



INTERNATIONAL COTTON ADVISORY COMMITTEE

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Trends in World Cotton Prices¹

Structural Change Leading to Lower Real World Cotton Prices

The price of cotton, adjusted for inflation, is tending downward over the long run. This is a phenomenon common to many primary commodity industries and results from market forces in a competitive world economy. If inflation is considered, cotton prices have been falling since the 1950s. Estimates of average prices were more than \$3 per pound of lint in today's dollars in the early 1950s, prices fell to between \$1 and \$2 in the 1970s, and the average Cotlook A Index (an indicator of average prices for lint cotton delivered to Far Eastern ports) in 2006/07 is estimated at 58 cents per pound.

In nominal prices, or not adjusted for inflation, from 1973/74 through 1997/98 the Cotlook A Index ranged between 50 cents and 95 cents per pound and averaged 74 cents per pound. However, during the most recent eight cotton seasons, the Cotlook A Index has ranged between 40 cents and 70 cents and the average has been 19 cents lower at 55 cents per pound. There seems to have been a downward shift in average price levels.

For the 2007/08 cotton season (the season that will begin August 1 this year and finish in July 2008) world consumption is forecast at nearly 27 million metric tons, while world production is forecast at 25 million tons. As a result, world cotton stocks are expected to fall during 2007/08, and the Cotlook A Index is expected to rise to between 60 and 65 cents per pound. Even with record consumption and a significant decline in projected stocks, there is no indication at this time that the average Cotlook A Index will return to the previous long run average of 74 cents.

Technology

The long run decline in real commodity prices is linked to technology change in agriculture, competition with substitute fibers and possibly also to reduced prices for cotton products at the retail level. Since World War II, agriculture has been transformed by increased mechanization, expanded use of chemical fertilizers, the development of pesticides and in developed countries the extension of electricity to rural areas. The process of technology change is continuing, and may even be accelerating.

The most visible of the new technologies is biotechnology. Biotech cotton varieties accounted for an estimated 36% of world cotton area in 2006 and about 45% of world production and trade. Biotech varieties are expected to account for 40% of world cotton area and close to half of production in 2007/08.

Biotech cotton is primarily risk reducing and cost reducing, leading to larger area and greater production. Biotech varieties in China are now planted on 70% of cotton area. Biotech varieties account for 80% to 90% of area in Australia, South Africa and the USA, 70% of area in

¹ Remarks prepared for delivery during the Director-General's Consultative Framework Mechanism on Cotton, 8th Round of Consultations, 18 June 2007, WTO Headquarters in Geneva.

Argentina, 60% of area in Mexico and about 50% of area in India. Field trials are underway in other countries, including Brazil, Pakistan and Burkina Faso.

Incremental advances in proven technologies such as irrigation management, pesticide formulations and pesticide applicators, low till and no till production systems, crop rotations and other management techniques are also contributing to lower production costs and expanded cotton production. All of the technologies are being enhanced by the revolution in information technology, making possible great improvements in management efficiency and control of input applications. The new technologies result in an expansion of supply at each level of cotton prices, resulting in lower average prices.

The world cotton yield rose from an average of 580 kilograms per hectare in the 1990s to 740 kilograms now. The increase of 160 kilograms in the average world yield between 1998/99 and 2006/07, world area held constant, resulted in a rise in world production of 5 million tons of lint, which alone could account for half or more of the decline in average prices since the 1990s.

Polyester

Competition is at the heart of a market economy. Timber must compete with fabricated wood products and the development of plastics. Coffee and tea must compete with each other, and with milk, soft drinks, powdered drinks, orange juice and other choices. Copper must compete with fiber optic cables. Sugar competes with corn sweeteners and artificial sweeteners. Cocoa must compete with other types of candies. Grains compete with each other and with oilseeds, and other examples of competitive pressures affecting natural commodity industries abound.

For cotton, competition with polyester is a challenge that is accelerating as chemical fiber production technology results in lower costs of polyester production and an increased range of uses for chemical fibers. Production of all fibers other than cotton rose from 5 million tons in 1960 to 10 million in 1970, 16 million in 1980, 19 million in 1990, and then leaped to 30 million in 2000. Non-cotton fiber production is estimated at 37 million tons in 2006.

Cotton's share of world fiber use exceeded 60% in the 1960s, fell to 50% during the 1980s and fell below 40% in the early 2000s. However, cotton experienced a revival in use during 2004 and 2005 linked to lower prices, and cotton's share of fiber use increased to above 40% in 2005. However, over the longer term, cotton is expected to lose market share again to less than 40%.

The decline in cotton's share of world fiber use from 50% in the 1980s to 40% at present represents a loss in demand in apparel and household furnishing markets of approximately 3 million tons, or about one-eighth of current world cotton consumption. This lost demand for cotton caused by competition with polyester can easily explain much of the decline in average cotton prices since the 1980s and 1990s.

Retail Prices for Clothes

Another phenomenon recent to the fiber industry has been deflation in retail prices of clothing products. Data from the United States indicate that prices of clothing at retail peaked in the early 1990s and actually fell by about 8% in nominal terms from the late 1990s through 2006. Retail industry analysts suggest that reduced barriers to trade in textile and apparel products and increased efficiency in retailing in the United States contributed to the declines in retail clothing prices. Many analysts suggest that similar patterns are being repeated in Europe and Japan,

and perhaps also in developing countries such as India. Regardless of cause, the decline in prices for consumer goods is placing increased pressure on suppliers within the chain of businesses producing clothing products, including increased pressures on textile mills to reduce the costs of cotton procurement. Therefore, competition in the retail sector could be contributing to declines in real prices of cotton lint paid to farmers.

Government Measures

There is broad recognition that distortions to production and trade caused by government measures in agriculture reduce income and lower wealth in the aggregate. There is agreement in the ICAC that government measures that distort cotton production and trade should be reduced and eventually eliminated. There is broad agreement that the venue for negotiation of reductions in agricultural subsidies is the World Trade Organization (WTO).

Government measures in cotton that directly distort production and trade have ranged between \$3.5 and \$6 billion since 1997/98 when the Secretariat began compiling these data on a world basis. Support may have been as high, or nearly so, in preceding years. The United States provides the largest amount of direct support. The EU also provides substantial support, but the EU program was changed at the beginning of 2006 to decouple 65% of payments from current production. Other countries, including Turkey, Colombia, Mexico, and Brazil provide smaller levels of direct income and price support. The Government of China (Mainland) provides border protection to its domestic market through a system of quotas and variable levies that range from 1% to 40% of the landed value of cotton. In the aggregate, all forms of direct government measures are valued at about US\$4 billion in 2006/07, representing about one-eighth of the value of world cotton production.

Numerous studies have been conducted on the impacts of government measures in cotton on average world cotton prices. Estimates of the impacts range from a low of a few percent to as much as 30%. Results vary depending on the year used for analysis, whether researchers assume that all agricultural subsidies are eliminated or only subsidies on cotton, whether it is assumed that all countries eliminate subsidies on cotton and other agricultural products or only the U.S. eliminates subsidies, and whether researchers are estimating the price shock in the first year after elimination of subsidies or whether researchers are allowing time for other cotton producers and consumers to react to the elimination of subsidies and resulting higher prices. Researchers also differ on how much and how fast producers and consumers around the world would respond to higher prices linked to the elimination of subsidies.

Based on research in the ICAC and our understanding of the structure of the cotton market, in a situation in which all cotton subsidies were eliminated worldwide, but subsidies on other products remained in place, it is estimated that world cotton prices would settle about 10% higher than they would be otherwise after a period of three or four years following the change in policies. At current prices that would result in a long-term increase in the Cotlook A Index of about 6 cents per pound; the impact on cotton prices during the first year after the elimination of subsidies would probably be greater. However, the impact on cotton prices if subsidies on all agricultural products were removed would probably be lower.

As noted earlier, average cotton prices are lower this decade than they were during previous decades, and most of the change in prices seems to be linked to rising yields, competition with polyester and a compression of marketing margins in the cotton fiber-to-apparel production pipeline. Government measures may also be contributing to the long run decline in average prices. Government measures were in place during the 1970s, 1980s and 1990s, while cotton prices averaged 74 cents per pound. However, U.S. policies changed fundamentally in 1986 to encourage increased production and exports rather than placing an emphasis on market price stability, and U.S. exports have more than doubled since the 1990s. Chinese (Mainland) cotton policies also changed fundamentally in 1997 to emphasize a market-based cotton program and

to reduce stocks. Therefore, the policies of both the U.S. and China (Mainland) may be causing more distortion to world markets today than was the case in the 1980s and 1990s.

Exchange Rates and African Cotton Prices

Cotton prices are quoted and traded in U.S. dollars per pound or metric ton. African cotton companies, including merchants, private ginners and the national cotton companies, realize prices in domestic currency, and movements in exchange rates create greatly different situations in different regions.

The CFA Franc has been pegged to the French Franc, the ECU and the Euro for decades, rising and falling relative to the U.S. dollar in line with European currencies. The CFA Franc weakened relative to the dollar in the early 1980s but strengthened to its previous exchange rate of between 250 and 300 CFA Franc per dollar during the late 1980s and early 1990s. There was a one-time devaluation in 1994, and the CFA Franc weakened to about 530 to the dollar, and then gradually weakened further, dropping to 744 CFA Franc to the dollar in 2001/02. The CFA Franc has since strengthened to about 500 to the dollar and may rise further to less than 500 CFA Franc per dollar in 2007/08.

As a result of exchange rate changes, the value of the Cotlook A Index converted into CFA Franc per kilogram of lint more than doubled to 1,100 in 1994/95 but has since dropped to an estimated 640 in the current season. The Cotlook A Index, when converted to CFA Franc, is about the same now as in the early 1980s and is higher now than in the late 1980s and early 1990s, although there is great variation over the period.

In the CFA Zone, the impact on farmers of declining international prices has been cushioned by the operations of the national cotton companies and the systems of announcing a single national procurement price effective for the season in each country. Prices paid to producers rose from 150 CFA Franc per kilogram of lint-equivalent seed cotton to 450 CFA Franc in the late 1990s, but procurement prices have been forced lower and average 390 CFA Franc this season. Procurement prices have shown much less year-to-year variation than has the Cotlook A Index, but the reduced margin between export prices and prices paid to producers by the cotton companies and private ginners and merchants is reducing the profitability of the cotton sector.

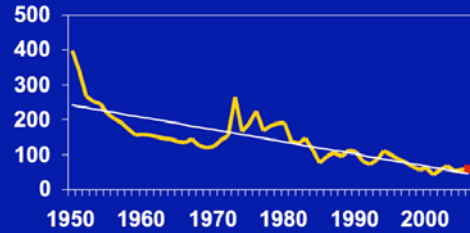
For other major exporters, the devaluation of exchange rates has cushioned the cost of falling cotton prices in dollars. The Cotlook A Index converted to Egyptian pounds has increased from about 1 per kilogram in the early 1980s to 6 in the mid-1990s and about 7 pounds in the current season. In Tanzanian shillings, international cotton prices have risen almost continuously since the early 1980s. Other countries that do not have currencies pegged to the Euro or dollar have generally seen rising prices in domestic currencies.



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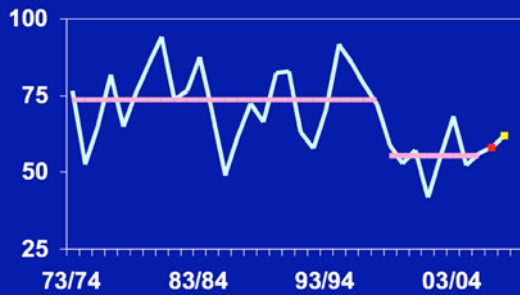
COTLOOK A INDEX

2006 Cents per Pound



Cotlook A Index

Season-average (US cents/lb)



Causes of Long Run Price Decline:

- Technology Change
- Polyester
- Retail Prices of Apparel
- Government Measures

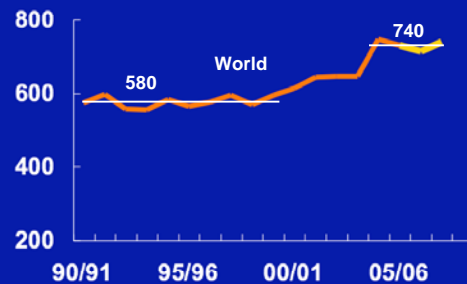
BIOTECH COTTON AREA

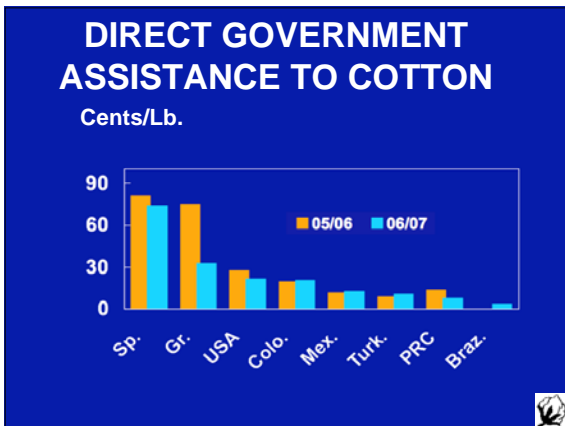
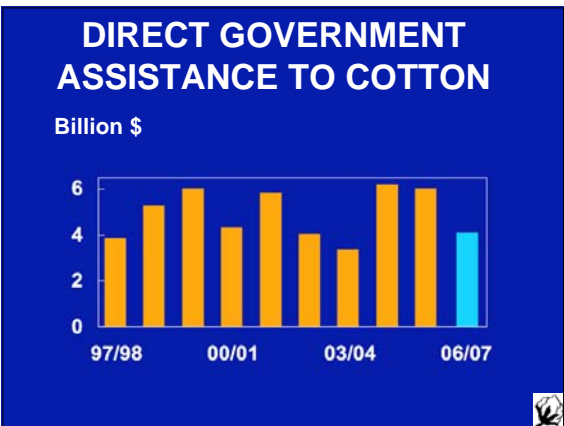
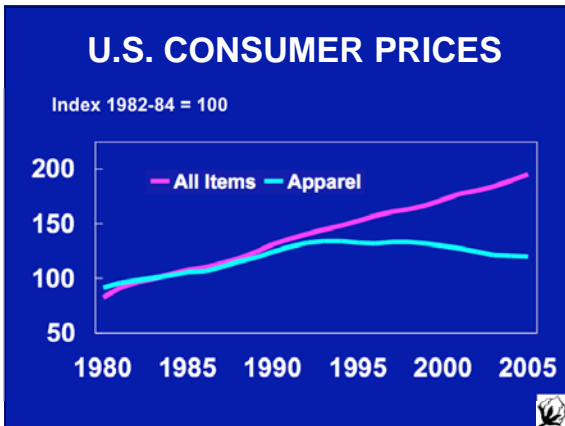
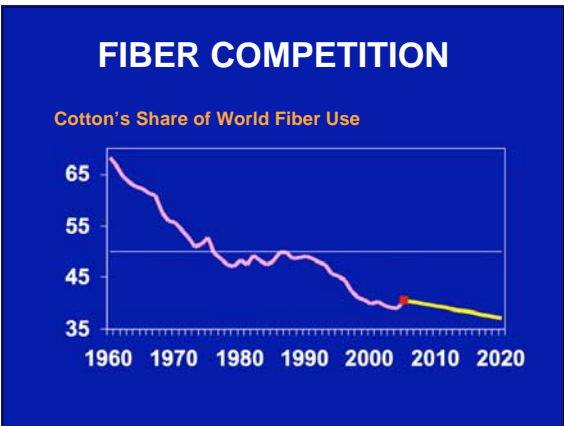
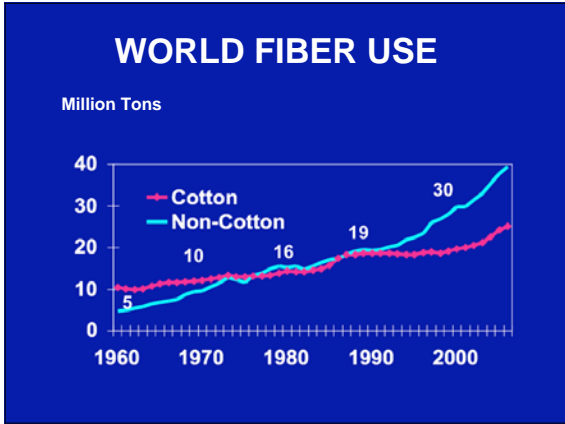
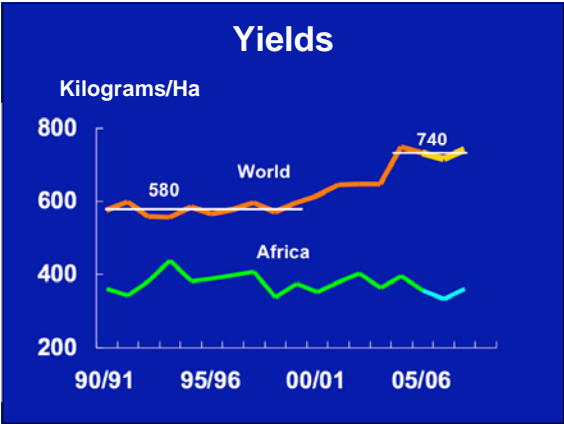
Percent of Total Area



Yields

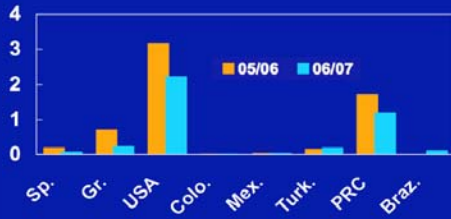
Kilograms/Ha





DIRECT GOVERNMENT ASSISTANCE TO COTTON

\$ Billion

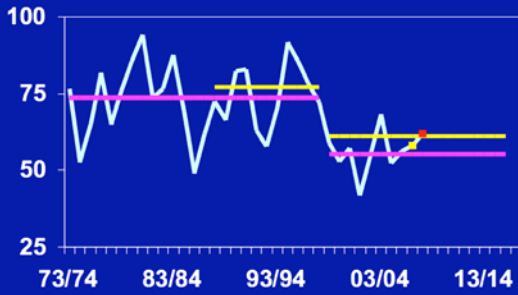


Variation in Analysis of Impacts of Subsidies:

- Year
- All Commodites or Cotton
- All Countries or USA
- First Year or Many Years

Cotlook A Index

Season-average (US cents/lb)



CFA Exchange Rate

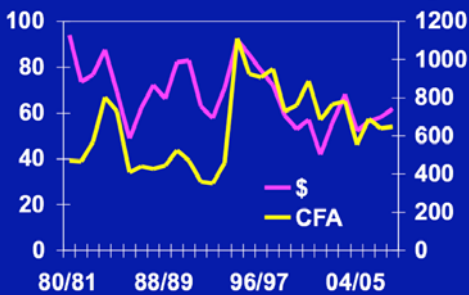
CFA/\$



Cotlook A Index

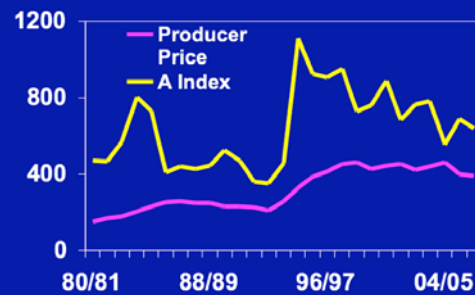
US cents/lb

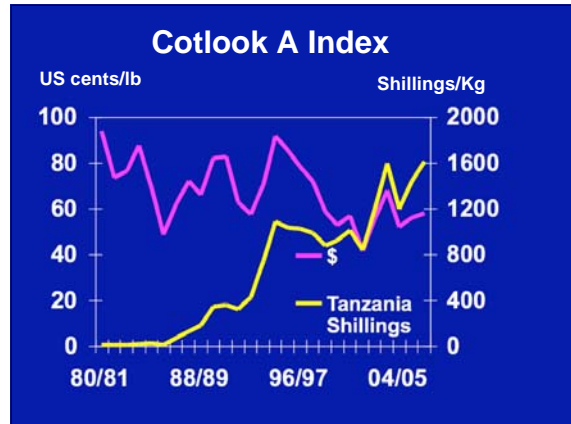
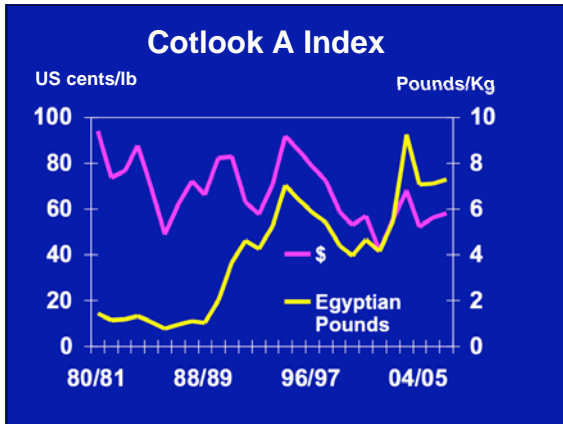
CFA/Kg



CFA Cotton Prices

CFA/Kg Lint





- ### Summary:
- Long-run prices declining
 - Government measures & exchange rates contribute to price pressure
 - Trade & development aspects are both important



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