



# THE WORLD COTTON MARKET SITUATION

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## Introduction

World cotton prices, as measured by the Cotlook A Index, have fluctuated this crop year between 80 and 74 cents per pound, compared with the long term average of 73 cents. Cotton prices have been above average since 1993/94 and reached historic highs in 1994/95. World production rose in 1995/96. However, the response of production to higher prices was less than normal due to adverse weather and pests in major producing countries and to the bankruptcy of many cotton producers in developing countries as a result of the previous period of low prices between 1991 and 1993. In addition, a disruption of the flow of cotton from Greece to the rest of the European Union caused by a strike of Greek farmers over cotton prices and subsidies created upward pressures on prices during the last month of 1996. Prices increased from about 75 cents in mid November to nearly 80 cents in December.

World production increased from 16.9 million tons in 1993/94 to 20 million in 1995/96 and is expected to reach just 18.8 million tons in 1996/97. With world cotton consumption expected to reach the same level of production in 1996/97, world cotton stocks are expected to continue at 9.1 million tons at the end of 1996/97. World stocks increased sufficiently during 1995/96 to move world prices 8 cents below the average of 94 cents registered in 1994/95. Prices in 1996/97 are moving downwards again because of reduced imports by China (Mainland). Stocks outside China (Mainland) are expected to increase in tandem with consumption from 4.9 million tons on August 1, 1996, to 5.2 million tons on August 1 1997. Stocks outside China (Mainland) are, therefore, equivalent to just four months of consumption. However, net imports by China (Mainland) are falling from 660,000 tons last season to an estimated 250,000 tons this season, leading to lower prices. With six months remaining in the current crop year, the Cotlook A Index is averaging 76 cents per pound, one cent less than the expected level for 1996/97.

Current price levels are expected to keep world production growing with consumption during the next two years, and ending stocks are expected to remain above 9 million tons in 1997/98. As a result, the Cotlook A Index will likely average 78 cents per pound in 1997/98, one cent above current estimates for 1996/97.

## Demand

World cotton consumption increased 1% in 1995/96 and is expected to increase 2.5% in 1996/97. Between 1990 and 1995, cotton consumption increased at lower rates than the consumption of other textile fibers and, as a result, it is estimated that on a world basis the market share of cotton declined from 49.2% in 1990 to 45.1% in 1995. Such decline has been mainly the result of high prices of cotton relative to other textile fibers and a gradual reduction in investment dedicated to cotton promotion activities in a good number of countries.

Despite the recent loss of market share, world cotton consumption is bound to resume long term growth during the next four years as major obstacles to increases in cotton consumption have dissipated. The declines in mill consumption of cotton experienced since 1989 in Eastern Europe and the former USSR have been reversed, and growth in the rest of the world is expected to continue.

Dramatic declines in consumption since 1989 in Eastern Europe and the former USSR prevented world cotton and textile consumption in the 1990s from achieving greater growth. Consumption of cotton in this group of countries in 1994/95 was about 1 million tons, a third of the level of consumption in 1989/90. Had mill consumption of cotton in Eastern Europe and the former USSR remained at the level of 1989/90, the world would now be consuming over 20 million tons of cotton. Mill consumption of cotton in Eastern

Europe and the former USSR is expected to experience a slight increase in 1996/97, the first increase since 1989. Therefore, consumption in Eastern Europe and the former USSR will not offset increased consumption elsewhere in the world this year, as it did between 1989/90 and 1995/96.

Mill consumption in the rest of the world increased from 16.3 million tons in 1990/91 to 17.6 million tons in 1995/96 with most of the increase taking place in developing countries in Asia and in the United States.

It is expected that world consumption of cotton will increase from 18.5 million tons in 1995/96 to 18.9 million in 1996/97 and 19.5 million tons in 1997/98.

### **China (Mainland)**

Consumption in China (Mainland) is expected to maintain in 1996/97 the same level of 4.3 million tons experienced during the previous two years. However, in 1997/98 mill consumption of cotton in the world's largest consuming country will probably increase to 4.5 million tons, the level registered in 1986/87. Under the influence of tight supplies, which caused high cotton prices and government policies to reduce subsidies to unprofitable textile enterprises, consumption in China (Mainland) dropped to current levels in 1994/95. Production of cotton yarn dropped from 5 million tons in 1993 to 4.6 million in 1994, and cotton's share of fiber used in blended cotton yarn fell from 74% to an estimated 73%. Both the decline in yarn production and the shift toward chemical fibers were mandated by the National Textile Council, a government organization that oversees the textile industry. Since 1986/87, consumption in China (Mainland) has ranged between 4.2 and 4.6 million tons. Because of the accumulation of stocks of cotton by the government during the 1994/95 crop year, greater supplies will probably continue to be made available to textile mills in China (Mainland) during 1997, even if cotton production declines. Therefore, a rise in consumption toward the upper half of the range recorded during the last nine years may be allowed.

### **India**

Cotton consumption in India rose by 200,000 tons to reach 2.5 million tons in 1995/96 and is expected to increase another 200,000 tons in 1996/97. Last crop year, India became the world's second largest mill consumer of cotton displacing the United States. Strong growth in textile exports and strong economic growth, leading to increased domestic demand, are encouraging increased mill consumption of cotton in India. Proximity to cotton production is an advantage for textile mills in India; cotton prices in Bombay for medium cotton were 16% less than the Cotlook A Index in early May, 1996 and 19% less in early December, 1996. Prices were between 12% and 14% below the Cotlook A Index in 1994/95.

### **United States**

Mill consumption of cotton in the United States increased at an average annual rate of 4.7% during the last 15 years reaching 2.4 million tons in 1994/95, the fifth year of continuous growth. In 1995/96, limited supplies caused a 130,000 tons decline in US mill consumption of cotton, but greater domestic availability of cotton as a result of small production increases and lower exports are expected to result in a full recovery of US consumption in 1996/97. US mill consumption of cotton is expected to reach 2.4 million tons in 1996/97 and 2.5 million tons in 1997/98.

Ten years ago almost every analyst in the United States agreed with US cotton projections for 1994 showing stable or declining mill consumption, but none envisioned the 100% increase that took place between 1985/86 and 1994/95. Such success is the result of several factors. The US industry managed to lower costs and improve quality by investing in new technologies and, more important, US consumer preferences for cotton have grown stronger. In fact, according to research by the ICAC, the US has been the only country where the market share of cotton has not been greatly affected by relatively high prices and is expected to continue to increase over the next ten years. While cotton promotion programs in other

countries have been greatly reduced or discontinued since 1990, investment in cotton promotion in the US more than doubled between 1986 and 1994.

### **Pakistan**

GDP in Pakistan rose by 5.3% in 1995 mainly as a result of increases in cotton production. Increased cotton production in 1994 contributed to the rise in economic growth. Even though cotton supplies remained relatively tight in Pakistan during the 1994/95 crop year, textile production increased because of continued investment in new technology and increased capacity. In 1994, yarn production increased by 5% and production of cotton cloth increased by 4.6%. However, in 1995 tighter supplies resulted in a 1.3% increase of cotton yarn production. Prices for cotton fiber of the type NIAB-78 averaged 16% lower than the Cotlook B Index during 1994/95 but the differential has narrowed to 2.5% below the Cotlook B Index in December, 1996. Cotton production in 1996/97 is not reaching the levels of the previous year and cotton supplies are tight. Because mills no longer enjoy domestic prices at levels substantially lower than international prices, mill consumption is not expected to increase at the rates of growth registered during the 1980's. Mill consumption of cotton in Pakistan is expected to remain at 1.5 million tons in 1996/97 and to increase to 1.6 million in 1997/98.

### **Turkey**

Mill consumption of cotton in Turkey is projected to reach 950,000 tons in 1996/97, 50,000 tons more than in 1995/96. Turkey joined the European Union customs system in January 1996 and now has greater access to European textile markets. Economic policies are enhancing the competitiveness of Turkish exports by reducing the value of the lira, and cotton production in Turkey is rising, providing a supply for domestic spinners. Mill consumption of cotton is projected to increase during the next four years at the same pace as in 1996/97.

## **Supply**

Despite prices having maintained levels above 80 cents per pound during 1995/96, world cotton production is expected to decline from 20 million tons in 1995/96 to 18.8 million tons in 1996/97. Lower prices than in 1995/96 caused world area dedicated to cotton to contract from 35.2 million hectares in 1995/96, the second highest area registered since 1952/53, to an expected 33.8 million hectares in 1996/97. In addition, a combination of adverse weather conditions and increasing difficulties in containing pests in many countries are causing world yields to decrease 2% to 559 kilograms per hectare in 1996/97. In the six largest producing countries, production in 1996/97 is expected to be lower than in the previous year in the China (Mainland), Pakistan, Uzbekistan and Turkey, and only somewhat higher in the United States and India. In the remaining producing countries production is expected to increase by 200,000 tons to reach 4.9 million tons in 1996/97. Because of higher than anticipated production in 1995/96, imports of cotton by China (Mainland), which reached 900,000 tons in 1994/95 and played a key role in the price increase of 1994/95, declined to 663,000 tons in 1995/96 and are expected to decline to 300,000 tons in 1996/97. Accordingly, it is the decline in imports by China (Mainland) and not an increase in supplies in the rest of the world that explains most of the decline in average cotton prices in 1996/97.

With current cotton prices close to 80 cents and likely to remain above the long term average of 73 cents during the next crop year, production is expected to continue to expand but will not be near the record level of 20.7 million tons established in 1991/92. World production is expected to reach 19.7 million tons in 1997/98. Higher-than-average cotton prices are expected to keep area near 35 million hectares, near the top of the range for world harvested area established since the 1950s. However, problems with disease and insect resistance to pesticides will probably continue to affect yields in many countries through the rest of the 1990s, keeping production from expanding sufficiently to lower the season average Cotlook A Index well below 70 cents per pound.

## United States

At the beginning of the 1995/96 crop year production in the USA was expected to increase to a new record of 4.4 million tons. However, despite an increase of over 1 million hectares dedicated to cotton in 1995/96, adverse weather in some cotton producing states and pests in other states lowered yields from 794 kilograms per hectare in 1994/95 to 602 kilograms in 1995/96. Production reached 3.9 million tons in 1995/96, some 400,000 tons less than in 1994/95. Higher-than-average cotton prices will keep most land in production, and yields may rise as producers who started growing cotton in the 1990s gain experience. However, the decoupling of cotton benefits from cotton production will reduce the incentive to plant cotton, and US production may be lower than it would have been otherwise. In 1996/97 it is estimated that 5.1 million hectares are being dedicated to cotton. As a result of lower area and a recovery of yields, US cotton production is expected to increase to 4.1 million tons in 1996/97 but to decline to 3.9 million tons in 1997/98.

Between 1988/89 and 1995/96, ending-stocks-to-use ratios in the USA ranged between 0.13 and 0.23, except for 1992/93 when exports were affected by unusually strong competition from China (Mainland) and Central Asia. The ratio of ending stocks-to-use in the US is forecast to rise from 0.14 in 1995/96 to 0.23 in 1996/97 as a result of slower growth of both production and consumption and a decline in exports.

## China (Mainland)

Cotton production in China (Mainland) increased 420,000 tons to 4.8 million tons in 1995/96. Exceptional weather conditions and the implementation by Chinese authorities of an early management program for pests that affected the crop during previous years caused yields to increase from 785 kilograms in 1994/95 to 879 kilograms in 1995/96. Production in China (Mainland) is estimated at 3.7 million tons in 1996/97 and could reach 4.1 million tons in 1997/98, 10% less than in 1995/96 and about 400,000 tons less than consumption. Grain prices have risen in China (Mainland) but prices for cotton have not. As a result, area dedicated to cotton declined from 5.4 million hectares in 1995/96 to 4.4 million hectares in 1996/97. The national average cotton yield in China in 1995/96 was the highest in four seasons and was 5% above the five-season average. Resistance to pesticides among populations of boll worm continues to be a problem in the eastern and central cotton producing regions. Consequently, there is limited scope for substantial increases in the Chinese average cotton yield to offset likely declines in area the next two seasons. China (Mainland) is expected to remain a net importer of cotton in most years, although large stocks carried over from 1994/95 and 1995/96 will still mitigate the need for imports this season and in 1997/98.

## Pakistan

Production in Pakistan reached 1.8 million tons in 1995/96, the highest in four years, and was expected to at least maintain the same level in 1996/97. Rising domestic prices more in line with international prices caused area dedicated to cotton to increase 400,000 hectares to 3 million hectares in 1995/96 and are likely to keep area dedicated to cotton in Pakistan increasing by 2% to 3% a year; a change in government policy in Pakistan reducing the barriers to exports of cotton will probably lead to higher farm prices over a period of years. Nevertheless, a continued problem with the leaf curl virus, again, has lowered yields in 1996/97. It is estimated that over 60% of cotton area in 1996/97 was affected with the virus and, as a result, cotton production is now expected to reach 1.4 million tons. It is also expected that production will gradually recover in the next few years but that due to the continued problem of the leaf curl virus production will be below the 1991/92 record of 2.2 million tons. Pakistan, therefore, may be able to export and import cotton routinely.

## India

High prices caused area in India to expand 10% to reach 8.6 million hectares and production reached 2.7 million tons in 1995/96. Expanding cotton consumption in India will maintain upward pressure on Indian market prices and will encourage increased production. However, low yields and competition with other

crops for planted area may keep production close to consumption in most years. Cotton production is expected to reach 2.8 million tons in 1996/97, but as a result of declines in area might decline to 2.7 million tons in 1997/98. As with Pakistan, Brazil, and Turkey, India may need to import cotton in many seasons.

### **Uzbekistan**

Uzbekistan's production was 1.25 million tons in 1995/96 and a crop of 1.1 million tons is expected in 1996/97. The Government of Uzbekistan hopes to stabilize cotton area at 1.5 million hectares and yields are likely to remain just about 800 kilograms per hectare. As a result, production is likely to stabilize at 1.2 million tons in the next few years. Economic difficulties in other countries in Central Asia may lead to reduced production and exports from the region. Production in the CIS countries was 1.8 million tons in 1995/96, it is expected to be 1.5 million tons in 1996/97 and is likely to fluctuate between 1.5 and 1.6 million tons in the next four years.

### **Turkey**

Production in Turkey increased 33% to reach 837,000 tons in 1995/96 as a result of expanded area and higher yields. Area is expected to continue to increase but only gradually during the next two years and less than the optimal weather conditions experienced in 1995/96 are translating into somewhat lower yields in 1996/97. As a result, production is expected to be between 792,000 tons in 1996/97 and 850,000 tons 1997/98. Turkey, however, will likely increase again cotton production substantially by the end of the 1990's as the GAP dam project is completed and over 1 million additional hectares will be available for irrigation.

### **Other Countries**

Cotton production in countries other than the largest six is gradually adjusting to high prices and is expected to increase by 180,000 tons to reach 4.9 million tons in 1996/97. The most important increases in 1995/96 and 1996/97 took place in Australia and in Francophone African countries.

### **Prices**

The main factor determining prices is available supplies on the market relative to demand, which is measured by stocks as a ratio of mill consumption. In the cotton market, a simple one equation model that explains prices as a function of the stocks-to-use ratio in the world minus China (Mainland) and Chinese cotton trade is used by the Secretariat of ICAC to project the likely season average of the Cotlook A Index.

Furthermore, the model includes a barter variable that reflects the impact of barter transactions of Central Asian cotton, a factor affecting cotton prices since the disintegration of the Soviet Union in 1990. Finally the model also adds price expectations measured by changes in the December contract in New York between February and November in the current and previous year.

Given that production exceeded consumption in 1995/96, stocks increased from 7.6 million tons to 9.1 million. However, in 1996/97 and in 1997/98, stocks are expected to remain at about the same level. Ending stocks outside China (Mainland) are expected to increase from 4.9 million tons in 1995/96 to 5.2 million tons in 1996/97 and 5.6 million tons in 1997/98. The stocks-to-use ratio is expected to decrease from 0.39 in 1995/96 to 0.38 in 1996/97 and 1997/98. Other things being equal, the expected decrease in non-China (Mainland) ending stocks are likely to increase the average Cotlook A Index by 2 cents per pound in 1996/97.

Net imports by China (Mainland) are expected to decline from 663,000 tons in 1995/96 to 250,000 tons in 1996/97 and 150,000 tons in 1997/98. Such a decline in imports by China (Mainland) will likely reduce the average Cotlook A Index by 9 cents in 1996/97.

Barter sales of Central Asian cotton rose from 9% of total exports from the region in the late 1980's to 60 in 1993/94, contributing to the decline of cotton prices in the early 1990's. During the last two years barter sales have declined substantially maintaining upward pressures on prices. Barter sales are estimated to be 35% of total Central Asian cotton exports in 1995/96 and are expected to decline further to 28% in 1996/97 and 22% in 1997/98. The decline in barter sales is expected to create upward pressures on the Cotlook A Index of about 2 cents in 1996/97.

As a result of these likely changes in the world cotton market, it is expected that the season average of the Cotlook A Index will be 77 cents per pound in 1996/97 and 78 cents in 1997/98.