The World and U.S. Cotton Outlook for 2016/17

Interagency Commodity Estimates Committee

Presented by
Leslie A. Meyer
LMeyer@ERS.USDA.GOV

Agricultural Outlook Forum
February 26, 2016
World Cotton Consumption Exceeds Production for the First Time in 6 Years…

...but prices decline further.

Sources: USDA, Interagency Commodity Estimates Committee and Cotlook.
Global Cotton Stocks Decline From Record...

...but supplies represent nearly a year’s worth of consumption.

Source: USDA, Interagency Commodity Estimates Committee.
2015/16
World Cotton Situation
Global Production Experienced Declines in 2015/16

Weather played key role in crop shortfall

China’s lower area/crop mainly due to reduced support.

India becomes world’s leading cotton producer.

Source: USDA, Interagency Commodity Estimates Committee.
World Consumption Decrease Expected in 2015/16

*Cotton consumption estimated at 109.6 million bales.*

- Equal to the 5-year average despite lowest prices in 7 years.
  - Declines expected in China and Pakistan.
  - Increases expected in Bangladesh and Vietnam.
  - India, Turkey, and the United States are unchanged.

- Macroeconomic uncertainties constraining retail growth.

- Polyester prices have fallen further than cotton, increasing its price competitiveness.
China’s Cotton Mill Use Declines...

...but yarn imports supplanted the decrease.

Sources: USDA and Global Trade Atlas.
China’s Cotton Yarn Import Expansion:

Leading suppliers include India, Pakistan, and Vietnam

Million bale-equivalents

Marketing year


Vietnam  India  Pakistan  Others

Sources: USDA and Global Trade Atlas.
Cotton Loses Share to Manmade Fibers
(U.S. product imports, raw fiber-equivalent basis)

Data show share still declining.

Sources: USDA, Economic Research Service and U.S. Census Bureau.
2015/16
U.S. Cotton Situation
U.S. Production Declines in Each Region:

*Total planted area smallest since 1983*

<table>
<thead>
<tr>
<th>Region</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>5.6</td>
<td>4.5</td>
<td>5.0</td>
<td>4.2</td>
</tr>
<tr>
<td>Delta</td>
<td>3.8</td>
<td>2.9</td>
<td>3.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Southwest</td>
<td>4.8</td>
<td>4.0</td>
<td>5.5</td>
<td>5.2</td>
</tr>
<tr>
<td>West</td>
<td>1.8</td>
<td>1.2</td>
<td>1.1</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: USDA, National Agricultural Statistics Service.
U.S. Cotton Supply & Demand Estimates:
*Production and Exports Significantly Lower; Stocks Down Slightly*

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>2014/15</th>
<th>2015/16</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beg. stocks</td>
<td>Mil. bales</td>
<td>2.4</td>
<td>3.7</td>
<td>54.2</td>
</tr>
<tr>
<td>Production</td>
<td>&quot;</td>
<td><strong>16.3</strong></td>
<td><strong>12.9</strong></td>
<td><strong>-20.9</strong></td>
</tr>
<tr>
<td>Imports</td>
<td>&quot;</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total supply</td>
<td>&quot;</td>
<td>18.7</td>
<td>16.7</td>
<td><strong>-10.7</strong></td>
</tr>
<tr>
<td>Mill use</td>
<td>&quot;</td>
<td>3.6</td>
<td>3.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Exports</td>
<td>&quot;</td>
<td><strong>11.2</strong></td>
<td><strong>9.5</strong></td>
<td><strong>-15.2</strong></td>
</tr>
<tr>
<td>Total demand</td>
<td>&quot;</td>
<td>14.8</td>
<td>13.1</td>
<td><strong>-11.5</strong></td>
</tr>
<tr>
<td>Ending stocks</td>
<td>&quot;</td>
<td><strong>3.7</strong></td>
<td><strong>3.6</strong></td>
<td><strong>-2.7</strong></td>
</tr>
<tr>
<td>Stocks-to-use</td>
<td>%</td>
<td>25.0</td>
<td>27.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Farm price</td>
<td>Cents/lb.</td>
<td>61.3</td>
<td>59.5</td>
<td><strong>-2.9</strong></td>
</tr>
</tbody>
</table>

Source: USDA, Interagency Commodity Estimates Committee.
U.S. Cotton Export Share by Country

**2010/11-2014/15 Average**
- Vietnam: 8%
- Turkey: 14%
- Mexico: 8%
- China: 36%
- Rest of World: 34%

**Aug-Jan 2015/16**
- Vietnam: 18%
- Turkey: 15%
- Mexico: 15%
- Rest of World: 45%
- China: 7%

Source: USDA, Foreign Agricultural Service.
2016/17
World Cotton Outlook
Cotton’s Global Supply Problem:

*China accounts for over 60% of world stocks*

China accounts for over 60% of world stocks.

Source: USDA, Interagency Commodity Estimates Committee.
Cotton’s Global Demand Problem:

*Cotton share in fiber products declining*

Cotton becomes less competitive as ratio moves higher.

Sources: cnCotton.com (polyester) and Cotlook (cotton, A Index).
Key Assumptions for USDA’s 2016/17 Forecast

• World economic growth improves in calendar 2016 & 2017, aiding cotton consumption prospects.

• China continues policies discouraging production and limiting imports to reduce surplus stocks, with reserve sales higher.

• Normal weather and growing conditions provide modest rebound in global production.

• World and U.S. cotton prices decline slightly.
Global Production Projected Higher in 2016/17

Yield rebound largely behind production growth

Pakistan, the U.S., and India lead recovery; China continues lower.

Source: USDA, Interagency Commodity Estimates Committee.
World Cotton Consumption Growth Limited in 2016/17

• Global consumption projected at 110.5 M bales.
  – Modest growth (< 1%) based on global GDP increase.
  – Polyester price competition remains strong.

• China consumption to grow 1 M bales.
  – Increased access to reserve stocks.
  – Expansion of Xinjiang spinning.

• Consumption outside China: No-net growth projected.
  – Vietnam and Bangladesh continue expansion.
  – India and U.S. remain flat while others decline.

• Cotton’s share of world fiber market continues to decline.
World Cotton Supply & Demand Projections:

*Consumption Exceeds Production; Stocks Reduced Further*

<table>
<thead>
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<th>Unit</th>
<th>2015/16</th>
<th>2016/17</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beg. stocks</td>
<td>Mil. bales</td>
<td>112.2</td>
<td>104.1</td>
<td>-7.2</td>
</tr>
<tr>
<td>Production</td>
<td>&quot;</td>
<td>101.4</td>
<td><strong>105.5</strong></td>
<td>4.1</td>
</tr>
<tr>
<td>Imports</td>
<td>&quot;</td>
<td>35.0</td>
<td>35.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total supply</strong></td>
<td>&quot;</td>
<td><strong>248.5</strong></td>
<td>244.6</td>
<td>-1.5</td>
</tr>
<tr>
<td>Consumption</td>
<td>&quot;</td>
<td>109.6</td>
<td><strong>110.5</strong></td>
<td>0.8</td>
</tr>
<tr>
<td>Exports</td>
<td>&quot;</td>
<td>35.0</td>
<td>35.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total demand</strong></td>
<td>&quot;</td>
<td>144.6</td>
<td>145.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>&quot;</td>
<td>104.1</td>
<td><strong>99.1</strong></td>
<td>-4.8</td>
</tr>
<tr>
<td>Stocks-to-consumption</td>
<td>%</td>
<td>95.0</td>
<td>89.7</td>
<td>-5.6</td>
</tr>
</tbody>
</table>

Source: USDA, Interagency Commodity Estimates Committee.
Global Cotton Stocks Projected Lower...

...but world prices also decline.

Source: USDA, Interagency Commodity Estimates Committee.
2016/17
U.S. Cotton Outlook
Drought Monitor Shows Improvement in 2016...

February 17, 2015

... but dry conditions developing in Texas.

February 16, 2016
Outlook for 2016 U.S. Cotton Area

• Planted acreage expected higher due mainly to 2015 “prevented plantings” area returning.
  – Total plantings at 9.4 M acres—nearly 10% higher.
  – NCC survey indicated 9.1 M acres.

• Relative prices favor cotton slightly, but high input costs may offset this advantage.

• Cotton marketing loan program cushions the downside price risk.
U.S. Cotton Planted Area: A Historical Perspective

Despite 2016 rebound projection, area remains near historical lows.

Source: USDA, National Agricultural Statistics Service.
# U.S. Cotton Area, Yield, and Production

Key Factors Include Crop Conditions & Abandonment

**Southwest expected to account for 60% of planted area**

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<thead>
<tr>
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<th>2016/17</th>
<th>Change(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planted area</td>
<td>Mil. acres</td>
<td>8.58</td>
<td>9.40</td>
<td>9.6</td>
</tr>
<tr>
<td>Harvested area</td>
<td>&quot;</td>
<td>8.08</td>
<td>8.45</td>
<td>4.6</td>
</tr>
<tr>
<td>Abandonment rate</td>
<td>%</td>
<td>5.9</td>
<td><strong>10.1</strong></td>
<td>71.2</td>
</tr>
<tr>
<td>Yield/harvested acre</td>
<td>Lbs.</td>
<td>769</td>
<td>812</td>
<td>5.6</td>
</tr>
<tr>
<td>Production</td>
<td>Mil. bales</td>
<td>12.94</td>
<td><strong>14.30</strong></td>
<td>10.5</td>
</tr>
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Source: USDA, Interagency Commodity Estimates Committee.
# U.S. Cotton Supply & Demand Projections: 
*Production and Exports Rebound; Stocks Unchanged*

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<td>Mil. bales</td>
<td>3.7</td>
<td>3.6</td>
<td>-2.7</td>
</tr>
<tr>
<td>Production</td>
<td>&quot;</td>
<td>12.9</td>
<td>14.3</td>
<td>10.5</td>
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<td>58.0</td>
<td>-2.5</td>
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Source: USDA, Interagency Commodity Estimates Committee.
U.S. Export Forecast Higher in 2016/17:

*Growth Contingent Upon Several Factors*

- Relatively tight foreign stocks outside China.
  - Beginning stocks lowest in 6 years.
  - Import demand similar to 2015/16.

- Increased exportable supplies in the United States.
  - Additional 1+ M bales at current production expectations.
  - U.S. share of world trade (30.6%) between previous 2 seasons.

- Better quality distribution of the 2016 U.S. crop expected.
  - High quality cotton limited in 2015.
  - Less than 60 percent of U.S. crop tenderable.
Variables that Could Change the Outlook

- Greater world area response to low prices than anticipated.
- Weather and growing conditions altering production.
- Further China policy changes affecting stocks and prices.
- Macroeconomic growth varying from average expectations.
- Changes in polyester prices relative to cotton.
Final Thought:

“Prediction is very difficult, especially if it’s about the future.”

--Niels Bohr, Nobel laureate in Physics

Thank You