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USDA  
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**Agricultural Outlook Forum**  
**A New Horizon: The Future of Agriculture**  
February 23-24, 2017 • Crystal Gateway Marriott Hotel, Arlington, Virginia

# Cotton Outlook

Friday, February 24, 2017

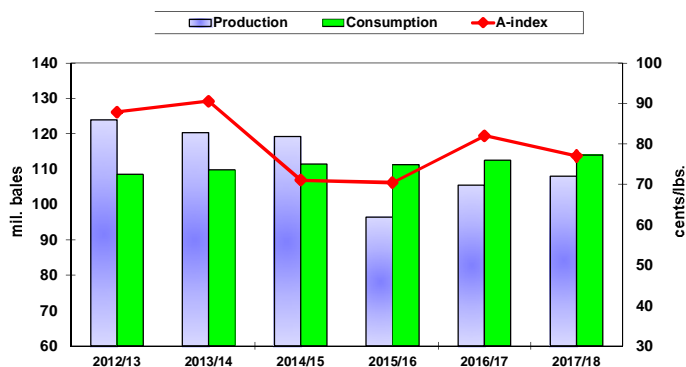
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## THE WORLD AND UNITED STATES COTTON OUTLOOK

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 U.S. Department of Agriculture

### Introduction

#### World Production, Consumption, and Prices 2012/13 through 2017/18 projection



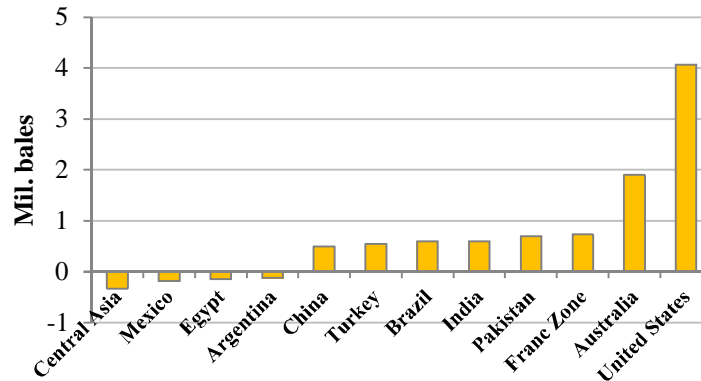
The U.S. Department of Agriculture’s (USDA’s) first 2017/18 world cotton projections anticipate that consumption will exceed production for the third consecutive marketing year, drawing excessive world stocks down by another 6 million bales. World cotton production is expected to rise 2.4 percent, as area planted responds to prices which have risen sharply from year-ago levels. Global consumption is also likely to continue to grow at a modest pace. It is expected that China will continue to pursue policies limiting production and imports in order to dispose of surplus government-held stocks. The A Index is forecast to decline about 5 cents to 77 cents per pound due to projected higher stocks outside of China.

U.S. 2017/18 cotton production is pegged at 17.0 million bales for the second consecutive season based on a 14-percent increase in planted area, combined with higher abandonment and lower yields. Domestic mill use is projected marginally above the 2016/17 level, and both exports and ending stocks are likely to rise.

## World Cotton Situation, 2016/17

### World Cotton Production, 2016/17

**Estimated Changes in World Production,  
2016/17 compared with 2015/16**



Global 2016/17 cotton production is expected to rise 9 percent from the previous year to 105.4 million bales, as most major production areas saw increases, and the four largest—India, China, the United States, and Pakistan—rose substantially. World 2016/17 area harvested is estimated at 29.3 million hectares, down 4 percent from last year and 14 percent below 2014/15. The world average yield is forecast at 784 kg/hectare, up nearly 14 percent.

India's 2016/17 crop is estimated at 27.0 million bales, up 2 percent from the preceding year on much higher yields, despite lower area. Harvested area for the world's largest producer is estimated at 10.5 million hectares, down 12 percent from 2015/16, as area shifted to alternative crops. India's 2016/17 yield is estimated at an above-average 560 kg/hectare, 16 percent higher than in 2015/16, due to a favorable monsoon and reduced pest problems.

China's 2016/17 crop is estimated at 22.5 million bales, a 2-percent increase from last season, the first such gain since 2012/13. A continued decline in the eastern cotton areas was more than offset by higher area and yields in the Xinjiang Autonomous Region. China remained the world's second-largest producer, behind India. China's 2016/17 harvested area is estimated at about 2.9 million hectares, 200,000 below 2015/16. Yields are expected to reach 1,719 kilograms per hectare, up 9 percent due to more favorable yields and a higher proportion of area in the Xinjiang Autonomous Region.

Pakistan is expected to produce 7.7 million bales in 2016/17, an increase of 10 percent from the previous year, but nonetheless its second-smallest crop since 1998/99. Pakistan's 2016/17 area harvested decreased to an estimated 2.4 million hectares, the lowest since 1985/86, but yields rebounded as the major pest and disease problems in 2015/16 were mostly avoided this year.

Australia's 2016/17 production is forecast up 73 percent to 4.5 million bales on much higher harvested area, as water availability has improved substantially. Production in Brazil, the other major southern hemisphere producer, is also forecast up 10 percent on improved yields versus 2015/16. In Franc Zone

Africa, production is forecast up 17 percent to 4.9 million bales as both area and yield improved thanks to the availability of inputs. Production in Central Asia is expected to fall 4 percent to 5.7 million bales on poor yields, especially in Uzbekistan.

### 2016/17 China Supply and Demand

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

|                        | <b>Unit</b>       | <b>2015/16</b> | <b>2016/17</b> | <b>Change (%)</b> |
|------------------------|-------------------|----------------|----------------|-------------------|
| <b>Beg. Stocks</b>     | <b>mil. bales</b> | <b>66.9</b>    | <b>58.2</b>    | <b>-13.0</b>      |
| <b>Production</b>      | <b>"</b>          | <b>22.0</b>    | <b>22.5</b>    | <b>2.3</b>        |
| <b>Imports</b>         | <b>"</b>          | <b>4.4</b>     | <b>4.5</b>     | <b>2.1</b>        |
| <b>Total supply</b>    | <b>"</b>          | <b>93.3</b>    | <b>85.2</b>    | <b>-8.7</b>       |
| <b>Consumption</b>     | <b>"</b>          | <b>35.0</b>    | <b>36.3</b>    | <b>3.6</b>        |
| <b>Exports</b>         | <b>"</b>          | <b>0.1</b>     | <b>0.1</b>     | <b>-21.9</b>      |
| <b>Total use</b>       | <b>"</b>          | <b>35.1</b>    | <b>36.4</b>    | <b>3.5</b>        |
| <b>Ending stocks</b>   | <b>"</b>          | <b>58.2</b>    | <b>48.8</b>    | <b>-16.1</b>      |
| <b>Reserve stocks</b>  | <b>"</b>          | <b>43.9</b>    | <b>32.0</b>    | <b>-27.1</b>      |
| <b>Stocks-to-use</b>   | <b>%</b>          | <b>165.7</b>   | <b>134.4</b>   | <b>-18.9</b>      |
| <b>% of world stks</b> | <b>"</b>          | <b>60.1</b>    | <b>54.3</b>    | <b>-9.7</b>       |

With consumption exceeding production, China is expected to draw its massive stocks down for the second consecutive season in 2016/17; however, stocks are expected to remain above 130 percent of disappearance. Production is estimated to rise marginally following sharp declines from 2013/14 through 2015/16. Imports continue to be restricted close to the level of the basic WTO tariff rate quota of about 4.1 million bales (894,000 metric tons). The government has announced an auction program to begin March 6 and run through August 31, 2017, with terms similar to last year's auction, which netted sales of more than 12.0 million bales (see Appendix for a summary of China's current cotton policy measures).

Ample supplies are supporting China's cotton consumption growth at an estimated 3.6-percent rate, well above the world average; however, projected consumption is still 29 percent below the record realized in 2007/08. The flow of cotton from government-held reserves has replaced a portion of last season's yarn imports with domestic spinning; at the same time, the government's program to support mill expansion has raised Xinjiang's share of total consumption to an estimated 10 percent.

2016/17 World Consumption, Trade, Ending Stocks, and Prices

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

|                              | <u>Unit</u>       | <u>2015/16</u>     | <u>2016/17</u>     | <u>Change (%)</u> |
|------------------------------|-------------------|--------------------|--------------------|-------------------|
| <b>Beg. Stocks</b>           | <b>mil. bales</b> | <b>111.7</b>       | <b>96.8</b>        | <b>-13.3</b>      |
| <b>Production</b>            | <b>"</b>          | <b>96.5</b>        | <b>105.4</b>       | <b>9.3</b>        |
| <b>Imports</b>               | <b>"</b>          | <b><u>35.2</u></b> | <b><u>35.7</u></b> | <b><u>1.5</u></b> |
| <b>Total supply</b>          | <b>"</b>          | <b>243.4</b>       | <b>238.0</b>       | <b>-2.2</b>       |
| <b>Consumption</b>           | <b>"</b>          | <b>111.3</b>       | <b>112.5</b>       | <b>1.1</b>        |
| <b>Exports</b>               | <b>"</b>          | <b><u>35.3</u></b> | <b><u>35.7</u></b> | <b><u>1.3</u></b> |
| <b>Total use</b>             | <b>"</b>          | <b>146.5</b>       | <b>148.3</b>       | <b>1.2</b>        |
| <b>Ending stocks</b>         | <b>"</b>          | <b>96.8</b>        | <b>89.9</b>        | <b>-7.2</b>       |
| <b>Stocks-to-consumption</b> | <b>%</b>          | <b>87.0</b>        | <b>79.9</b>        | <b>-8.2</b>       |

World cotton consumption is expected to increase 1.1 percent in 2016/17 to 112.5 million bales. An expected 2-percent decline in use in India, caused in part by the demonetization policy, coupled with the long-term trend of declines in East Asia and developed countries, has partially offset continued strong growth in use in Vietnam and Bangladesh, up 16 and 10 percent, respectively. As a result, consumption outside of China is expected to remain flat. Consumption growth in China is expected to increase, with use in 2016/17 forecast up 3.6 percent from last season, in response to growing domestic demand for textile and apparel products, coupled with weaker yarn import demand due to the declining price gap in China between domestically produced and imported yarn. Further supporting demand is the rapid growth in spinning capacity in Xinjiang, which has benefited from government support.

World trade is expected to increase slightly to 35.7 million bales. Higher import demand in India, due to strong early season imports when internal prices were high, and Vietnam and Bangladesh, more than offset lower imports in Pakistan and Turkey, which both saw production recover from lower levels in the previous season. Production rebounds for the United States and Australia will boost exports by more than one-third from these two suppliers, while nearly all other major exporters are expected to see export volumes decline. With no change in China's import policy, imports there are forecast roughly the same as last year.

World stocks are forecast to decline 6.9 million bales to 89.9 million, for a global stocks-to-consumption ratio of 80 percent. Stocks outside of China will increase 2.5 million bales to 41.1 million. The A Index is forecast to average 82 cents per pound for 2016/17, up 11.6 cents from last season.

## U.S. Cotton Situation, 2016/17

### Area and Production

U.S. all-cotton production in 2016/17 is estimated at 17.0 million bales, nearly 32 percent higher than last season's crop. Cotton planted acreage increased 17 percent in 2016 as relative prices favored cotton over alternative crops. At 10.1 million acres, planted area recovered nearly 1.5 million acres from the lowest area since 1983. The U.S. abandonment rate declined to 5.5 percent, compared with the 5-year average of 22 percent. The U.S. 2016/17 yield averaged 855 pounds per harvested acre, the highest since 2012/13. Upland production is estimated at 16.4 million bales—approximately 4 million above 2015/16—with an average yield of 844 pounds per harvested acre. Extra-long staple (ELS) cotton production is estimated 29 percent higher—at 558,000 bales—as larger area and a higher yield resulted in a crop similar to 2014/15.

| <b>U.S. All-Cotton Area, Abandonment, Yield, and Production</b> |                   |                |                |                |                |                |
|---|-------------------|----------------|----------------|----------------|----------------|----------------|
|   |                   | <u>2012/13</u> | <u>2013/14</u> | <u>2014/15</u> | <u>2015/16</u> | <u>2016/17</u> |
| <b>Planted acres</b>  | <b>mil. acres</b> | <b>12.3</b>    | <b>10.4</b>    | <b>11.0</b>    | <b>8.6</b>     | <b>10.1</b>    |
| <b>Harvested acres</b>  | <b>mil. acres</b> | <b>9.3</b>     | <b>7.5</b>     | <b>9.3</b>     | <b>8.1</b>     | <b>9.5</b>     |
| <b>Abandonment rate</b>   | <b>%</b>          | <b>24.0</b>    | <b>27.5</b>    | <b>15.3</b>    | <b>5.9</b>     | <b>5.5</b>     |
| <b>Yield/harvested acre</b>                                     | <b>lbs./acre</b>  | <b>892</b>     | <b>821</b>     | <b>838</b>     | <b>766</b>     | <b>855</b>     |
| <b>Production</b>   | <b>mil. Bales</b> | <b>17.3</b>    | <b>12.9</b>    | <b>16.3</b>    | <b>12.9</b>    | <b>17.0</b>    |

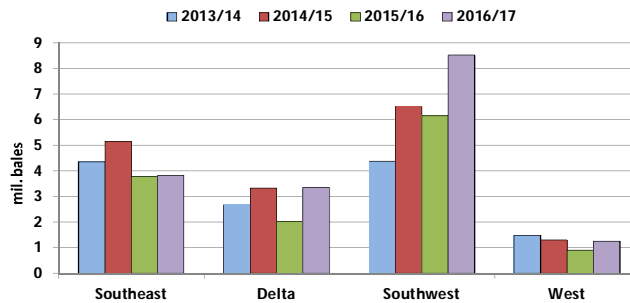
Compared with last season, 2016/17 upland cotton production was higher in each region of the Cotton Belt. Upland cotton production in the Southwest increased nearly 39 percent to 8.5 million bales, accounting for 52 percent of total U.S. upland production. Southwest abandonment was a relatively low 8 percent, and an excellent growing season led to a high quality crop with an above-average yield—738 pounds per harvested acre.

Southeast cotton production rose slightly in 2016/17 to 3.8 million bales. Planted area decreased to its lowest level since 2009, as area shifted mainly to corn. However, a relatively low abandonment offset a below-average yield of 862 pounds per harvested acre, keeping the region's crop near that of 2015/16. Cotton production in the Mississippi Delta States increased 1.3 million bales from the previous year to 3.3 million bales. Delta planted area grew 500,000 acres in 2016 from a record low of 985,000 acres. With a higher yield, the Delta crop increased to its highest level in 4 years.

Upland planted area in the West rose from 171,000 acres the previous year—the lowest in nearly a century—to 233,000 acres in 2016. Increased irrigation supplies helped the region produce a record

yield of 1,586 pounds per harvested acre, raising upland production 47 percent to 740,000 bales. ELS planted area in the West increased 25 percent to 177,500 acres. Higher yields pushed ELS production for the region to 525,500 bales. As a result, total cotton production in the West equaled 1.3 million bales, compared with 907,000 bales in 2015/16.

**U.S. Cotton Regional Production,  
2013/14 to 2016/17**



| <b>U.S. Cotton Supply and Demand<br/>2015/16 and 2016/17 est.</b> |             |                |                |                   |
|---|-------------|----------------|----------------|-------------------|
|   | <b>Unit</b> | <b>2015/16</b> | <b>2016/17</b> | <b>Change (%)</b> |
| <b>Beg. Stocks</b>  | mil bales   | 3.7            | 3.8            | 4.1               |
| <b>Production</b>   | "           | 12.9           | 17.0           | 31.6              |
| <b>Imports</b>  | "           | 0.0            | 0.0            | -69.7             |
| <b>Total supply</b>   | "           | 16.6           | 20.8           | 25.3              |
| <b>Mill use</b>   | "           | 3.5            | 3.3            | -4.3              |
| <b>Exports</b>  | "           | 9.2            | 12.7           | 38.8              |
| <b>Total use</b>  | "           | 12.6           | 16.0           | 27.0              |
| <b>Ending stocks</b>  | "           | 3.8            | 4.8            | 26.3              |
| <b>Stocks-to-use</b>  | %           | 30.2           | 30.0           | -0.7              |
| <b>Farm price</b>   | cents/lb.   | 61.2           | 69.0           | 12.7              |

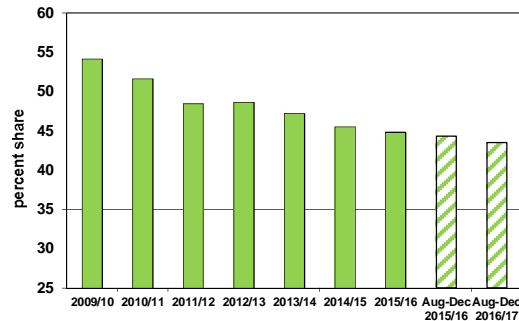
Domestic Mill Use and Consumer Demand

U.S. cotton mill use for 2016/17 is forecast at 3.3 million bales, 4 percent below 2015/16 and the lowest since 2011/12. Mill use is expected to decline for the second consecutive season as cotton continues to lose share to polyester fiber. During the first 5 months of 2016/17, mill use reached about 1.4 million

bales, slightly below the year-ago level. With relative fiber prices favoring polyester, U.S. cotton mill use is expected to continue near current levels during the second half of 2016/17.

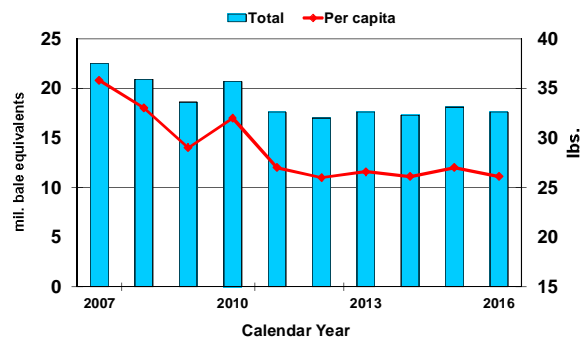
U.S. consumer demand for textile and apparel products follows the global economy. As U.S. GDP growth slowed in calendar year 2016, total U.S. fiber product imports decreased about 1.5 percent from the 2015 record; however, manmade fiber products continued to account for the majority of imports. In 2016, U.S. cotton textile and apparel imports decreased 3 percent to 17.8 million bale-equivalents, while manmade fiber product imports declined 1 percent. Competitively-priced polyester fiber reduced the U.S. cotton product import share from 45 percent in calendar 2015 to 44 percent in 2016. During the first 5 months of 2016/17, cotton's share was slightly below the corresponding period of 2015/16.

**Cotton's Share of U.S. Textile Imports,  
2009/10 to Aug-Dec 2016/17**  
(raw fiber equivalent basis)



Meanwhile, U.S. cotton product exports decreased 7 percent in calendar 2016 to 3.6 million bale-equivalents, the smallest since 2012. As a result, U.S. domestic consumption of cotton (mill use plus net textile trade) in calendar 2016 is estimated at 17.6 million bale-equivalents, compared with 18.1 million in 2015. U.S. per capita cotton consumption declined approximately 1 pound in calendar 2016 to an estimated 26 pounds, similar to 2014.

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



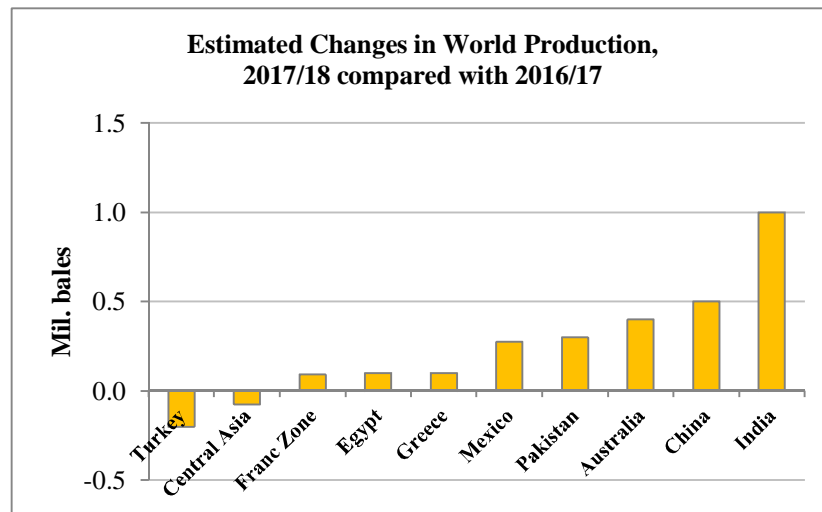


### 2016/17 U.S. Exports, Ending Stocks, and Prices

U.S. raw cotton exports for 2016/17 are forecast at 12.7 million bales, up nearly 40 percent from 2015/16. A sharply higher exportable surplus, improved quality, and reduced competition from some major foreign exporters (India, Brazil, Central Asia) have enhanced U.S. cotton's position, and U.S. exports are expected to capture the largest share of world trade in 6 years. Export sales to date are strong, and total commitments to date as a percent of the expected marketing year total exports are at about the five-year average. Despite the higher export forecast, ending stocks are forecast to rise 1.0 million bales to 4.8 million, the highest level since 2008/09. The average farm price is expected to increase to 69.0 cents per pound, up from 61.2 cents last season.

### World Cotton Outlook, 2017/18

#### World Cotton Production, 2017/18



World cotton production is expected to rise 2.4 percent in 2017/18 to 108 million bales. Area devoted to cotton is projected to rise almost 6 percent to 31 million hectares, as prices are proving favorable at planting time for the northern hemisphere. The United States is anticipated to have essentially unchanged production, while notable increases are projected for India, China, and Australia.

The world's largest cotton producer, India, is expected to increase production by 1 million bales from 2016/17 to 28.0 million, with area also rising to 11.5 million hectares, though yields are expected to fall slightly. This forecast increase is primarily attributable to very competitive cotton prices in India. Production in China is also expected to rise for a second year as eastern cotton area stabilizes while Xinjiang continues to grow.

Pakistan's production is still not expected to show a full recovery from the 2015/16 whitefly epidemic that reduced production, but the 2017/18 crop is expected to rise on a slight recovery in planted area.

Yield is expected essentially unchanged from 2016/17, while area is forecast up as farmers continue to return to cotton after recent struggles.

In Australia, irrigation reserves have risen above year-ago levels, supporting high production growth. Meanwhile, production declines are forecast for Turkey, as yields return to more normal levels after an impressive year in 2016/17, and for Central Asia, as the region's major producing countries continue to gradually shift away from cotton.

#### USDA Projections for China, 2017/18

USDA's China outlook is based on the assumption that China's policies will remain largely unchanged (see Appendix), with production and consumption rising and stocks falling in 2017/18. China's production is projected to rise for the second consecutive season, as production in the east has largely stabilized and Xinjiang production continues to grow. Assuming similar patterns of reserve sales in 2017 and 2018 to 2016, the China reserve could fall to just over 40 percent of its peak of 53 million bales by the end of 2017/18. Declining reserve stocks might set the stage for a more liberal China import policy in 2018/19.

#### **China Cotton Supply and Demand 2016/17 est. and 2017/18 proj.**

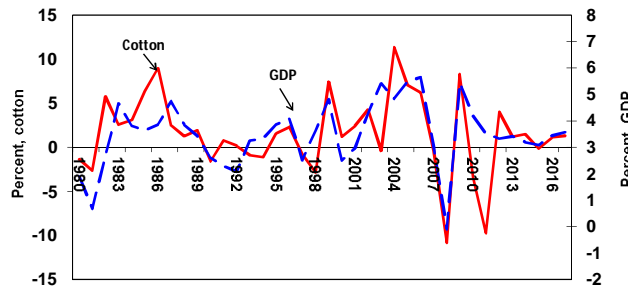
|                       | <b>Unit</b>      | <b>2016/17</b>    | <b>2017/18</b>    | <b><u>Change</u><br/>(%)</b> |
|-----------------------|------------------|-------------------|-------------------|------------------------------|
| <b>Beg. Stocks</b>    | <b>mil bales</b> | <b>58.2</b>       | <b>48.8</b>       | <b>-16.1</b>                 |
| <b>Production</b>     | "                | <b>22.5</b>       | <b>23.0</b>       | <b>2.2</b>                   |
| <b>Imports</b>        | "                | <b><u>4.5</u></b> | <b><u>5.0</u></b> | <b><u>11.1</u></b>           |
| <b>Total supply</b>   | "                | <b>85.2</b>       | <b>76.8</b>       | <b>-9.8</b>                  |
| <b>Consumption</b>    | "                | <b>36.3</b>       | <b>37.0</b>       | <b>2.1</b>                   |
| <b>Exports</b>        | "                | <b><u>0.1</u></b> | <b><u>0.1</u></b> | <b><u>0.0</u></b>            |
| <b>Total use</b>      | "                | <b>36.4</b>       | <b>37.1</b>       | <b>2.1</b>                   |
| <b>Ending stocks</b>  | "                | <b>48.8</b>       | <b>39.7</b>       | <b>-18.6</b>                 |
| <b>Reserve stocks</b> | "                | <b>32.0</b>       | <b>22.0</b>       | <b>-31.2</b>                 |
| <b>Stocks-to-use</b>  | <b>%</b>         | <b>134.4</b>      | <b>107.1</b>      | <b>-20.3</b>                 |

#### World Cotton Consumption, 2017/18

World cotton consumption is expected to continue growing in 2017/18, with a 1.3-percent increase from the year before, to 114.0 million bales. Consumption in China is likely to grow faster than the world average for the third consecutive year—reaching 37 million bales—and slower growth is expected on average elsewhere in the world. Southeast Asia outside of Vietnam is likely to experience falling cotton

consumption for the third consecutive year, while South Asia outside of Bangladesh is likely to see relatively slow growth. Both Pakistan and India saw their cotton consumption contract in 2015/16, and declines are expected there again in 2016/17. However, with world income growth forecast by the International Monetary Fund (IMF) in 2018 at its highest rate in 7 years—3.6 percent—and with China’s consumption rebound slowing in 2017/18, consumption in India and Pakistan are projected to increase slightly.

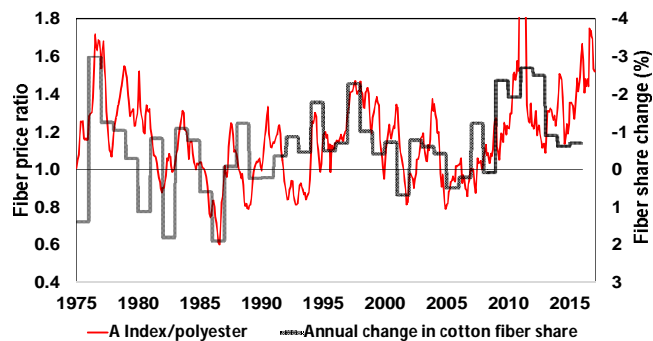
### World Cotton Consumption and Economic Growth



Sources: USDA and International Monetary Fund.

While rising cotton prices relative to polyester have likely limited cotton’s consumption gains in 2016/17, falling cotton prices in 2017/18 offer the potential of movement in the cotton/polyester price ratio favoring cotton consumption. Over the 2009-2012 seasons, cotton suffered a loss in its share of world fiber consumption that was unprecedented in its severity and persistence. Cotton has continued to lose share faster than its 1960-2008 median annual decline in the years since that shock. The return of China’s textile industry to greater participation in cotton yarn production offers a positive factor to sustaining cotton’s share of world fiber use. In the short run, it is likely that the strongest source of additional demand for cotton will come from increased demand for all fibers rather than a recovery in cotton at the expense of other inputs into clothing production.

### Cotton/Polyester Price Ratio Remains High



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

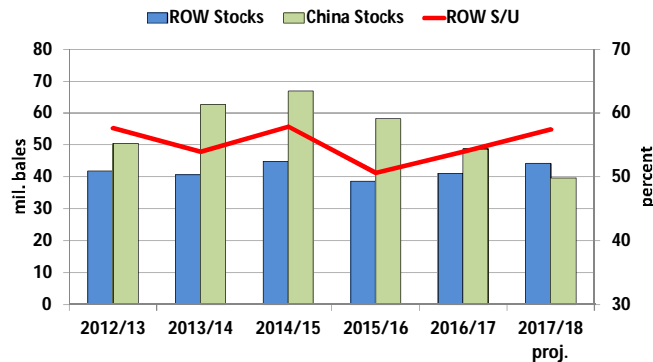
### World Trade, Stocks, and Prices, 2017/18

#### World Cotton Supply and Demand 2016/17 est. and 2017/18 proj.

|                              | <u>Unit</u> | <u>2016/17</u> | <u>2017/18</u> | <u>Change (%)</u> |
|------------------------------|-------------|----------------|----------------|-------------------|
| <b>Beg. Stocks</b>           | mil bales   | 96.8           | 89.9           | -7.2              |
| <b>Production</b>            | "           | 105.4          | 108.0          | 2.4               |
| <b>Imports</b>               | "           | 35.7           | 35.5           | -0.7              |
| <b>Total supply</b>          | "           | 238.0          | 233.4          | -1.9              |
| <b>Consumption</b>           | "           | 112.5          | 114.0          | 1.3               |
| <b>Exports</b>               | "           | 35.7           | 35.5           | -0.7              |
| <b>Total use</b>             | "           | 148.3          | 149.5          | 0.8               |
| <b>Ending stocks</b>         | "           | 89.9           | 83.9           | -6.7              |
| <b>China stocks</b>          | "           | 48.8           | 39.7           | -18.6             |
| <b>Stocks-to-consumption</b> | %           | 79.9           | 73.6           | -7.9              |

World trade in 2017/18 is projected at 35.5 million bales, about even with 2016/17. China's imports are projected to rise slightly, but Pakistan's imports may fall as domestic production rises. With larger supplies for most major exporters, stocks outside of China are likely to increase. The A Index is projected 5 cents below the 2016/17 level at 77 cents per pound.

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



### U.S. Cotton Outlook for 2017/18

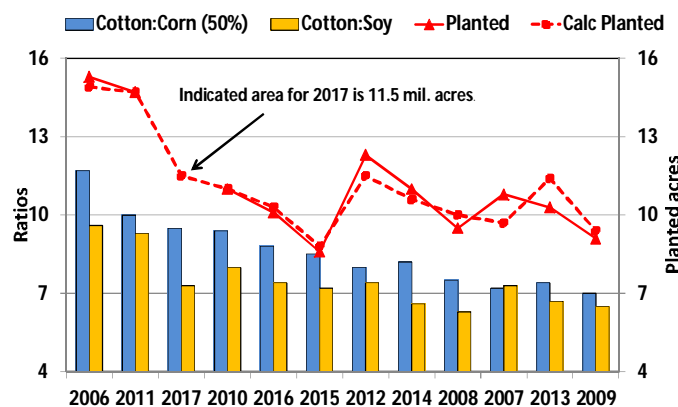
#### Area, Production, and Supply

#### U.S. All-Cotton Area, Yield, and Production 2016/17 and 2017/18 proj.

|                             | <u>Unit</u>       | <u>2016/17</u> | <u>2017/18</u> | <u>Change(%)</u> |
|-----------------------------|-------------------|----------------|----------------|------------------|
| <b>Planted area</b>         | <b>mil. acres</b> | <b>10.07</b>   | <b>11.50</b>   | <b>14.2</b>      |
| <b>Harvested area</b>       | <b>"</b>          | <b>9.52</b>    | <b>10.00</b>   | <b>5.0</b>       |
| <b>Abandonment rate</b>     | <b>%</b>          | <b>5.5</b>     | <b>13.0</b>    | <b>236.4</b>     |
| <b>Yield/harvested acre</b> | <b>lbs./acre</b>  | <b>855</b>     | <b>816</b>     | <b>-4.6</b>      |
| <b>Production</b>           | <b>mil. bales</b> | <b>16.96</b>   | <b>17.00</b>   | <b>0.2</b>       |

The early USDA projection for 2017 U.S. cotton planted acreage is 11.5 million acres, an increase of 14 percent from 2016. Analysis of historical area response shows a strong correlation between cotton planted area and the ratios of expected cotton prices to corn and soybeans, further adjusted for soil moisture conditions on the Texas High Plains at planting time. Cotton futures prices currently are averaging more than 25 percent above price expectations in the spring of 2016; at the same time, prices of soybeans have risen about 15 percent while corn prices are marginally higher. Cotton farmers in the Southwest had positive returns in 2016 from a combination of higher prices, low abandonment, and favorable yields; also, abundant winter precipitation is expected to improve 2017 irrigation supplies in the Far West. The USDA projection is 4 percent (483,000 acres) above the recent National Cotton Council (NCC) survey.

**All-Cotton Planted Acres Based on  
Relative Crop Prices, Texas Moisture Index,  
2006-2017 proj.**



The NCC's survey forecast of 11.0 million acres was released on February 11, 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, cotton acreage similar to 2016 was expected as mixed crop results were reported across the States. For the Delta States, the NCC survey indicated a 13-percent increase in cotton plantings at the expense mainly of corn. The survey indicated an 11-percent increase in Southwest cotton acreage as producers shift area out of grains. In the West, upland cotton area is expected to rise 15 percent due mainly 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.

Overall, USDA anticipates that cotton planted area will be higher than the NCC survey results in part because December 2017 cotton futures prices have risen about 5 percent since the survey period. USDA's first survey of producer planting intentions—*Prospective Plantings*—will be conducted in early March and published on March 31, 2017.

For the purposes of this analysis, cotton plantings of 11.5 million acres are estimated to result in harvested acreage of about 10.0 million acres, which is 5 percent above 2016. The projected 13-percent national abandonment rate is based on regional long-run averages, with the exception of the Southwest, where a projected abandonment of 20 percent is below the historical average, but well above the 8 percent of acres abandoned in 2016. Southwest abandonment rates are highly variable and conditions there will have a considerable impact on the U.S. crop.

USDA is forecasting a national average yield of 816 pounds per harvested acre, based on regional average yields. The 2017/18 U.S. cotton crop is projected at 17.0 million bales, the same level as 2016/17 despite the larger area, due to an anticipated return to normal abandonment and yields. With higher carry-in stocks of 4.8 million bales, the total supply—21.8 million bales—would rise 1.0 million bales from 2016/17.

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

**U.S. Cotton Supply and Demand  
2016/17 est. and 2017/18 proj.**

|                      | <b>Unit</b>      | <b>2016/17</b> | <b>2017/18</b> | <b>Change(%)</b> |
|----------------------|------------------|----------------|----------------|------------------|
| <b>Beg. Stocks</b>   | <b>mil bales</b> | <b>3.80</b>    | <b>4.80</b>    | <b>26.3</b>      |
| <b>Production</b>    | <b>"</b>         | <b>16.96</b>   | <b>17.00</b>   | <b>0.2</b>       |
| <b>Imports</b>       | <b>"</b>         | <b>0.01</b>    | <b>0.01</b>    | <b>0</b>         |
| <b>Total supply</b>  | <b>"</b>         | <b>20.77</b>   | <b>21.81</b>   | <b>5.0</b>       |
| <b>Mill use</b>      | <b>"</b>         | <b>3.30</b>    | <b>3.40</b>    | <b>3.0</b>       |
| <b>Exports</b>       | <b>"</b>         | <b>12.70</b>   | <b>13.20</b>   | <b>3.9</b>       |
| <b>Total use</b>     | <b>"</b>         | <b>16.00</b>   | <b>16.60</b>   | <b>3.7</b>       |
| <b>Ending stocks</b> | <b>"</b>         | <b>4.80</b>    | <b>5.20</b>    | <b>8.4</b>       |
| <b>Stocks-to-use</b> | <b>%</b>         | <b>30.0</b>    | <b>31.2</b>    | <b>4.3</b>       |
| <b>Farm price</b>    | <b>cents/lb.</b> | <b>69.0</b>    | <b>65.0</b>    | <b>-5.8</b>      |

U.S. domestic mill use is projected at 3.4 million bales, a slight increase from 2016/17, due to large domestic supplies and moderate growth in demand. 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. At the same time, however, growth in mill use will be constrained by competitive prices for polyester.

U.S. cotton exports are projected at a 7-year high of 13.2 million bales in 2017/18, due to expectations of a large U.S. exportable surplus. Ending stocks are also projected to rise to 5.2 million bales, which would be the highest level since 2008/09. It is worth noting that both the U.S. share of global trade and the ending stocks-to-use ratio would be the highest in more than 6 years. Increased supplies outside of China are expected to pressure cotton prices in 2017/18, and the average price received by producers could fall within the range of 60-70 cents per pound, compared with the 2016/17 current forecast of 69 cents.

## **Appendix: China Cotton Policy and USDA Assumptions**

### **Import Policy: 2017 same as 2016**

- Out-of-quota import duty is 40% ad valorem.
- 894,000 metric tons (MT) TRQ at 1% duty, calendar year basis, one-third reserved for State Enterprises.
- Duty-free processing imports, limited amount allowed.
- Sliding scale import licenses, assume none to be issued. Not issued since 2014.

### **State Reserve Policy:**

#### 2016

- Sales ran from May 3 thru September 30, 2016. Daily 30,000 MT offered for sale, 88% bought in total.
- 2.6 million MT sold, 2.0 million MT initially offered, increased when sale period extended.
- State Reserve stocks estimated at 8.5 million MT as of February 2017.

#### 2017

- Sales from March 6 thru August 31, 2017; may be extended.
- Daily offers of 30,000 MT, may be increased if sales strong.
- Offer price based on weekly average of internal price and A Index (same as 2016).

### **Domestic Support Policies:**

#### **Target Price policy:**

##### 2016/17

- Target price of 18,600 renminbi (RMB)/MT for Xinjiang.
- Xinjiang subsidy level based on difference between target price and average price received by gins during ginning period.
- For inland farmers, subsidy applied of 2,000 RMB/MT.
- Further shift to payments being linked to production rather than area.
- Subsidy for long staple cotton at 1.3 times base rate.

##### 2017/18

- No formal announcement yet, no major changes expected.

### **Other support for cotton:**

High quality planting seeds: A subsidy is paid for the use of high quality planting seeds.

Xinjiang transport subsidy: Subsidies are provided to transport cotton lint and cotton containing yarns from Xinjiang to other regions.

Government support for spinning in Xinjiang: Government provides direct support for spinning and for investment in spinning capacity in Xinjiang.