

The practical significance of this observation is that for market watchers, it is no longer an appropriate methodology to estimate mill use and exports independently and then calculate ending stocks as a residual. Rather, total US disappearance is determined simultaneously with ending stocks, with price changes causing the total of mill use and exports to rise or fall to meet the market's perception of a desirable stock level. In 1996/97, US mill use is estimated at 10.8 million bales and exports at 7.4 million for a total of 18.2 million bales and a stocks-to-use ratio of 0.21. In 1997/98, production is estimated at 18.4 million bales and beginning stocks at 3.8 million, suggesting that disappearance will rise to about 18.5 million bales, keeping the stocks-to-use ratio near the top of the range the US market seems to find acceptable.

This is not to indicate that ratios of 0.13 and 0.23 reflect hard engineering relationships that can't be broken, just that above and below these parameters special economic conditions are needed to induce market participants to hold either fewer stocks or more stocks than normally desired. A change in government policy in China (Mainland) to dump stocks on the market through exports of several million bales would be an example of such a condition. A rise or fall in interest rates would also prompt a change in the desired level of ending stocks, as would a significant change in the outlook for US production. If a crop of substantially less than 18 million bales is expected in 1997/98, stocks of more than three months worth of use will be desired on August 1, 1997, and a crop forecast of more than 19 million bales will lower the level of desired stocks.

SUPPLY AND DISTRIBUTION OF COTTON
23 May 1997

Years Beginning August 1

	1992	1993	1994	1995 Est.	1996 Proj.	1997 Proj.
Million 480-Lb. Bales						
BEGINNING STOCKS						
WORLD TOTAL	42.3	39.6	31.9	34.7	42.4	43.3
CHINA (MAINLAND)	14.7	13.6	9.8	14.0	19.4	20.4
USA	3.7	4.7	3.5	2.7	2.6	3.8
NET EXPORTERS	18.5	17.9	14.7	13.3	15.5	15.9
NET IMPORTERS 1/	23.9	21.7	17.3	21.4	26.8	27.3
PRODUCTION						
WORLD TOTAL	82.6	77.6	85.9	92.7	88.6	88.3
CHINA (MAINLAND)	20.7	17.2	19.9	21.9	19.3	17.5
USA	16.2	16.1	19.7	17.9	19.0	18.4
INDIA	10.9	9.6	10.8	12.6	12.7	12.1
PAKISTAN	7.1	6.3	6.8	8.7	7.3	8.3
UZBEKISTAN	6.0	6.2	5.7	5.8	4.9	5.5
TURKEY	2.6	2.8	2.9	3.9	3.6	3.6
OTHERS	19.0	19.4	20.1	22.1	21.8	23.0
CONSUMPTION						
WORLD TOTAL	86.1	85.0	84.4	85.0	87.5	89.4
CHINA (MAINLAND)	21.1	21.1	19.6	19.5	20.8	20.7
INDIA	9.7	9.9	10.5	11.6	12.3	12.6
USA	10.3	10.4	11.2	10.6	10.8	11.2
EAST ASIA & AUSTRALIA	10.8	10.6	10.1	10.0	9.8	9.7
EU & TURKEY	8.2	8.7	9.4	9.4	9.5	9.8
PAKISTAN	7.0	7.3	6.9	7.3	7.4	7.6
E. EUR. & FORMER USSR	6.8	5.0	4.4	4.0	3.9	4.0
BRAZIL	3.6	3.8	3.8	3.9	3.9	4.0
OTHERS	8.7	8.2	8.6	8.6	9.2	9.7
EXPORTS						
WORLD TOTAL	25.3	27.2	28.9	27.7	27.1	27.1
USA	5.2	6.9	9.4	7.7	7.3	7.3
UZBEKISTAN	6.0	5.9	5.7	4.3	4.8	5.0
FRANCOPHONE AFRICA	2.3	2.4	2.8	2.9	3.2	3.3
AUSTRALIA	1.7	1.7	1.3	1.4	2.4	2.5
ARGENTINA	0.2	0.3	1.0	1.2	1.3	1.2
GREECE	0.6	0.8	1.2	1.5	0.8	0.9
CHINA (MAINLAND)	0.7	0.8	0.2	0.0	0.0	0.2
IMPORTS						
WORLD TOTAL	26.6	26.5	30.3	27.5	26.9	27.1
EAST ASIA & AUSTRALIA	10.3	10.2	9.8	10.0	9.3	9.4
EU & TURKEY	5.5	5.7	5.7	5.3	5.2	5.5
E. EUR. & FORMER USSR	5.1	3.9	4.1	3.2	2.9	3.4
CHINA (MAINLAND)	0.2	0.8	4.1	3.0	2.5	1.4
SOUTH AMERICA	2.3	2.5	2.2	2.4	2.9	3.3
TRADE IMBALANCE 3/	1.3	-0.7	1.3	-0.2	-0.2	0.0
STOCKS ADJUSTMENT 4/	-0.5	0.5	-0.1	0.2	0.0	0.0
ENDING STOCKS						
WORLD TOTAL	39.6	31.9	34.7	42.4	43.3	42.2
CHINA (MAINLAND)	13.6	9.8	14.0	19.4	20.4	18.3
USA	4.7	3.5	2.7	2.6	3.8	3.6
NET EXPORTERS	17.9	14.7	13.3	15.5	15.9	17.1
NET IMPORTERS 1/	21.7	17.3	21.4	26.8	27.3	25.2
ENDING STOCKS/USE 5/	0.39	0.35	0.38	0.40	0.38	0.36
COTLOOK A INDEX 6/	57.70	70.60	94.30	85.61	79*	82**

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

2/ Cuba, East Europe, former USSR; Vietnam is included in East Asia

3/ 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.

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

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

6/ U.S. Cents per pound. Model results for 1996/97 and 1997/98 are based on net China (Mainland) trade, ratios of world-less-China (Mainland) ending stocks to use, barter sales from Central Asia, and futures prices. The estimate for 1994/95 is adjusted for quotes during June and July.

*/ Estimate for 1996/97 based on data year-to-date and expected pattern through July.

**/ 95% confidence intervals extend 9 cents per pound above and below each point estimate

SUPPLY AND DISTRIBUTION OF COTTON

23 May 1997

Years Beginning August 1

	1992	1993	1994	1995 Est.	1996 Proj.	1997 Proj.
Million Metric Tons						
BEGINNING STOCKS						
WORLD TOTAL	9.221	8.629	6.956	7.551	9.22	9.42
CHINA (MAINLAND)	3.204	2.964	2.126	3.043	4.22	4.44
USA	0.807	1.015	0.769	0.577	0.57	0.83
NET EXPORTERS	4.018	3.906	3.193	2.902	3.38	3.47
NET IMPORTERS 1/	5.203	4.723	3.763	4.649	5.85	5.95
PRODUCTION						
WORLD TOTAL	17.985	16.889	18.705	20.190	19.30	19.23
CHINA (MAINLAND)	4.510	3.739	4.342	4.767	4.20	3.80
USA	3.531	3.513	4.281	3.897	4.13	4.00
INDIA	2.380	2.095	2.355	2.734	2.77	2.64
PAKISTAN	1.539	1.368	1.479	1.886	1.59	1.80
UZBEKISTAN	1.306	1.358	1.248	1.254	1.07	1.20
TURKEY	0.574	0.602	0.628	0.851	0.79	0.79
OTHERS	4.145	4.214	4.373	4.801	4.75	5.01
CONSUMPTION						
WORLD TOTAL	18.750	18.513	18.380	18.509	19.05	19.45
CHINA (MAINLAND)	4.589	4.587	4.269	4.251	4.52	4.50
INDIA	2.108	2.160	2.279	2.536	2.67	2.75
USA	2.232	2.268	2.438	2.318	2.36	2.44
EAST ASIA & AUSTRALIA	2.358	2.299	2.189	2.182	2.13	2.12
EU & TURKEY	1.796	1.898	2.050	2.048	2.08	2.12
PAKISTAN	1.514	1.583	1.508	1.589	1.61	1.66
E. EUR. & FORMER USSR	1.473	1.089	0.956	0.877	0.84	0.87
BRAZIL	0.793	0.834	0.818	0.845	0.85	0.88
OTHERS	1.888	1.794	1.873	1.863	1.99	2.11
EXPORTS						
WORLD TOTAL	5.503	5.917	6.302	6.037	5.90	5.90
USA	1.132	1.494	2.047	1.671	1.60	1.60
UZBEKISTAN	1.300	1.288	1.250	0.940	1.05	1.09
FRANCOPHONE AFRICA	0.504	0.520	0.614	0.625	0.69	0.72
AUSTRALIA	0.371	0.367	0.293	0.308	0.53	0.53
ARGENTINA	0.047	0.069	0.208	0.261	0.28	0.27
GREECE	0.120	0.175	0.265	0.325	0.18	0.19
CHINA (MAINLAND)	0.149	0.166	0.040	0.005	0.01	0.05
IMPORTS						
WORLD TOTAL	5.797	5.765	6.588	5.992	5.85	5.91
EAST ASIA & AUSTRALIA	2.238	2.225	2.140	2.181	2.03	2.04
EU & TURKEY	1.191	1.231	1.250	1.159	1.14	1.19
E. EUR. & FORMER USSR	1.113	0.840	0.901	0.704	0.64	0.74
CHINA (MAINLAND)	0.053	0.176	0.884	0.663	0.55	0.30
SOUTH AMERICA	0.496	0.542	0.474	0.516	0.63	0.72
TRADE IMBALANCE 2/	0.293	-0.152	0.286	-0.045	-0.05	0.01
STOCKS ADJUSTMENT 3/	-0.119	0.102	-0.016	0.037	-0.01	-0.01
ENDING STOCKS						
WORLD TOTAL	8.629	6.956	7.551	9.224	9.42	9.19
CHINA (MAINLAND)	2.964	2.126	3.043	4.218	4.44	3.99
USA	1.015	0.769	0.577	0.568	0.83	0.79
NET EXPORTERS	3.906	3.193	2.902	3.379	3.47	3.72
NET IMPORTERS 1/	4.723	3.763	4.649	5.845	5.95	5.48
ENDING STOCKS/USE 4/	0.39	0.35	0.38	0.40	0.38	0.36
COTLOOK A INDEX 5/	57.70	70.60	94.30	85.61	79*	82**

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

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.

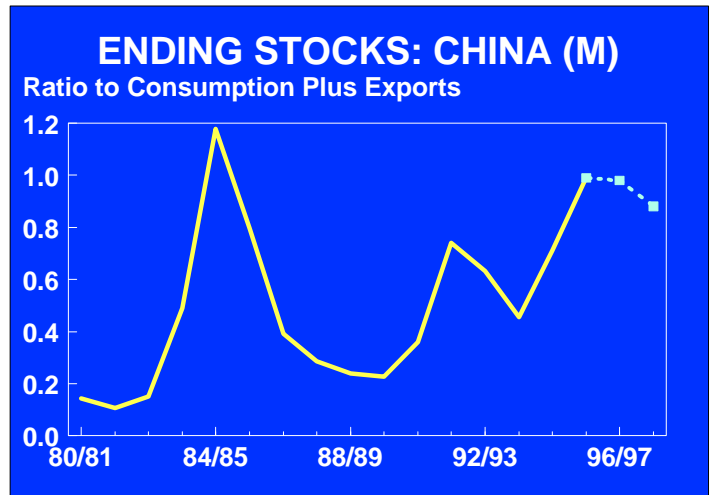
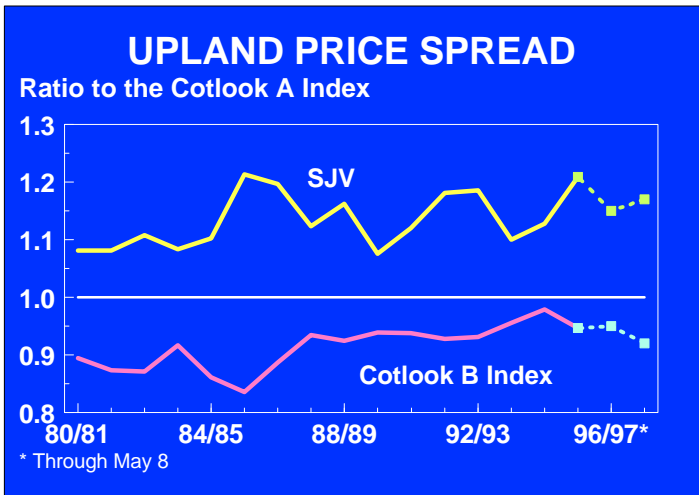
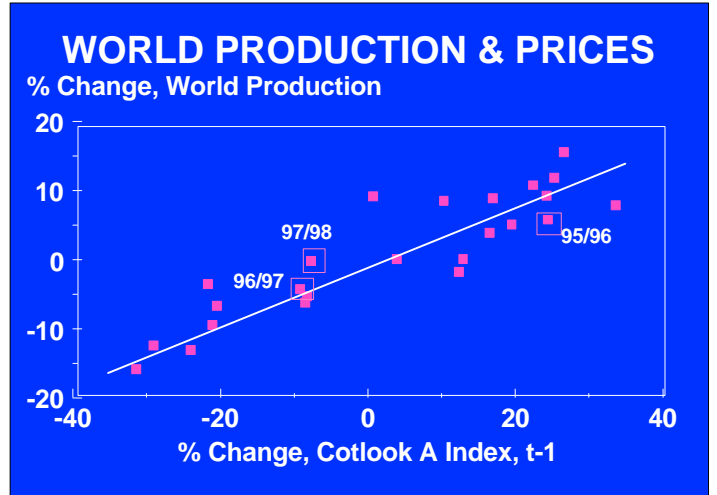
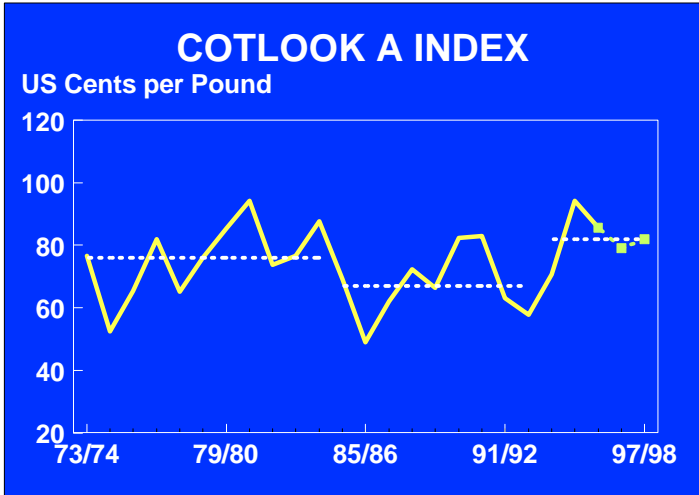
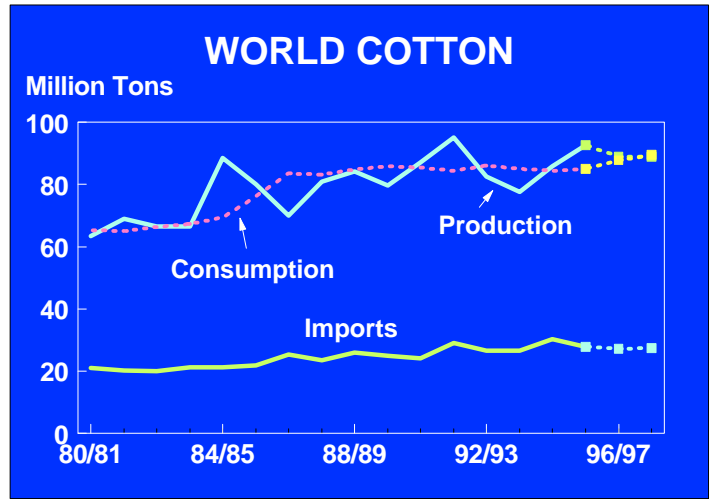
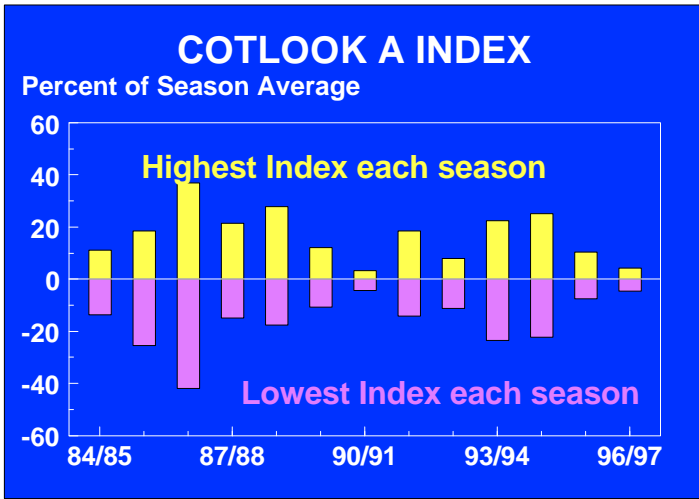
3/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated

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

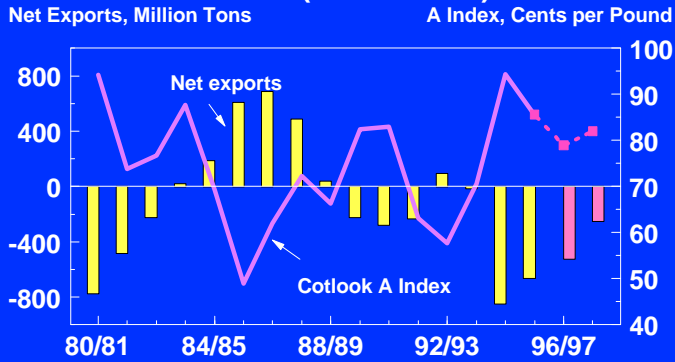
5/ U.S. Cents per pound. The model result for 1997/98 is based on net China (Mainland) trade, ratios of world-less-China (Mainland) ending stocks to use, barter sales from Central Asia, and futures prices. The estimate for 1994/95 is adjusted for quotes during June and July.

*/ Not a model result; the estimate for 1996/97 is based on data year-to-date and the expected pattern through July.

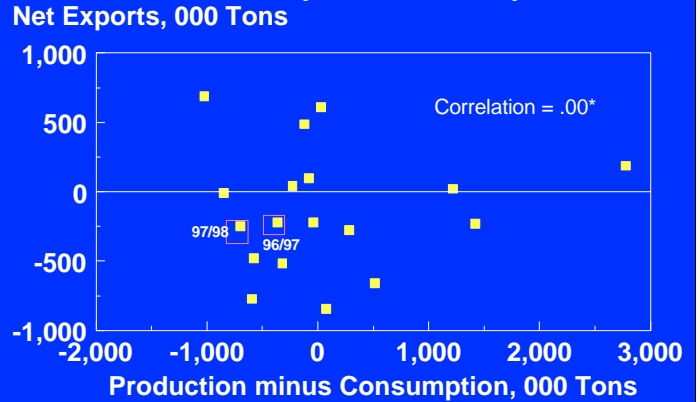
**/ 95% confidence intervals extend 9 cents per pound above and below each point estimate



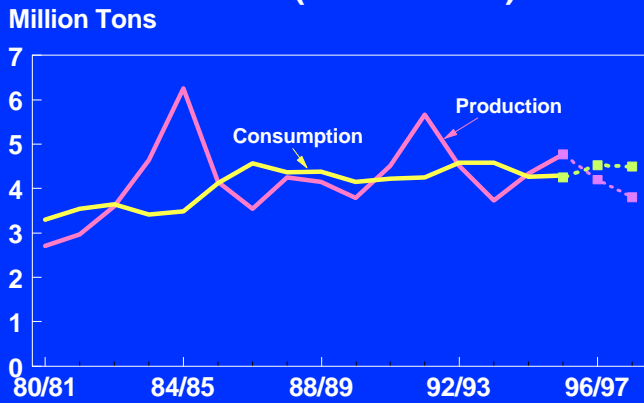
EXPORTS AND PRICES CHINA (MAINLAND)



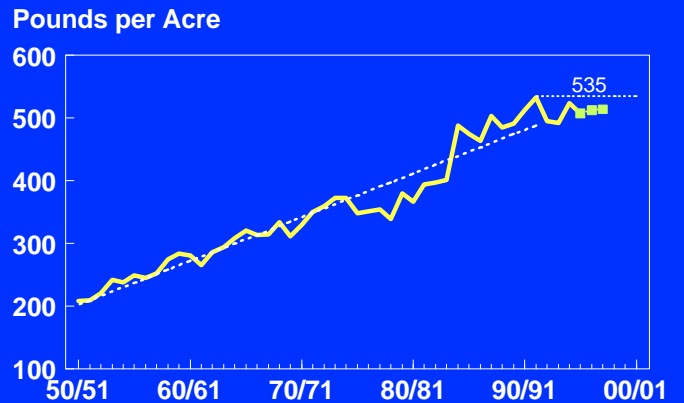
CHINA (MAINLAND)



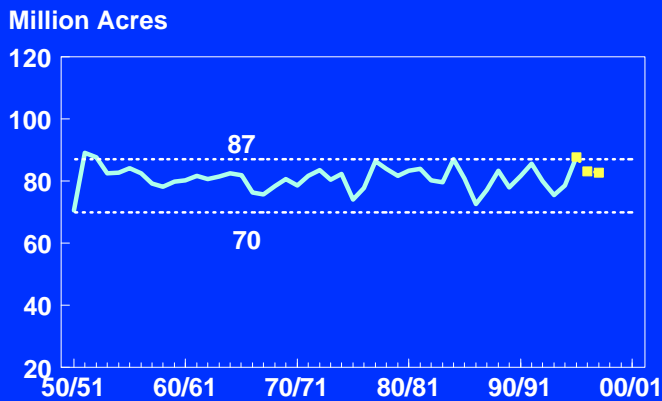
CHINA (MAINLAND)



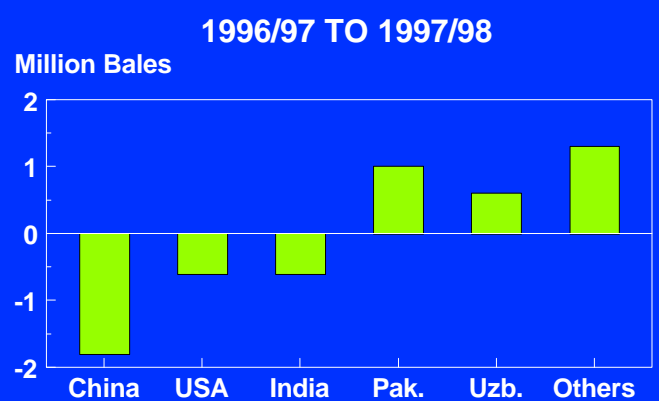
WORLD YIELD



WORLD COTTON AREA

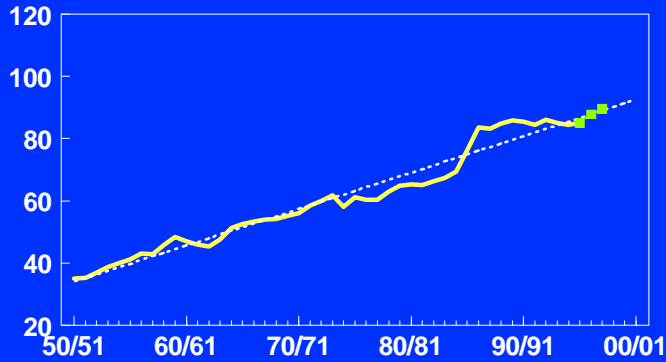


CHANGES IN PRODUCTION 1996/97 TO 1997/98



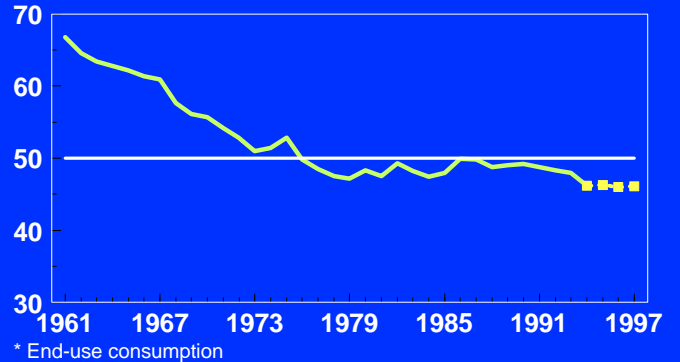
WORLD COTTON CONSUMPTION

Million Bales



WORLD COTTON CONSUMPTION

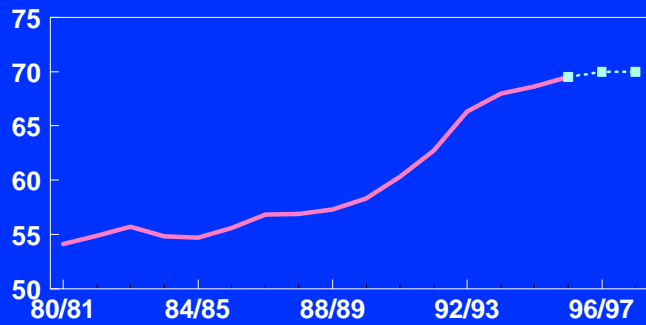
Percent of World Fiber Use*



COTTON MILL USE

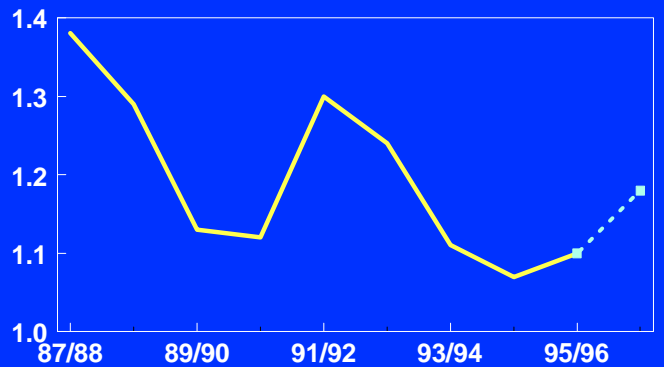
Ten Largest Producing Countries

Percent of World Total



COTLOOK YARN INDEX

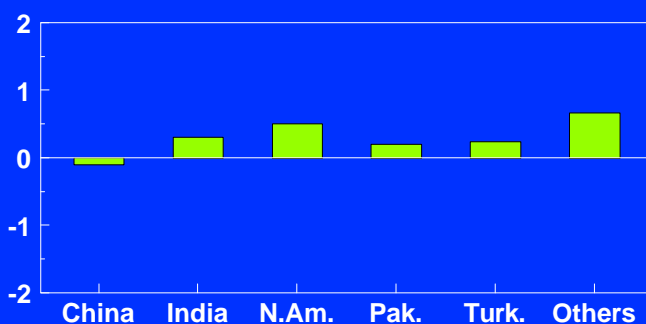
Ratio to the Cotlook A Index



CHANGES IN CONSUMPTION

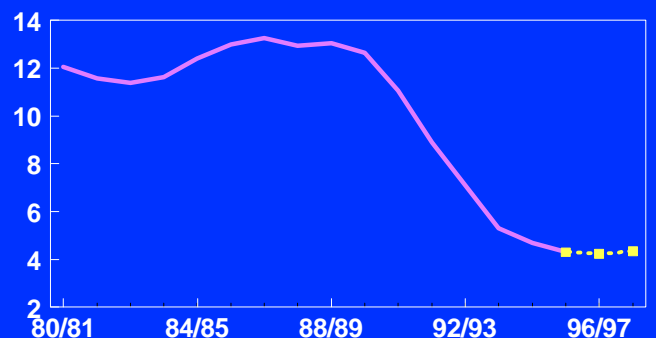
1996/97 TO 1997/98

Million Bales



COMECON CONSUMPTION*

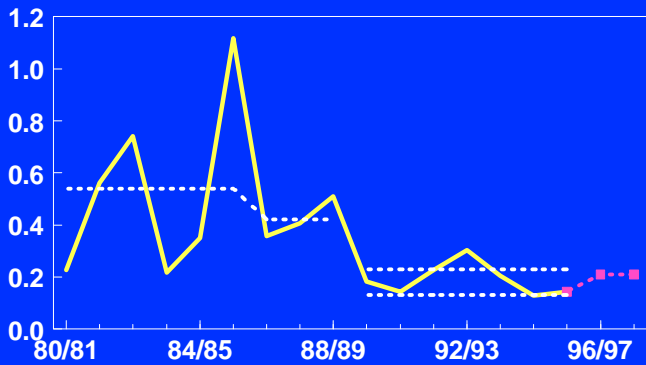
Million Bales



* Former USSR, Vietnam, Cuba, N. Korea and Central Europe

ENDING STOCKS: USA

Ratio to Consumption Plus Exports



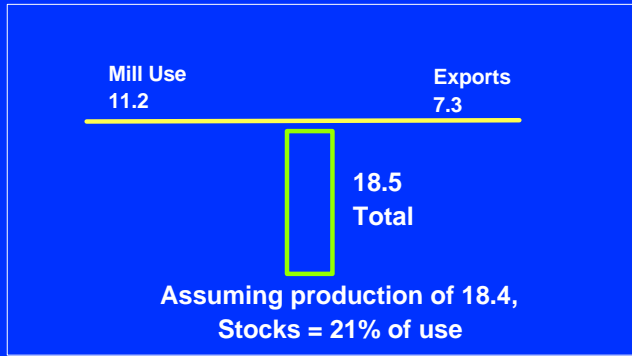
1996/97 USA DISAPPEARANCE

Million Bales



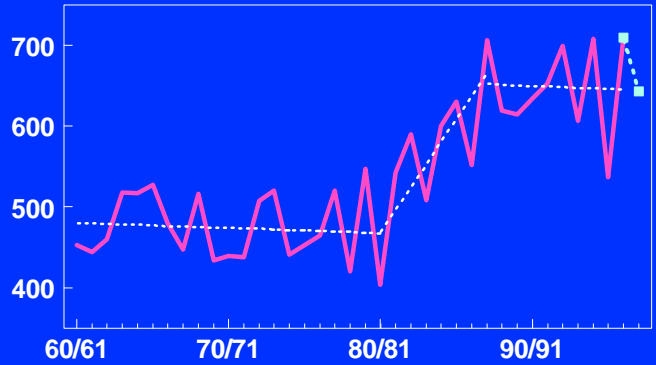
1997/98 USA DISAPPEARANCE

Million Bales



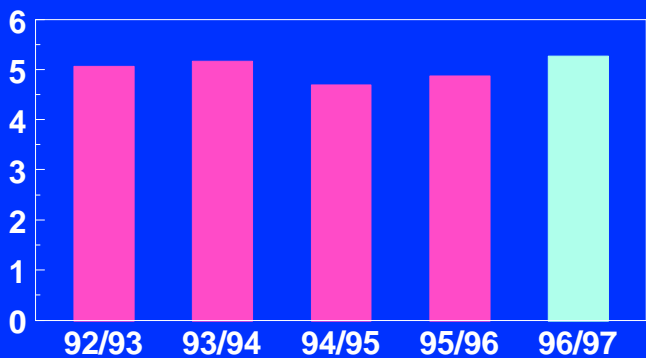
US COTTON YIELDS

Pounds per Acre



CHINA (M) YARN PRODUCTION

Million Tons



PAKISTAN PRODUCTION

Million Bales

