

Background paper for the
**Competitive Commercial Agriculture in Sub-Saharan
Africa (CCAA) Study**

COTTON
INTERNATIONAL COMMODITY PROFILE

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COTTON: INTERNATIONAL COMMODITY PROFILE¹

1 Introduction

Cotton is one of the most important and widely produced agricultural crops in the world. In 2006, about 100 countries produced cotton, and it is estimated that the crop was planted on 2.5 percent of the world's arable land area. Cotton is produced for various purposes. It may meet the basic consumption needs of farm families; it may be exported to earn foreign exchange; or it may provide the raw material for textile production for domestic markets or for export. At the household level, cotton is an important cash crop for millions of farmers worldwide. The income generated from the crop contributes to rural household food security, especially in developing countries.

Cotton is also a heavily traded agricultural commodity in the world market. Nearly 140 countries and regions were involved in the export or import of cotton in 2006. In addition, through exports of textile manufactures, cotton contributes to national economic growth, employment and trade earnings. These contributions are especially important for many developing countries that not only produce cotton but increasingly also use cotton to manufacture textiles which are a major source of export revenue.

2 Market Structure

2.1 Production

Over the past few decades, world cotton production has steadily trended up with a few significant year to year variations. Average output during 1979-1981 was 14.4 million tonnes and climbed to 18.8 million tonnes for 1989 – 1991 with a 2.8 percent annual growth rate. After sluggish growth during 1990s, the output in 2004-2005 jumped from 19.2 million tonnes during 1999-2001 to 24.5 million tonnes. Several developments have contributed to the steady increase in output over time and sharp rising in the past few years. With significant technology breakthrough since mid-1990s, it was witnessed a significant increase in cultivation of new genetically engineered or transgenic cotton varieties. These new varieties were bred for insect resistance, herbicide tolerance, improved yield, virus resistance and higher quality of cotton, which contributed to cost reduction and yield improvement. In 2005, nearly 10 million hectares, about 25 percent of world cotton areas were planted to various types of biotech cotton. World cotton production has been largely driven by the increase in yield. Over the past 40 years, the land used to plant cotton has been relatively stabilized around 34 million hectares but the average yield has climbed from 355 Kg/Ha in 1970 to 707 Kg/Ha in 2005.

Another development was the significant expansion in production in Africa during the last two decades. In 2005, output in Africa reached nearly 2 million tonnes which was about 42 percent more than in 1990 and about 81 percent more than 1980. Many major producing countries in Africa such as Benin, Burkina Faso, Mali and Zimbabwe saw their output jump near or more than double in the past 20 years. Expansion in new production areas have also

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contributed to significant increase in production in Brazil and Turkey since late 1990s. The progresses in technology, the expansions in production in major producing countries and the emerging of new low cost producers have been the major factors to drive the higher the output levels.

While more than 100 countries in the world planted cotton, the six major producing countries - China, the United States, India, Pakistan, Brazil and Turkey along with Africa accounted for over 90 percent of the world output (table 1). With such a concentration, developments in these countries often bring about significant impacts on the world output level. For instance, compared with late 1970s, 2004-05 witnessed about 10 million tonnes of net increase in the output, in which the production expansion in the six major producing countries in the world – China, the United States, India, Pakistan, Brazil and Turkey accounted for more than 90 percent of the net increase, while Australia and ten African producing countries (Syria, Mali, Burkina Faso, Benin, Côte d'Ivoire, Nigeria, Cameroon, Togo, Zimbabwe, Chad) contributed about 1.6 million tonnes to the net output increase.

The surge in world cotton output from 20 million tonnes in 2000 to 25 million tonnes in 2005 revealed great supply potentials in world cotton production. The possible expansion in planting areas and the significant deviations of yields among producing countries are attributed to the huge potential of the world cotton production expansions. Although only around 3 percent of arable land in the world is used for cotton production, the land suitable to plant cotton is estimated to be 60 million hectares, about 6 percent of world arable land. If the relative price of cotton comparing with other alternative crops such as maize is favourable, more land can be used for cotton production. Moreover, yields in many producing countries, in particular these in Africa and India are significant lower than the world average. Improvement in yields in these countries will contribute considerably to the world output. Adoption in biotech cotton and improvement in irrigation condition have contributed to the sharp increase in cotton output in India in the past few years.

2.2 Consumption

As the raw material, cotton consumption is derived from demand for textiles. The economic growth, the population increase and the price competition from man-made fibres determine predominantly cotton consumption. According to the FAO/ICAC World Fibre Consumption Survey (2006), with only about 20 percent of the world population, the developed countries consumed about half of world cotton. The consumption growth, however, has been slowing down in recent years due to saturation. For instance, per capita consumption of cotton in the United States reached 16.1 kilogram in 2004, which was only about 1.8 percent more than in 2000 and essentially the same as the previous year (Table 2).

On the other hand, after slowing growth for several decades, per capita consumption in the developing countries, especially in the populous countries such as China and India has signed a trend of substantial growth. In 2005, per capita consumption of cotton in China increased by nearly 39 percent compared with 2000. Given the fact that the current cotton consumption level is very low, only 2.3 Kg/per person, developing countries would play a key role in driving the increase in cotton consumption in the future (table 2). The advances in technology in man-made fibre production, which reduced production cost and improved the quality, have made man-made fibre become more competitive. In 2004, world total fibre consumption

reached more than 65 million tonnes, in which man-made fibres accounted for nearly 57 percent. The share of man-made fibre in total fibre consumption in developing countries was over 62 percent in 2004, especially in these most populous countries such as China and India.

Given the world trade pattern of cotton textiles and clothing, cotton mill consumption was very different from consumption of the cotton textiles and clothing. Developing countries, in deed, dominated world cotton mill consumption. In 2004, the world total cotton mill consumption was around 22 million tonnes in which developing countries accounted for 87 percent, more than 19 million tonnes. With implementing the WTO Agreement of Textiles and Clothing, under which developed countries were required to phase out all their quota restrictions on imports of textiles and clothing, two significant developments have occurred in cotton mill consumption. Mill consumption of cotton in developed countries declined considerably from 5.2 million tonnes in 1992 to 2.9 million tonnes in 2004. The trend of decline is expected to be continued.

With rapid expansion in exports of textiles and clothing, developing countries as a whole saw their cotton mill consumption expanded from 13 million tonnes in 1992 to 19 million tonnes in 2004. However, not every country in the developing world enjoyed the equal growth in mill consumption, especially after implementing the ATC and China's admission to WTO in 2001. In fact, world cotton mill consumption has become increasing concentration since 2000. The average cotton mill consumption during 2004 and 2005 was about 24 million tonnes but 9 countries including Bangladesh, Brazil, China, India, Indonesia, Mexico, Pakistan, Thailand and Turkey accounted for nearly 80 percent amounted at 19 million tonnes. Most significantly, China saw its cotton mill consumption soar from around 5 million tonnes in 2000 to 9.5 million tonnes in 2005, which accounted for more than 40 percent of the world cotton mill usage. India, Pakistan and Turkey also saw their cotton mill consumption increase noticeably to reach 3.3, 2.3 and 1.5 million tonnes in 2005, respectively. These four countries with total 16.6 million tonnes accounted for nearly 70 percent of world cotton mill consumption.

2.3 Trade and Prices

These patterns and characteristics of production and consumption determined the pattern of trade in cotton and the structure of the world cotton market: while cotton is widely traded, it is dominated by a few importers and exporters. Such a concentration has been further intensified in recent years. In 2005, world cotton trade reached 9.65 million tonnes, in which five countries including the United States, Uzbekistan, Australia, India and Brazil alone with four West Africa cotton exporting countries accounted for 78 percent. Five importing countries including China, Turkey, Pakistan, Thailand and Bangladesh took 64 percent of the world cotton imports. In particular, China imported about 4.2 million tonnes which accounted for nearly 44 percent of the world cotton traded (table 3 and table 4).

Over the past few decades, while many exporting countries vanished or emerged from the major player list, the United States has remained to be the top exporter. In 2005, the United States shipped about 3.8 million tonnes, which accounted for 40 percent of the total trade. The second largest exporter, Uzbekistan, had much smaller shipments than the United States, only around 1 million tonnes over the past few years. African countries have become an important source of exports over the past decades. Burkina Faso and Mali exported over 250,000 tonnes in 2005 to become the world sixth and seventh largest exporters. With the

decline in mill consumption, developed countries, which were major cotton importers a few decades ago have imported less cotton over time. Since most cotton imports are used to manufacture exports of textiles, the developments of textiles trade among developing countries determined largely the importing ports. Over the past few years, while a few developing countries experienced surge in imports, some others witnessed their imports to decline due to smaller shipments of their exports of textiles. It is similar to the exporting market that the top importer left the second largest one far behind. In 2005, China imported about 4.2 million tonnes but the second largest importer, Turkey, had just about 730,000 tonnes (table 5).

Trade in cotton has been relatively free. China's tariff quota (TRQ) and production subsidies in developed countries in particular the United States and the European Union have been cited as significant trade distortions affecting world cotton trade. Since cotton trade is greatly influenced by trade in textiles and clothing, the re-installment of quotas on some Chinese exports of textiles and clothing to the United States and the European Union in 2006 has also had important impacts on world cotton trade. If all these direct and indirect trade barriers would be removed, trade in world cotton would increase significantly, especially the significant changes in trade flows.

The market dominance of few major players and in particular the trade concentration of one exporter and one importer often lead to substantial volatile world market prices. In 2003, when a lower output level in China was forecasted, the world cotton price shot up 68 percent from about US\$ 1.15/kg in August to US\$ 1.89/kg in March 2004. The price, however, dropped sharply to US\$ 1.18/kg in just 6 months as good harvest in 2004 was foreseen in China. Another important trait of the world cotton price is that it has been on the downward trend over the past few decades. Even after recovering significantly from its historical low at US\$ 0.21/kg in real term late 2001, the current real price about US\$ 0.28/kg is still just 38 percent of the 1979 level and 60 percent of the 1989 level. The technology progresses which resulted in lower production cost and higher yields have been attributed to the decline in prices. The huge domestic subsidies to cotton production in the United States and the European Union as well as the TRQ imposed by China have been blamed to the lower cotton prices in past few years. The lower price had significant impact on the revenue of cotton exporting countries. The quantity of the world cotton exports in 2005 nearly doubled compare the average during 1978-80, but the export revenue in real term was just 80 percent of the 1978-80 level (table 3). Since the world cotton trade is based on US dollar, the fluctuation of the exchange rates had significant effects on West African cotton exporting countries, which pegged to Euro. With substantial depression of the US dollar against Euro, the exports revenue declined in terms of Euro considerably.

The position of Mozambique, Nigeria and Zambia in the world cotton market

Mozambique, Nigeria and Zambia produce cotton but in terms of the export volume, all are marginal players in the world cotton market. During 2003-2004, the average quantities of cotton exports from Mozambique, Nigeria and Zambia were only 22,129, 20,090 and 48,989 tonnes, respectively (table 6). Nigeria is an important cotton producing country in the world with output over 140,000 tonnes over the past decade, but its output has been used for domestic consumption. Zambia has experienced rapid expansion in cotton production and its production reached 76,333 tonnes during 2003-05 from almost nil in 1960s with expansions planting areas and increases in yields over the past few decades. Mozambique, however,

witnessed dramatic fluctuations of production, largely due to its wars and political crisis. In deed, its current output level is still below that in early 1960s. The yield levels in all three countries (why yield in Zambia increase significantly from late 1990s needs more investigations) are below the world average level. In particular, the current yield levels in Mozambique and Nigeria are only about 30 percent of the world average yield (table 7).

Most significant challenges facing these countries are (1) catching up with the recently rapid technological advances in production; and (2) benefiting from exports of value-added textiles and clothing rather than as only a raw material supplier. With significant technology breakthrough since mid-1990s, it was witnessed a significant cultivation of new genetically engineered or transgenic cotton varieties. These new varieties were bred for insect resistance, herbicide tolerance, improved yield, virus resistance and higher quality of cottons. In 2004, nearly 8 million hectares, about 25 percent of world cotton areas were planted to various types of biotech cottons. In particular, many major cotton producing countries have adopted the biotech cotton. By 2004, nearly 80 percent of the total US cotton acreage was planted in insect and herbicide resistance varieties, in which about 32 percent was biotech cotton. Preliminary studies suggested that the adoption of biotech-cotton contributed to the reduction in production cost. These three countries, however, have adopted little biotech cotton so far.

All three countries are exporting textiles and clothing but their total shipments are relatively small and Mozambique and Nigeria have been net importers of textiles and clothing in the past decade. In 2005, Mozambique had US \$ 43.5 million of total imports of textiles and clothing but only US\$ 9.6 million of exports. Zambia, being a net exporter of textiles and clothing in late 1990s became a net importer in 2005. It recorded US \$ 20 million net export revenue of clothing in 2000 but paid about US\$ 14 million for its net import clothing bill. Obviously, how to benefit from exports of value-added textiles and clothing or reduce imports rather than as only a raw material supplier is an important contest facing these countries.

3 Market Situation and Outlook

World Market prospects and opportunities/challenges to the CCAA 3 countries

Population growth and economic expansion will continue to be the drivers of increase in cotton consumption. Given that the current consumption level is low in developing countries, only 2.3 Kg/per person in 2004 which was less than 25 percent of that in developed countries, there will be a great market potential for cotton consumption. In addition, all re-imposed quotas on Chinese textiles and clothing by the United States and European Union will be removed by 2008, which would stimulate higher demand for consumption of textiles and clothing. On the production side, advances in technologies, especially the development and adoption of biotech cotton, will further reduce production cost, improve cotton quality and yield, which will make cotton become more competitive over man-made fibres, especially when oil price is high. Based on these considerations and under the assumption that there would be no major policy changes in cotton trade and production supports, FAO/ICAC made the world cotton market projection for 2015 using FAO/ICAC projection model.

Our preliminary results suggested that world cotton production and consumption will continue to grow. By 2015, world cotton production and consumption would reach 30.5 million tonnes, which would be about 25 percent more than the level in 2005, a net increase of around 5

million tonnes. As mill consumption is largely determined by trade in textiles and clothing, there would be further concentration in world cotton mill consumption. It is projected that only five countries including China, India, Pakistan, Turkey and Brazil would use nearly 25 million tonnes of cotton, which would be about 75 percent of world mill consumption. In particular, China is expected to use 14.5 million tonnes of cotton, which would account for nearly half of world cotton mill consumption. Moreover, more than 90 percent of cotton would be milled in Asia (table 8).

The further concentration in cotton mill consumption would affect world cotton market significantly, which would induce high trade volume and make China as the sole key market for cotton exporters. It is projected that world total trade would reach over 11 million tonnes by 2015. China, as the solo largest importer, will import over 7 million tonnes, over 65 percent of the world imports and about 4 million tonnes more than the average during 2004 and 2005. Currently, while China is buying cotton from all exporters in the world, the United States, Uzbekistan, India, Australia and West African cotton producing countries such as Burkina Faso, Mali and Benin are the major suppliers. Given its commercial ties and long time presence in the Chinese market, the United States is the biggest supplier to the Chinese market. During 2004 and 2005, about 1.8 million tonnes of cotton from the United States were exported to China. Uzbekistan along with several other cotton producing countries in Central Asia has long been exporting most of their cotton to China largely due to their geographic advantage. India barely exported any cotton over the past few decades. However, with its adoption of biotech cotton and improvement of irrigation conditions in cotton producing area, it has become an important cotton exporter in the world cotton market. It is expected that India would continue to export cotton to China given its geographic advantage. Western African countries exported only small amount of cotton to China before 2002. During 2004 and 2005, however, more than half of cotton exported from West Africa went to China mainly through multinational cotton trading firms controlled by the US and European multinational companies.

Given their commercial ties, long time market presence and geographic advantage, the United States, India and Central Asian cotton producing countries would have relatively competitive advantages in the Chinese market. However, given the huge size of the Chinese market, all countries can seize opportunities in the Chinese market. In deed, the rapid expansion of exports to China from Western Africa – from a few hundred tonnes to more than 500,000 tonnes revealed the huge opportunity. Currently, China cotton imports are regulated by the TRQ set up by the China's commitment for its WTO admission. In fact, the TRQ was set at a very low level, only 800,000 tonnes at the initial implementing period (2002) with a certain percent growth over years. While Chinese authority voluntarily increased its TRQ on cotton, there still existed a gap between the domestic price and the world market price (domestic price was about 5 percent higher than the world price). All above quota imports will be levied 30-50 percent tax. It is not expected that the Chinese authority would abolish its TRQ system but a proposal which have all African exports to China free both quota and tariff would give all African cotton exporters an edge if it would be implemented.

Since the textile manufacture process often mixes various lengths of cotton staples into final products to meet demand and maximize profit as well as the competitive pressure from man-made fibre, price of cotton becomes the key to measuring competitiveness in the world cotton market. Therefore, the cotton production efficiency will be essential to the success in the world cotton market. If Mozambique, Nigeria and Zambia want to succeed in the cotton world

market, the cost reduction and yield improvement will hold the key. In particular, it is not expected that the world cotton price would be improved substantially largely due to the existence of great production expansion potential and the price competitiveness of man-made fibres. In deed, it was why the world cotton price experienced little improvement even though the world total demand increased by more than 20 percent in 2005 compared with in 2000. Finally, although China would be the world largest destination for cotton exports, it is not the solo market. Other Asian countries such as Indonesia, Thailand and Vietnam should be explored. Diversification of export destinations will reduce trade risks.

Table 1. World cotton major producing countries: 1969 - 2005

	Area Harv (1000ha)					Yield (Kg/ha)					Production (1000Mt)				
	1969-71	1979-81	1989-91	1999-01	2004-05	1969-71	1979-81	1989-91	1999-01	2004-05	1969-71	1979-81	1989-91	1999-01	2004-05
World	34,342	34,386	33,487	33,031	34,015	1,036	1,246	1,636	1,673	1,881	12,226	14,386	18,808	19,198	24,065
China	4,912	4,867	5,777	4,192	5,288	1,315	1,613	2,403	3,228	3,187	2,154	2,627	4,657	4,523	6,087
USA	4,543	5,381	4,618	5,439	5,225	1,314	1,493	1,856	1,850	2,236	2,225	3,004	3,288	3,952	5,172
India	7,707	7,985	7,599	8,795	8,620	423	495	695	603	862	1,088	1,314	1,755	1,767	4,128
Pakistan	1,817	2,135	2,699	3,009	3,125	979	1,027	1,945	1,844	2,092	595	730	1,758	1,847	2,284
Uzbekistan	na	na	na	na	na	na	na	na	2,233	2,389	na	na	na	1,012	1,115
Brazil	4,318	3,619	1,952	783	1,042	480	465	1,004	2,546	3,109	684	555	648	667	1,128
Turkey	618	646	655	686	625	1,857	1,967	2,463	3,239	3,732	441	488	610	862	875
Australia	36	87	277	467	268	2,321	2,866	3,783	3,944	4,414	30	105	413	750	494
Greece	147	136	256	416	376	2,342	2,612	2,690	3,179	2,981	111	115	227	428	350
Syrian Arab Republic	266	146	162	257	213	1,482	2,337	2,935	3,910	4,455	150	126	173	329	315
Egypt	668	507	399	265	280	2,147	2,646	2,075	2,510	2,548	520	504	299	263	263
Mali	65	100	203	414	543	829	1,181	1,279	1,031	1,126	20	45	109	179	247
Turkmenistan	na	na	na	na	na	na	na	na	2,100	1,508	na	na	na	217	214
Burkina Faso	80	74	190	256	496	366	887	1,026	1,124	1,039	11	25	70	114	194
Tajikistan	na	na	na	na	na	na	na	na	1,476	1,899	na	na	na	112	169
Côte d'Ivoire	40	119	204	307	249	913	1,105	1,293	1,175	1,361	14	54	117	160	152
Benin	42	24	122	349	382	853	763	1,169	1,060	1,109	13	7	59	139	149
Nigeria	405	482	524	531	622	454	190	497	742	573	62	31	88	147	140
Kazakhstan	na	na	na	na	na	na	na	na	1,975	2,005	na	na	na	92	124

Table 2. World cotton consumption in raw fibre equivalent: 1992 - 2004

	1992	1996	2000	2001	2002	2003	2004
	(1000Mt)						
World							
Mill consumption	18,017.0	18,410.0	19,267.9	19,558.2	20,084.7	20,705.3	22,346.6
Textiles Imports	9,215.5	11,634.6	14,651.1	14,933.2	15,828.7	16,920.4	17,938.6
Textiles Exports	9,041.9	12,043.5	15,203.1	14,635.2	15,945.6	17,421.1	18,897.9
Trade Balance	173.3	-408.9	-552.0	298.0	-116.8	-500.8	-959.3
Consumption	18,191.0	18,001.1	18,715.9	19,856.2	19,967.8	20,204.5	21,387.3
Per capita (kg)	3.6	3.4	3.4	3.5	3.5	3.5	3.7
Developed countries							
Mill consumption	5,246.9	4,551.2	4,261.9	3,778.0	3,491.8	3,148.2	2,937.7
Textiles Imports	6,345.0	7,357.4	9,141.9	9,889.0	10,488.2	11,286.3	11,977.1
Textiles Exports	2,678.8	3,104.3	3,727.6	3,734.7	3,718.5	3,763.3	3,904.9
Trade Balance	3,666.1	4,253.1	5,414.3	6,154.2	6,769.7	7,523.0	8,072.2
Consumption	8,913.0	8,804.8	9,672.9	9,932.2	10,261.4	10,671.2	11,009.9
Per capita (kg)	7.9	7.7	8.4	8.3	8.6	8.9	9.1
Developing countries							
Mill consumption	13,019.8	14,079.3	15,222.3	15,780.2	16,592.9	17,557.1	19,408.9
Textiles Imports	2,955.0	4,104.2	5,136.6	5,044.2	5,340.6	5,634.0	5,961.5
Textiles Exports	6,301.0	8,489.7	10,500.1	10,900.5	12,227.0	13,657.8	14,993.0
Trade Balance	-3,346.4	-4,406.1	-5,412.4	-5,856.3	-6,886.5	-8,023.8	-9,031.5
Consumption	9,674.1	9,673.2	9,809.8	9,923.9	9,706.4	9,533.3	10,377.4
Per capita (kg)	2.4	2.2	2.0	2.2	2.2	2.1	2.3
USA							
Mill consumption	2,239.7	2,370.8	2,207.8	1,781.0	1,621.0	1,484.0	1,439.0
Textiles Imports	1,519.1	1,994.7	3,256.1	3,396.0	3,860.3	4,261.4	4,398.1
Textiles Exports	360.7	621.5	978.5	941.0	977.7	1,025.2	1,047.6
Trade Balance	1,088.1	1,265.6	2,277.7	2,455.0	2,882.6	3,236.2	3,350.6
Consumption	3,327.8	3,636.4	4,485.5	4,236.0	4,503.6	4,720.2	4,789.6
Per capita (kg)	14.6	14.6	15.8	14.7	15.5	16.1	16.1
China							
Mill consumption	4,771.0	4,616.7	4,916.7	5,381.4	5,880.9	6,632.1	7,880.9 *
Textiles Imports	245.2	692.4	906.9	997.1	1,228.4	1,354.9	1,374.1 *
Textiles Exports	1,452.9	2,482.4	2,999.7	3,629.1	4,770.7	5,771.0	6,383.2 *
Trade Balance	-1,207.7	-1,790.0	-2,092.8	-2,632.0	-3,542.3	-4,416.1	-5,009.1 *
Consumption	3,563.3	2,826.7	2,823.9	2,749.4	2,338.6	2,216.0	2,871.8 *
Per capita (kg)	3.1	2.3	2.3	2.2	1.8	1.7	3.2 *

* 2005 for China

Table 3. World Cotton Trade

	Quantity (Mt)	Imports Value (1000\$)	Real Value (1000\$)	Quantity (Mt)	Exports Value (1000\$)	Real Value (1000\$)
1978-80	4,700,805	7,559,042	11,599,048	4,554,717	6,857,854	10,523,102
1988-90	5,309,339	8,667,621	8,966,114	5,264,336	8,174,608	8,456,123
1998-00	5,557,173	7,941,868	7,676,517	5,489,755	6,850,315	6,621,435
2001	5,912,726	7,461,157	7,137,302	5,936,698	6,655,866	6,366,965
2002	5,634,170	5,975,635	5,513,631	6,146,717	6,085,362	5,614,875
2003	6,176,379	7,738,316	6,959,773	6,891,636	8,227,775	7,399,988
2004	7,164,735	10,934,472	9,608,363	6,799,933	9,673,173	8,500,031
2005(est.)	9,645,000	11,249,927	9,955,688	9,644,000	10,485,070	9,278,823

Table 4. World cotton major exporters (1980-05)

Major exporters 1980	Quantity 000 MT	real price	nominal price
		Value '000 US\$	Value '000 US\$
WORLD TOTAL	4,414	9,180,299	3,177,796
USA	1,290	2,683,666	928,961
Former USSR	876	1,821,868	630,647
PAKISTAN	327	681,106	235,767
TURKEY	222	461,920	159,895
MEXICO	175	363,196	125,722
EGYPT	162	336,930	116,630
INDIA	140	291,644	100,954
GUATEMALA	106	220,997	76,499

Major exporters 1990	Quantity 000 MT	real price	nominal price
		Value '000 US\$	Value '000 US\$
WORLD TOTAL	5,073	9,283,889	5,073,163
USA	1,697	3,104,984	1,696,712
AUSTRALIA	329	601,338	328,600
Former USSR	327	597,649	326,584
PAKISTAN	272	496,845	271,500
INDIA	255	467,361	255,389
PARAGUAY	205	374,746	204,779
CHINA (MAINLAND)	202	369,717	202,031
BRAZIL	167	306,395	167,429
TURKEY	164	299,935	163,899

Major exporters 2000	Quantity 000 MT	real price Value '000 US\$	nominal price Value '000 US\$
WORLD TOTAL	5,881	7,410,672	5,934,419
USA	1,472	1,855,297	1,485,710
AUSTRALIA	849	1,069,570	856,505
UZBEKISTAN	800	1,008,000	807,200
GREECE	270	340,200	272,430
SYRIA	212	266,742	213,605
COTE D'IVOIRE	150	188,892	151,263
BENIN	140	176,733	141,527
MALI	134	168,880	135,238

Major exporters 2005	Quantity 000 MT	real price Value '000 US\$	nominal price Value '000 US\$
WORLD TOTAL	9,645	11,959,800	11,207,490
USA	3,821	4,738,040	4,440,002
UZBEKISTAN	1,000	1,240,000	1,162,000
AUSTRALIA	660	818,400	766,920
INDIA	600	744,000	697,200
BRAZIL	456	565,440	529,872
GREECE	355	440,200	412,510
BURKINA FASO	304	376,960	353,248
MALI	250	310,000	290,500

Table 5. World major raw cotton importers (1980-05)

Major importers 1980	Quantity 000 MT	real price Value '000 US\$	nominal price Value '000 US\$
WORLD	4,555	9,474,400	3,279,600
CHINA (MAINLAND)	773	1,607,664	556,499
JAPAN	697	1,449,085	501,606
KOREA, REP.	332	691,522	239,373
CHINA (TAIWAN)	214	444,259	153,782
ITALY	193	401,690	139,046
FRANCE	167	347,799	120,392
POLAND	165	342,817	118,668
GERMANY	158	328,008	113,541
CHINA (HONG KONG)	153	318,363	110,202

Major importers 1990	Quantity 000 MT	real price Value '000 US\$	nominal price Value '000 US\$
WORLD	5,220	9,552,600	5,220,000
JAPAN	634	1,161,087	634,474
CHINA (MAINLAND)	480	878,376	479,987
KOREA, REP.	447	817,454	446,696
CHINA (TAIWAN)	358	656,018	358,480
THAILAND	354	647,033	353,570
ITALY	336	614,702	335,903
INDONESIA	324	593,831	324,498
GERMANY	233	425,841	232,700

Major importers 2000	Quantity 000 MT	real price Value '000 US\$	nominal price Value '000 US\$
WORLD	5,755	7,251,300	5,806,795
INDONESIA	570	718,200	575,130
MEXICO	410	516,100	413,289
TURKEY	383	482,426	386,324
RUSSIA	373	469,884	376,280
INDIA	350	441,226	353,331
THAILAND	342	431,458	345,509
KOREA, REP.	304	383,661	307,233
ITALY	300	378,000	302,700
JAPAN	240	302,984	242,628

Major importers 2005	Quantity 000 MT	real price Value '000 US\$	nominal price Value '000 US\$
WORLD	9,527	11,813,480	11,070,374
CHINA (MAINLAND)	4,200	5,208,000	4,880,400
TURKEY	730	905,200	848,260
PAKISTAN	450	558,000	522,900
THAILAND	404	500,960	469,448
BANGLADESH	401	497,240	465,962
INDONESIA	400	496,000	464,800
MEXICO	325	403,000	377,650
RUSSIA	300	372,000	348,600

Table 6. Cotton trade in 3 CCAA African countries

	Import Q (Mt)			Import V (1000\$)			Export Q(Mt)			Export V(1000\$)		
	Mozambique	Nigeria	Zambia	Mozambique	Nigeria	Zambia	Mozambique	Nigeria	Zambia	Mozambique	Nigeria	Zambia
1961-63	0	0	0	0	0	0	35,757	37,773	67	21,107	24,814	40
1969-71	0	0	0	0	0	0	42,824	21,778	1,530	25,526	14,475	732
1979-81	0	5,703	100	0	10,421	199	12,267	6,877	2,409	18,800	11,383	3,627
1989-91	983	543	218	1,667	913	406	5,633	1,598	4,220	8,300	1,973	5,065
1999-01	0	8,097	2,563	0	21,171	2,854	11,500	9,097	10,573	11,233	13,431	13,364
2003-04	42	2,075	775	22	2,664	1,076	22,129	20,090	48,989	23,960	18,646	55,480

Table 7. Cotton production in 3 CCAA African countries

	Area Harv (ha)			Yield (kg/ha)			Production (Mt)		
	Mozambique	Nigeria	Zambia	Mozambique	Nigeria	Zambia	Mozambique	Nigeria	Zambia
1961-63	289,667	300,000	182	375	489	375	36,028	48,333	68
1969-71	377,380	404,667	9,500	337	454	855	41,884	62,267	2,676
1979-81	143,667	482,333	30,302	406	190	526	19,333	31,297	5,651
1989-91	82,667	523,667	75,769	386	497	576	10,067	88,000	15,800
1999-01	164,517	510,667	68,373	471	736	1,260	23,750	142,333	31,449
2003-05	115,000	622,000	72,400	435	573	1,127	25,000	140,000	76,333

Table 8. World cotton market projection: 2015

	Area Harv (1000ha)		Yield (Kg/ha)		Production (1000Mt)		Mill Uses (1000Mt)		Net Exports (1000Mt)	
	2004-05	2015	2004-05	2015	2004-05	2015	2004-05	2015	2004-05	2015
World	34,562	36,200	739	887	25,526	30,500	24,144	30,500		
Major Importing Countries:										
China	5,377	5,759	1,125	1,285	6,047	7,400	9,113	14,500	-3,066	-7,100
Turkey	649	739	1,310	1,420	850	1,050	1,525	1,600	-675	-550
Bangladesh	47	50	287	300	14	15	395	560	-382	-545
Indonesia	12	15	500	500	6	8	470	470	-464	-462
Thailand	33	35	462	460	15	16	449	430	-434	-414
Russian Federation	2	2	667	670	1	1	287	330	-286	-329
Pakistan	3,165	3,846	722	780	2,286	2,600	2,312	2,900	-27	-300
Mexico	116	100	1,190	1,200	138	120	444	400	-306	-280
Viet Nam	25	30	400	420	10	13	153	250	-143	-237
Korea, Republic of	0	0	0	0	0	0	265	220	-265	-220
China, Taiwan Prov of	0	0	0	0	0	0	261	200	-261	-200
Japan	0	0	0	0	0	0	162	100	-162	-100
China, Hong Kong SAR	0	0	0	0	0	0	66	50	-66	-50
Malaysia	0	0	0	0	0	0	56	50	-56	-50
Poland	0	0	0	0	0	0	42	30	-42	-30
Czech Republic	0	0	0	0	0	0	46	30	-46	-30
Colombia	70	70	784	800	55	56	98	100	-43	-44
Canada	0	0	0	0	0	0	53	40	-53	-40
European Union	460	380	1,132	1,150	520	330	527	320	-7	10
South Africa	25	30	800	820	20	25	50	40	-30	-15
									-6,809	-10,986

**Table 8 (cont.) World cotton market projection:
2015**

	Area Harv (1000ha)		Yield (Kg/ha)		Production (1000Mt)		Mill Uses (1000Mt)		Net Exports (1000Mt)		
	2004-05	2015	2004-05	2015	2004-05	2015	2004-05	2015	2004-05	2015	
Major Exporting Countries:											
USA	5,435	5,417	944	1,080	5,132	5,600	1,376	750	3,756	4,850	
India	8,830	8,794	469	630	4,140	5,750	3,329	4,600	811	1,150	
Uzbekistan	1,426	1,686	822	860	1,172	1,250	178	180	995	1,070	
Brazil	1,012	1,600	1,160	1,250	1,174	1,650	885	1,000	289	650	
Australia	320	403	1,948	2,010	624	550	12	10	612	540	
Burkina Faso	606	673	462	520	280	350	2	4	278	346	
Mali	558	625	418	480	234	300	4	4	230	296	
Greece	372	278	1,104	1,080	410	270	88	70	322	200	
Syrian Arab Republic	215	219	1,541	1,600	331	300	150	175	181	125	
Benin	263	336	482	550	127	185	3	4	124	181	
Kazakhstan	202	213	720	750	146	160	10	25	136	135	
Tajikistan	274	292	566	600	155	175	22	25	134	150	
Turkmenistan	575	610	363	410	209	250	90	100	119	150	
Côte d'Ivoire	270	296	471	540	127	140	10	15	117	125	
Egypt	287	308	861	910	247	250	210	170	37	80	
Nigeria	365	467	245	300	90	115	69	85	21	30	
									8,159	10,078	