

USDA  
United States Department of Agriculture

USDA's  
92<sup>nd</sup>  
Annual

**AGRICULTURAL OUTLOOK FORUM**  
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February 25-26, 2016 / Crystal Gateway Marriott Hotel, Arlington, Virginia

# Cotton Outlook

Friday, February 26, 2016

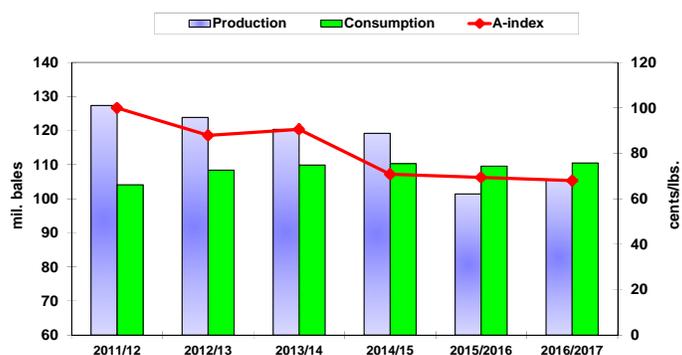
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## THE WORLD AND UNITED STATES COTTON OUTLOOK

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### Introduction

#### World Production, Consumption, and Prices 2011/12 through 2016/17 projection

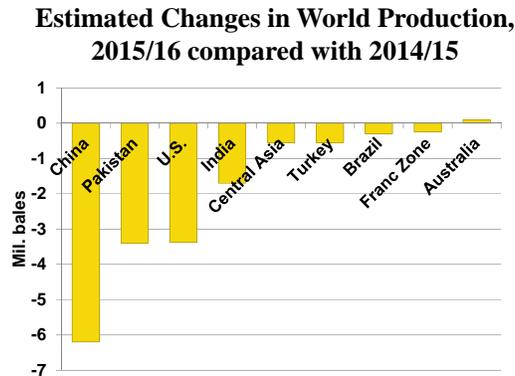


The U.S. Department of Agriculture's (USDA's) first 2016/17 world cotton projections anticipate that consumption will exceed production for the second consecutive year, drawing excessive world stocks down by an additional 5 million bales. World cotton production is expected to rise 4 percent, despite continued price and income constraints on planted area, as yields recover to more normal levels in several major cotton-producing countries. Global consumption is also expected to grow about 1 percent after declining slightly in 2015/16. It is expected that China will continue to pursue policies which have discouraged production and placed limitations on imports in order to dispose of surplus government-held stocks, and that these policies will support a rebound in consumption there. The A Index is forecast to decline to 67 cents per pound, despite the reduction in stocks, as the continued China surplus and low polyester prices weigh on the market.

U.S. cotton production is pegged at 14.3 million bales for 2016/17, as producers are anticipated to increase planted area by about 10 percent. Domestic mill use is projected about even with the 2015/16 level, while exports are anticipated to rise, with ending stocks unchanged from the beginning level.

## World Cotton Situation, 2015/16

### World Cotton Production, 2015/16



Global 2015/16 cotton production is expected to fall 15 percent from the previous year to 101.4 million bales, as all major production areas except Australia saw declines and the four largest—India, China, the United States, and Pakistan—fell sharply. World 2015/16 area harvested is estimated at 30.9 million hectares, down 9 percent from last year, and the world average yield is at 713 kg/hectare, down 6 percent.

China's 2015/16 crop is estimated at 23.8 million bales, a 21-percent drop from last season. Production in the eastern areas plummeted by about 40 percent, as farmers adjusted to the dramatically lower level of government support. At the same time, a combination of lower area and unfavorable weather reduced production in the Xinjiang Autonomous Region. With declining production, China fell behind India as the world's largest cotton producer. China's 2015/16 harvested area is estimated at about 3.4 million hectares, 1.0 million below 2014/15. Yields are expected to reach 1,524 kilograms per hectare, 3 percent higher, as the proportion of area in the higher-yielding Xinjiang Autonomous Region rose above 60 percent.

Pakistan is expected to produce 7.2 million bales in 2015/16, a drop of over 32 percent from the previous year and its smallest crop since 1998. Pakistan's 2015/16 area harvested is expected to decrease to 2.8 million hectares, and yield is estimated 28 percent lower at 560 kg/hectare due to serious pest and disease problems stemming from a combination of weather anomalies and insufficient inputs.

India's 2015/16 crop is estimated at 27.8 million bales, down 6 percent from the preceding year on lower area. The world's largest producer is expected to harvest 11.8 million hectares, down 7 percent from 2014, due to large carry-in stocks and relatively low prices at planting. India's 2015/16 yield is estimated at 513 kg/hectare, slightly higher than in 2014/15 but still below average, partly due to pest and disease problems shared in common with Pakistan.

Central Asia, Turkey, Mexico, and Greece likewise showed significant production declines. Area fell in all four regions due to less attractive cotton prices. Lower yields also contributed to their diminished crops. Brazil, the largest producer in the Southern Hemisphere, is forecast to produce 6.7 million bales in 2015/16, down 4 percent from the previous year due to high input and financing costs. In contrast, Australia is expected to produce 2.4 million bales in 2015/16, a slight increase from the previous year due to improved reservoir levels and timely rainfall.

2015/16 China Supply and Demand

**China Cotton Supply and Demand  
2014/15 and 2015/16 est.**

	<u>Unit</u>	<u>2014/15</u>	<u>2015/16</u>	<u>Change (%)</u>
<b>Beg. Stocks</b>	<b>mil. bales</b>	<b>62.7</b>	<b>67.9</b>	<b>8.3</b>
<b>Production</b>	<b>"</b>	<b>30.0</b>	<b>23.8</b>	<b>-20.7</b>
<b>Imports</b>	<b>"</b>	<b>8.3</b>	<b>5.0</b>	<b>-39.6</b>
<b>Total supply</b>	<b>"</b>	<b>101.0</b>	<b>96.7</b>	<b>-4.2</b>
<b>Consumption</b>	<b>"</b>	<b>33.0</b>	<b>32.0</b>	<b>-3.0</b>
<b>Exports</b>	<b>"</b>	<b>0.1</b>	<b>0.2</b>	<b>181.7</b>
<b>Total use</b>	<b>"</b>	<b>33.1</b>	<b>32.2</b>	<b>-2.6</b>
<b>Ending stocks</b>	<b>"</b>	<b>67.9</b>	<b>64.5</b>	<b>-5.0</b>
<b>Reserve stocks</b>	<b>"</b>	<b>52.8</b>	<b>49.0</b>	<b>-7.2</b>
<b>Stocks-to-use</b>	<b>%</b>	<b>205</b>	<b>200</b>	<b>-2.4</b>
<b>% of world stks</b>	<b>"</b>	<b>60.6</b>	<b>62.0</b>	<b>2.3</b>

The full effect of China's shifts in cotton policy became evident in 2015/16. Area and production both fell by over 20 percent in response to reduced government support, especially in eastern China. Imports are estimated at their lowest level since 2002/03, due both to tighter quota allocations and more competitive domestic prices. At this writing, there are numerous unofficial indications that the government intends to pursue a more aggressive reserve stocks sale program in the spring and summer of 2016.

Even though internal cotton prices have continued to decline and have moved closer to world prices, mill use in China is expected to decline. Mill use has been pressured by several factors, including: (1) continued strong imports of cotton yarn; (2) lower prices for competing manmade fibers, especially polyester; (3) a weaker domestic economy; (4) reduced industry access to imports; and (5) uncertainty about price levels for the upcoming sales of government reserves. Ending stocks are expected to decline about 3.5 million bales, remaining at historically high levels, as the decline in consumption partially offsets the lower available supply.

2015/16 World Consumption, Trade, Ending Stocks, and Prices

**World Cotton Supply and Demand  
2014/15 and 2015/16 est.**

	<u>Unit</u>	<u>2014/15</u>	<u>2015/16</u>	<u>Change (%)</u>
<b>Beg. Stocks</b>	<b>mil. bales</b>	<b>103.1</b>	<b>112.2</b>	<b>8.8</b>
<b>Production</b>	<b>"</b>	<b>119.2</b>	<b>101.4</b>	<b>-14.9</b>
<b>Imports</b>	<b>"</b>	<b><u>35.7</u></b>	<b><u>35.0</u></b>	<b><u>-2.0</u></b>
<b>Total supply</b>	<b>"</b>	<b>257.9</b>	<b>248.5</b>	<b>-3.6</b>
<b>Consumption</b>	<b>"</b>	<b>110.3</b>	<b>109.6</b>	<b>-0.6</b>
<b>Exports</b>	<b>"</b>	<b><u>35.4</u></b>	<b><u>35.0</u></b>	<b><u>-1.0</u></b>
<b>Total use</b>	<b>"</b>	<b>145.7</b>	<b>144.6</b>	<b>-0.7</b>
<b>Ending stocks</b>	<b>"</b>	<b>112.2</b>	<b>104.1</b>	<b>-7.2</b>
<b>Stocks-to-consumption</b>	<b>%</b>	<b>101.7</b>	<b>95.0</b>	<b>-6.6</b>

World cotton consumption is expected to decrease by 0.6 percent in 2015/16 to 109.6 million bales, despite declining global cotton prices that are expected to reach their lowest since 2008/09. At the retail level, cotton consumption is constrained by macroeconomic uncertainties and sharply lower prices for polyester. China's consumption is forecast to decline 3 percent, while consumption in countries outside of China is expected to rise slightly. Among the world's largest spinners, Vietnam and Bangladesh will continue to grow, while India, Turkey, and the United States consume at the 2014/15 level, and consumption for Pakistan and Brazil falls sharply.

World trade is expected to decline slightly to 35 million bales. Higher import demand by Pakistan, due to a significantly smaller crop, and Vietnam and Bangladesh, due to strong growth in spinning, will only partially offset the drop in imports by China. The large decline in U.S. exports is mostly offset by a sharp increase in India's exports that is driven mainly by higher import demand in Pakistan and Bangladesh.

World stocks are forecast to decline 8 million bales to 104 million, for a global stocks-to-consumption ratio of 95 percent. Stocks outside of China will decline 4.6 million bales to 39.6 million, a 6-year low. Stocks in China will fall 3.4 million bales to 64.5 million, but the stocks-to-use ratio will remain at 200 percent, as limited progress is made in reducing the massive surplus held by the State Reserve. The A-Index is forecast to average 69 cents per pound for 2015/16, down 2 cents from last season, as prices face significant pressure from the lack of demand growth and China's stocks.

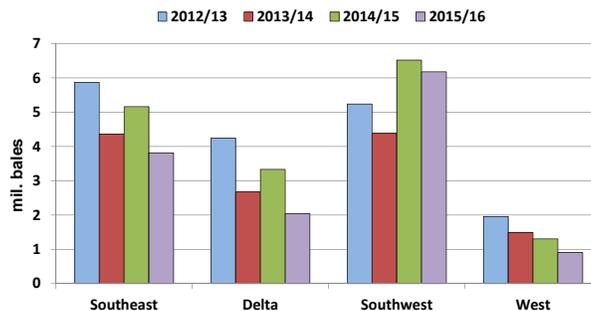
## U.S. Cotton Situation, 2015/16

### Area and Production

U.S. all-cotton production in 2015/16 is estimated at 12.9 million bales, 21 percent lower than last season's crop. Cotton planted acreage decreased 22 percent (nearly 2.5 million acres) in 2015 as relative crop prices favored alternative crops and excessive rainfall reduced sowing in the Southwest below producers' intentions. At 8.6 million acres, planted area was the lowest since 1983 and one of the smallest on record. The Southwest continued to recover from the severe 2011-2013 drought and the overall U.S. abandonment rate fell to 6 percent, compared with the 10-year average of 17 percent. The U.S. 2015 yield averaged 769 pounds per harvested acre, the lowest since 2003. Upland production is estimated at 12.5 million bales—approximately 3.2 million below 2014—with an average yield of 758 pounds per harvested acre. Extra-long staple (ELS) cotton production is estimated 23 percent lower—at 435,000 bales—as smaller area and a lower yield reduced the crop to its smallest since 2009.

<b>U.S. Cotton Area, Abandonment, Yield, and Production</b>						
		<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<b>Planted acres</b>	<b>mil. acres</b>	<b>14.7</b>	<b>12.3</b>	<b>10.4</b>	<b>11.0</b>	<b>8.6</b>
<b>Harvested acres</b>	<b>mil. acres</b>	<b>9.5</b>	<b>9.3</b>	<b>7.5</b>	<b>9.3</b>	<b>8.1</b>
<b>Abandonment rate</b>	<b>%</b>	<b>35.8</b>	<b>24.0</b>	<b>27.5</b>	<b>15.3</b>	<b>5.9</b>
<b>Yield/harvested acre</b>	<b>lbs./acre</b>	<b>790</b>	<b>892</b>	<b>821</b>	<b>838</b>	<b>769</b>
<b>Production</b>	<b>mil. bales</b>	<b>15.6</b>	<b>17.3</b>	<b>12.9</b>	<b>16.3</b>	<b>12.9</b>

### **U.S. Cotton Regional Production, 2012/13 to 2015/16**



Compared with last season, 2015/16 upland cotton production was lower in each region of the Cotton Belt. Upland cotton production in the Southwest decreased 5 percent to 6.1 million bales, accounting for 49 percent of total U.S. upland production. Southwest abandonment was a relatively low 6 percent, but rain during the harvest period hurt both yields—which declined to an average of 625 pounds—and quality.

Southeast cotton production decreased 26 percent in 2015 to 3.8 million bales. Planted area fell to its lowest level since 2009, as area shifted mainly to peanuts. In addition, a relatively high abandonment and an average yield of 876 pounds per harvested acre reduced the crop to its lowest in 6 years, due in large part to a devastating October storm in the Carolinas. Cotton production in the Mississippi Delta states declined 39 percent from the previous year to 2 million bales. Delta planted area decreased to a record low of 985,000 acres, 32 percent below 2014. With a slightly lower yield, the Delta crop declined to its lowest level since 1983.

Upland planted area in the West declined for the fourth consecutive season to 171,000 acres, 32 percent below 2014 and the lowest in nearly a century, due to a combination of low prices and severe drought. With an average yield of 1,463 pounds per harvested acre, upland production totaled only 503,000 bales. ELS planted area in the West also fell 19 percent to 141,500 acres, the lowest in 6 years. Yield decreased for the third consecutive season, bringing ELS production for the region to 407,000 bales. As a result, total cotton production in the West equaled 910,000 bales, compared with 1.3 million bales in 2014.

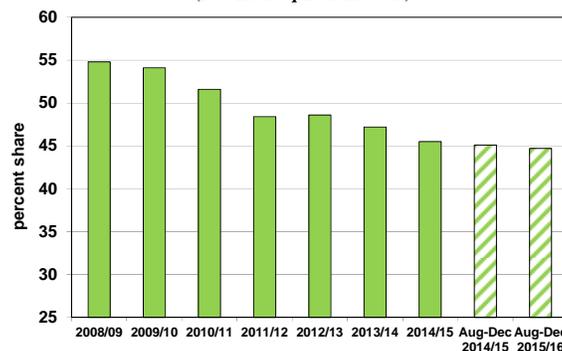
<b>U.S. Cotton Supply and Demand</b>				
<b>2014/15 and 2015/16 est.</b>				
	<b>Unit</b>	<b>2014/15</b>	<b>2015/16</b>	<b>Change (%)</b>
<b>Beg. Stocks</b>	<b>mil bales</b>	<b>2.4</b>	<b>3.7</b>	<b>57.4</b>
<b>Production</b>	<b>"</b>	<b>16.3</b>	<b>12.9</b>	<b>-20.7</b>
<b>Imports</b>	<b>"</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total supply</b>	<b>"</b>	<b>18.7</b>	<b>16.7</b>	<b>-10.9</b>
<b>Mill use</b>	<b>"</b>	<b>3.6</b>	<b>3.6</b>	<b>0.7</b>
<b>Exports</b>	<b>"</b>	<b>11.2</b>	<b>9.5</b>	<b>-15.5</b>
<b>Total use</b>	<b>"</b>	<b>14.8</b>	<b>13.1</b>	<b>-11.6</b>
<b>Ending stocks</b>	<b>"</b>	<b>3.7</b>	<b>3.6</b>	<b>-2.7</b>
<b>Stocks-to-use</b>	<b>%</b>	<b>25.0</b>	<b>27.5</b>	<b>10.0</b>
<b>Farm price</b>	<b>cents/lb.</b>	<b>61.3</b>	<b>59.5</b>	<b>-2.9</b>

## Domestic Mill Use

U.S. cotton mill use for 2015/16 is forecast at 3.6 million bales, about the same as 2014/15. During the first 5 months of 2015/16, mill use was similar to the year-ago level. With relatively stable growth forecast for the U.S. economy in 2016, U.S. cotton mill use is expected to continue near current levels during the second half of 2015/16.

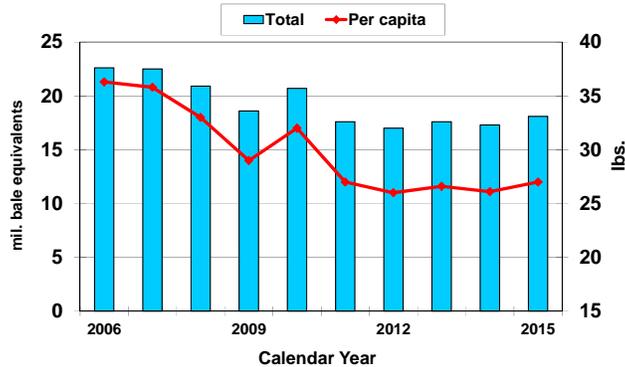
U.S. consumer demand for textile and apparel products follows the global economy. Despite persistent economic uncertainty in calendar year 2015, U.S. fiber product imports increased nearly 7 percent to a record. While gains occurred for each fiber, manmade fiber product imports accounted for 64 percent of the annual increase, with cotton contributing an additional 32 percent. In 2015, U.S. cotton textile and apparel imports rose 4.5 percent to 18.3 million bale-equivalents, the highest in 5 years, while manmade fiber product imports increased 9 percent; competitively-priced manmade fibers reduced the U.S. cotton product import share from 46 percent in calendar 2014 to 45 percent in 2015. During the first 5 months of 2015/16, cotton's share was marginally below the corresponding period of 2014/15.

**Cotton's Share of U.S. Textile Imports,  
2008/09 to Aug-Dec 2015/16**  
(raw fiber equivalent basis)



U.S. cotton product exports rose 3 percent in calendar 2015 to 3.8 million bale-equivalents, the largest in four years. As a result, U.S. domestic consumption of cotton (mill use plus net textile trade) in calendar 2015 is estimated at 18.1 million bale-equivalents, compared with 17.3 million in 2014. U.S. per capita cotton consumption increased approximately 1 pound in calendar 2015 to an estimated 27 pounds, the highest since a similar amount was used in 2011.

### U.S. Domestic Cotton Consumption: Total and Per Capita



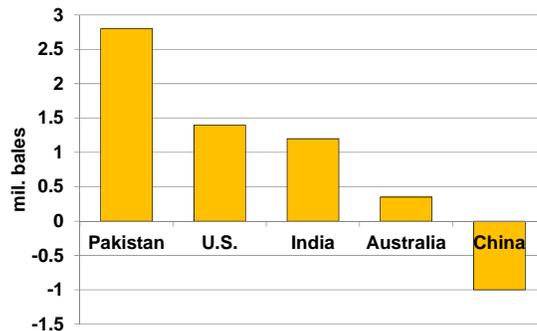
### 2015/16 U.S. Exports, Ending Stocks, and Prices

U.S. raw cotton exports for 2015/16 are forecast at 9.5 million bales, down nearly 15 percent from 2014/15. U.S. exports are expected to capture a smaller share of world trade in the face of strong competition from other machine-picked cotton from Brazil and Australia. A lower exportable surplus and sharply reduced imports by China, combined with a strengthening dollar and concerns over the quality of this season's crop, have reduced U.S. cotton's competitiveness. Export commitments to date have lagged significantly as forward sales are hampered by quality issues and hand-to-mouth buying by foreign mills. Ending stocks are forecast at 3.6 million bales, down 100,000 bales from the last season. The average farm price is expected to decrease slightly to 59.5 cents per pound.

### World Cotton Outlook, 2016/17

#### World Cotton Production, 2016/17

#### Projected Changes in World Production, 2016/17 compared with 2015/16



World cotton production is expected to rise 4 percent in 2016/17 to 105.5 million bales. Area devoted to cotton is projected to remain about even with 2015's 31 million hectares, while yields are expected to recover from the adverse weather and pest problems that affected global output in the preceding year. The United States is anticipated to account for just over one-third of the net increase, with the remaining two-thirds attributable to foreign producing countries, notably Pakistan and India.

The world's largest cotton producer, India, is expected to increase production by 1.2 million bales from 2015/16 to 29.0 million, with area constant at 11.8 million hectares and yields recovering to normal levels. Largely offsetting the India increase is a 1.0-million-bale decrease projected for China, which is based on a further area decline of 7 percent, as producers continue to adjust to lower prices and reduced government support. China's yield is anticipated to rise based on an assumption of normal weather and a rising proportion of planted area in Xinjiang.

Pakistan lost about one-third of its production in 2015/16, as weather conditions were favorable to the spread of the whitefly and containment measures fell short due to the effect of low prices on input use. For 2016/17, Pakistan's yield is projected to rise 25 percent, but to remain below the average of recent years due to continued low prices. Production is projected at 9.0 million bales, accounting for 44 percent of the projected net global increase.

Australia's production is difficult to forecast because of the more distant time horizon for planting decisions; however, irrigation reserves are currently at or above year-ago levels, which could support a production increase of 10-20 percent. Other countries which may see slight production increases include Turkey, with slightly larger area, and Greece, with a return to normal yields. Little or no change is projected for Brazil, Central Asia, or the countries of the African Franc Zone, consistent with world prices remaining near their current levels.

#### USDA Policy Assumptions and Projections for China, 2016/17

USDA estimates that China will hold 49 million bales of stocks in its national reserve at the beginning of 2016/17, nearly half of total world stocks. USDA's China outlook is based on the assumption that China's policies will remain largely unchanged, resulting in lower production and continued import restrictions on the supply side, while the current lower domestic prices and initiatives to support spinning in Xinjiang boost demand.

A higher volume of reserve sales is anticipated during 2016/17 based on the widening deficit of production relative to consumption, as well as unofficial indications that reserve sale prices may fall. Significant exports are not projected because China's internal prices are still not likely to be competitive with world prices; also, policymakers in China have not indicated that exports are a goal, possibly because of potential trade policy issues associated with exporting cotton that was heavily subsidized. In this policy framework, there is potential for China to reduce stocks by another 8 percent, following the estimated 5-percent drawdown for 2015/16.

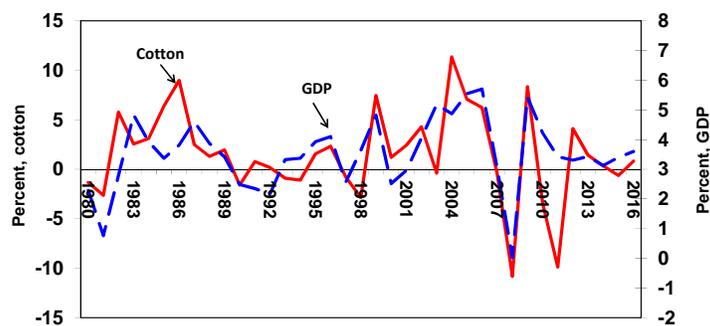
**China Cotton Supply and Demand**  
**2015/16 est. and 2016/17 proj.**

	<b>Unit</b>	<b>2015/16</b>	<b>2016/17</b>	<b>Change (%)</b>
<b>Beg. Stocks</b>	<b>mil bales</b>	<b>67.9</b>	<b>64.5</b>	<b>-5.0</b>
<b>Production</b>	<b>"</b>	<b>23.8</b>	<b>22.8</b>	<b>-4.2</b>
<b>Imports</b>	<b>"</b>	<b>5.0</b>	<b>5.0</b>	<b>0</b>
<b>Total supply</b>	<b>"</b>	<b>96.7</b>	<b>92.3</b>	<b>-4.5</b>
<b>Consumption</b>	<b>"</b>	<b>32.0</b>	<b>33.0</b>	<b>3.1</b>
<b>Exports</b>	<b>"</b>	<b>0.2</b>	<b>0.3</b>	<b>25.0</b>
<b>Total use</b>	<b>"</b>	<b>32.2</b>	<b>33.3</b>	<b>3.3</b>
<b>Ending stocks</b>	<b>"</b>	<b>64.5</b>	<b>59.1</b>	<b>-8.4</b>
<b>Reserve stocks</b>	<b>"</b>	<b>49.0</b>	<b>43.0</b>	<b>-12.2</b>
<b>Stocks-to-use</b>	<b>%</b>	<b>200.4</b>	<b>177.7</b>	<b>-11.3</b>

World Cotton Consumption, 2016/17

World cotton consumption is expected to increase 0.8 percent from the year before in 2016/17, reaching 110.5 million bales. World economic growth is expected to accelerate slightly in calendar years 2016 and 2017, rebounding from a below-average 2015 rate of 3.1 percent. By 2017, the International Monetary Fund projects global gross domestic product to grow at a 3.6-percent rate, slightly above the long-run average.

### World Cotton Consumption and Economic Growth



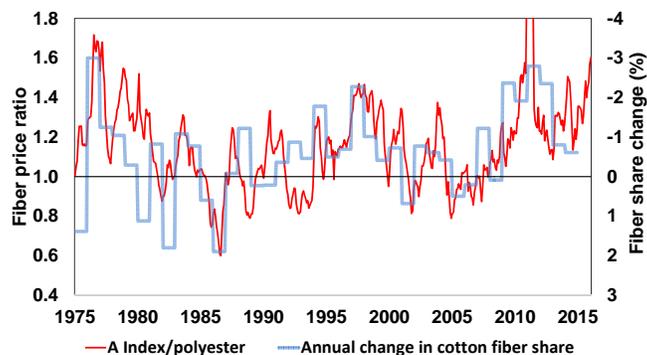
Sources: USDA and International Monetary Fund.

The expected release of cotton from China's government reserves is also a positive factor for 2016/17 global cotton consumption. For several years, China's cotton price support policy was a detriment to cotton consumption. More recently, the government substituted income supports for price supports and tightened restrictions on imports. These measures--combined with a reluctance to drive down world prices by releasing substantial reserve stocks--reduced supplies available to domestic mills, further hindering cotton consumption. In 2015/16, China's consumption was its lowest since shortly after its accession to World Trade Organization in December 2001. In 2016/17, with growing consumption of cotton in Xinjiang and increased access to reserve stocks, China's cotton textile producers should be able to leverage China's superior infrastructure to regain some of its lost share of world cotton spinning. China's 1-million-bale increase in cotton consumption—from 32 million to 33 million bales—accounts for the entire gain expected in world consumption in 2016/17.

Cotton consumption is also expected to continue growing in Vietnam and Bangladesh in 2016/17, but at rates substantially below the 32-percent and 8-percent averages of the previous 3 years. Vietnam has benefitted from both opportunities to export yarn to China and from extensive investment from China in recent years, and is likely to remain the fastest growing cotton consumer in 2016/17. Little or no consumption gains are expected in a number of countries that have begun to see their yarn shipments to China decline recently, and a large number of countries will likely see lower cotton consumption in 2016/17. Cotton consumption in India, the world's second-largest spinner, is expected to remain at 24.5 million bales for the third consecutive year.

Outside of China, no net growth of cotton consumption is expected in 2016/17 as strong competition from polyester continues to constrain the global textile industry's demand for cotton. Since the beginning of 2015/16, cotton prices relative to polyester prices have been higher than any time since 2011, despite declining in absolute terms. In January 2016, cotton relative to polyester rose to a level previously only observed during the cotton price shock of 2010/11, and before that in 1977. The January 1977 cotton/polyester ratio of 1.564 was marginally above the January 2016 ratio, but the corresponding A Index that year was 89 cents/lb., compared with 69 cents/lb. in 2016, indicative of the substantial structural change in world fiber and agricultural markets during the intervening years.

### Cotton/Polyester Price Ratio Near-Record in January 2016



Source: USDA calculations based on data from Cotlook Ltd., Cencotton, National Cotton Council, and International Cotton Advisory Committee.

Inflation-adjusted prices of agricultural commodities and manmade fibers have been falling for decades, driven down by continued technical innovation. In the last decade, the effect has been more pronounced for polyester than for cotton, and cotton's share of world fiber consumption fell virtually every year between 2007 and 2014 as relative cotton prices rose. Marketing year 2015/16 saw a particularly sharp decrease in polyester prices, as well as in prices for petroleum and most other commodities. Monthly real polyester prices during 2015 moved with an 88 percent correlation with the U.S. Federal Reserve Board's broad real exchange rate index, while cotton's correlation was only 18 percent, and the A Index actually rose between January 2015 and January 2016. Real appreciation of the dollar is expected to continue—albeit more slowly—through mid-2016, suggesting polyester prices could continue weakening, and little if any improvement in the cotton/polyester price ratio can be expected for 2016/17 compared 2015/16.

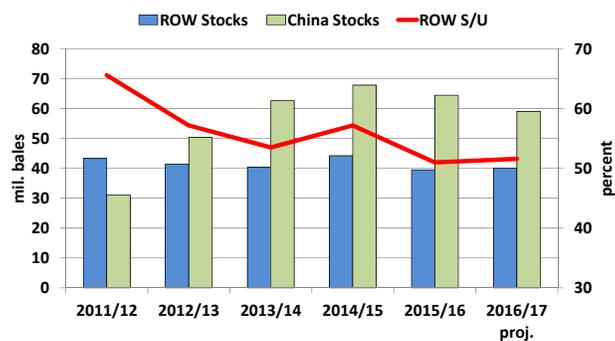
## World Trade, Stocks, and Prices, 2016/17

**World Cotton Supply and Demand**  
**2015/16 est. and 2016/17 proj.**

	<u>Unit</u>	<u>2015/16</u>	<u>2016/17</u>	<u>Change</u> <u>(%)</u>
<b>Beg. Stocks</b>	<b>mil bales</b>	<b>112.2</b>	<b>104.1</b>	<b>-7.2</b>
<b>Production</b>	<b>"</b>	<b>101.4</b>	<b>105.5</b>	<b>4.1</b>
<b>Imports</b>	<b>"</b>	<b>35.0</b>	<b>35.0</b>	<b>0</b>
<b>Total supply</b>	<b>"</b>	<b>248.5</b>	<b>244.6</b>	<b>-1.6</b>
<b>Consumption</b>	<b>"</b>	<b>109.6</b>	<b>110.5</b>	<b>0.8</b>
<b>Exports</b>	<b>"</b>	<b>35.0</b>	<b>35.0</b>	<b>0</b>
<b>Total use</b>	<b>"</b>	<b>144.6</b>	<b>145.5</b>	<b>0.6</b>
<b>Ending stocks</b>	<b>"</b>	<b>104.1</b>	<b>99.1</b>	<b>-4.8</b>
<b>China stocks</b>	<b>"</b>	<b>64.5</b>	<b>59.1</b>	<b>-8.4</b>
<b>Stocks-to-consumption</b>	<b>%</b>	<b>95.0</b>	<b>89.7</b>	<b>-5.6</b>

World trade in 2016/17 is projected at 35 million bales, the same level as 2015/16. China's imports are also projected even with 2015/16, but Pakistan's imports are likely to fall as domestic production rises. Relatively tight foreign beginning stocks outside of China are likely to result in higher imports which will offset the Pakistan decline. These developments should provide opportunities for major exporters with larger available supplies, especially the United States and India.

**China's Stocks, Stocks Outside China,  
and Stocks Outside China as % of Use**



Overall world stocks are expected to fall 5 million bales to 99 million in 2016/17, but global stocks will remain well above historical levels. The projected decline in China's stocks more than accounts for the global reduction, due to its anticipated deficit of production relative to consumption. As a result, stocks outside of China are projected to increase marginally.

The A Index is projected 2 cents below the 2015/16 level at 67 cents per pound, as continued weak demand growth, low manmade fiber prices, and the pressures of China's surplus disposal policies continue to weigh on world prices.

### U.S. Cotton Outlook for 2016/17

#### Area, Production, and Supply

#### U.S. Cotton Area, Yield, and Production 2015/16 and 2016/17 proj.

	<b>Unit</b>	<b>2015/16</b>	<b>2016/17</b>	<b>Change(%)</b>
<b>Planted area</b>	<b>mil. acres</b>	<b>8.58</b>	<b>9.40</b>	<b>9.6</b>
<b>Harvested area</b>	<b>"</b>	<b>8.08</b>	<b>8.45</b>	<b>4.6</b>
<b>Abandonment rate</b>	<b>%</b>	<b>5.9</b>	<b>10.1</b>	<b>71.2</b>
<b>Yield/harvested acre</b>	<b>lbs./acre</b>	<b>769</b>	<b>812</b>	<b>5.6</b>
<b>Production</b>	<b>mil. bales</b>	<b>12.94</b>	<b>14.30</b>	<b>10.5</b>

The early USDA projection for 2016 U.S. cotton planted acreage is 9.4 million acres, an increase of 800,000 acres or nearly 10 above 2015. Cotton planted area is expected to rise due mainly to a return of area prevented from being planted last season as a result of wet conditions, as well as slightly more favorable prices for cotton relative to alternative crops. More than 500,000 acres of intended cotton acres were unable to be planted in 2015 due to adverse weather. In addition, while cotton prices have fallen from year-ago levels, prices of alternative crops, including corn, soybeans, and grain sorghum, are also lower. The USDA projection is 3 percent (300,000 acres) above the recent National Cotton Council (NCC) survey.

With prices for cotton and other commodities close to break-even levels, cotton may be disadvantaged due to its relatively higher input costs. At the same time, government program incentives are mixed: downside cotton price risk is cushioned by the CCC marketing loan program, which was recently reinforced by the addition of commodity certificates to eliminate reductions due to payment limitations; on the other hand, potential payments for other crops under the ARC and PLC programs could induce growers with generic (cotton) base acres to increase plantings of alternative crops.

The NCC's survey forecast of 9.1 million acres was released on February 6, reflecting responses received from mid-December through mid-January. Survey respondents reported upland cotton area increases for three of the four Cotton Belt regions. In the Southeast, a 5-percent decrease in cotton acreage was reported as corn and soybeans increase. For the Delta States, the NCC survey indicated a 25-percent increase in cotton plantings at the expense of corn, soybeans, and wheat. The survey indicated that Southwest producers will shift area out of grains and prevented plantings will return to cotton. In the West, upland cotton area is expected to rise 24 percent due to an increase in Arizona, where shifts from grains were reported. In addition, ELS cotton planted area will rise as a result of weaker prices for alternatives and expectations for increased water allocations in the West. USDA's first survey of producer planting intentions—*Prospective Plantings*—will be conducted in early March and published on March 31, 2016.

For the purposes of this analysis, cotton plantings of 9.4 million acres are estimated to result in harvested acreage of nearly 8.5 million acres. The projected U.S. harvested area is based on regional abandonment rates near their long-run averages, with the exception of the Southwest, where the abandonment rate is expected below the average at 15 percent. As a result, U.S. abandonment of 10 percent is 4 percentage points above 2015 but well below the 2011-14 seasons. With the Southwest expected to account for 60 percent of U.S. cotton area in 2016, crop conditions in this region will once again have a considerable impact on the U.S. crop. The NOAA mid-February seasonal outlook through April indicates that drought conditions are not expected. However, recent warm weather, coupled with a lack of rainfall, has resulted in dry conditions developing in central and southern Texas.

USDA is forecasting a national average yield of 812 pounds per harvested acre, based on regional average yields. U.S. 2016 crop production is projected at 14.3 million bales, 1.4 million (10.5 percent) above 2015 but 2 million bales below 2014. With carry-in stocks at 3.6 million bales, total supply—17.9 million bales—would rise approximately 7.5 percent from 2015/16.

U.S. Disappearance, Ending Stocks, and Farm Price

**U.S. Cotton Supply and Demand  
2015/16 est. and 2016/17 proj.**

	<b>Unit</b>	<b>2015/16</b>	<b>2016/17</b>	<b>Change(%)</b>
<b>Beg. Stocks</b>	<b>mil bales</b>	<b>3.70</b>	<b>3.60</b>	<b>-2.7</b>
<b>Production</b>	<b>"</b>	<b>12.94</b>	<b>14.30</b>	<b>10.5</b>
<b>Imports</b>	<b>"</b>	<b>0.01</b>	<b>0.01</b>	<b>0.0</b>
<b>Total supply</b>	<b>"</b>	<b>16.65</b>	<b>17.91</b>	<b>7.6</b>
<b>Mill use</b>	<b>"</b>	<b>3.60</b>	<b>3.60</b>	<b>0.0</b>
<b>Exports</b>	<b>"</b>	<b>9.50</b>	<b>10.70</b>	<b>12.6</b>
<b>Total use</b>	<b>"</b>	<b>13.10</b>	<b>14.30</b>	<b>9.2</b>
<b>Ending stocks</b>	<b>"</b>	<b>3.60</b>	<b>3.60</b>	<b>0.0</b>
<b>Stocks-to-use</b>	<b>%</b>	<b>27.5</b>	<b>25.2</b>	<b>-8.4</b>
<b>Farm price</b>	<b>cents/lb.</b>	<b>59.5</b>	<b>58.0</b>	<b>-2.5</b>

U.S. domestic mill use is projected at 3.6 million bales, unchanged from 2015/16. Mill use has steadily improved from a low of 3.3 million bales in 2011/12, when cotton prices peaked relative to polyester. Cotton mill use in 2016/17 is expected to continue near the level of the last several seasons—despite increased investment efficiencies—as polyester remains competitively priced. U.S. cotton mill use has been sustained mostly by semi-processed textile and apparel exports—mainly to Mexico and the CAFTA-DR/CBI countries—that are finished and shipped back to the United States. U.S. mill use has also benefitted from cotton yarn shipments to China and from expanding capacity.

U.S. cotton exports are projected at 10.7 million bales in 2016/17, an increase of nearly 13 percent, due to expectations for higher U.S. exportable supplies and relatively tight foreign stocks outside of China. The United States is projected to account for a world trade share above 30 percent in 2016/17, up from 27 percent in 2015/16 but below 2014/15's 32 percent. Ending stocks, projected to remain flat at 3.6 million bales, would account for 25 percent of total disappearance, compared with a 5-year average of 23 percent. In addition, U.S. stocks as a share of world stocks are expected to remain below 4 percent, consistent with the previous three seasons.

The 2016/17 marketing year average price received by U.S. upland cotton producers is projected to range between 53 and 63 cents per pound, with the mid-point of 58 cents 2.5 percent below the 2015/16 estimate. Prices for corn and soybeans, the main cropping alternatives to cotton, are also projected below the current season. At 58 cents per pound, the 2016/17 U.S. cotton farm price would decline to its lowest since 2008/09's 47.8 cents per pound.