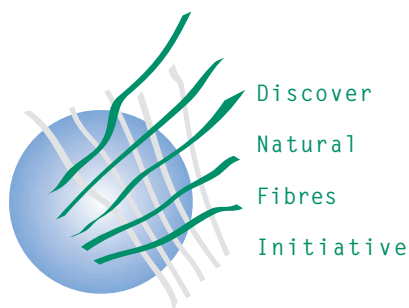




COTTON :

Review of the World Situation

International
Cotton
Advisory
Committee

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SUMMARY OF THE OUTLOOK FOR COTTON

Early Forecast Wrong: Lower 2013/14 Prices Due to Changed World Situation

In April 2013, the Secretariat's projected price for the current season was 118 cents per pound. Since then ICAC's projected price has plummeted, and the current midpoint of the forecast range is 88. The two main variables in the ICAC model of the Cotlook A Index are 1) the stocks-to-mill use ratio outside China and 2) the ratio of net Chinese imports to world trade.

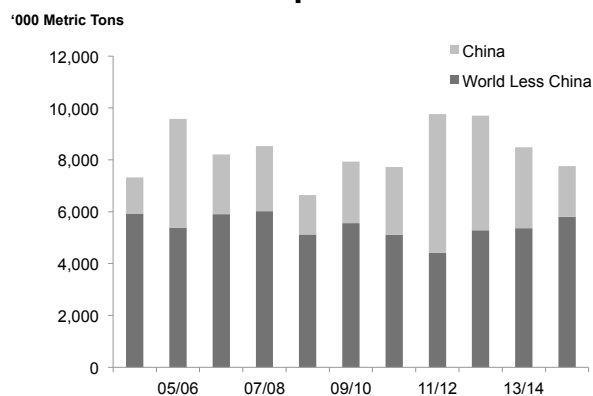
When the Secretariat forecast the 2013/14 price in April this year, world ending stocks for 2013/14 were projected at 16.4 million tons, 6.9 million tons of which were held outside of China. Since then, world ending stocks have been revised upward to about 20 million tons and world stocks outside China have increased to 8.9 million tons, which is both an increase in absolute terms and as a share of world stocks. The stock-to-mill use ratio outside of China increased from 44 to 57 percent since our initial forecast. The change in ending stocks occurred because of revisions in previous seasons, primarily in India and Pakistan, that increased world stocks and carried through to the current season. Additionally, 2013/14 world production increased by 2.2 million tons from 23.47 million tons in April 2013 to 25.64 million tons, due mostly to the favorable weather increasing yields and production in India.

China's reserve and import policies also weigh heavily on international prices. So far in 2013/14 the China National Cotton Reserves Corporation (CNCRC) has bought more than 2.7 million tons, and its total cotton reserves have passed 10.1 million tons. The Secretariat is assuming that China will follow a similar policy to last season with regard to its reserve purchases with procurement continuing until late spring. On

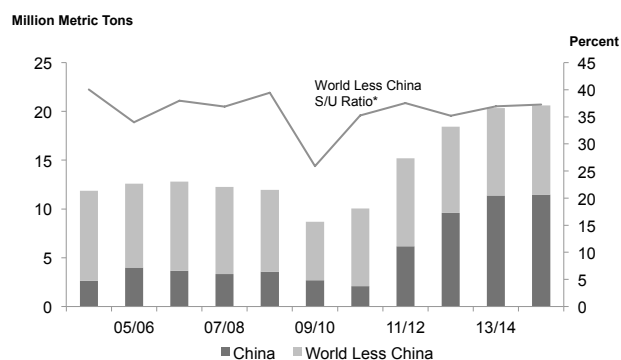
November 26, CNCRC announced that it would begin selling cotton on November 28, 2013 at 18,000 yuan per ton for standard grade starting with 2011 reserves. It also announced that no quota would be allocated against the actual volume released and that cotton from the current harvest would be subject to the new price differentials used in the current reserve procurement. Although there is no planned volume of sales from the reserves, the ICAC Secretariat assumes that CNCRC will sell roughly 2-3 million tons so that China's ending stock for the season will be around 11-12 million tons. The Secretariat thinks it is likely that China will announce a policy shift in its handling of the reserves this spring and implement it in the 2014/15 season.

With regard to its import policy, in the past two seasons, China imported much of the surplus stock on the world market, allowing prices to remain relatively high. This season its imports are expected to decrease 40% from last season to

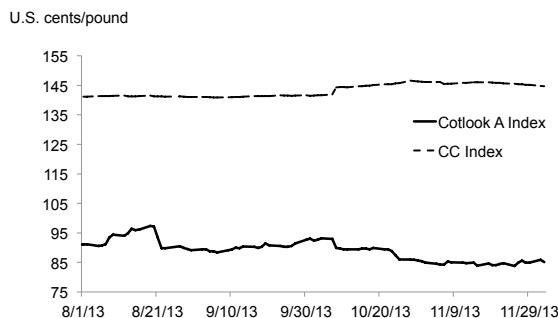
Imports



Ending Stocks



2013/14 World and Chinese Cotton Prices



3.1 million tons. As international prices are hovering around 84 cents/lb, the import price with a 40% tariff would be around 118 cents/lb. The sales price of cotton from China's reserve was announced as 18,000 Yuan per ton for standard grade, or 133 cents/lb using current exchange rates, which is significantly higher than the import price. Thus, unless international prices rise above the mid-90s, China's imports are expected to remain around 3.1 million tons for the season.

As was the case the last three seasons, 2013/14 world production is expected to outpace world consumption. Despite delays in several countries this season, harvesting in the northern hemisphere is nearing completion and production is projected at 25.6 million tons, down by 1.2 million tons from last season. Cotton area is falling by 1 million hectares from last season to 32.8 million hectares, and the average yield is down slightly to 781 kilograms per hectare.

Planting has started in the southern hemisphere. Cotton area is expected to increase by 3% to 3.3 million hectares. An 11% increase in production to 3.1 million tons is forecast for South America, mainly due to expected area increases in Brazil and Argentina and slightly better yields than in 2012/13. Although Australia is forecast to decrease area by 10%, its production is expected to remain stable at around 995,000 tons due to better than expected yields this season, stemming from the improved water situation.

World cotton consumption is forecast at 23.8 million tons in 2013/14, up 2% from last season with an upward revision of 85,000 tons in India from last month. Consumption in 2014/15 is also expected to further rise by 3% to 24.6 million tons. Consumption in China in both 2013/14 and 2014/15 are forecast to be lower than the previous four seasons, decreasing to 8 million tons in 2013/14 and 7.8 million tons in 2014/15. On the other hand consumption in India and Pakistan are both forecast to increase in 2013/14 and 2014/15. India's consumption in 2013/14 is forecast at 5.1 million tons, which is an increase of 12% from the average of 4.5 million tons for the last four seasons. In 2014/15, its consumption is forecast to increase a further 7% from the current season to 5.5 million tons. Pakistan averaged 2.3 million tons in the last four completed seasons. Its consumption in 2013/14 is forecast to increase 8% over the average to 2.5 million tons, and in 2014/15, to increase to 2.6 million tons.

While world cotton consumption is expected to see modest growth this season and next, the projected accumulation of cotton stocks will weigh on international cotton prices. However, the extent of this downward pressure will depend in large part on how the Chinese national reserve is handled and on the timing and amount of additional import quotas.



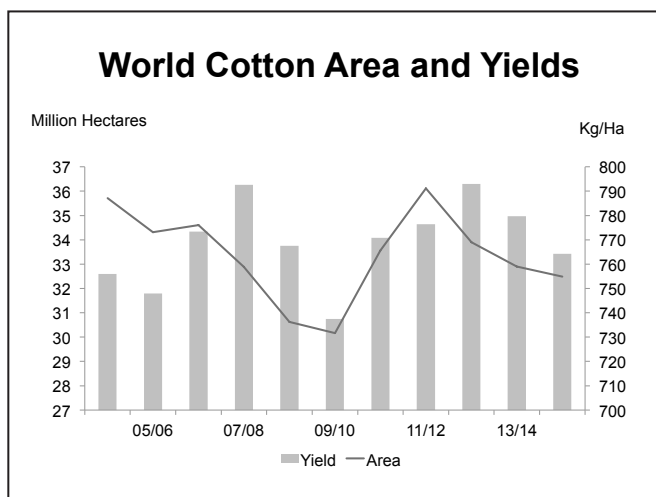
GLOBAL COTTON PRODUCTION IN 2014/15

By Rebecca Pandolph, ICAC.

Cotton plantings for the 2014/15 season will start in February 2014 in the northern hemisphere.¹ Since the record highs in 2010/11, cotton prices dropped sharply the following season and are at a similar level this season. However, competing crops like maize and soybeans have also seen declines in price compared with last season. As a result, cotton area in many

countries is expected to remain fairly stable or decline slightly in 2014/15. The Secretariat projects global harvested cotton area to contract by 1% to 32.4 million hectares and production to decrease by 3% to 24.8 million tons.

This article explains which factors are affecting cotton plantings in 2014/15, and it gives detailed production projections for the largest countries and regions.



Factors Affecting Cotton Plantings in 2014/15

China's Cotton Policy

The largest variable weighing on prices for the next season and thus production planning, is China's decisions with regard to both its imports and its large reserves. Currently, the Chinese government holds more than 10 million tons of cotton. In late November, the Chinese National Cotton Reserve Corporation announced that it would begin selling reserves at a floor price of 18,000 Yuan per ton for standard grade or about 133 U.S. cents per pound.

The 2013/14 season will be the fourth season of surplus

1) The northern hemisphere accounted for an estimated 90% of global production in 2012/13 and 2013/14.

production. In the last season, China's policy of building up its reserve and importing much of the surplus stock has kept cotton prices up. Selling of its reserves will add to the expected surplus for this season and it is likely to place downward pressure on prices. However, as this price is still higher than the current international price for cotton with a 40% tariff included, it is unclear at this time how much of an effect this will have on China's imports and international prices. As planting season in the northern hemisphere draws nearer, there should be more information available to farmers.

Low Farmers Returns in 2013/14

The world cotton yield is projected at 781 kg/ha in 2013/14, 2% lower from last season. Furthermore, international cotton prices have declined since the start of 2013/14 to a level similar to last season. The average Cotlook A Index for the first four months of 2013/14 is 89.46 cents/lb, which is one cent higher than the 2012/13 season average, though prices in the last month have averaged 84.6 cents/lb. With the pressure of another season of global cotton supplies growth outstripping demand, the 2013/14 season average Cotlook A Index is expected to be around 88 cents/lb. In the northern hemisphere, producers are currently selling their new crop at lower prices than last year. As a consequence, farmers' returns in many countries are expected to decline in 2013/14,² which will affect their planting decisions in 2014/15.

Cotton Gaining in Attractiveness Relative to Competing Crops

After recovering in 2010 and 2011, the price attractiveness of cotton relative to its main competing crops at planting time in the northern hemisphere fell sharply in 2012. However, in the first four months of the season, international cotton prices are 7% higher as compared with the same time period last year,

but are expected to decline further this season. On the other hand, competing crops are experiencing falling prices. Maize's price declined by 13% from the third quarter of 2012 to 2013 and has continued to decline in October reaching a price of \$201 per metric ton, which is 20% lower than the 2013 third quarter average. Similarly, soybeans' price has declined by 28% from the 2012 third quarter average to 2013 third quarter average. Prices of sugar and rice, two crops that compete with cotton on a smaller scale than grains and soybeans, have also declined since the start of the 2013/14 planting season.³

Although the international price of cotton has declined since the start of the season, it is expected to remain at a similar level as the current season. In contrast, many of the alternative crops have seen dramatic price declines since last season. Thus, it is likely that many farmers will maintain cotton area this season.

Agricultural Production Costs

Cotton is generally more expensive to produce than soybeans, maize and wheat. It requires larger quantities of fertilizer per hectare than soybeans and wheat, and larger amounts of pesticides and fuel per hectare (if machinery is used) than soybeans, maize and wheat. On the other hand, rice and sugarcane tend to require larger quantities of inputs than cotton.

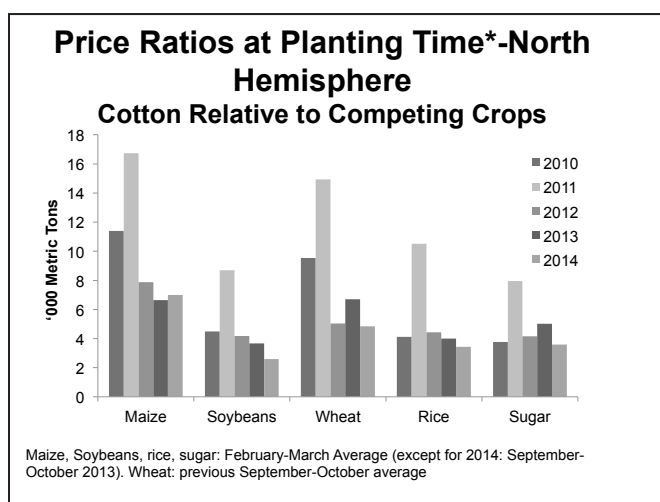
Fertilizer prices have declined in 2013 while energy prices have been relatively stable and are expected to remain stable or decrease in 2014.⁴ The World Bank Fertilizer Index⁵ decreased from 125.07 in March-April 2013 to 98.75 in October 2013, and is expected to decline or remain stable in 2014. The World Bank's Energy Index⁶ increased from 124.68 in March-April 2013 to 128.34 in October 2013, and is expected to remain relatively stable or decline in 2014. These trends suggest that overall fertilizer and energy prices may have only a minor impact on farmers' planting decisions in 2014/15. However, there may be variations in prices from country to country.

The cost of planting seeds, pesticides, labor and water (in irrigated areas) will also impact cotton production costs, but vary greatly across countries.

Expectations in the Largest Producing Countries

India

Cotton area in India remained stable in 2013/14, growing by only 1% to 11.9 million hectares. However, yield increased by 5% due to the monsoon early in the summer and timely rains just before harvesting resulting in an estimated record production of 6.5 million tons. In 2014/15, the Secretariat



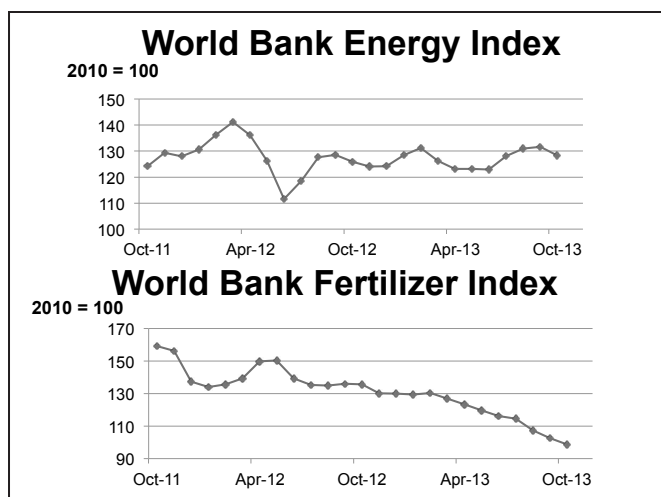
2) Note that this may not be true for farmers who sold their cotton forward, at relatively high prices, such as in the United States, Australia and Brazil.

3) World Bank Pink Sheet, November 2013.

4) World Bank Commodity Price Forecasts, October 2013, and World Bank Pink Sheet, November 2013.

5) 2010 = 100.

6) 2010 = 100.



forecasts cotton area in India to remain stable at 11.9 million hectares. However, assuming average weather conditions next year, yield is expected to decrease by 3% to 526 kg/ha. Cotton production in India is forecast at 6.2 million tons, down 4% from this season.

China

In 2011/12, cotton area in China peaked at 5.5 million hectares, but then declined in the following seasons, reaching 4.6 million hectares in 2013/14. The yield declined due to unfavorable weather, and overall production is estimated down by 9% to 6.7 million tons. Chinese seedcotton prices are above last season's prices and international prices this season. Over the first four months of the season, the average CC Index was 19,366 Yuan/ton, or 2% higher than in the previous season (19,072 Yuan/ton), bolstered by significant purchases of domestic cotton for the national reserve. While the government has not announced its policy for next season, it is not expected that it will continue with its current procurement policy. At this stage, uncertainty with domestic cotton policy, an expected decline in prices combined with rising production costs and increasing labor scarcity at harvest time, will likely lead to a contraction in total cotton area in 2014/15. Cotton area in China is expected to decline by 18% to 3.9 million hectares in 2014/15 and production by 13% to 5.9 million tons.

United States

Low prices for cotton combined with higher prices for competing crops like corn and soybeans drove cotton plantings down 19% to 3.6 million hectares in 2013/14. Severe drought, particularly in Texas, led to an estimated abandonment rate of 24% so that harvested area in 2013/14 is expected to be 3.1 million hectares.

For 2014/15, there is a lot of uncertainty for farmers as the U.S. congress has yet to complete a new farm bill. The American Taxpayer Relief Act of 2012 extended most of the provisions of the 2008 farm bill without change through the end of the 2013 fiscal year, crop year, or calendar year, depending on the

provision. If the U.S. congress does not pass a new farm bill, the 1949 farm bill will go into effect, which was created when agricultural production was much smaller than today and does not have any provisions for certain crops like soybeans. While there are still some months before planting decisions need to be made in the United States, it is uncertain if this will be resolved in time and how farmers will react.

In 2013/14, prospective cotton prices are lower in relation to corn and soybeans. However, the price of cotton paid to U.S. farmers has been increasing while corn and soybeans have been decreasing. This season also saw record yields for cotton in several states, despite unfavorable weather conditions through the growing season and strong demand for U.S. cotton exports. Thus, the Secretariat expects U.S. planted cotton area to increase by 14% to 4.3 million hectares in 2014/15. Assuming a national abandonment rate of 21%, U.S. harvested cotton area is forecast up by 10% to 3.4 million hectares. U.S. cotton production is projected to rise by 8% to 3.1 million tons in 2014/15.

Pakistan

Cotton area in Pakistan has fluctuated around 3 million hectares since the mid-1990s. Cotton area is estimated at 2.9 million hectares in 2013/14, down by 2% from the previous season, driven by a decrease in local seedcotton prices during 2012/13 season and farmers switching to more favorable crops in flood prone areas. National production is estimated down by 9% to 2.03 million tons in 2013/14 due to unfavorable weather conditions, an insufficient supply of quality seeds, lack of water during planting and poor germination. The losses caused by unfavorable weather in 2013/14 and another season of low seedcotton prices will likely drive cotton area down in 2014/15. At this point in time, the Secretariat forecasts cotton area in Pakistan to decline 1% to 2.9 million hectares in 2014/15. Assuming an average yield, production is forecast down by 7% to 2.2 million tons due to the decrease in area.

Uzbekistan

Cotton plantings in Uzbekistan have in the past been little affected by variations in international prices. Since 2009/10, when the Uzbek government reduced the planting target in to increase the production of food crops, cotton area has fluctuated around 1.3 million hectares. In 2014/15, it is projected at a similar level, increasing by 3% to 1.3 million hectares. The average cotton yield rose to nearly 800 kg/ha in 2012/13, owing to adequate irrigation and favorable weather. However, 2013/14 had poor weather conditions leading to a decline in yield of 5% to 738 kg/ha. Assuming adequate irrigation supply and weather, the average yield is expected to remain stable in 2014/15 at 740 kg/ha. As a result, production in 2014/15 is projected at 950,000 tons, up by 3% from the current season.

Francophone Africa

After recovering in 2011/12, cotton production in the eleven producing countries of Francophone Africa⁷ increased again

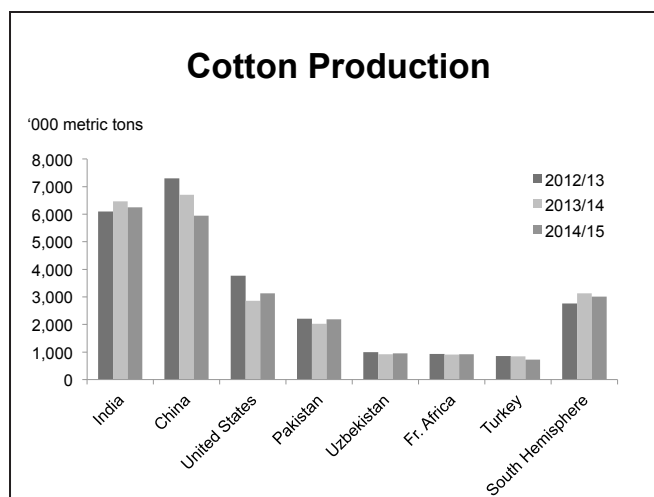
7) Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Guinea, Mali, Niger, Senegal, Togo.

in 2012/13 by 23% to 934,700 tons and is expected to remain above 900,000 tons in this season and 2014/15. Planting intentions for 2014/15 will not be known before the second quarter of 2014, when seedcotton purchasing prices for next season are published. These seedcotton purchasing prices may remain stable or decline, leading farmers in most Francophone African countries to reduce their cotton plantings in 2014. However, other factors will affect their planting decisions, including the availability of input credit, input provision, and weather at planting time. There are few alternative cash crops in this region. At this stage, cotton plantings in Francophone Africa are expected to decrease by 3% to 2.4 million hectares in 2014/15. Production is forecast up by 1% to 920,000 tons.

Mali and Burkina Faso are expected to be the top cotton producers in Francophone Africa, accounting for just under half of 2014/15 production in the region. Unlike most other producer countries in Francophone Africa where cotton production will remain stable or decline, Burkina Faso's cotton production is expected to rise modestly in 2014/15 by 3% to 254,400 tons in part due to larger cotton area. Additionally, Burkina Faso's yields in 2014/15 are expected to increase due to a larger share of Bt cotton being planted than in the current season. In spring of this year, the government of Cote d'Ivoire passed new reforms for the cotton sector such as increasing growers' access to seeds and inputs. These reforms will be implemented during the 2014/15 season and as a result, cotton area is expected to remain stable at 323,000 hectares, though production will decrease by 3% to 144,000 tons assuming a yield of 447 kg/ha.

Turkey

After peaking in 2011/12, cotton area declined in the following seasons and reached 500 thousand hectares in 2013/14. This decline was due to low returns for cotton relative to other crops. Since 2011/12, overall yields have improved due to more irrigated land being available and increased mechanization in picking cotton. Cotton production is estimated at 880,000 tons this season, up by 2.5% from 2012/13 due to more area sown



with cotton this season. However, cotton plantings in 2014/15 will decline slightly in face of the low price of cotton this season and high planting costs. At this stage, it is expected that cotton area will decrease by 2% to 490,000 hectares in 2014/15. Production is forecast at 722,000 tons.

Rest of the Northern Hemisphere

In the rest of the northern hemisphere, which accounts for about 8% of the regional cotton output, production is expected to decrease by 3% to 1.7 million tons in 2014/15.

Southern Hemisphere

Planting decisions in the southern hemisphere will be made during the second part of 2014 and will respond to commodity prices and weather conditions prevailing at that time. At this stage, cotton area in the southern hemisphere is projected up by 1% to 3.3 million hectares in 2014/15, but below the peak of 4.6 million hectares in 2011/12. Based on recent average yields for each country, southern hemisphere production is projected to decrease by 4% to 3 million tons. The share of the southern hemisphere in world cotton production could remain at 12% in 2014/15, similar to that of 2013/14.



FIBER CONTENT IN COTTON YARN AND FABRIC

By Alejandro Plastina, ICAC

Declining Cotton Content in Cotton Yarns⁸

Due mainly to reduced price competitiveness, a slowdown in economic activity in several advanced economies and a recession in the euro area, the demand for cotton textiles declined from 23.9 million tons in 2011 to 23.5 million tons in 2012. Cotton demand in 2012 was still 3.1 million tons below its level in 2007, before the Great Recession. Demand

destruction for cotton goods as of 2012 accounted for 12% of cotton consumption in 2007.

World cotton mill use contracted for a second consecutive year in 2012, reaching its lowest level since 2004. In 2012, the contraction of mill use in developing countries accounted for 75% of the 459,000 tons fall in world mill use. With the exceptions of Pakistan, Turkey, and Indonesia (where mill use increased by 3%, 2%, and 2%, respectively), the top

⁸ This article refers to calendar years (January 1-December 31), as opposed to cotton seasons (August 1 – July 31).

Table 1. Annual average ratio of cotton yarn production to cotton mill use by country, 1970-2012

	70-74	75-79	80-84	85-89	90-94	95-99	00-04	05-09	10-12	1970-2012*
China	0.82	0.87	0.93	1.00	1.10	1.24	1.42	1.96	3.16	1.31 [0.49]
India	0.82	0.77	0.80	0.77	0.74	0.76	0.74	0.72	0.75	0.77 [0.05]
Pakistan	0.72	0.75	0.82	0.78	0.79	0.93	0.97	1.10	1.27	0.89 [0.19]
Turkey	0.90	0.83	0.73	0.72	0.51	0.58	0.85	0.79	0.90	0.75 [0.23]
Brazil	0.85	0.87	0.86	0.84	0.85	0.81	0.89	1.07	1.11	0.90 [0.12]
Indonesia	0.86	1.23	1.39	1.59	1.06	0.78	1.47	1.84	1.80	1.31 [0.32]
United States	0.89	0.81	0.81	0.76	0.78	0.85	0.92	0.85	0.86	0.83 [0.07]
Mexico	0.93	0.77	0.68	0.84	0.84	0.84	0.85	0.83	1.13	0.84 [0.17]
World	0.83	0.83	0.88	0.88	0.86	0.90	1.03	1.29	1.78	1.00 [0.27]
World less China	0.83	0.83	0.86	0.84	0.79	0.80	0.86	0.86	0.88	0.84 [0.04]

* Coefficient of Variation in square brackets, i.e. standard deviation/average

ten cotton spinning countries used less cotton in 2012 than in 2011. China, where 39% of world mill use takes place, accounted for 40% of the decline in world use. The United States and Bangladesh, which jointly represent 6% of world mill use, accounted for 32% of the reduction in world mill use. The other top-ten countries that suffered declines in mill use during 2012 are India, Brazil, Mexico, and Vietnam.

Data from the 2013 edition of World Textile Demand suggests that, despite the contraction in cotton mill use, world production of cotton yarn did not fall during the Great Recession, but suffered only a slowdown. After growing at an average annual rate of 9% between 2000 and 2007, world production of cotton yarn expanded by 1% in 2008, 8% on average in 2009 and 2010, 5% in 2011, and 10% in 2012. Data on cotton yarn production in tons are derived from country surveys and from the United Nations' Monthly Bulletin of Statistics Online.

Since 2005, China accounts for more than half of world cotton yarn production, and in 2012 that share amounted to 72%. According to United Nations data, Chinese cotton yarn production grew, on average, 17% annually between 2000 and 2007, 8% in 2008, 12% on average in 2009 and 2010, 7% in 2011, and 15% in 2012. Cotton yarn production outside China grew by 2% annually between 2000 and 2007, experienced an 8% contraction in 2008, partially recovered by 4% in 2009 to contract again by 2% in 2010, remained stagnant in 2011, and contracted again by 1% in 2012. It is safe to conclude that **China has been the driver of world cotton yarn production since the early 2000s.**

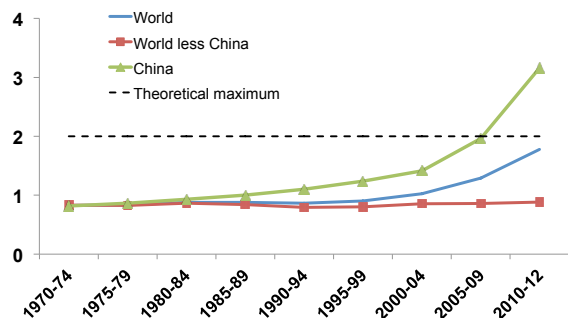
In order to analyze the relationship between cotton yarn production and cotton mill use, the ratio of cotton yarn production to cotton mill use is calculated at the world level and for selected countries that jointly accounted for 92% of world cotton yarn production and 83% of world cotton mill

use in 2012 (table 1). The ratio can take any value between zero and two. When all cotton is used in the production of yarns in which cotton accounts for less than 50% of the blend (and therefore none of the yarns is classified as cotton yarn) the ratio takes the value of zero. In the hypothetical case where all cotton is used in the production of cotton yarns with exactly 50% cotton content with no waste in the process, then the ratio takes the value of two. This indicator is only useful for extreme values, i.e. values close to 0 or 2: the closer the ratio is to 0, the higher the use of cotton fiber in non-cotton dominant yarns; and the closer the ratio is to 2, the lower the cotton content in cotton yarns. Any value in between the extremes can be achieved through an infinite number of combinations of: (a) the production level of 100% cotton yarn, (b) the waste level, (c) the production level of cotton-dominant yarns with less than 100% cotton content, (d) the production level of non-cotton dominant yarns.⁹ Therefore, when the ratio takes values far away from the extremes, no clear inferences can be derived.

According to table 1, the long term ratio of cotton yarn production to cotton mill use at the world level averaged 1 between 1970 and 2012, with a coefficient of variation of 27%. No inference that can be derived from that observation alone, but when comparing it with the long term ratios for China and for the rest of the world (1.31 with a 49% coefficient of variation, and 0.84 with a 4% coefficient of variation, respectively), it is evident that China has been the main driver of the level and the variability in the ratio. It is important to note that China accounted for 34% of world cotton yarn production and 26% of world cotton mill use, on average, over the entire period. Since the annual average ratio for the world surpassed one for the most recent sub-periods, the inverse of those ratios is calculated to analyze the theoretical maximum average cotton content in cotton yarn: 98% for 2000-04, 78% for 2005-09, and 57% for 2010-12. That calculation assumes

9) As an example, the ratio takes the value of 1 in the following three alternative situations: (1) if all cotton is used to produce 100% cotton yarns and no waste occurs; (2) if half of cotton mill use is used in the production of cotton yarns with exactly 50% cotton content, and the other half of cotton mill use is used in the production of non-cotton dominant yarns; and (3) if one-third of cotton mill use is used in the production of 100% cotton yarns, one-third is used in the production of 50% cotton yarns, one-sixth is used in the production of non-cotton dominant yarns, and one-sixth is wasted in the spinning processes.

Fig 1. Annual Average Ratio of cotton Yarn Production to Cotton Mill Use



that no waste exists in the production of cotton yarn and that all cotton is used only in the production of cotton dominant yarns (as opposed to non-cotton dominant yarns). But by this very rough approximation to cotton content in cotton yarns, it is apparent that **cotton is losing market share to other fibers**.

Furthermore, analyzing the Chinese ratios, it becomes apparent that they grew exponentially over time, surpassing the theoretical maximum for the ratio in 2010-12 (Figure 1). The fact that the Chinese ratio for 2010-12 is 3.16 means that, assuming all cotton is used in the production of cotton yarn only with no waste, the average cotton content of cotton yarn would be 32%, which by definition cannot be true (must have at least 50% cotton to be classified as cotton yarn). Therefore, **either cotton yarn production is substantially overestimated or cotton mill use is substantially underestimated in China for 2008 through 2012**, i.e. those years where the ratio exceeds 2. If data on Chinese cotton yarn production published by the United Nations is assumed to be correct, then the minimum

level of cotton mill use required to produce 33.3 million tons of cotton yarn in 2012 amounts to 16.7 million tons, assuming all cotton goes into the production of cotton yarns with exactly 50% cotton content and no waste (figure 2). That estimate is 7.5 million tons higher than the ICAC estimate for cotton mill use in 2012. If the same exercise is conducted for previous years, the ICAC would have underestimated Chinese mill use by 19.3 million tons or 16% of the total published cotton mill use over the period 2008-2012. Using these new estimates, the theoretical maximum cotton content in cotton yarn at the world level is 98% for 2000-04, 80% for 2005-09, and 69% for 2010-12. Therefore, even after increasing the estimates of cotton mill use, the same conclusion as before can be reached: **cotton is losing market share to other fibers**.

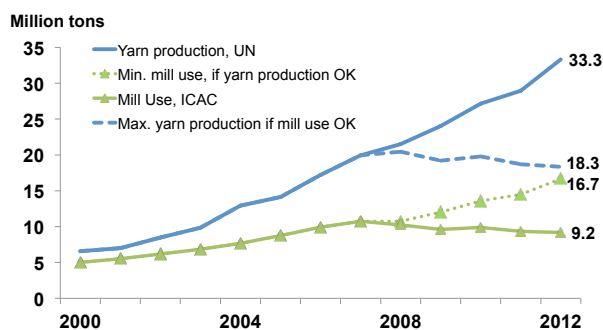
Alternatively, it can be assumed that mill use estimates are correct and yarn production data are flawed. Assuming that all cotton fiber in China is used in the production of cotton yarn with 50% cotton content and no waste, the maximum level of Chinese cotton yarn that could have been produced in 2012 is 18.3 million tons, or about 15 million tons below the published estimate. Over the period 2008-2012, the total overestimation of cotton yarn production would have amounted to 38.5 million tons, or 19% of the published total cotton yarn production. Using these new estimates, the theoretical maximum cotton content in cotton yarn at the world level is 98% for 2000-04, 81% for 2005-09, and 76% for 2010-12. Therefore, even after reducing the estimates of cotton yarn production, the same conclusion as before can be reached: **cotton is losing market share to other fibers**.

Given the key role that estimates of cotton mill use in China play in shaping the market fundamentals of the international cotton sector, the ICAC Secretariat will investigate the reasons behind the mismatch between cotton mill use and cotton yarn production in China. The expected output of the investigation is a recommendation on the best set of mill use estimates to adopt, and a detailed explanation of how those estimates relate to estimates of cotton production, trade and stocks in China and abroad.

Going back to table 1, the only country besides China with ratios close to 2 is Indonesia, which has the same long term ratio as China and a high coefficient of variation. Most cotton used in Indonesia is of foreign origin, and official cotton import data into Indonesia differs substantially from estimates from other agencies. For example, between 2004/05 and 2010/11, USDA WAOB import estimates for Indonesia were, on average, 15% lower than official data.¹⁰ As a result, **official cotton yarn production data might be systematically upward biased in Indonesia**.

The long term ratios of cotton yarn production to cotton mill use in India, Pakistan, Turkey, Brazil, the United States, and Mexico are lower than one, indicating that some of the

Fig. 2. Chinese Cotton Mill Use and Yarn Production



10) USDA WAOB PSD Online: <http://www.fas.usda.gov/psdonline/>

Table 2. Average annual ratio of cotton fabric production to available cotton yarn by country, 1970-2012

	70-74	75-79	80-84	85-89	90-94	95-99	00-04	05-09	10-12	1970-2012*
China	0.58	0.58	0.61	0.55	0.50	0.43	0.43	0.28	0.18	0.47 [0.28]
India	0.97	1.03	0.93	0.95	1.00	1.21	1.54	1.60	1.75	1.19 [0.26]
Pakistan	n/a	n/a	n/a	n/a	n/a	n/a	1.45	1.39	1.36	1.41 [0.07]
Indonesia	0.93	0.91	0.58	0.85	0.96	0.96	0.96	0.93	0.91	0.89 [0.19]
Brazil	0.50	0.48	0.49	0.63	0.94	0.95	1.01	0.69	1.61	0.77 [0.49]
Turkey	0.70	1.33	1.62	1.19	1.22	0.60	0.48	0.40	0.27	0.90 [0.56]
World	0.63	0.63	0.61	0.59	0.59	0.55	0.60	0.50	0.38	0.57 [0.13]
World less China	0.64	0.64	0.60	0.60	0.63	0.60	0.73	0.82	0.86	0.67 [0.14]

* Coefficient of Variation in square brackets, i.e. standard deviation/average.

n/a: not available

cotton fiber industrialized in those countries went into the production of non-cotton dominant yarn.¹¹ However, the annual ratios for Pakistan, Brazil, and Mexico started to consistently exceed 1 (but remaining below 2) in 2004, 2006, and 2010, respectively. This indicates that **the cotton content of a growing proportion of cotton yarns produced in those countries has been on the decline in recent years.**

More Blending in Fabric Production

World production of woven cotton fabric¹² peaked in 2007 at 17.2 million tons and as of 2012 it was still 7% below its peak. Despite higher cotton yarn production, world cotton fabric production remained at 16.0 million tons between 2011 and 2012.

In order to analyze the evolution of cotton fabric vis-à-vis the evolution of cotton yarn, the ratio of cotton fiber production to cotton yarn available (= production + imports – exports) by country was calculated. This ratio can take values ranging from 0 to 11. A value of zero indicates that all cotton yarn is used in the production of non-cotton dominant fabrics. A value of 11 indicates that a high percentage of the cotton content in the fabric comes from non-cotton dominant fibers that contain cotton in their blends. For example, a cotton fabric with 50% cotton content can be produced weaving 9 parts of cotton yarn with 100% cotton content and 91 parts of a polyester yarn with 45% cotton content (assuming no waste¹³). An important threshold for the ratio is the value of 1, which indicates the theoretical case where the yarn-to-fabric transformation process produces no waste, and all available cotton yarn is used in the production of cotton fabrics, irrespectively of the cotton content of the cotton fabric. Values of the ratio below 1 are indicative of the existence of waste in the transformation process, and that some cotton yarns are used in the production of non-cotton dominant fabrics. Values of the ratio above 1 do not have clear interpretations without complementary specific information about the most common blends of yarns by country, due to the infinite number of potential combinations

of different yarns that can be applied to produce fabric with the same cotton content.

The list of countries included in table 2 accounted for 58% and 91% of world cotton fabric production over 1970-2012 and in 2012, respectively. The long-term average annual ratio of cotton fabric production to available cotton yarn at the world level amounts to 57% with an average variation of 13%, indicating –as expected– that cotton yarn is not only used to produce cotton fabric but also non-cotton dominant fabrics. However, in 2005-09 and 2010-12, the annual average world ratio declined substantially, suggesting that **an increasing proportion of cotton yarns are used in the production of non-cotton dominant fabrics, i.e. cotton fabrics are losing market share.**

China, which accounted for one-third of cotton fabric production in 2012, consistently has the lowest average annual ratio since 1985-89. The Chinese ratio is on a declining trend reaching only 18% in 2010-12. Even assuming that cotton yarn production data in China is overestimated, and that yarn production moved in tandem with mill use as reported by the ICAC Secretariat reaching 18.3 million tons in 2012, the ratio of cotton fabric production to available cotton yarn also follows a declining trend reaching 28% in 2010-12. Therefore, **China is increasingly blending cotton yarns with other yarns to produce an increasing proportion of non-cotton dominant fabrics.** The only other top cotton fabric producing country with a strong long term declining ratio is Turkey, which accounted for 2% of world cotton fabric production in 2012. **Similar conclusions apply for Turkey and China.**

The ratio for the world less China averaged 67% with little variation over 1970-2012, and it shows an increasing trend since the early 2000s. The ratio for India, which accounted for 27% of world cotton fabric production in 2012, follows and increasing trend, suggesting that **India has increased the proportion of other fibers in cotton-dominant fabrics starting in the late 1990s. Similar conclusions apply for**

11) Besides waste, the only other factor that pushes the ratio below 1 is the diversion of some cotton fiber into the production of non-cotton dominant yarn.

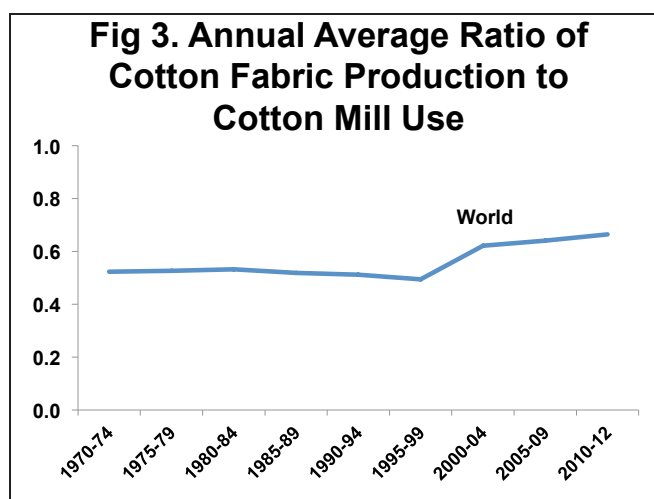
12) Cotton fabric refers to woven cotton fabrics with a cotton content of at least 50%, classified as codes 5208, 5209, 5210, 5211 and 5212 in the HS 2002.

13) Waste translates into lower ratios.

Brazil, since its ratio also experienced a long-term increase although with higher variability than in India. Pakistan and Indonesia have the most stable ratios, although both have declined since the early 2000s. However, **while the volume of cotton fabric production tends to follow closely the availability of cotton yarn in Indonesia, cotton fabric production consistently exceeds available cotton yarn in Pakistan, indicating that cotton fabrics tend to include fibers other than cotton in their blend.**

Declining Market Share of Cotton in Textiles

A direct comparison of world cotton fabric production with world cotton mill use seems to indicate that the average cotton content of cotton fabrics has increased over the last decade (figure 3). Unfortunately, that comparison is misleading because as discussed above an increasing proportion of cotton is being used in the production of non-cotton dominant yarns and an increasing proportion of cotton yarns end up being used in the production of non-cotton dominant fabrics. The



annual average market share of cotton among all textile fibers declined from 51.1% in the 1970s to 48.6% in the 1980s, to 45.2% in the 1990s, to 39.1 in the 2000s, to 31.8% between 2010 and 2012.



CONTRACT DISPUTES AND DEFAULTS ARE BACK TO NORMAL IN 2013

By Andrei Guitchounts, ICAC

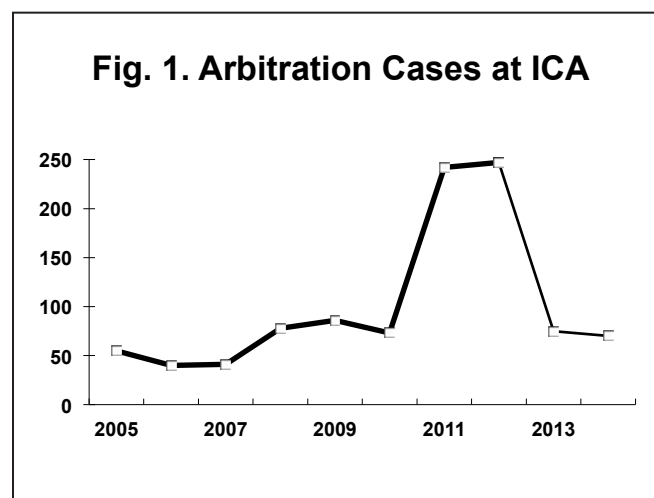
The number of contract defaults, disputes and arbitration cases are returning to normal averages in 2013, after two years of surges to record levels caused by the record price volatility experienced during 2010/11.

A record level of cotton price volatility caused a surge in the number of arbitration cases filed at the International Cotton Association (ICA) during the past two years. New arbitration cases at the ICA rose from 73 in 2010 to 242 in 2011 and to 247 in 2012. These disputes were related to contract performance, weight and quality and involved the entire cotton supply chain, from farmers to merchants, and to textile mills. The unprecedented increase in prices caused a large number of growers in the USA, India (associated with a government ban on exports), Brazil, Tanzania and other countries to default on cotton contracts, to delay delivery, or to deliver smaller quantities and lower qualities than agreed in contracts with merchants. When prices declined sharply, a large number of spinning mills also defaulted on contracts by failing to issue letters of credit or to accept shipments of cotton. Most of these mills are based in Bangladesh, China, Indonesia, Pakistan, Thailand and Vietnam.

During 2013, the situation with contract defaults has improved substantially as a result of the recent stabilization of cotton prices. Data from the past four decades indicate that cotton prices normally fluctuate 15% below and 17% above the average each season. During the first three months of 2013/14

prices ranged from 6% below to 9% above the average of 90 cents. The number of arbitration cases filed with the ICA during the first 10 months of 2013 declined to 71, and the ICA is projecting that about 70 new cases will be filed during calendar 2014. These volumes of arbitrations are closer to levels recorded before 2011. Between 2005 and 2010, the number of arbitration cases handled by the ICA ranged between 40 and 73 per year.

The world cotton industry is dependent on contract sanctity and an environment in which all parties fulfill their contractual



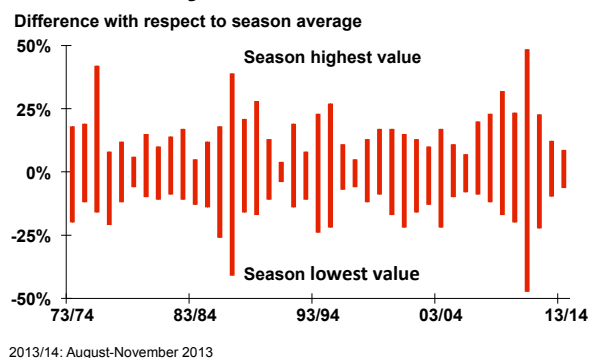
obligations to ensure a smooth flow of cotton from field to consumers. Millions of farmers enter into contracts with thousands of traders or ginning mills agreeing to deliver cotton once it is produced. Traders then sell cotton to international merchants or spinning mills, which in their turn sign contracts with buyers of cotton yarn. The chain continues all the way to the retailer. If any part of the chain does not fulfill their contract obligations, because prices have changed and they could do better in new market conditions, the trading system fails, causing losses for the entire chain and disrupting a normal flow of products to the consumer. Such losses increase operational risks and the cost of financing, making production more expensive and less competitive compared with man-made fibers. That is what happened as a result of defaults caused by record price volatility during 2010/11.

Contract defaults cause substantial difficulties and uncertainties for trading companies obligated to deliver cotton to mills. Traders face losses if forced to replenish shortfalls at higher market prices. The defaults also create problems for mills, which experience shortages of cotton, rising costs and increased uncertainty in operations. Some mills resort to defaulting on high-priced cotton if they are not able to pass increased costs to buyers of cotton yarn. A large number of contracts require re-negotiation. Defaults on contracts increase counter-party-risks, thus limiting the availability and increasing the cost of trade finance. Confidence in the cotton trading system is undermined by defaults.

International cotton associations serve to minimize risks inherent in forward trading and provide rules for fair and equitable trading. Disputes between trading parties arise occasionally and are usually settled amicably or through the framework of arbitration provided by the associations. The standards and principles of good trading practices and the ethic of the sanctity of contracts are essential for the health of the cotton industry. Government support to the underlying principles of good trading practices and enforcement of arbitral awards (including foreign arbitral awards) is necessary and very important. The significance of the New York convention of 1958 cannot be over emphasized. A partnership between governments and the cotton industry helps enable international trade to take place in an equitable manner.

In the aftermath of the record number of defaults following 2010/11, international cotton associations, including the ICA, introduced a number of initiatives to improve and modernize their arbitration systems by streamlining the process to reduce costs and time. The ICA introduced a pool of 10 senior arbitrators to improve the quality and enforceability of awards. In addition, a new business intelligence unit was created in order to spotlight firms that are evading arbitral awards. The ICA is forming an insurance company to provide insurance for legal fees for the collection of awards, and eventually to provide insurance against defaults.

Fig. 2. Price Volatility by Season: Daily Cotlook A Index



The Committee for International Co-operation between Cotton Associations (CICCA) maintains and publishes a list of firms reported by member association to have failed to fulfill arbitration awards. The most recent CICCA default list has 648 firms, as of November 15, 2013. This is a 54% increase from 420 firms on the default list as of November 2011. Firms are added to the list and deleted from the list all the time depending on the change in the status of the company. The largest numbers of defaulters were added to the list during 2012 and 2013 reflecting contract defaults caused by price swings in 2010/11. The most current list indicates that the largest number of defaulters added to the list during 2012 and 2013 were textile mills. During these two years 46 defaulters from China were added to the list; 41 from Bangladesh; 27 from Vietnam; 17 from Thailand; 13 from Pakistan; and 11 from Indonesia. The largest numbers of defaulting producers, 13 each, were added to the list from India and Brazil. The previous spike in the CICCA default list was recorded in 2009, when 71 firms were added after a sharp price spike in March 2008. That price spike caused an increase in non-performance of contracts, and defaults on arbitral awards were reflected on the CICCA default list in 2009.

Losses suffered by trading companies because of widespread contract defaults caused by price volatility in 2010/11 could be hundreds of millions of U.S. dollars.

To deal with the issue of increasing defaults, a continuation of efforts to harmonize trading rules is important and helps to minimize risks and the cost of doing business. Standardizing and digitizing trading practices is also important. Publicizing information about defaults is instrumental in deterring defaults, while an efficient arbitration system is essential in dealing with defaults. Trading with defaulters undermines the efficacy of trading rules. Risk management, and especially price risk management, is essential.





2013/14 SUPPLY AND USE OF COTTON BY COUNTRY

December 2, 2013

	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	1	1		0	0.03	0.03
CUBA	4	272	1	1	2	3		1	0.19	0.19
DOM. REP.					1	1		0	0.47	0.47
MEXICO	118	1,468	174	327	114	238	49	327	1.14	1.37
USA	3,149	906	2,853	848	2	784	2,237	682	0.23	0.87
N. America	3,276	925	3,029	1,177	120	1,029	2,287	1,011	0.30	0.98
EL SALVADOR				11	22	22		11	0.52	0.52
GUATEMALA				7	23	21		9	0.45	0.45
HONDURAS	0	319	0	0				0		
C. America	2	515	1	18	45	43	0	21	0.49	0.49
ARGENTINA	488	447	218	158	6	142	40	200	1.10	1.41
BOLIVIA	5	532	3	1	2	3	1	1	0.16	0.20
BRAZIL	1,040	1,437	1,590	844	48	925	777	780	0.46	0.84
CHILE				0	0	0		0	0.20	0.20
COLOMBIA	44	792	35	6	43	78	0	6	0.08	0.08
ECUADOR	1	436	1	2	11	12		2	0.14	0.14
PARAGUAY	67	380	25	10	1	8	16	12	0.51	1.52
PERU	43	894	38	34	54	92	1	34	0.37	0.37
URUGUAY				0	0	0		0	0.49	0.49
VENEZUELA	15	365	6	1	2	8		1	0.17	0.17
S. America	1,702	1,125	1,915	1,057	168	1,268	834	1,037	0.49	0.82
ALGERIA				1	3	3		1	0.19	0.19
EGYPT	122	828	100	56	103	128	72	58	0.29	0.46
MOROCCO				4	36	36		4	0.10	0.10
SUDAN	53	360	19	17		4	15	17	0.92	4.30
TUNISIA				3	13	13		3	0.21	0.21
N. Africa	175	682	119	80	154	184	87	83	0.31	0.45
BENIN	333	381	95	48		4	105	34	0.31	8.50
BURKINA FASO	557	444	247	108		4	253	99	0.39	24.70
CAMEROON	214	491	110	51		2	101	58	0.56	30.36
CENT. AFR. REP.	36	228	8	4			8	3	0.38	
CHAD	257	162	41	13		1	38	16	0.41	31.80
COTE D'IVOIRE	323	407	149	44		2	130	61	0.47	30.64
GUINEA	13	270	4	2			4	1	0.38	
MADAGASCAR				3				3		
MALI	548	375	205	85		3	199	89	0.44	29.67
NIGER	5	444	2	0		1	1	0	0.12	0.25
SENEGAL	32	378	12	2		1	9	4	0.44	5.47
TOGO	116	320	37	5			35	7	0.20	
F. Africa	2,433	374	910	365		17	882	376	0.42	21.95
ANGOLA	3	299	1	0		1	0	0	0.24	0.34
ETHIOPIA	123	303	37	4	4	42	3	1	0.02	0.02
GHANA	16	363	6	4	1	1	6	4	0.56	2.97
KENYA	35	185	6	1	0	7	0	1	0.08	0.08
MALAWI	162	268	43	22		3	36	26	0.68	8.75
MOZAMBIQUE	135	201	27	27			36	18	0.49	
NIGERIA	284	203	57	33	1	19	47	26	0.40	1.40
SOUTH AFRICA	9	957	9	47	19	21	10	44	1.43	2.12
TANZANIA	409	195	80	124		32	56	115	1.31	3.61
UGANDA	67	261	17	11		1	17	11	0.58	9.19
CONGO, DR				2	8	8		2	0.27	0.27
ZAMBIA	151	203	31	57			36	52	1.44	
ZIMBABWE	357	285	92	40		4	80	48	0.58	12.90
S. Africa	1,771	232	411	378	56	163	328	354	0.72	2.17
KAZAKHSTAN	126	588	74	43	0	15	59	43	0.58	2.92
KYRGYZSTAN	27	831	23	3	3	1	25	3	0.11	2.92
TAJIKISTAN	186	537	130	26		7	98	52	0.50	7.73
TURKMENISTAN	550	565	311	267		144	177	256	0.80	1.77
UZBEKISTAN	1,246	697	920	358	1	345	680	255	0.25	0.74
C. Asia	2,136	682	1,458	698	4	511	1,039	609	0.39	1.19


2013/14 SUPPLY & USE OF COTTON BY COUNTRY (cont'd) December 2, 2013

	AREA	YIELD	PROD	BEG STKS	IMPORTS	CONS	EXPORTS	END STKS	S/U *	S/MU **
	000 Ha	Kgs/Ha			000 Metric Tons				Ratio	Ratio
AUSTRIA				3	3	3		3	0.90	0.90
AZERBAIJAN	25	499	15	15		10	8	11	0.62	1.11
BELARUS				4	11	11		4	0.34	0.34
BELGIUM				5	10	4	6	5	0.51	1.29
BULGARIA	0	324	0	4	2	2		4	2.11	2.11
CZECH REP.				0	5	5	0	0	0.05	0.05
DENMARK										
ESTONIA										
FINLAND										
FRANCE				3	16	14	2	3	0.17	0.19
GERMANY				25	40	35	5	24	0.60	0.68
GREECE	250	974	270	50	3	24	238	61	0.23	2.52
HUNGARY				0	1	1		0	0.44	0.44
IRELAND				0	0	0		0	3.09	3.09
ITALY				16	50	41	4	21	0.46	0.51
LATVIA				0	1	1		0	0.10	0.10
LITHUANIA				0	0	0		0	0.56	0.56
MOLDOVA				1	2	2		1	0.34	0.34
NETHERLANDS				0	5	5		0	0.10	
NORWAY										
POLAND				1	2	2		1	0.29	0.29
PORTUGAL				14	21	21		14	0.69	0.69
ROMANIA				0	1	1		0	0.22	0.22
RUSSIA	1	519	1	11	48	48		12	0.26	0.26
SLOVAK REP.										
SPAIN	61	788	50	7	3	6	42	13	0.26	2.23
SWEDEN				0	0	0		0	0.10	0.10
SWITZERLAND				0	4	4	0	0	0.08	0.09
UKRAINE				0	3	2		0	0.19	0.19
UNITED KINGDOM				0	0	0		0	1.27	1.27
FORMER YUGOSLAVIA				1	6	6		1	0.20	0.20
Europe	339	992	336	163	239	252	305	182	0.09	0.72
Including EU-27	311	1,029	320	130	164	167	297	151	0.33	0.91
CHINA	4,600	1,514	6,700	9,607	3,127	8,041	9	11,383	1.41	1.42
TAIWAN				48	214	204		58	0.29	0.29
HONG KONG				58	45	11	35	58	1.26	5.04
Sub total	4,600	1,456	6,700	9,713	3,386	8,256	44	11,499	1.39	1.39
AUSTRALIA	400	2,269	995	285	0	8	998	274	0.27	36.29
INDONESIA	9	714	6	412	665	600		484	0.81	0.81
JAPAN				27	60	60		27	0.45	0.45
KOREA, D.R.				1	5	5		1	0.24	0.24
KOREA, REP.				64	294	272		86	0.32	0.32
MALAYSIA				17	166	15	144	24	0.15	1.61
PHILIPPINES	0	566	0	4	9	8		5	0.72	0.72
SINGAPORE				0	12		12	0	0.02	
THAILAND	2	516	1	52	334	353		34	0.10	0.10
VIETNAM	12	465	6	104	480	453		137	0.30	0.30
E. Asia	443	2,293	1,016	969	2,026	1,780	1,154	1,076	0.37	0.60
AFGHANISTAN	45	414	19	18		4	17	16	0.76	3.80
BANGLADESH	48	561	27	9	848	800		84	0.11	0.11
INDIA	11,878	526	6,468	1,681	277	5,100	1,326	2,001	0.31	0.39
MYANMAR	332	421	140	107		201		45	0.23	0.23
PAKISTAN	2,914	762	2,026	1,019	463	2,488	80	940	0.37	0.38
SRI LANKA				0	2	2		0	0.11	0.11
S. Asia	15,219	570	8,681	2,837	1,591	8,598	1,422	3,088	0.31	0.36
IRAN	105	601	63	38	69	131		38	0.29	0.29
IRAQ	19	360	7	1	6	13		1	0.09	0.09
ISRAEL	6	1,746	11	1			11	1	0.12	
SYRIA	103	976	100	184		100	2	182	1.79	1.82
TURKEY	500	1,380	880	754	562	1,404	38	754	0.52	0.54
Sub total	771	1,395	1,076	985	647	1,673	52	983	0.83	0.59
WORLD TOTAL	32,848	781	25,645	18,437	8,435	23,766	8,435	20,316	0.85	0.85

*/ Ending stocks divided by consumption plus exports.

Subtotals and total include countries not shown.

**/ Ending stocks divided by consumption.


2014/15 SUPPLY AND USE OF COTTON BY COUNTRY December 2, 2013

	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	1	1		0	0.03	0.03
CUBA	4	272	1	1	2	3		1	0.19	0.19
DOM. REP.					1	1		0	0.47	0.47
MEXICO	118	1,475	175	327	141	250	47	345	1.16	1.38
USA	3,432	911	3,125	682	2	823	2,250	737	0.24	0.90
N. America	3,560	928	3,302	1,011	147	1,080	2,297	1,084	0.32	1.00
EL SALVADOR				11	22	22		11	0.52	0.52
GUATEMALA				9	21	21		9	0.45	0.45
HONDURAS	0	319	0	0				0		
C. America	2	515	1	21	42	43	0	21	0.49	0.49
ARGENTINA	488	447	218	200	5	142	50	231	1.21	1.63
BOLIVIA	5	537	3	1	2	3	1	1	0.16	0.20
BRAZIL	1,040	1,444	1,502	780	113	925	690	780	0.48	0.84
CHILE				0	0	0		0	0.20	0.20
COLOMBIA	45	796	36	6	46	82	0	6	0.08	0.08
ECUADOR	1	440	1	2	11	12		2	0.14	0.14
PARAGUAY	70	384	27	12		8	19	12	0.46	1.53
PERU	43	903	39	34	58	95	1	34	0.36	0.36
URUGUAY				0	0	0		0	0.49	0.49
VENEZUELA	15	368	6	1	7	8		6	0.68	0.68
S. America	1,706	1,072	1,830	1,037	243	1,276	761	1,073	0.53	0.84
ALGERIA				1	3	3		1	0.19	0.19
EGYPT	128	832	107	58	103	134	71	63	0.31	0.47
MOROCCO				4	32	32		4	0.11	0.11
SUDAN	55	363	20	17		4	16	17	0.87	4.10
TUNISIA				3	13	13		3	0.21	0.21
N. Africa	184	691	127	83	151	187	86	87	0.32	0.47
BENIN	317	385	122	34		4	115	37	0.31	9.31
BURKINA FASO	562	453	254	99		4	243	107	0.43	26.68
CAMEROON	203	496	101	58		2	111	45	0.40	23.88
CENT. AFR. REP.	34	230	8	3			8	3	0.39	
CHAD	259	162	42	16		1	41	16	0.39	32.59
COTE D'IVOIRE	323	447	144	61		2	185	18	0.10	8.97
GUINEA	12	272	3	1			4	1	0.36	
MADAGASCAR				3				3		
MALI	521	382	199	89		3	195	90	0.45	30.00
NIGER	5	448	2	0		1	1	0	0.11	0.25
SENEGAL	31	382	12	4		1	11	4	0.34	5.25
TOGO	110	323	36	7			34	9	0.26	
F. Africa	2,377	388	923	376		17	948	335	0.35	19.49
ANGOLA	3	302	1	0		1	0	0	0.25	0.41
ETHIOPIA	129	306	39	1	4	43	1	0	0.01	0.01
GHANA	16	366	6	4	1	1	6	4	0.55	2.97
KENYA	38	185	7	1	0	7	0	1	0.09	0.10
MALAWI	170	271	46	26		3	41	28	0.63	9.32
MOZAMBIQUE	142	203	29	18			28	19	0.68	
NIGERIA	298	205	61	26	1	19	41	28	0.47	1.46
SOUTH AFRICA	10	962	9	44	22	22	10	44	1.41	2.05
TANZANIA	434	197	86	115		34	47	120	1.49	3.58
UGANDA	70	263	18	11		1	21	6	0.28	5.54
CONGO, DR				2	8	8		2	0.27	0.27
ZAMBIA	159	205	33	52			31	53	1.71	
ZIMBABWE	339	285	97	48		4	81	60	0.71	16.13
S. Africa	1,827	239	436	354	59	167	309	372	0.78	2.23
KAZAKHSTAN	126	591	75	43	0	16	59	43	0.58	2.78
KYRGYZSTAN	27	835	23	3	3	1	25	3	0.11	2.92
TAJIKISTAN	186	539	100	52		7	94	52	0.52	7.58
TURKMENISTAN	550	568	312	256		152	161	256	0.82	1.69
UZBEKISTAN	1,284	704	950	255	1	345	530	331	0.38	0.96
C. Asia	2,174	3,237	1,460	609	4	520	868	685	2.41	1.32



2014/15 SUPPLY & USE OF COTTON BY COUNTRY (cont'd) December 2, 2013

	AREA	YIELD	PROD	BEG STKS	IMPORTS	CONS	EXPORTS	END STKS	S/U *	S/MU **
	000 Ha	Kgs/Ha			000 Metric Tons				Ratio	Ratio
AUSTRIA				3	3	3		3	0.93	0.93
AZERBAIJAN	25	502	13	11		11	4	9	0.62	0.87
BELARUS				4	11	11		4	0.34	0.34
BELGIUM				5	10	4	6	5	0.51	1.33
BULGARIA	0	324	0	4	1	2		4	2.10	2.10
CZECH REP.				0	5	5	0	0	0.05	0.05
DENMARK								0		
ESTONIA										
FINLAND										
FRANCE				3	15	14	1	2	0.16	0.18
GERMANY				24	37	34	4	24	0.64	0.71
GREECE	275	974	268	61	3	23	241	68	0.26	2.93
HUNGARY				0	1	1		0	0.47	0.47
IRELAND				0	0	0		0	3.43	3.43
ITALY				21	48	39	4	25	0.58	0.64
LATVIA				0	1	1		0	0.10	0.10
LITHUANIA				0	0	0		0	0.56	0.56
MOLDOVA				1	2	2		1	0.34	0.34
NETHERLANDS				0	5	5		0	0.10	
NORWAY										
POLAND				1	2	2		1	0.30	0.30
PORTUGAL				14	20	20		14	0.72	0.72
ROMANIA				0	1	1		0	0.23	0.23
RUSSIA	1	521	1	12	50	50		13	0.26	0.26
SLOVAK REP.										
SPAIN	59	803	48	13	3	5	45	13	0.27	2.46
SWEDEN				0	0	0		0	0.11	0.11
SWITZERLAND				0	4	4	0	0	0.09	0.09
UKRAINE				0	2	2		0	0.19	0.19
UNITED KINGDOM				0	0	0		0	1.31	1.31
FORMER YUGOSLAVIA				1	6	6		1	0.20	0.20
Europe	362	3,184	329	182	232	247	305	191	0.09	0.77
Including EU-27	335	943	316	151	155	159	301	162	0.35	1.02
CHINA	3,910	1,521	5,949	11,383	1,960	7,800	7	11,486	1.47	1.47
TAIWAN				58	193	193		58	0.30	0.30
HONG KONG				58	42	11	31	58	1.38	5.30
Sub total	3,910	1,521	5,949	11,499	2,196	8,004	38	11,601	1.44	1.45
AUSTRALIA	412	2,280	939	274	0	7	762	444	0.58	61.85
INDONESIA	9	718	6	484	648	690		449	0.65	0.65
JAPAN				27	60	60		27	0.45	0.45
KOREA, D.R.				1	5	5		1	0.24	0.24
KOREA, REP.				86	285	285		86	0.30	0.30
MALAYSIA				24	168	16	144	32	0.20	2.05
PHILIPPINES	0	569	0	5	9	8		6	0.84	0.84
SINGAPORE				0	12		13	0	0.00	
THAILAND	2	518	1	34	387	388		34	0.09	0.09
VIETNAM	12	465	6	137	544	544		142	0.26	0.26
E. Asia	455	2,111	960	1,076	2,118	2,010	919	1,225	0.42	0.61
AFGHANISTAN	45	414	19	16		4	16	14	0.66	3.15
BANGLADESH	48	564	27	84	888	880		119	0.14	0.14
INDIA	11,878	526	6,246	2,001	288	5,508	1,027	2,001	0.31	0.36
MYANMAR	332	423	140	45	5	181		10	0.06	0.06
PAKISTAN	2,856	766	2,187	940	442	2,613	81	875	0.32	0.33
SRI LANKA				0	2	2		0	0.11	0.11
S. Asia	15,161	569	8,622	3,088	1,626	9,190	1,124	3,021	0.29	0.33
IRAN	105	607	63	38	68	131		38	0.29	0.29
IRAQ	19	362	7	1	6	13		1	0.09	0.09
ISRAEL	7	1,894	13	1			13	1	0.10	
SYRIA	72	981	70	182		102	55	96	0.61	0.94
TURKEY	490	1,473	722	754	861	1,544	38	754	0.48	0.49
Sub total	731	2,587	890	983	945	1,815	106	897	1.19	0.49
WORLD TOTAL	32,429	765	24,821	20,316	7,762	24,548	7,762	20,589	0.84	0.84

*/ Ending stocks divided by consumption plus exports.

Subtotals and total include countries not shown.

**/ Ending stocks divided by consumption.

SUPPLY AND DISTRIBUTION OF COTTON

December 2, 2013

Seasons begin on August 1

	2009/10	2010/11	2011/12	2012/13 Est.	2013/14 Proj.	2014/15 Proj.
	Million Metric Tons					
BEGINNING STOCKS						
WORLD TOTAL	11.942	8.676	10.044	15.190	18.44	20.32
CHINA	3.585	2.688	2.087	6.181	9.61	11.38
USA	1.380	0.642	0.566	0.729	0.85	0.68
PRODUCTION						
WORLD TOTAL	22.247	25.869	28.041	26.880	25.64	24.82
CHINA	6.925	6.400	7.400	7.300	6.70	5.95
INDIA	5.185	5.865	6.354	6.095	6.47	6.25
USA	2.654	3.942	3.391	3.770	2.85	3.13
PAKISTAN	2.070	2.408	2.311	2.204	2.03	2.19
BRAZIL	1.194	1.960	1.877	1.303	1.59	1.50
UZBEKISTAN	0.850	0.910	0.880	1.000	0.92	0.95
OTHERS	3.369	4.385	5.827	5.208	5.09	4.86
CONSUMPTION						
WORLD TOTAL	25.520	24.502	22.796	23.340	23.77	24.55
CHINA	10.192	9.580	8.635	8.290	8.04	7.80
INDIA	4.300	4.509	4.340	4.845	5.10	5.51
PAKISTAN	2.393	2.100	2.217	2.416	2.49	2.61
EAST ASIA & AUSTRALIA	1.892	1.796	1.646	1.858	2.00	2.21
EUROPE & TURKEY	1.600	1.549	1.495	1.532	1.58	1.71
BRAZIL	1.024	0.958	0.888	0.887	0.93	0.93
USA	0.773	0.849	0.718	0.751	0.78	0.82
CIS	0.604	0.577	0.550	0.561	0.58	0.60
OTHERS	2.743	2.583	2.306	2.201	2.27	2.36
EXPORTS						
WORLD TOTAL	7.798	7.673	9.870	10.001	8.44	7.76
USA	2.621	3.130	2.526	2.902	2.24	2.25
INDIA	1.420	1.085	2.159	1.685	1.33	1.03
AUSTRALIA	0.460	0.545	1.010	1.345	1.00	0.76
BRAZIL	0.433	0.435	1.043	0.938	0.78	0.69
CFA ZONE	0.560	0.476	0.597	0.796	0.88	0.94
UZBEKISTAN	0.820	0.600	0.550	0.653	0.68	0.53
IMPORTS						
WORLD TOTAL	7.928	7.725	9.760	9.709	8.44	7.76
CHINA	2.374	2.609	5.342	4.426	3.13	1.96
EAST ASIA & AUSTRALIA	1.989	1.825	1.998	2.264	2.28	2.35
EUROPE & TURKEY	1.170	0.972	0.724	1.015	0.74	1.03
BANGLADESH	0.887	0.843	0.680	0.593	0.85	0.89
CIS	0.209	0.132	0.098	0.062	0.07	0.07
TRADE IMBALANCE 1/	0.130	0.052	-0.111	-0.292	0.00	0.00
STOCKS ADJUSTMENT 2/	-0.122	-0.051	0.013	0.000	0.00	0.00
ENDING STOCKS						
WORLD TOTAL	8.676	10.044	15.190	18.437	20.32	20.59
CHINA	2.688	2.087	6.181	9.607	11.38	11.49
USA	0.642	0.566	0.729	0.848	0.68	0.74
ENDING STOCKS/MILL USE (%)						
WORLD-LESS-CHINA 3/	39	53	64	59	57	54
CHINA 4/	26	22	72	116	142	147
COTLOOK A INDEX 5/	78	164	100	88		

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.