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COTTON :
Review of the World Situation

International
Cotton
Advisory
Committee

Volume 70 - Number 4
March-April 2017

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ICAC

SUPPLY AND DISTRIBUTION OF COTTON

April 3, 2017

Seasons begin on August 1

	2012/13	2013/14 Est.	2014/15 Est.	2015/16 Est.	2016/17 Proj.	2017/18 Proj.
	Million Metric Tons					
BEGINNING STOCKS						
WORLD TOTAL	**15.494**	**18.567**	**20.581**	**22.359**	**19.17**	**17.85**
CHINA	6.181	9.607	12.109	12.917	11.16	9.27
USA	0.729	0.827	0.512	0.795	0.83	0.98
PRODUCTION						
WORLD TOTAL	**26.776**	**26.172**	**26.188**	**21.040**	**22.78**	**23.12**
INDIA	6.290	6.766	6.562	5.746	5.80	5.93
CHINA	7.300	6.950	6.500	4.753	4.74	4.81
USA	3.770	2.811	3.553	2.806	3.75	3.74
PAKISTAN	2.002	2.076	2.305	1.514	1.68	1.87
BRAZIL	1.310	1.734	1.563	1.289	1.44	1.36
UZBEKISTAN	1.000	0.910	0.885	0.832	0.79	0.77
OTHERS	5.104	4.926	4.820	4.100	4.58	4.64
CONSUMPTION						
WORLD TOTAL	**23.782**	**24.002**	**24.440**	**24.133**	**24.10**	**24.42**
CHINA	8.290	7.517	7.479	7.442	7.59	7.67
INDIA	4.731	5.057	5.261	5.277	5.12	5.17
PAKISTAN	2.216	2.470	2.492	2.256	2.23	2.24
EUROPE & TURKEY	1.560	1.611	1.692	1.687	1.63	1.61
BANGLADESH	1.023	1.146	1.204	1.324	1.40	1.47
VIETNAM	0.492	0.673	0.875	1.007	1.14	1.22
USA	0.762	0.773	0.778	0.751	0.72	0.75
BRAZIL	0.910	0.862	0.797	0.733	0.72	0.70
OTHERS	3.798	3.893	3.861	3.657	3.54	3.59
EXPORTS						
WORLD TOTAL	**10.046**	**9.027**	**7.703**	**7.587**	**7.85**	**8.06**
USA	2.836	2.293	2.449	1.993	2.87	2.88
INDIA	1.685	2.014	0.914	1.255	0.96	0.99
CFA ZONE	0.825	0.973	0.893	0.962	0.98	1.08
BRAZIL	0.938	0.485	0.851	0.939	0.61	0.71
UZBEKISTAN	0.690	0.615	0.550	0.543	0.45	0.45
AUSTRALIA	1.343	1.057	0.520	0.616	0.80	0.81
IMPORTS						
WORLD TOTAL	**10.201**	**8.934**	**7.781**	**7.537**	**7.85**	**8.06**
BANGLADESH	1.044	1.190	1.177	1.355	1.43	1.47
VIETNAM	0.517	0.687	0.934	1.001	1.17	1.24
CHINA	4.426	3.075	1.804	0.959	0.98	1.09
TURKEY	0.803	0.924	0.800	0.918	0.83	0.87
INDONESIA	0.686	0.651	0.728	0.640	0.69	0.66
TRADE IMBALANCE 1/	**0.155**	**-0.093**	**0.078**	**-0.050**	**0.00**	**0.00**
STOCKS ADJUSTMENT 2/	**-0.075**	**-0.063**	**-0.047**	**-0.042**	**-0.01**	**0.00**
ENDING STOCKS						
WORLD TOTAL	**18.567**	**20.581**	**22.359**	**19.174**	**17.85**	**16.55**
CHINA	9.607	12.109	12.917	11.160	9.27	7.47
USA	0.827	0.512	0.795	0.827	0.98	1.09
ENDING STOCKS/MILL USE (%)						
WORLD-LESS-CHINA 3/	**58**	**51**	**56**	**48**	**52**	**54**
CHINA 4/	**116**	**161**	**173**	**150**	**122**	**97**
COTLOOK A INDEX 5/	**88**	**91**	**71**	**70**		

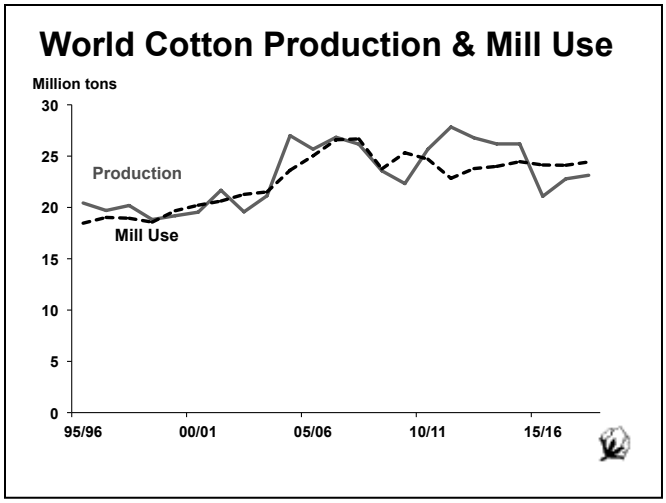
1/ The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports.
2/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated.
3/ World-less-China's ending stocks divided by World-less-China's mill use, multiplied by 100.
4/ China's ending stocks divided by China's mill use, multiplied by 100.
5/ U.S. cents per pound.

SUMMARY OF THE OUTLOOK FOR COTTON

China Refines its Cotton Policy

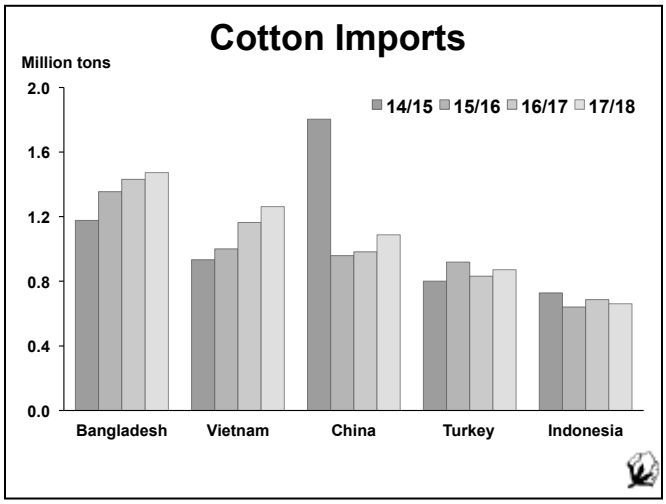
The Chinese government announced a new target price for cotton grown in Xinjiang last month as the trial period expired in 2016. The new target price is 18,600 yuan per ton (approximately U.S. 122 cts/lb using current exchange rates), unchanged from 2016, and will be in effect through the 2019 planting season. In order to maintain a stable supply of cotton, the subsidy will also only apply to output less than 85% of the average annual production grown from 2012-2014 (around 7 million tons). The level of subsidy for extra-long staple cotton will remain unchanged at 1.3 times the price of upland cotton.

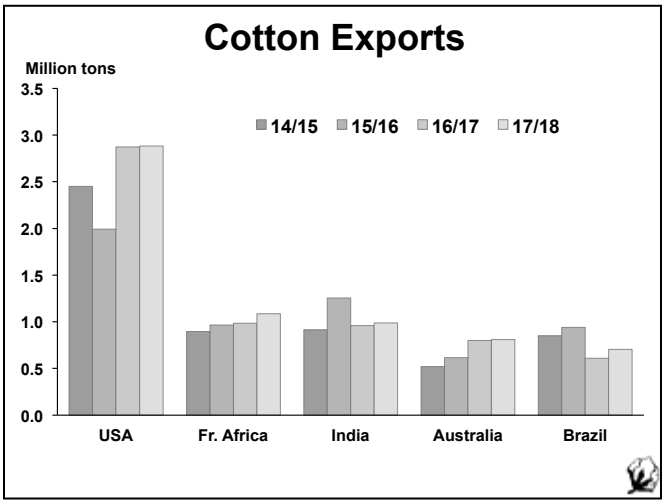
World cotton production is forecast to grow by 1% to 23.1 million tons in 2017/18 as high prices in 2016/17 encourage farmers to plant cotton. However, the average yield is expected to decline by 2% to 761 kg/ha, similar to the 4-year average.



Firm prices this season are likely to encourage farmers in India to return to cotton, and cotton production in India is projected to grow by 2% to 5.9 million tons. Due to high prices in 2016/17 and a stable subsidy for the next three years, China's cotton area is projected to expand by 3% to 3 million hectares after five seasons of contraction. Assuming an average yield of 1,640 kg/ha, China's production could reach 4.8 million tons in 2017/18. The average yield for the United States increased by 13% to 973 kg/ha in 2016/17, which, coupled with firm prices, will encourage farmers to expand cotton area in 2017/18. However, production is expected to remain unchanged from 2016/17 at 3.7 million tons as the average yield is assumed to be closer to the 5-year average.

World cotton mill use in 2016/17 is expected to remain unchanged at 24.1 million tons due largely to weak global economic growth and competition from polyester, which has significantly lower prices than cotton this season. Global consumption may recover by 1% in 2017/18 to 24.4 million tons as cotton prices decrease, making cotton more competitive, and growth in the global economy is expected to be much stronger in 2017 and 2018. After several seasons of decline, China's mill use is projected to rise by 2% to 7.6 million tons in 2016/17 and by 1% to 7.7 million tons in 2017/18. The gap between China's domestic cotton prices and international cotton prices has decreased, making yarn imports less attractive than in recent seasons. In addition, mill use in Xinjiang, where the bulk of China's domestic crop is grown, has expanded and the proximity to the higher quality cotton grown in this region offers cost advantages over yarn imports. After declining by 3% to 5.1 million tons in 2016/17 due to high domestic and international cotton prices, India's mill use is projected to recover by 1% to 5.2 million tons in





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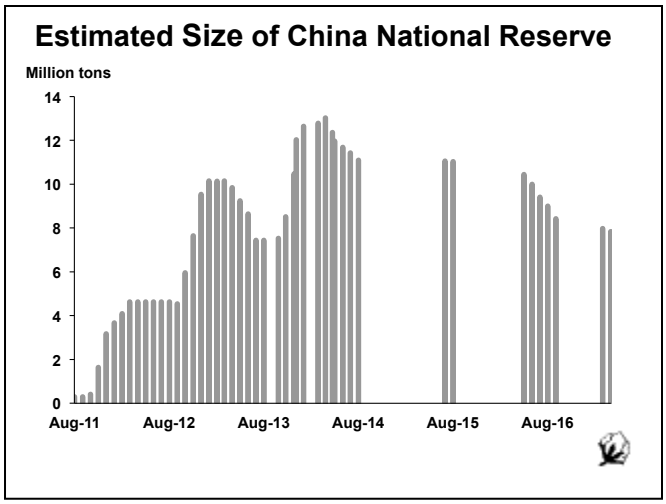
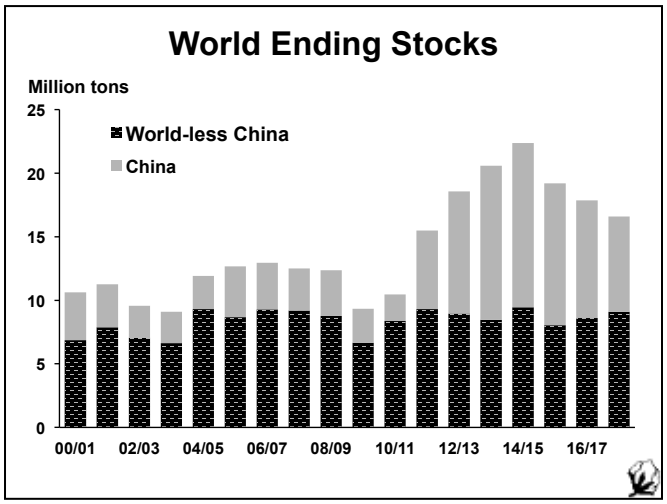




2017/18. Meanwhile, consumption in Pakistan is forecast to decline by 1% to 2.2 million tons and remain at that level in 2017/18.

During the first seven months of 2016/17, China has imported over 600,000 tons of cotton, up by 6% from the same period last season. Its main suppliers this season are the United States (38%), India (20%), and Australia (18%). Limited by import restrictions, China's total volume of imports is expected to rise by 2% to 983,000 tons in 2016/17. Imports by Bangladesh are expected to rise by 6% to 1.4 million tons, making it the world's largest importer, and in 2017/18 they may increase by 3% to 1.5 million tons. Vietnam's imports are projected to grow by 17% to 1.17 million tons in 2016/17 and by 6% to 1.24 million tons in 2017/18. Given its large exportable surplus and the high quality of its crop this year, the United States is expected to export 2.9 million tons of cotton in 2016/17, accounting for 37% of global exports. India's exports are projected to decline by 23% to 960,000 tons in 2016/17, partially due to the delay in harvesting earlier this season, while Australia's exports could increase by 30% to 800,000 tons due to a significantly larger crop.

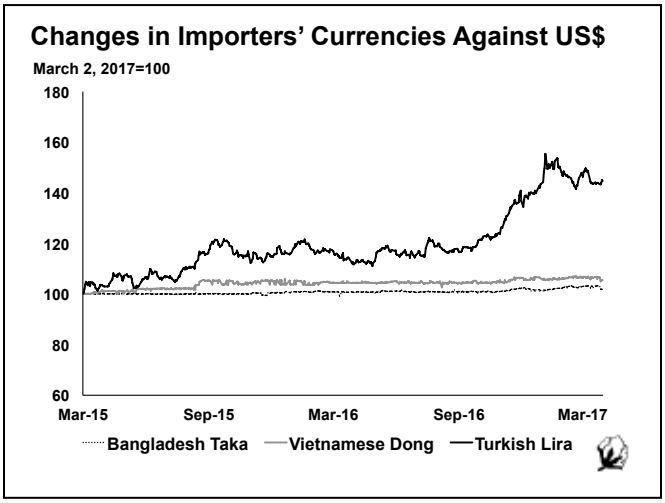
China began selling cotton from its national reserve last month as part of its efforts to reduce its large cotton stockpile. The total volume sold reached 450,000 tons as at the time of writing, which reduces the total volume in China's reserve to just under 8 million tons. Sales started strong during the first week with nearly all cotton on offer being purchased, but have lost steam since then. Last year, sales made from May through September 2016 reached over 2.6 million tons. While the pace of sales this year is slower, the auction period started two months earlier. If the level of sales that occurred last month is maintained, a similar volume of cotton may be sold this year as well, lowering the total volume held by the government to around 6 million tons at the end of August 2017. At the end of 2016/17, China's stocks are projected to fall by 17% to 9.3 million tons. World ending stocks in 2016/17 are expected to decline by 7% to 19.1 million tons.

IMPACT OF EXCHANGE RATES AND GOVERNMENT POLICIES ON COTTON PRICE TRENDS MARCH 2015 TO MARCH 2017

By Rebecca Pandolph, ICAC

After two seasons close to the long-term average of 70 cts/lb, international prices jumped to an average of 81 cts/lb for the first eight months of 2016/17. However, this rise in price has affected the cotton producing and consuming countries in different ways depending on their exchange rates, the volume of cotton they trade and government policies affecting the cotton trade. This paper will look at the impact of the increase in cotton prices, focusing on the largest importers and exporters.

Exchange rates affect cotton trade by determining the relationship between international and domestic prices. Movements in exchange rates directly affect prices of cotton in local currency terms: an appreciating dollar raises the price of cotton in international markets while a depreciating dollar lowers international cotton prices. The Cotlook A Index is the best available indicator of international cotton prices. Between 2011/12 and 2013/14, international cotton prices, as measured



by the Cotlook A Index, remained well above the long-term average of 70 cts/lb, averaging around 93 cts/lb. However, prices fell dramatically in 2014/15 as world stocks reached a record 22.4 million tons. In 2015/16, cotton prices dropped slightly, averaging 70 cts/lb, but quickly rose at the end of the season. For the first eight months of 2016/17, prices have remained high, averaging 81 cts/lb. Between March 2016 and March 2017, the Cotlook A Index increased by 33% from 65 cts/lb to 87 cts/lb.

When variations in the Cotlook A index are moderate over a given period, like in the past two years, exchange rate fluctuations play an important role in domestic price trends, either benefiting or hurting various players within the domestic cotton sector when compared to their counterparts in the rest of the world. Conversely, when the A Index moves significantly in one direction (up or down), such as at the end of the 2015/16 season, moderate variations in exchange rates do not significantly impact price trends in specific countries. In this situation, most countries around the world experience similar cotton price trends.

Small Cotton Trading Countries

Small cotton importing and exporting countries are price takers: variations in their purchases and sales of cotton do not significantly affect international prices. If these countries are not insulated from the rest of the world, for example via trade barriers and/or a system of price control, their internal cotton prices often move in parallel with international cotton prices. The trends in the A Index and exchange rates between March 2015 and March 2017 suggest that the stability between March 2015 and March 2016 followed by the rise from April 2016 through July 2016 was reflected in domestic prices of small trading countries, without great advantages or disadvantages to any.

Large Trading Countries and Countries with Trade Barriers and/or Price Controls

Countries that account for a large share of international cotton trade influence world cotton prices via their exchanges of cotton with the rest of the world. Price trends in their domestic markets do not necessarily reflect international price trends. Such countries include in particular the largest cotton importers, Bangladesh, Vietnam, and China (responsible for 47% of projected world imports in 2016/17) and the largest exporters, the United States and India (37% and 12% of projected world exports in 2016/17, respectively). Notably, the volume of cotton traded has spread out across more countries compared with previous seasons. In 2011/12, China dominated imports, accounting for 55% of global imports. Although its share declined in the following two seasons, it still accounted for 45% of world imports in 2012/13 and 35% in 2013/14. However, its share has fallen to just 12% in 2016/17. India accounted for 22% of global exports in 2011/12, 17% in 2012/13 and 22% in 2013/14. However, its share is expected to fall to 12% in 2016/17. In contrast, the United States accounted for 26% of all exports in 2011/12, but its share is likely to grow to 37% in 2016/17 due to a large exportable surplus and the exceptional quality of its current crop.

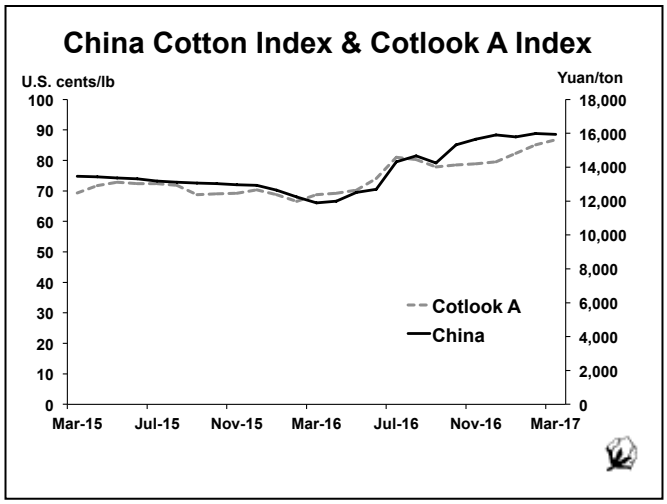
In addition, some governments can affect cotton prices in their domestic markets via various measures, partly insulating them from international influence. Such measures can include import or export restrictions, domestic price support, and systems with fixed farmers' prices. Examples of such countries are China, and countries in Africa's CFA zone.[1]

For large importers that are also large exporters of cotton yarn, exchange rates can be more complicated. A strong currency makes imports of raw material cheaper, but can make exports of the value-added product less competitive depending on the trading partners involved. Given that the cost of cotton lint is only a portion of the overall cost of yarn and even less so of downstream products, it may be preferable for a country to have a lower exchange rate in order to maintain a competitive advantage for its value-added products.

Bangladesh

Bangladesh became the world's largest importer in 2015/16 and is expected to maintain that position in 2016/17, accounting for 18% of global imports. In 2003, the Bangladesh taka switched to a free floating regime, though the central bank intervenes from time to time in order to avoid excessive volatility. Due to the stability of its currency over the last two years, the prices of cotton imports have followed movements of the Cotlook A Index. As a result, prices in terms of the Bangladesh taka did

1) The CFA zone includes: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo.



not rise further than the Cotlook A Index between March 2016 and March 2017. While its input costs may have been stable, textile exports from Bangladesh may not be as competitive compared to those countries, such as China, whose currencies depreciated during this time period.

Vietnam

In 2015/16, Vietnam became the world's second largest importer, accounting for 13% of global imports. The Vietnamese dong is loosely pegged to the U.S. dollar and, as a result, domestic prices of cotton follow the same trend as the Cotlook A Index. Since June 2014, however, the Vietnamese dong has been devalued five times. This has increased the price of cotton imports in terms of domestic currency. Despite higher costs for cotton, the devaluation of the dong is expected to keep Vietnam's exports of downstream products competitive in relation to other countries.

China

Since 2015, cotton price trends in China have been affected by the government's support price policy and import quotas. In an effort to reduce its large stockpile of cotton, the Chinese government has restricted its low duty cotton import quota to 894,000 tons from 2015 to 2017, which is the limit required by its agreement with the World Trade Organization. Any cotton imported above that volume is subject to a 40% tariff. As a result, China's imports have fallen significantly in 2015 and 2016.

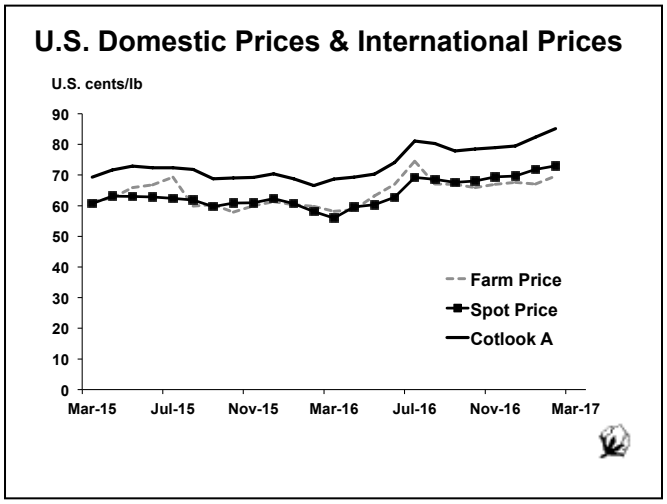
China's internal prices fell sharply in 2014 and 2015 due to the change in its cotton policy from direct purchases to a reduced production subsidy. The China Cotton Index[2] fell by 12%, from an average of 13,463 yuan/ton in March 2015 to 11,894 yuan/ton in March 2016. However, strong demand and limited supply due to both lower production and restrictions on imports in 2016 have pushed prices up. In March 2017, the China Cotton Index averaged 15,945 yuan per ton, which represents an increase of 34% compared to prices in March 2016, while the A Index rose by 33% during the same time period. However, the Chinese yuan lost 6% against the U.S. dollar during the same time period. Although domestic cotton prices rose slightly more than international prices, the depreciation of the yuan against the U.S. dollar during this period made imports as or more expensive than domestic cotton.

Turkey

Turkey accounts for around 11% of world imports and is the world's fourth largest importer. The United States is one of the main countries from which it buys cotton, though in April 2016 a 3% anti-dumping duty has been applied to cotton imports from that country. Compared to March 2015, the Turkish lira has strongly depreciated against the U.S. dollar, making cotton imports more expensive. As a result, imports by Turkey during the first half of 2016/17 have declined by 30% compared to the same period in the previous season. The appreciation of the U.S. dollar against the euro has also made it difficult for Turkish textile companies, which export mainly to countries in the euro zone, since the higher price of cotton and a weaker euro does not allow for much of an increase in sales prices.

United States

The U.S. spot price and monthly farm price generally followed a similar trend to the A Index for the period March 2015 through March 2017.[3] The U.S. spot price averaged 61 cts/lb from March 2015 through March 2016, ranging from 56 cts/lb to 62.9 cts/lb while the U.S. farm price averaged 62 cts/lb, ranging between 57.9 cts/lb and 69.3 cts/lb. Like the Cotlook A Index, both prices rose between April 2016 and



2) China Cotton Index represents the price level of Type 3128B, delivered to mill, on the day proceeding the date of publication. The CC Index includes the value added tax of 13% and the local transportation cost (delivered mill price).

3) Source: USDA, Agricultural Marketing Service, Cotton Price Statistics (in ERS, USDA, Cotton and Wool Outlook, various issues).

July 2016 before falling in August 2016, though the change was more sizeable for the U.S. farm price. The U.S. spot price rose from 59.7 cts/lb in April 2016 to 69.3 cts/lb in July 2016, and then declined by 1% to 68.6 cts/lb in August 2016. The U.S. farm price increased from 58.7 cts/lb in April 2016 to 74.5 cts/lb in July 2016. In August 2016, the U.S. farm price decreased by 10% to 67.1 cts/lb in contrast to the Cotlook A Index, which declined by 1% to 80.3 cts/lb. However, while both the U.S. spot price and A Index fell slightly in September 2016, the U.S. farm price remained stable. Over the next five months both the A Index and the U.S. spot price steadily rose, increasing by 8% and 7%, respectively. The U.S. farm price fluctuated, increasing in one month then decreasing in the next, but increasing overall by 6% between September 2016 and February 2017. Exports from the United States are projected to increase by 44% in 2016/17, which has led to strong domestic prices. Additionally, as the world's largest exporter, the strong demand for U.S. exports coupled with lower global supplies have contributed to the rise in international cotton prices in 2016/17.

India

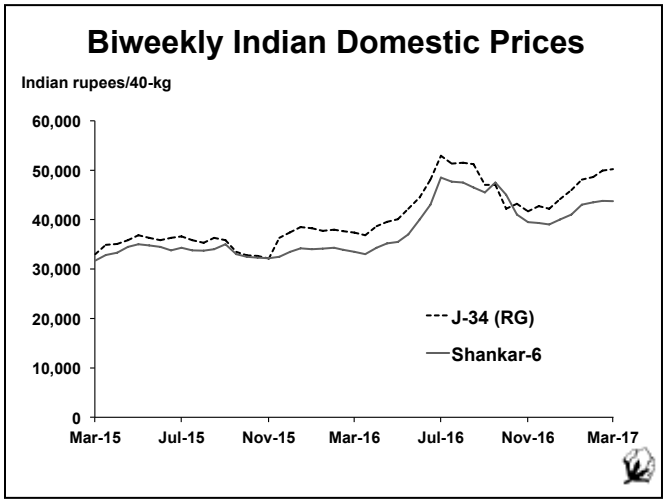
Following the same trend as the Cotlook A Index, the monthly average spot price of Shankar-6 cotton increased by 45% between March 2016 and July 2016 (from 33,250 rupees per candy to 48,100 rupees per candy).[4] Prices fell by 15% from September 2016 through December 2016 (from 46,500 rupees per candy to 39,500 rupees per candy). However, prices have risen in the first three months of 2017 due to the slower pace of arrivals, caused by delays in cash payments to farmers as a result of the demonetization policy and a tendency for some farmers to await a further rise in prices before selling their cotton. The monthly average spot price of Shankar-6 cotton rose by 8% from 33,250 rupees per candy in January 2017 to 40,500 rupees per candy in the first two weeks of March 2017.

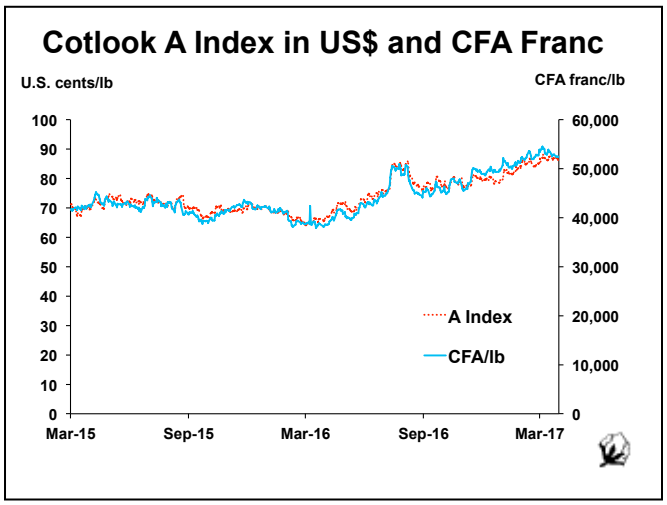
The overall increase in the spot price of Shankar-6 between March 2016 and March 2017 was 31%, slightly less than the increase in the Cotlook A Index during the same period. After steadily depreciating against the U.S. dollar from March 2015 until February 2016, the Indian rupee held steady through October 2016. However, after the introduction of the demonetization policy in mid-November, the Indian rupee quickly depreciated against the U.S. dollar through December 2016. Since early January 2017, the Indian rupee has steadily appreciated. The strengthening of its currency, combined with the rise in domestic prices since December 2016, will likely limit export growth. At the same time, imports are expected to be much more attractive than in previous seasons given their relative cheapness and the high cost of domestic cotton.

Africa-CFA Zone

Farmers' seedcotton prices in many of the cotton-producing African countries in the CFA franc zone are fixed at the beginning of the season by the cotton companies. At the end of the season, depending on the prices actually received by cotton companies and the trend in international prices, farmers sometimes obtain a premium over the initial price. The non-weighted average seedcotton price paid to farmers across eight countries in the CFA zone was 249 CFA francs/kg in 2016/17 (equivalent to 41 US cents/kg in March 2017). This was 4% higher than in 2015/16.

Unlike most other currencies used by cotton-trading countries, the CFA franc is tied to the euro. For over a decade, the euro has been much stronger than the U.S. dollar. This makes export prices from these countries less competitive and reduces their earnings when expressed in domestic currency. Cotton prices expressed in CFA francs have followed the same trend as the Cotlook A Index due to the fact that the U.S. dollar and euro have been close to parity for much of 2016. In April and May 2016, the euro and CFA franc appreciated slightly against the U.S. dollar, which reduced export earnings from sales made during that period. However, the dollar has gained against



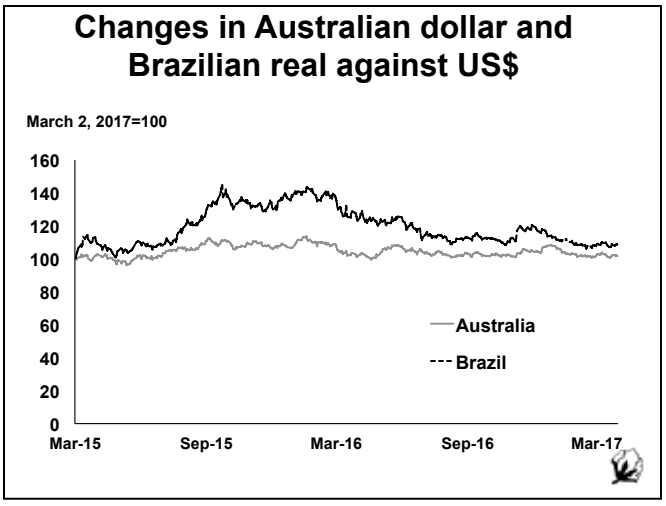


4) Prices reported by the Indian Cotton Federation.

the euro since mid-November 2016, making exports from the CFA zone this season much more competitive as well as increasing earnings expressed in domestic currency. Higher earnings this season may also allow the cotton companies to offer higher prices to farmers in 2017/18.

Australia and Brazil

Both Australia and Brazil are fairly large exporters, accounting for around 10% and 9%, respectively, of the world total. However, unlike most other exporters, the bulk of their harvest reaches the international market in June through August, since both are located in the Southern Hemisphere. As a result, competition from major exporters from the Northern Hemisphere is not as great. Thus, the impact of their respective exchange rates may not be as meaningful with regard to competition, but influences how much exporters earn in a particular season. This in turn can affect farmers' planting intentions. In June through August 2015, the Brazilian real depreciated against the U.S. dollar with the decline accelerating from mid-July. In June and July 2015, the Australian dollar was stable, but depreciated slightly from mid-July through August 2015. As a result, exports from both countries were competitively priced and earnings were increased. This helped to offset the lower prices of cotton during this time period. During the same period in the following year, however, international cotton prices rose significantly. During this time period, the Australian dollar remained stable while the Brazilian real appreciated slightly. Currently, the Australian dollar is around the same level as in March 2015. If the Cotlook A Index continues at elevated levels through the remainder of the 2016/17 season, export earnings for Australia will remain high. After depreciating greatly in September 2015 to March 2016, the Brazilian real has slowly gained against the U.S. dollar and is currently near the same level as in March 2015. Like Australia, export earnings are expected to be high.



THE COTTON INDUSTRY IN KENYA

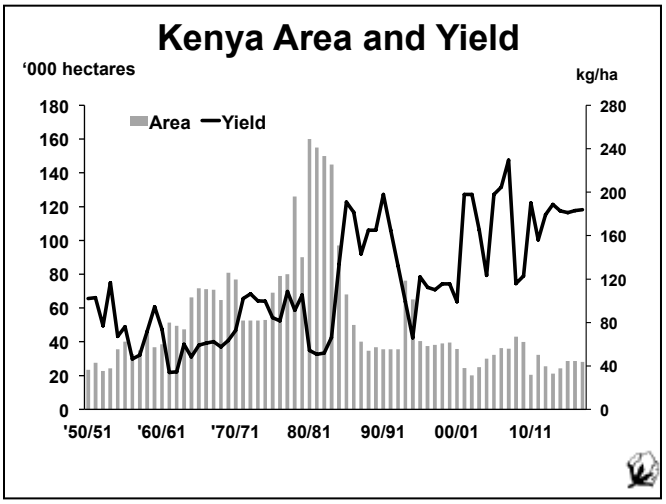
By Rebecca Pandolph, ICAC

Kenya is one of the few African countries that has a long value chain from cotton production to apparel. The Kenyan government has identified fiber crops, particularly cotton and sisal, as a key sub-sector for economic development, especially in arid and semi-arid areas of the country. These crops have the potential to reduce extreme poverty, food insecurity and unemployment due to their multiplier effect through upstream and downstream links to the industry's players, who include farmers, processors, traders, transporters and input suppliers. This paper will examine the different components of the cotton value chain in Kenya, the challenges they face, and the efforts undertaken by the government to overcome these challenges.

Historical Background

Cotton cultivation in Kenya started in 1902, coinciding with the construction of the Kenya/Uganda railway, but attempts to develop cotton production before 1923 were unsuccessful. The lack of success was due to low and highly variable yields, high incidence of pests and diseases and a wide range of planting dates. In the early stages, cotton production and marketing activities were handled by private companies under the colonial government, mainly the British Cotton Grower's Association and, later in the 1940s, the Uganda Lint Marketing Board.

In 1955, the Colonial Government established the Cotton Lint and Seed Marketing Board (CL&SMB) to regulate and promote cotton production. The CL&SMB was established under Ordinance No. 50 of 1954, which was later replaced



by the Cotton Act Cap 335. The main objective of the CL&SMB was to intervene in the activities related to cotton processing and marketing in Kenya. It provided financing for cotton research, extension and seed supply. The Cotton Act Cap 334 concurrently governed cotton production. The two Acts were repealed in 1988 by the Cotton Act Cap 355, which transformed the CL&SMB into the Cotton Board of Kenya (CBK). The Cotton Act Cap 355 was amended in 2006, establishing the Cotton Development Authority (CODA). In 2014, the CODA was merged with the Kenya Sisal Board to form the Fibre Crops Directorate under the Agriculture, Fisheries and Food Authority.

Research

Before the 1940s, cotton research was conducted by the Cotton Research Corporation (CRC), then known as the Imperial Cotton Growing Corporation. Around 1950, the CRC, in collaboration with the CL&SMB, started research activities in several sites in Western Kenya and in the Coast region. Cotton research continued under the CRC until 1975, when it was handed over to the Ministry of Agriculture. In 1988 cotton research activities were transferred to the Kenya Agricultural Research Institute (KARI). In 2014, under the Kenya Agricultural and Livestock Research Act of 2013, KARI was merged with the Coffee Research Foundation, the Tea Research Foundation and the Kenya Sugar Research Foundation to form the Kenya Agricultural and Livestock Research Organization (Kalro). Kalro was formed to increase efficiency in resource use and coordination of research activities. The Industrial Crops Research Institute, a semi-autonomous institute under Kalro, was created to support commercialization of industrial crops, including cotton, through focused and efficient research. The headquarters is located in Mtwapa, with sub-centers in Mtwapa, Mwea and Molo.

Cotton research in Kenya investigates challenges faced in the fields of agronomy, quality, disease and pest control, and processing seedcotton into fiber and by-products. Low productivity is an ongoing concern and research into improving yields includes establishing a certified seed program, reviving irrigation schemes, and commercialization of biotechnology.

Three new high-yielding cotton varieties have successfully gone through national trials, including one variety from Amiran Kenya that has been approved for semi-commercialization. In October 2016, 578 acres of this variety will be planted in the Bura irrigation scheme. In 2015, the Directorate helped Karlo to produce 9,000 tons of certified cotton seed (KSA 81M), which will be multiplied in Isolo County in 2016/17 with the goal of producing 2,000 tons of seed cotton. The Fibre Crop Directorate has also initiated a partnership with Kalro, the Kenya Seed Company and National Irrigation Board (NIB) to do seed bulking, and in 2015, 10 tons were produced. Once a suficient quantity of certified seed is available to farmers, the government will ensure that ginners do not provide uncertified seed to farmers.

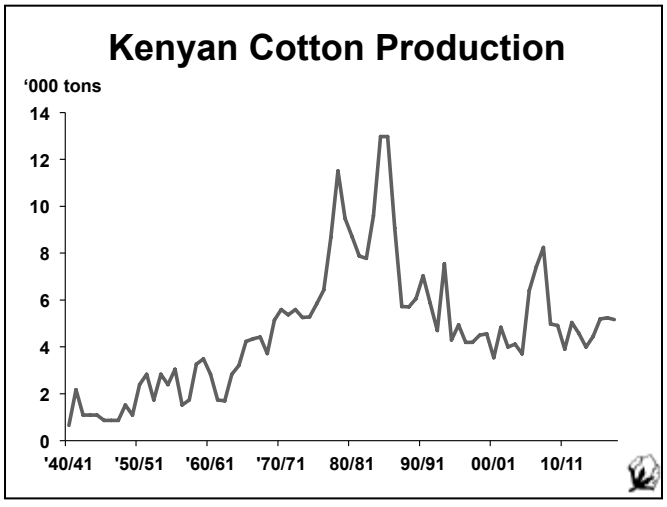
Cotton Production

Approximately 39,000 farmers currently produce cotton in Kenya. Including family and hired labor as well as cotton-related industries, about 780,000 persons are employed in the cotton sector. Most cotton is grown by small-scale farmers on holdings of less than one hectare, in arid and semi-arid areas where economic activities are limited and food crops do not perform well. There is little mechanization to cotton production due to the small size of farms and uneven topography. The main growing regions are in the Rift Valley, Eastern, Central, Coast, and Nyanza zones. Cotton is currently produced as a cash crop. It is a source of livelihood for farmers in arid and semi-arid lands, which helps to reduce poverty and to promote food security.

Between 1965/66 and 1978/79, cotton production increased from 4,500 to 11,700 tons of lint. It declined to 7,800 tons in 1982/83 due to delayed payments to farmers. Production fell further in 1983/84 to 5,400 tons as a result of a severe drought compounded by delayed payments to farmers. In 1976/77, more than half of Kenya's cotton was grown in the Western province and less than one-third in Eastern and Central provinces.

In 1984/85 production reached a record of 13,000 tons due to the availability of free seeds, good weather and timely payments to farmers by the CL&SMB (prior to 1983/84, the CL&SMB had taken over from the cooperative societies the responsibility of paying farmers in the areas worst affected by payment delays). Production also shifted from the Western Province to the Central and Eastern provinces in 1984/85. This change was attributed to factors related to farmer payment records, population pressure, size of farm holdings, agronomic practices and competition with food crops and alternative cash crops in the respective regions.

In 1985/86, production was maintained at 13,000 tons, but declined over the next 15 years. Between 2001/02 and 2005/06, cotton area was further reduced to 30,000 hectares or below, with annual production averaging 5,000 tons. The cotton area



increased to 36,000 hectares, and output reached 7,000 tons in 2006/07 due to government efforts to revitalize the sector. Acreage was maintained in 2007/08, and production increased to 8,000 tons as the average yield improved. Unfavorable weather and poor access to inputs led to a significant decrease in yields in 2008/09, and production declined by 40% to 5,000 tons. Since then production has averaged around 5,000 tons a year with area ranging between 20-30,000 hectares.

The difficulties currently faced by cotton producers include:

- High input costs, particularly for pesticide
- Low yields due to lack of certified seeds, with farmers using seeds left from ginning
- Lack of technology adoption
- Low and variable prices, particularly compared to competing crops

Efforts underway to solve some of these problems:

- The government encourages farmers to adopt integrated pest management and to use contracts to combat high production costs.
- Biotech cotton was given approval by Kenya's National Bio-Safety Committee in 2003 and the importation of biotech cotton seeds from Monsanto was permitted for trials. The completion of the trials have provided sufficient data to allow for approvals of further study before commercialization. Bt cotton is expected to increase yields while reducing the cost of pesticide sprays.
- The government is reviving its irrigation schemes, which in the past produced 40% of national output and greatly improved yields. Over 800 hectares were planted with cotton in 2012/13 in the Bura and Hola irrigation schemes.

Cotton Ginning

There are currently 23 ginneries in Kenya, but only seven are operational. These gins are located in the coastal (3 gins), central (3 gins) and rift valley (1 gin) regions. One gin in the western region is currently in the process of rehabilitation. The total installed capacity of the ginneries is 140,000 185-kg bales (26,000 tons), and is 70,000 185-kg bales (13,000 tons) for the operational gins. Three ginneries are owned by cotton cooperative societies that have in the past been leased to private operators.

Most of the ginneries were set up in the 1930s, while a few are more modern; all are equipped principally with roller gins. While roller ginning is appropriate for Kenyan seedcotton (medium to medium-long fibers), it is a relatively slower technology that prolongs the ginning season. Currently most ginneries have high operational costs (particularly electricity), low efficiency and low ginning outturn ratios. The average ginning outturn achieved by most ginneries is 33% against a potential of 40%. The government is promoting a public-private partnership to rehabilitate farmer-owned facilities in Homabay and Luanda with support from county governments.

Kenya Gins

Region	Total Number of Gins	Operational Gins	Name(s)
Coast	5	3	Voi, Mpeketoni, Malindi
Western	5	0	Luanda under rehabilitation
Nyanza	6	0	
Eastern	5	3	Kitui, Makueni, Meru
Central	1	0	
Rift Valley	1	1	Salawa (Rift Valley Products)

The government is also considering revising tariffs on electricity for the ginning sector.

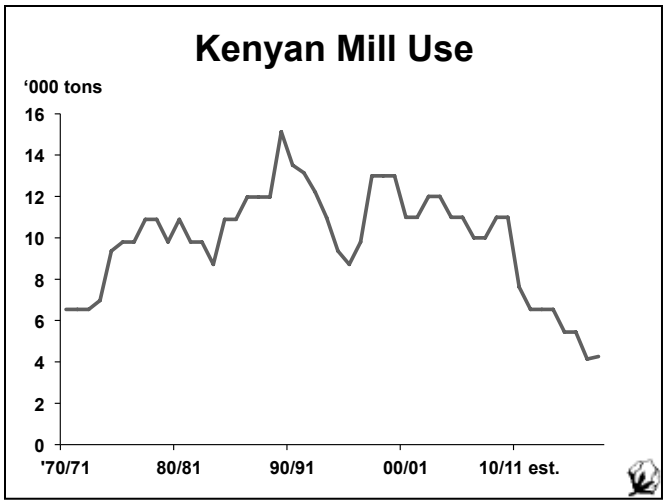
Cotton Marketing

Kenya's cotton market has been fully liberalized and cotton marketing is now wholly in the hands of the private sector. The Fibre Crop Directorate is the regulatory body in charge of coordinating and regulating cotton marketing to promote transparency. All seedcotton buyers are registered with the Directorate to improve transparency with regard to seed cotton purchases.

Cotton marketing faces several difficulties, including the collapse of cotton cooperative unions/societies and organized farmer groups, resulting in farmers with little bargaining power and no economies of scale. Farmers are being encouraged to form farmer organizations and cooperative societies in order to undertake marketing activities on behalf of members. In 2007/08, the government waived non-performing loans that farmer cooperatives owed to the Cooperative Bank of Kenya. However, the farmer cooperatives remain weak.

Low and unpredictable prices have also proved a challenge that has led to declining production. This is exacerbated by the fact that high capital costs incurred by ginneries or other buyers of seedcotton often lead to delayed and/or irregular payments to farmers. Currently, the Fibre Crop Directorate oversees negotiations on setting a price floor for cotton among farmers, ginners, and textile companies. The government has been working with stakeholders to use contracts between all three groups of stakeholders in order to spread risks along the value chain. Spinning mills have been receptive and are willing to provide seed to farmers to ensure that the cotton produced has the desired characteristics. The government is also examining proposals to establish a price stabilization or revolving fund.

Kenya, assisted by ICAC as a supervisory body, launched a project in 2012 to develop its national cotton classing system. A grant for capacity building and system institutionalization was received from the Common Fund for Commodities (CFC),



Operational Spinning Mills

Factory	Town	Ownership
Thika Cloths Mills	Thika	Private
Rift Valley Textile Mills	Eldoret	Moi University
Sun Flag Mills	Nairobi	Private
African Cotton Mills	Mombasa	Private

with co-financing from the OPEC Fund for International Development. The Kenyan government provided the necessary infrastructure, including buildings, high volume instrument (HVI) machines and ambient air management system (AAMS), as in-kind contributions. The project established a functioning national cotton classing system in Kenya that covers all cotton production through 100% bale sampling and HVI testing. The objective of the project was to allow ginners to negotiate better prices for their cotton lint based on quality parameters, which in turn would allow them to pay better prices to farmers. Currently, two of the spinning mills regularly use HVI classing data, while two others are still learning to use it. The two mills that rely on the HVI data have also recently renovated their facilities with new equipment that allows them to better use the available data. The HVI facility is also used to check the characteristics of imported cotton lint.

Textile and Apparel Manufacture

With market liberalization in the early 1990s, a decline occurred in the performance of the cotton textile industry due to an influx of cheap textile products and garments from other countries (new and second-hand), high production costs, and the usage of obsolete technology. Local textile manufacturers supply only 45% of Kenyan textile market requirements, while imported new and used clothes account for much of the rest of the market. The used clothing market is particularly challenging because not only are these articles generally cheaper but the quality is better than for new imports. Most textile mills currently operate below capacity, while others have closed down. Currently four mills operate in Kenya, one of which is owned by Moi University. Domestic spinning mills use both open end and ring spinning. High costs for electricity are a specific problem. In an effort to curb costs, some textile factories are locating near energy plants in order to use the steam by-product from energy generation in their production process.

The Ministry of Industrialization and Enterprise Development has developed a strategic, comprehensive and integrated plan to guide its industrialization. It focuses on a core number of sectors that are considered to provide significant opportunities and have a competitive advantage, including apparel and textiles. Textiles have been a major contributor to Kenya's industrial export growth. While accounting for around 0.6% of GDP, textiles provide employment to around 66,000 people, or 3% of formal employment. Kenya's labor costs are lower than many Asian countries and it has preferential trade access to global markets, creating a cost advantage. However, there is currently insufficient skilled labor outside of basic apparel, and the time required for products to reach consuming markets is often lengthier than for Asia. Kenya is also working with India through the Supporting India Trade and Investment in Africa (SITA) program, to train workers on modern hand looms. Kenya has focused on hand looms in order to develop its small and medium enterprises, which would help to alleviate poverty. In addition, these products can also be exported to the United States through the African Growth and Opportunity Act (AGOA). Once training is completed, they will work to increase production volume in order to make exports feasible. The Kenyan government is also working with India to import microspinners and train workers in order to create small batches for the hand looms, since the domestic spinning mills currently in operation do not usually sell in small quantities.

Kenya was authorized to export textiles to the U.S. market under AGOA in January 2001, making it the first Sub-Saharan African country to be accredited as a beneficiary. AGOA enhances market access to the United States for qualifying sub-Saharan African countries, which requires that each country must be working to improve its rule of law, human rights, and respect for core labor standards. In June 2015, AGOA was extended for the second time and will remain in force for a further ten years to 2025. AGOA extends duty-free and quota-free benefits to imports of a number of apparel items, and textile products used to make those goods, produced in eligible countries, which include Kenya. The enactment of AGOA opened up an opportunity for growth and revival of the textile sector in Kenya. AGOA benefits brought

foreign investors into the country particularly in the Export Processing Zones (EPZs) to manufacture apparel for export to the U.S. market.

The Export Processing Zone Authority oversees and promotes EPZs in Kenya, in which numerous large-scale and micro garment manufacturers operate. EPZs offer incentives that lower operational costs and quick installation. These incentives include: tax holidays, stamp duty exemption, 100% investment deduction over 20 years for building and machinery, unrestricted investment by foreigners, and on-site documentation and inspection by customs officials. Garments and textiles is one of the sectors that the EPZ Authority considers particularly desirable. Around USD 380 million are earned annually from apparel exports. However, apparel firms within the EPZs rely heavily on imports of fabric and accessories from other regions, particularly Asia, which costs around USD 220 million in a year. This brings the net gain from EPZs close to USD 160 million. In the long term, the government will attempt to bring production of apparel inputs back into Kenya or the East African region.

ICAC Expectations

The Secretariat is forecasting increases in cotton area and yield in Kenya in coming seasons. Price risk management through contracts, coupled with better financing for inputs or free provision of inputs, will likely encourage farmers to expand cotton area. However, because cotton is grown in marginal areas and primarily under rainfed conditions, the yield is expected to grow at a slower rate than the planted area. Widespread use of certified seed and expansion of irrigation scheme usage will help to boost cotton yields in Kenya. Kenya's cotton production is projected to double to 6,500 tons by 2020. Mill use is forecast to double to 8,000 tons by 2020 if government support is continued.

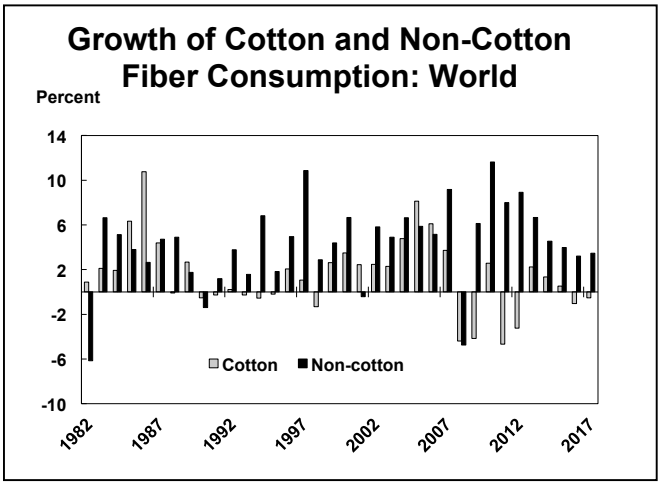
TEXTILE FIBER DEMAND OUTLOOK

Adapted from the October 2016 *World Textile Demand*[5], Lorena Ruiz, Economist, ICAC

Eight years after the financial crisis, global economic activity is starting to show signs of modest recovery, though the international outlook remains uncertain. The world economic recovery has been dampened by several major headwinds, such as: macroeconomic uncertainties; declining trade flows; rising volatility in exchange rates and capital flows; stagnant investment and diminishing productivity growth; and a continued disconnect between finance and the real sector activities.[6] In January 2017, the International Monetary Fund (IMF) maintained its predictions for economic growth in 2017 of a modest 3.4% and projects that the global economy will expand by 3.6% in 2018.[7] Prospects for a strengthening global economy relies on projected growth in emerging market and developing economies as current macroeconomic difficulties are resolved in these markets. However, there are medium term risks that may limit economic growth. Notably, the global economic forecast remains susceptible to a number of geopolitical and other noneconomic factors, which means that weaker growth scenarios are possible. In addition, several emerging market economies have downside risks from high corporate debt, declining profitability, weak bank balance sheets and weak policy support that may limit economic growth in the next two years.

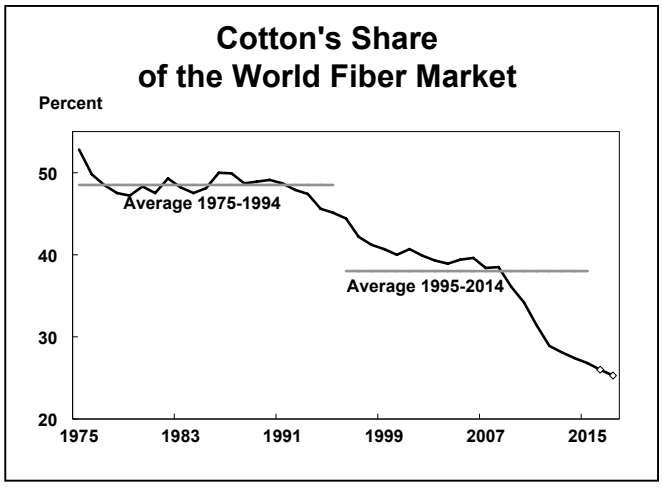
Textile Demand

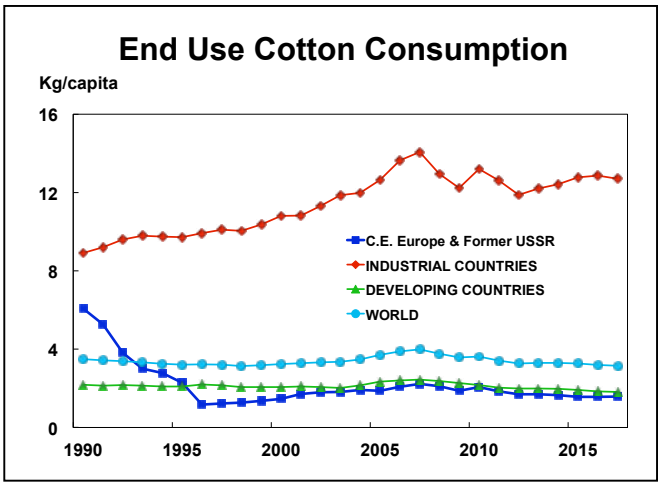
Based on current projections of world economic growth,

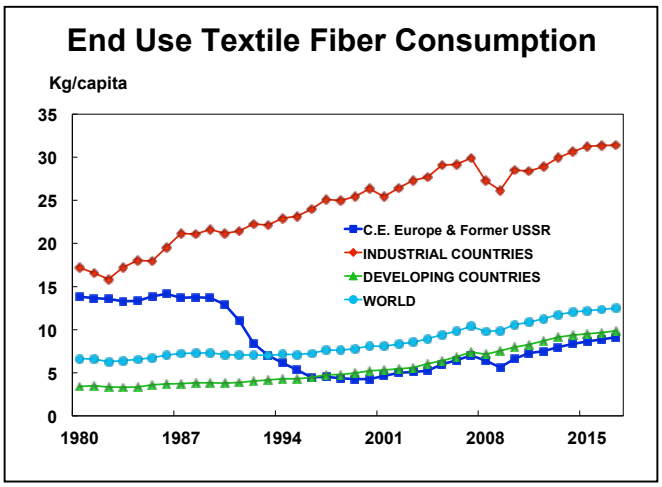


along with a 1.1% annual increase in population, world textile demand is estimated at 91.7 million tons in 2016 and is expected to rise to 93.9 million tons in 2017. World textile fiber consumption continued to increase for the seventh consecutive year and reached 89.8 million tons in 2015, 3% higher than in 2014. The growth was driven by the increase of non-cotton goods, which rose from 63.2 million tons in 2014 to 65.8 million tons in 2015. Demand for cotton products experienced a marginal increase of 0.5% and reached 24 million tons in 2015. Although textile demand has continued to expand since

5) This report will be updated in May 2017 and will be available for purchase at the ICAC bookstore: https://www.icac.org/login?url=%2Fsearchpubresults.php.
6) World Economic Situation and Prospects 2017. United Nations https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/2017wesp_full_en.pdf.
7) *World Economic Outlook Update: A Shifting Global Economic Landscape.* International Monetary Fund. January 2017. https://www.imf.org/external/pubs/ft/weo/2017/update/01/.







the Great Recession, the growth rate decreased from 3.7% in 2014 to 3% in 2015. Longer-term projections suggest that world textile fiber consumption could expand at an average annual rate of 3.2% to reach about 119.2 million tons by 2025. World cotton consumption is projected to expand at a lower annual rate of 0.6% and reach 24.9 million tons in 2025.

The growth of textile demand in developing countries accounted for 78% of additional demand at the world level, *i.e.* 2.1 million tons. In particular, textile consumption increased by almost 185,000 tons in Africa (6.6%). The largest increase in textile demand in volume terms was registered in developing Asia, which grew by 4% (1.8 million tons). Central and Eastern Europe and Former USSR (CEEU), the Middle East and Europe (MEE), and Latin America and the Caribbean (LAC) registered increases of 3.7%, 2.1% and 0.8%, respectively.

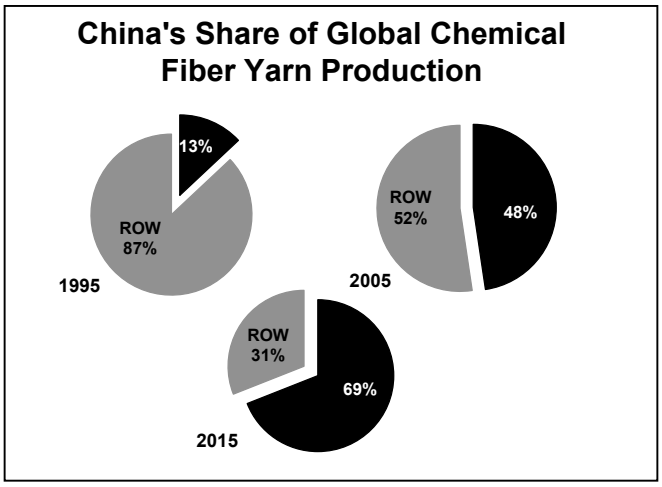
Economic expansion in developed and developing countries plays a crucial role in the demand for cotton. The percentage change in the demand for cotton derived from a percentage change in income is higher in developed countries, where consumer preferences for fiber are more important. In developing and CEEU countries, economic growth tends to mainly produce gains in chemical fiber consumption. A plausible explanation is that affordability is more important than the quality attributes of garments in these locations.

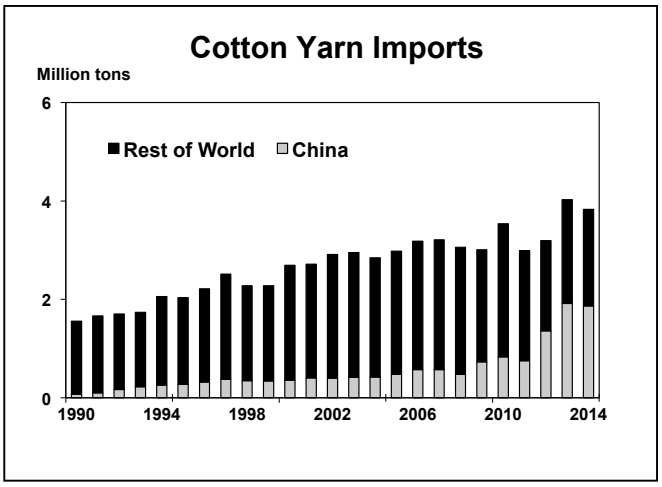
Over the last decade, the market share of cotton in total textile consumption has varied in all regions. While market share in developing countries declined from 35% in 2006 to 20% in 2015, the market share in industrial countries has remained above 40%. In the CEEU countries the trend is the same as in developing countries and the market share of cotton in total textile consumption has decreased by 14 percentage points, from 32% to 18%, during the same period. Developed countries accounted for 49% of all cotton products consumed in 2015, followed by developing countries with a 48% share. The CEEU countries account for the remaining 3%.

Fiber and Yarn Markets

World cotton mill use increased for the second consecutive year by 0.5% to 24.1 million tons in 2015. This was the third consecutive year of increased cotton consumption, which has risen by 963,000 tons since 2012. The increase was spurred by industrial countries, which consumed an additional 291,000 tons. China continues to lose market share, decreasing from 40.3% in 2007 to 38.5% in 2011 and 30.8% in 2015. Cotton consumption in developing countries and central and Eastern Europe and the former USSR decreased marginally and reached a total of 11.6 million and 0.64 million tons respectively. Based on weaker-than-expected improvement in global economic activity and increases in cotton prices, mill use of cotton is expected to shrink by 1% to 23.8 million tons in 2016, after three seasons of consumption growth. Faster growth in global cotton mill use has been limited by competition for fiber share in many apparel products.

World chemical fiber consumption increased by 4.1%, the lowest rate since 2008, and reached 64.6 million tons in 2015. Non-cellulosic fiber consumption accounted for most of the increase, as it represents 92% of chemical fiber consumption. As consumption of chemical fibers continues to expand at a higher rate than that of cotton, the market share of cotton dropped by 0.7 percentage points to 26.8% in 2015. Cotton's share in textile fiber end use has decreased every year since





2009. According to the ICAC Textile Demand Model,[8] the demand for cotton and non-cotton textile fibers is more sensitive to changes in income than to changes in relative prices, *i.e.* a 1% increase in GDP per capita generates, on average, a higher increase in demand for each fiber than a 1% decline in (relative) prices. Furthermore, the sensitivity of world non-cotton fiber demand to income is significantly higher than the corresponding sensitivity of world cotton demand, implying that a given increase in GDP per capita results, on average, in a higher proportional increase in the demand for non-cotton fibers than in the demand for cotton.

World production of chemical fiber yarn increased for the seventh consecutive year and reached 64.6 million tons in 2015. Filament fiber yarn production registered the highest growth with 4.6%, while staple fibers increased by 3.1%. In the past three decades, there has been a continued shift in the geographic location of the world chemical fiber yarn production. Several factors, such as labor and energy costs, as well as technological advances, have led the production of chemical fiber yarn to move away from traditional production centers. The United States, Western Europe and Japan have been affected by the loss of their traditional export markets and a significant increase of imported products, mainly from East Asian countries. In 1985, the world's leading producing countries were the U.S.A., with 3.1 million tons, followed by Japan (1.7 million tons), Germany (1.2 million tons), Taiwan (1.1 million tons), and China (0.9 million tons). Together, these five countries accounted for almost 53% of global production of chemical yarn.

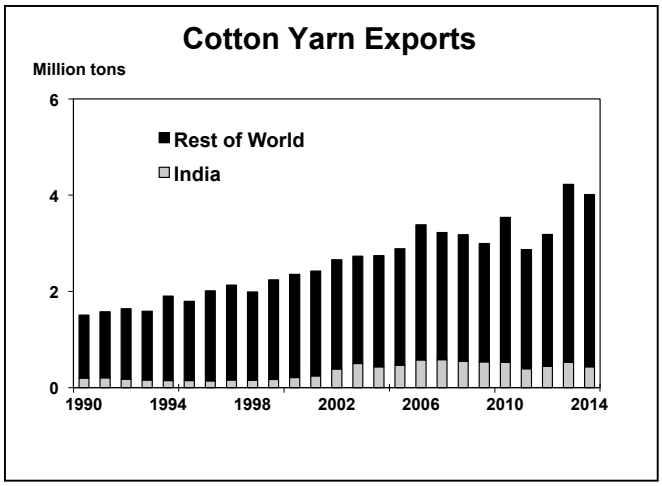
By 1995 the U.S.A had increased its production by almost 350,000 tons and remained the world's largest producer of chemical fiber yarn. At the same time, China almost tripled its production and surpassed Japan as the world's second largest producer. Taiwan followed the same trend and doubled its production to 2.6 million tons. The Republic of Korea became the fourth largest producer, with a total of 1.9 million tons, while Japan's production dropped by 8% (to 134,000 tons) and ranked fifth. The market share of the top five countries grew by six percentage points, accounting for 58.7% of the total.

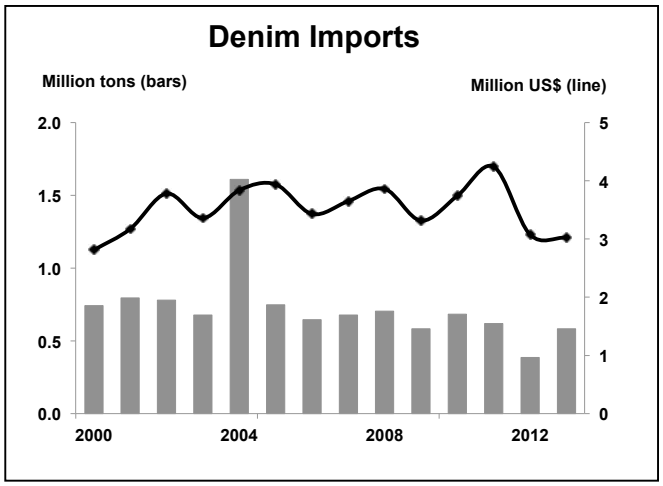
In 1997, China became the largest producer of chemical fiber yarn and its annual production has increased exponentially, by 14%, since then. Consequently, the average annual increase in chemical fiber yarn production in China was 1.92 million tons between 1997 and 2015. As chemical fiber yarn production is dominated by China, any slowdown in that country's economy may affect the rate of global synthetic fiber growth. Although China continues to have the fastest growth of chemical yarn production in the world, there is evidence that the pace is slowing due to rising labor costs, weak demand and excess production capacity. ICAC estimates that world chemical fiber yarn production increased by 3.2% in 2016 and will increase by 3.5% in 2017.

Yarn and Fabric Trade

Global trade in cotton yarn has been negatively affected by the sharp fall in demand from China, weak global economic growth, and low polyester prices. In 2014, world cotton yarn imports decreased by 5%, after two consecutive years of increases, and reached a total of about 3.8 million tons. China, the world's largest cotton consumer, was the main driver behind the decline as the country imported 3% less cotton yarn than in 2013. Despite the decline, China remained the leading cotton yarn importer and its share in these imports increased slightly, from 47.7% in 2013 to 48.7% in 2014. India continued to be the main exporter of cotton yarn in the world in 2014 with 1.26 million tons. China, Bangladesh and Egypt were the main destinations of India's exports, accounting for 42%, 13% and 5% respectively. Yarn exports in Vietnam have increased rapidly in the past seven years, growing from

8) The ICAC Textile Demand Model is a collection of equations that rest on basic principles of consumer economics and make textile consumption dependent upon income, population and prices. The textile projections are prepared by the Secretariat on the basis of projections of world economic activity and population growth developed by other international organizations.

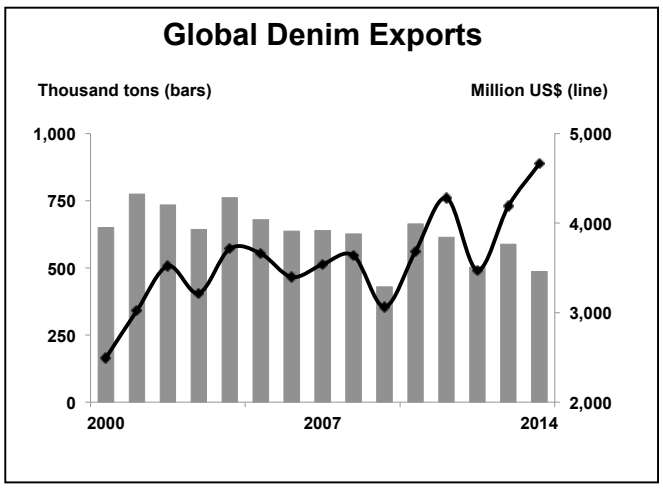




83,000 tons in 2008 to 429,000 tons in 2014, strengthening its position in the overall structure of export destinations.

Since 2013, the *World Textile Demand* report incorporates data on the value of cotton fabric[9] imports and exports by country. Although import and export data are not necessarily reconcilable at the world level because of lack of data for some countries, timing issues and estimation errors, both import and export data show that the average world price of traded cotton fabric decreased in 2013. According to import data, the average price of cotton fabric in 2014 amounted to US$8.2/kg, while the average price calculated from export data amounted to US$12.1/kg. Hong Kong (167,400 tons), Egypt (153,000 tons), Vietnam (118,000 tons), Italy (107,000 tons) and China (101,200 tons) were the main importers of cotton fabric, accounting for approximately 30.5% of the total. Despite a reduction of 41% in the volume of cotton fabric exported in 2014, China remained the largest exporter of cotton fabric in the world, accounting for 40% of global exports. The second largest exporter was Pakistan (259,300 tons), followed by Hong Kong (161,300 tons), India (133,900 tons) and Turkey (109,500 tons). These five countries accounted for almost 67% of cotton fabric exports.

Denim is one of the most traditional cotton fabrics. It increased its presence worldwide as societies became more accepting of its relaxed look, comfort and ease of wear, and as open end rotor technology facilitated productivity gains in spinning yarn for denim. In recent years, the demand for denim has been facing new challenges and pressures. The use of athletic apparel for activities other than exercise is rapidly increasing and consumers, especially women, are seeking casual and versatile athletic clothing that can be worn throughout the day for several activities, including work. Moreover, high cotton prices led manufacturers to reduce cotton content or replace it with polyester.



According to the latest data, the trade of denim fluctuated between 442,000 and 760,000 tons per year between 2005 and 2014, and averaged around 610,000 tons. In 2014, the largest importing countries by volume were Egypt (130,000 tons), Hong Kong (83,000 tons), Turkey (39,300 tons), Mexico (27,600 tons) and Colombia (25,200 tons). The market share of denim in cotton fabric imports by volume has ranged from 20% to 23% over the last five years. On the export side, the annual trade of denim fluctuated between 430,000 and 700,000 tons, and averaged 590,000 tons between 2005 and 2014. Despite a decline in denim exports by China of 47% (to 137,000 tons) in 2014, China remains the largest exporter of denim in the world. Hong Kong, Bangladesh, Vietnam, Mexico, and Colombia were the major markets for denim fabric exports from China, accounting for approximately 56% of the total.

9) Cotton fabric refers to woven cotton fabrics with a cotton content of at least 50%, classified as HS codes 5208, 5209, 5210, 5211 and 5212.

2016/17 SUPPLY AND USE OF COTTON BY COUNTRY April 3, 2017

	AREA	YIELD	PROD	BEG STKS	IMPORTS	CONS	EXPORTS	END STKS	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tons						Ratio	Ratio
CANADA				0	0	0		0	0.11	0.11
CUBA	4	269	1	1	2	3		1	0.19	0.19
DOM. REP.					1	1		0	0.47	0.47
MEXICO	95	1,559	148	161	298	418	28	161	0.36	0.38
USA	3,854	973	3,751	827	2	718	2,874	980	0.27	1.36
N. America	**3,958**	**986**	**3,902**	**990**	**304**	**1,142**	**2,902**	**1,142**	**0.28**	**1.00**
EL SALVADOR				9	34	34		9	0.27	0.27
GUATEMALA				7	24	24		7	0.29	0.29
HONDURAS	0	318	0	0		0		0		
C. America	**2**	**512**	**1**	**16**	**58**	**59**	**0**	**16**	**0.28**	**0.28**
ARGENTINA	300	522	157	312	3	141	60	271	1.35	1.92
BOLIVIA	4	639	3	2	0	3	0	2	0.50	0.53
BRAZIL	926	1,559	1,443	795	44	719	610	953	0.72	1.33
CHILE				0	0	0		0	0.12	0.12
COLOMBIA	26	816	21	14	35	56		14	0.25	0.25
ECUADOR	1	439	1	3	10	11		3	0.25	0.25
PARAGUAY	10	450	5	3	2	3	2	4	0.69	1.23
PERU	27	814	22	16	39	61	1	16	0.26	0.27
URUGUAY				0		0		0	0.06	0.06
VENEZUELA	15	390	6	4	4	10		3	0.30	0.30
S. America	**1,309**	**1,265**	**1,656**	**1,149**	**138**	**1,005**	**673**	**1,266**	**0.75**	**1.26**
ALGERIA				1	2	2		1	0.23	0.23
EGYPT	55	858	47	75	101	126	29	67	0.43	0.53
MOROCCO				4	15	15		4	0.24	0.24
SUDAN	49	487	24	20		18	13	13	0.41	0.72
TUNISIA				3	12	12		3	0.22	0.22
N. Africa	**104**	**683**	**71**	**101**	**130**	**174**	**43**	**87**	**0.40**	**0.50**
BENIN	392	385	151	58		4	137	68	0.48	16.96
BURKINA FASO	740	385	285	122		4	261	143	0.54	35.63
CAMEROON	224	455	102	64		2	111	53	0.47	27.91
CENT. AFR. REP.	32	216	7	2			7	3	0.42	
CHAD	298	239	71	23		1	48	46	0.94	91.30
COTE D'IVOIRE	345	432	149	47		2	134	60	0.44	28.93
GUINEA	12	276	3	1			3	1	0.40	
MADAGASCAR				3				3		
MALI	656	398	261	104		3	247	115	0.46	38.27
NIGER	5	447	2	0		1	1	0	0.11	0.25
SENEGAL	20	355	7	1		1	5	3	0.41	3.23
TOGO	133	241	32	11			31	11	0.36	
F. Africa	**2,856**	**375**	**1,070**	**438**		**17**	**986**	**505**	**0.50**	**29.35**
ANGOLA	3	302	1	0		1	0	0	0.33	0.48
ETHIOPIA	69	560	39	19	13	51	0	19	0.36	0.36
GHANA	15	370	6	1		1	4	1	0.26	1.11
KENYA	21	181	4	1	0	4		1	0.17	0.17
MALAWI	134	240	32	22		3	29	23	0.72	7.61
MOZAMBIQUE	133	170	23	26			29	20	0.68	
NIGERIA	253	202	51	22	1	25	31	18	0.32	0.71
SOUTH AFRICA	9	1,195	10	9	17	20	7	9	0.35	0.48
TANZANIA	315	217	68	87		39	53	64	0.69	1.63
UGANDA	74	373	28	21		1	32	16	0.50	30.09
CONGO, DR				2	8	8		2	0.27	0.27
ZAMBIA	122	325	40	39		2	40	37	0.91	
ZIMBABWE	202	180	36	3		3	20	17	0.72	5.93
S. Africa	**1,371**	**249**	**341**	**259**	**59**	**181**	**246**	**233**	**0.55**	**1.29**
KAZAKHSTAN	110	559	62	12	0	12	50	12	0.20	1.03
KYRGYZSTAN	14	810	12	4	4	1	14	4	0.27	4.19
TAJIKISTAN	165	485	80	27		9	71	27	0.34	2.88
TURKMENISTAN	545	536	292	150		140	178	123	0.39	0.88
UZBEKISTAN	1,250	631	789	221	1	327	445	238	0.31	0.73
C. Asia	**2,084**	**592**	**1,234**	**414**	**5**	**490**	**758**	**405**	**1.50**	**0.83**

2016/17 SUPPLY & USE OF COTTON BY COUNTRY (cont'd) April 3, 2017

	AREA	YIELD	PROD	BEG STKS	IMPORTS	CONS	EXPORTS	END STKS	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tons						Ratio	Ratio
AUSTRIA				0	4	3	1	0	0.12	0.15
AZERBAIJAN	42	756	32	6		15	10	13	0.53	0.88
BELARUS				4	11	11		4	0.34	0.34
BELGIUM				2	10	7	4	2	0.17	0.27
BULGARIA	1	324	0	1	5	5	0	1	0.18	0.19
CZECH REP.				0	3	3		0	0.13	0.13
DENMARK					0	0				
ESTONIA										
FINLAND										
FRANCE				2	13	10	3	2	0.14	0.19
GERMANY				9	44	38	6	9	0.21	0.24
GREECE	211	1,009	213	44	5	20	198	44	0.20	2.18
HUNGARY				0	1		1	0	0.03	
IRELAND				0	0	0		0	0.09	0.09
ITALY				7	39	36	3	7	0.17	0.18
LATVIA				0	0	0	0	0	0.03	0.04
LITHUANIA				0				0		
MOLDOVA				1	2	2		1	0.34	0.34
NETHERLANDS				0	4	4		0	0.10	
NORWAY										
POLAND				0	3	3		0	0.12	0.12
PORTUGAL				7	38	37	0	7	0.19	0.19
ROMANIA				0	0	0		0	0.09	0.09
RUSSIA	1	520	1	13	62	62	0	13	0.21	0.21
SLOVAK REP.										
SPAIN	61	828	50	10	3	5	48	10	0.19	2.04
SWEDEN				0	0	0		0	0.74	0.74
SWITZERLAND				0	3	3	0	0	0.10	0.10
UKRAINE				0	2	2		0	0.25	0.25
UNITED KINGDOM				0	0	0		0	0.14	0.14
FORMER YUGOSLAVIA				1	7	7		1	0.19	0.19
Europe	**318**	**933**	**296**	**110**	**262**	**277**	**275**	**117**	**0.21**	**0.42**
Including EU-28	**273**	**966**	**264**	**83**	**174**	**173**	**264**	**83**	**0.19**	**0.48**
CHINA	2,846	1,665	4,737	11,160	983	7,591	21	9,269	1.22	1.22
TAIWAN				41	132	132		41	0.31	0.31
HONG KONG				33	0		1	33	41.48	
Sub total	**2,846**	**1,665**	**4,737**	**11,234**	**1,116**	**7,723**	**22**	**9,343**	**1.21**	**1.21**
AUSTRALIA	557	1,827	1,019	185	0	7	800	397	0.49	59.29
INDONESIA	8	615	5	96	685	664		122	0.18	0.18
JAPAN				16	65	65		16	0.24	0.24
KOREA, D.R.				1	5	5		1	0.24	0.24
KOREA, REP.				54	229	229	1	53	0.23	0.23
MALAYSIA				30	92	62	15	44	0.56	0.70
PHILIPPINES	0	567	0	3	10	10		3	0.28	0.28
SINGAPORE				0	7		7	0	0.05	
THAILAND	2	517	1	46	268	269		46	0.17	0.17
VIETNAM	5	460	2	151	1,171	1,137		186	0.16	0.16
E. Asia	**591**	**1,749**	**1,034**	**583**	**2,532**	**2,456**	**823**	**869**	**0.26**	**0.35**
AFGHANISTAN	40	387	16	5		4	10	7	0.48	1.56
BANGLADESH	40	708	28	372	1,430	1,403		426	0.30	0.30
INDIA	10,500	553	5,803	1,966	323	5,119	961	2,012	0.33	0.39
MYANMAR	244	634	155	104	10	207		62	0.30	0.30
PAKISTAN	2,468	681	1,680	547	582	2,233	27	549	0.24	0.25
SRI LANKA				0	2	2		0	0.11	0.11
S. Asia	**13,295**	**578**	**7,683**	**2,994**	**2,347**	**8,971**	**997**	**3,057**	**0.31**	**0.34**
IRAN	70	824	58	30	52	110		30	0.27	0.27
IRAQ	13	361	5	2	4	9		2	0.21	0.21
ISRAEL	8	1,761	14	2			14	2	0.13	
SYRIA	35	983	35	22		24	22	11	0.23	0.45
TURKEY	415	1,552	644	826	831	1,450	88	763	0.50	0.53
Sub total	**544**	**1,390**	**756**	**886**	**898**	**1,605**	**124**	**810**	**0.47**	**0.50**
WORLD TOTAL	**29,277**	**778**	**22,783**	**19,174**	**7,848**	**24,100**	**7,848**	**17,849**	**0.74**	**0.74**

*/ Ending stocks divided by consumption plus exports.

**/ Ending stocks divided by consumption.

Subtotals and total include countries not shown.

2017/18 SUPPLY AND USE OF COTTON BY COUNTRY April 3, 2017

	AREA	YIELD	PROD	BEG STKS	IMPORTS	CONS	EXPORTS	END STKS	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tons						Ratio	Ratio
CANADA				0	0	0		0	0.12	0.12
CUBA	4	269	1	1	2	3		1	0.19	0.19
DOM. REP.					1	1		0	0.47	0.47
MEXICO	98	1,559	153	161	291	418	28	158	0.35	0.38
USA	3,986	938	3,740	980	2	747	2,883	1,092	0.30	1.46
N. America	**4,093**	**952**	**3,895**	**1,142**	**296**	**1,171**	**2,911**	**1,251**	**0.31**	**1.07**
EL SALVADOR				9	35	35		9	0.27	0.27
GUATEMALA				7	24	24		7	0.29	0.29
HONDURAS	0	318	0	0		0		0		
C. America	**2**	**512**	**1**	**16**	**58**	**59**	**0**	**16**	**0.27**	**0.27**
ARGENTINA	297	522	155	271	3	141	45	243	1.30	1.72
BOLIVIA	4	639	3	2	1	3	0	2	0.50	0.53
BRAZIL	907	1,504	1,365	953	44	697	706	959	0.68	1.38
CHILE				0	0	0		0	0.12	0.12
COLOMBIA	25	816	20	14	36	56		14	0.25	0.25
ECUADOR	1	439	1	3	10	10		3	0.31	0.31
PARAGUAY	10	413	4	4	3	3	4	4	0.52	1.29
PERU	26	814	22	16	40	61	1	16	0.26	0.27
URUGUAY				0	0	0		0	0.06	0.06
VENEZUELA	14	390	6	3	5	11		3	0.30	0.30
S. America	**1,286**	**1,225**	**1,575**	**1,266**	**142**	**983**	**756**	**1,243**	**0.71**	**1.27**
ALGERIA				1	2	2		1	0.23	0.23
EGYPT	110	684	75	67	108	145	38	67	0.37	0.46
MOROCCO				4	15	15		4	0.24	0.24
SUDAN	50	487	25	13		18	7	13	0.52	0.71
TUNISIA				3	12	12		3	0.22	0.22
N. Africa	**161**	**622**	**100**	**87**	**137**	**193**	**44**	**87**	**0.37**	**0.45**
BENIN	403	373	150	68		4	147	68	0.45	16.93
BURKINA FASO	763	405	309	143		4	309	139	0.45	34.79
CAMEROON	235	477	112	53		2	107	56	0.51	29.50
CENT. AFR. REP.	33	219	7	3			7	3	0.49	
CHAD	283	206	58	46		1	69	34	0.50	68.78
COTE D'IVOIRE	362	431	156	60		2	143	70	0.48	34.05
GUINEA	12	273	3	1			3	1	0.40	
MADAGASCAR				3				3		
MALI	689	392	270	115		3	260	121	0.46	40.49
NIGER	5	447	2	0		1	1	0	0.11	0.25
SENEGAL	21	330	7	3		1	6	3	0.50	4.06
TOGO	140	290	41	11			36	16	0.46	
F. Africa	**2,945**	**379**	**1,116**	**505**		**17**	**1,087**	**516**	**0.47**	**30.03**
ANGOLA	3	301	1	0		1	0	0	0.33	0.48
ETHIOPIA	71	498	35	19	18	53	0	19	0.35	0.35
GHANA	15	372	6	1		1	4	1	0.25	1.11
KENYA	20	183	4	1	2	4	1	2	0.30	0.36
MALAWI	132	252	33	23		3	33	20	0.54	6.54
MOZAMBIQUE	130	162	21	20			26	15	0.56	
NIGERIA	261	204	53	18	1	24	28	20	0.38	0.84
SOUTH AFRICA	9	1,195	10	9	17	20	7	9	0.35	0.47
TANZANIA	309	218	67	64		40	35	56	0.75	1.40
UGANDA	71	314	22	16		1	26	12	0.45	21.96
CONGO, DR				2	7	7		2	0.30	0.30
ZAMBIA	119	337	40	37		2	40	36	0.88	
ZIMBABWE	198	175	35	17		3	33	16	0.43	5.52
S. Africa	**1,359**	**244**	**332**	**233**	**65**	**181**	**235**	**213**	**0.51**	**1.18**
KAZAKHSTAN	116	559	65	12	0	13	52	12	0.19	0.93
KYRGYZSTAN	14	810	11	4	3	1	13	4	0.28	4.19
TAJIKISTAN	168	538	91	27		10	80	27	0.30	2.72
TURKMENISTAN	545	552	301	123		140	161	123	0.41	0.88
UZBEKISTAN	1,206	638	770	238	1	331	449	229	0.29	0.69
C. Asia	**2,049**	**604**	**1,237**	**405**	**4**	**495**	**755**	**396**	**1.48**	**0.80**

2017/18 SUPPLY & USE OF COTTON BY COUNTRY (cont'd) April 3, 2017

	AREA	YIELD	PROD	BEG STKS	IMPORTS	CONS	EXPORTS	END STKS	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tons						Ratio	Ratio
AUSTRIA				0	3	3		0	0.16	0.16
AZERBAIJAN	42	760	32	13		16	16	13	0.41	0.84
BELARUS				4	11	11		4	0.34	0.34
BELGIUM				2	10	6	4	2	0.17	0.28
BULGARIA	1	324	0	1	5	5	0	1	0.18	0.19
CZECH REP.				0	2	2		0	0.09	0.09
DENMARK					0	0			0.12	
ESTONIA										
FINLAND										
FRANCE				2	11	9	2	2	0.16	0.20
GERMANY				9	40	36	4	9	0.23	0.25
GREECE	222	1,028	228	44	5	20	209	48	0.21	2.43
HUNGARY				0				0		
IRELAND				0	0	0		0	0.10	0.10
ITALY				7	38	35	3	7	0.17	0.19
LATVIA				0	0	0	0	0	0.03	0.04
LITHUANIA				0				0		
MOLDOVA				1	2	2		1	0.34	0.34
NETHERLANDS				0	4	4		0	0.11	
NORWAY										
POLAND				0	3	3		0	0.12	0.12
PORTUGAL				7	34	35		5	0.15	0.15
ROMANIA				0	0	0		0	0.09	0.09
RUSSIA	1	520	1	13	62	62	0	14	0.22	0.22
SLOVAK REP.										
SPAIN	64	865	55	10	3	5	51	12	0.22	2.55
SWEDEN				0	0	0		0		
SWITZERLAND				0	3	3	0	0	0.10	0.11
UKRAINE				0	2	2		0	0.26	0.26
UNITED KINGDOM				0	0	0		0	0.13	0.13
FORMER YUGOSLAVIA				1	7	7		1	0.19	0.19
Europe	**331**	**956**	**316**	**117**	**249**	**270**	**290**	**122**	**0.22**	**0.45**
Including EU-28	**287**	**990**	**284**	**83**	**161**	**166**	**274**	**88**	**0.20**	**0.53**
CHINA	2,931	1,640	4,806	9,269	1,088	7,667	22	7,475	0.97	0.97
TAIWAN				41	128	128		41	0.32	0.32
HONG KONG				33	0		1	32	38.91	
Sub total	**2,931**	**1,640**	**4,806**	**9,343**	**1,216**	**7,795**	**22**	**7,548**	**0.97**	**0.97**
AUSTRALIA	530	1,837	973	397	0	6	810	553	0.68	86.99
INDONESIA	8	615	5	122	661	670		118	0.18	0.18
JAPAN				16	63	65		14	0.22	0.22
KOREA, D.R.				1	5	5		1	0.24	0.24
KOREA, REP.				53	236	236		53	0.22	0.22
MALAYSIA				44	93	86	8	44	0.47	0.51
PHILIPPINES	0	567	0	3	10	10		3	0.30	0.30
SINGAPORE				0	6		6	0	0.05	
THAILAND	2	517	1	46	263	264		46	0.17	0.17
VIETNAM	5	465	2	186	1,240	1,217		212	0.17	0.17
E. Asia	**561**	**1,759**	**987**	**869**	**2,578**	**2,565**	**824**	**1,046**	**0.31**	**0.41**
AFGHANISTAN	38	387	15	7		4	12	5	0.31	1.20
BANGLADESH	41	712	29	426	1,473	1,474		455	0.31	0.31
INDIA	11,235	528	5,935	2,012	290	5,170	987	2,080	0.34	0.40
MYANMAR	249	634	158	62	57	207		69	0.34	0.34
PAKISTAN	2,542	735	1,869	549	546	2,244	27	693	0.31	0.31
SRI LANKA				0	2	2		0	0.11	0.11
S. Asia	**14,108**	**568**	**8,008**	**3,057**	**2,368**	**9,103**	**1,026**	**3,303**	**0.33**	**0.36**
IRAN	72	737	53	30	60	113		30	0.26	0.26
IRAQ	10	361	3	2	5	8		2	0.24	0.24
ISRAEL	8	1,892	15	2			15	2	0.12	
SYRIA	25	954	23	11		22	4	9	0.34	0.39
TURKEY	427	1,529	654	763	872	1,436	90	763	0.50	0.53
Sub total	**545**	**1,376**	**750**	**810**	**946**	**1,590**	**108**	**808**	**0.48**	**0.51**
WORLD TOTAL	**30,370**	**761**	**23,123**	**17,849**	**8,060**	**24,422**	**8,060**	**16,550**	**0.68**	**0.68**

*/ Ending stocks divided by consumption plus exports.

**/ Ending stocks divided by consumption.

Subtotals and total include countries not shown.

76th Plenary Meeting
of the
International Cotton Advisory Committee

Tashkent (Uzbekistan)
October 22-27, 2017

(International Hotel Tashkent)

"Cotton in the Era of Globalization and Technological Progress"

Topics during Open Sessions will include:

- **World Cotton Market Report**
- **Exploiting Genetic Diversity, Gene-pools and Cotton Genomics: Where Are We and What to Expect?**
- **Trends in the Textile Industry and Inter-fiber Competition**
- **Textile Innovations: Nanotechnologies for Current and Future Fabrics**
- **Promotion of Cotton**
- **Technical Seminar: Opportunities and Challenges for Technology Transfer in Cotton**
- **Impacts on Quality and Volume of Long-Term Storage of Cotton Products**
- **Modern Cotton Ginning Technology**
- **Effects of GMO and Non-GMO Cotton Production**

For more information about the meeting and registration, please visit
https://www.icac.org/mtgs/Plenary/76th

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