Cotton and Wool Outlook

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Global 2020/21 Cotton Production Decrease Led by the United States and Brazil

The latest U.S. Department of Agriculture (USDA) estimates indicate that global cotton production in 2020/21 is projected at 117.5 million bales, about 4.5 percent below 2019/20, and largely the result of lower crop expectations for the United States and Brazil (fig. 1). Smaller reductions are seen for India and China—the largest producers—as well as for the rest of the world combined.

World cotton mill use is forecast to rebound to 113.1 million bales, 10 percent above 2019/20’s 16-year low. Global cotton trade is projected to increase approximately 3 percent to 41.6 million bales in 2020/21, the highest in 8 years, and helps support the mill use growth. However, with world production above mill use, 2020/21 global cotton ending stocks are forecast to increase for the second consecutive season, reaching its second-highest level behind only 2014/15. Accordingly, the surplus supplies will continue to influence global cotton prices in 2020/21.

Figure 1
Leading global cotton producers

Million bales

Note: 1 bale = 480 pounds.
Source: USDA, World Agricultural Supply and Demand Estimates reports.
Domestic Outlook

U.S. 2020 Cotton Crop Forecast Higher in August

According to USDA’s first survey-based forecast of the 2020 cotton crop, U.S. cotton production is estimated at 18.1 million bales, compared with July’s projection of 17.5 million bales and last season’s final estimate of 19.9 million bales. Compared with 2019, harvested area is expected to be substantially (20 percent) smaller, but a record yield is forecast to limit the production decline this season.

Based on the August forecast, total cotton planted acreage in 2020 is estimated at 12.2 million acres, equal to the area reported in the June Acreage report and the smallest in 4 years. U.S. harvested area is projected at only 9.25 million acres this season, indicating an abandonment rate of 24 percent, above last season’s rate of 15.5 percent. The U.S. cotton yield is forecast at 938 pounds per harvested acre this season, 115 pounds above 2019 and 33 pounds above the previous record in 2017.

Upland cotton production in 2020 is forecast at 17.5 million bales, 9 percent (1.7 million bales) below 2019 and, if realized, the smallest crop since 2016. During the past 20 years, the August upland production forecast was above the final estimate 12 times and below it 8 times. Past differences between the August forecast and the final production estimates indicate that chances are two out of three for the 2020 upland crop to range between 16.2 million and 18.9 million bales.

Compared with 2019, U.S. upland production is projected to decrease in three of the four Cotton Belt regions this season, with the Southwest rising slightly (fig. 2). Based on the August estimates, 2020 Southwest upland production is forecast at 7.5 million bales (43 percent of the U.S. crop), compared with nearly 7.3 million in 2019 and a 5-year average of 8.1 million bales. With less than ideal growing conditions this season in the Southwest, 2020 abandonment is projected to be considerably above 2019 and the 5-year average; Southwest abandonment is forecast at 38 percent this season versus 25.5 percent in 2019 and a 5-year average of 21

Figure 2
U.S. regional upland cotton production

<table>
<thead>
<tr>
<th>Region</th>
<th>Million bales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>5.0</td>
</tr>
<tr>
<td>Delta</td>
<td>4.2</td>
</tr>
<tr>
<td>Southwest</td>
<td>7.5</td>
</tr>
<tr>
<td>West</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Note: 1 bale = 480 pounds.
Source: USDA, National Agricultural Statistics Service, Crop Production reports.
percent. The Southwest yield is projected at 785 pounds per harvested acre in 2020—compared with 594 pounds last season—the result of a large percentage of the lower-yielding dryland area being abandoned that pushes this season’s regional yield to the third highest on record.

In the Southeast, 2020 production is estimated at nearly 4.8 million bales (27 percent of the U.S. crop), 17 percent below 2019, as area dips below the 5-year average. Meanwhile, the Southeast yield is projected slightly higher in 2020 at 950 pounds per harvested acre, the second highest on record. In the Delta, the 2020 cotton crop is estimated lower at 4.6 million bales (26 percent of the U.S. crop) after 4 consecutive increases that reached nearly 5.6 million bales in 2019, the highest since 2006. Lower area this season is partially offset by an anticipated record yield of 1,201 pounds per harvested acre that is expected to keep the Delta crop above the 5-year average.

In the West, upland production is projected at 610,000 bales in 2020, slightly below last season. Lower area is expected to be nearly offset by an above-average yield (1,450 pounds per harvested acre) in 2020. The West accounts for less than 4 percent of the total U.S. upland crop. In addition, extra-long staple (ELS) cotton production, which is primarily grown in the West, is forecast at 555,000 bales and one of the smaller crops of the decade; both ELS area and yield are projected to decrease in 2020, with each at its lowest in several seasons.

U.S. cotton crop development is running behind both last season and the 5-year average. As of August 9, 9 percent of the cotton crop had bolls opening, compared with 17 percent in 2019 and 11 percent for the 2015-19 average. Of note, Texas had bolls opening on 13 percent of its area (compared with 26 percent in 2019), while Arizona had bolls opening on 35 percent of its area (compared with 20 percent last year). Meanwhile, 2020 U.S. cotton crop conditions remain below last season and the 5-year average (fig. 3). As of August 9, 42 percent of the cotton area was rated “good” or “excellent,” compared with 56 percent last year, while 23 percent was rated “poor” or “very poor,” compared with 10 percent a year ago. Dry conditions, particularly in parts of the Southwest, have kept this season’s overall crop conditions below average.

Figure 3
U.S. cotton crop conditions

<table>
<thead>
<tr>
<th>Week ending</th>
<th>2015-19 average</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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</thead>
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<tr>
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<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>6/14</td>
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<td>3.4</td>
<td>3.4</td>
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<tr>
<td>6/28</td>
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<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>7/12</td>
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<td>3.7</td>
<td>3.6</td>
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<tr>
<td>7/26</td>
<td>3.8</td>
<td>3.8</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>8/9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>8/23</td>
<td>3.9</td>
<td>3.9</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>9/6</td>
<td>3.8</td>
<td>3.8</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>9/20</td>
<td>3.7</td>
<td>3.7</td>
<td>3.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: USDA, Crop Progress reports.
U.S. Cotton Demand and Stocks Adjusted in August

U.S. cotton demand and stocks for 2020/21 and 2019/20 were revised this month based on recently released data. For 2020/21, demand is forecast at 17.7 million bales, slightly below the July projection but slightly above the revised 2019/20 demand of 17.6 million bales. Despite higher supplies—from both larger beginning stocks and the higher August production forecast—U.S. cotton export opportunities in 2020/21 may be tempered as surplus foreign supplies will compete for the modestly higher global import demand. The U.S. share of world trade is projected at 36 percent in 2020/21, compared with 38 percent in 2019/20.

In 2020/21, U.S. cotton exports are forecast at 15.0 million bales, unchanged from last month’s projection but 400,000 bales below the upward adjusted 2019/20 export estimate; complete marketing year data for 2019/20 will be available next month, as the final estimate will be based on reported shipments in USDA’s U.S. Export Sales and reports by the Bureau of the Census. U.S. cotton mill use in 2020/21 is forecast at 2.7 million bales, a rebound from the revised 2.2-million-bale estimate for 2019/20 that was significantly affected by the COVID-19 impacts.

With U.S. cotton production expected to exceed demand in 2020/21 for the fourth consecutive season, ending stocks are forecast to increase further to 7.6 million bales—compared with 2019/20’s estimate of 7.2 million bales—and reach their highest since 2007/08’s estimate of 10.1 million bales. As a result, this season’s stocks-to-use ratio is expected to rise slightly to 43 percent, also the highest since 2007/08. Consequently, the 2020/21 upland farm price is forecast lower at 59 cents per pound, compared with 2019/20’s estimate of 59.5 cents.

U.S. Cotton Product Trade Declining in 2020

Total U.S. cotton textile and apparel trade declined considerably during the first half of 2020, compared with the corresponding 2019 period, as the effects of COVID-19 impacted the retail and manufacturing industries. U.S. cotton product imports totaled the equivalent of only 6.5 million 480-pound bales of raw cotton during January-June 2020—compared with 9.0 million bales for the first 6 months of 2019—while cotton product exports declined from 1.7 million bale-equivalents to 1.0 million bale-equivalents. As a result, the cotton textile and apparel trade deficit was nearly 24 percent lower during the first half of 2020, at 5.5 million bale-equivalents.

The source for U.S. cotton product imports remains concentrated among a handful of suppliers, however, with the top 5 countries accounting for nearly 68 percent of total imports during the first half of 2020, similar to the past 2 years. Compared with the same period in 2019, the share rose for 4 of the top 5 suppliers during the first 6 months of 2020 (fig. 4). Only imports from China saw a decrease, as manufacturers supplying the U.S. market appear to continue adjusting sourcing opportunities as a result of the uncertainty surrounding U.S.-China trade relations. Nevertheless, China remains the leading supplier of U.S. cotton product imports, accounting for 25 percent of the total during January-June of 2020. India supplied 13 percent of U.S. cotton product imports, while Pakistan and Vietnam each contributed 10 percent; Bangladesh accounted for an additional 9 percent of the total.
Figure 4
Leading suppliers of U.S. cotton textile and apparel imports

Percent share of total

World Cotton Production Forecast To Exceed Mill Use Again in 2020/21

Global cotton production in 2020/21 is projected to surpass consumption for the third time in 4 years (fig. 5). World production is forecast at 117.5 million bales this season, 5.5 million bales (nearly 4.5 percent) below 2019/20. Meanwhile, world cotton mill use in 2020/21 is forecast at 113.1 million bales, 10.7 million bales (10 percent) higher than the 2019/20 estimate that was significantly reduced due to the effects of COVID-19. Smaller crops are forecast for most of the major-producing countries, although Pakistan and Australia are notable exceptions. Lower world cotton price expectations for 2020/21 favored alternative crops in many countries, with global cotton harvested area forecast to decline 5 percent to 33.1 million hectares (81.8 million acres), the lowest in 4 seasons. Generally favorable conditions are expected to support a higher global yield in 2020/21, with the yield forecast at 773 kilograms (kg) per hectare (690 pounds per acre), slightly below the 3-year average.

For India, cotton production is forecast at 29.7 million bales in 2020/21, 800,000 bales (nearly 3 percent) below the 2019/20 crop that included record harvested area along with a near-average yield. In 2020/21, a marginally lower area of 13.2 million hectares is projected in addition to a slightly lower yield of 490 kg per hectare; India is expected to remain the leading cotton-producing country this season. Similarly, China’s 2020/21 cotton crop is projected 750,000 bales (3 percent) lower at 26.5 million bales, as area declines slightly but is largely offset by a higher yield. Area harvested in China is forecast at 3.3 million hectares while the national yield is projected at 1,748 kg per hectare, the second highest on record as cotton’s concentration continues in the high-yielding western region of Xinjiang.

Figure 5
Global cotton production and mill use

<table>
<thead>
<tr>
<th>Marketing year</th>
<th>Production</th>
<th>Mill use</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/15</td>
<td>116.6</td>
<td>113.4</td>
</tr>
<tr>
<td>2015/16</td>
<td>117.5</td>
<td>110.3</td>
</tr>
<tr>
<td>2016/17</td>
<td>117.0</td>
<td>110.0</td>
</tr>
<tr>
<td>2017/18</td>
<td>117.8</td>
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</tr>
<tr>
<td>2018/19</td>
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<td>112.1</td>
</tr>
<tr>
<td>2019/20 Est.</td>
<td>116.5</td>
<td>111.2</td>
</tr>
<tr>
<td>2020/21 Proj.</td>
<td>116.0</td>
<td>110.8</td>
</tr>
</tbody>
</table>

Note: 1 bale = 480 pounds.
Source: USDA, World Agricultural Supply and Demand Estimates reports.
In addition to declines for the United States, cotton production in Brazil—the fourth largest producer in 2020/21—is projected to decrease 10 percent (1.4 million bales) from last season’s record crop of 13.4 million bales, as both area and yield are expected to be lower for the upcoming season. Harvested area is forecast at 1.55 million hectares while the projected yield of 1,686 kg per hectare is below the 2019/20 record (1,747 kg per hectare).

For Pakistan, cotton production is forecast to rebound in 2020/21 to 6.5 million bales, 5 percent (300,000 bales) above last season’s crop that was limited by the lowest yield in 4 years. This season, the yield is expected to rebound to 590 kg per hectare, with area only slightly lower than 2019/20 at 2.4 million hectares. Meanwhile, Australia’s 2020/21 crop is forecast to increase dramatically after last season’s drought-related issues that reduced the crop to only 625,000 bales. Australia’s area and production in 2020/21 are projected substantially higher at 260,000 hectares and 1.9 million bales, respectively, but each remains below the 10-year average.

World cotton consumption in 2020/21 is projected at 113.1 million bales, compared with an estimated 102.4 million bales in 2019/20. Global mill use is forecast to reverse last season’s dramatic reduction resulting from the COVID-19 impacts on the manufacturing industry and move closer to—albeit still below—the level achieved in 2018/19. A relatively strong global economic growth outlook for calendar year 2021 is supporting the 10-percent expected mill use growth this season, with most countries’ cotton mill use forecast to increase.

Cotton mill use in China is projected at 36.5 million bales in 2020/21, up 10.5 percent (3.5 million bales) from last season. Imports of raw cotton in recent years, along with domestic supplies from China’s State Reserve, have helped support China’s spinning industry during a period of production shortfalls. Yarn imports have also supplemented China’s apparel manufacturing, which supports China’s economy through its export of cotton products.

India’s cotton mill use is expected to rise 12.5 percent (2.5 million bales) in 2020/21 to 22.5 million bales, as cotton supplies have risen dramatically there and value-added product exports remain important to India’s foreign exchange. Likewise, Pakistan’s consumption of 10.0 million bales is 800,000 bales (9 percent) higher for 2020/21 than the year before as cotton product export growth is expected to continue. Higher cotton mill use is also forecast for Bangladesh, Turkey, and Vietnam, as a rebound to pre-COVID-19 levels are within reach in 2020/21.

Bangladesh’s cotton mill use is projected at 7.3 million bales (+12 percent) in 2020/21, while in Turkey and Vietnam, mill use is forecast at 7.0 million bales (+6 percent) and 6.8 million bales (+11.5 percent), respectively.

Global Cotton Trade To Rise in 2020/21; Stocks Rise Further

World cotton trade is forecast at 41.6 million bales in 2020/21, compared with 40.3 million bales in 2019/20. China, Bangladesh, and Vietnam are expected to remain the leading raw cotton importers this season, with a combined increase of 2.8 million bales; however, lower import demand by Pakistan and Turkey are expected to offset these gains somewhat. Of the major producing and exporting countries, mixed results are expected in 2020/21. In addition to lower U.S. cotton exports, shipments from Australia are also expected to decline approximately 400,000 bales. In contrast, India—with its record cotton supplies—is expected to benefit, with exports forecast to expand 2 million bales to 4.9 million bales. Small gains are also seen for Brazil, Benin, and others in 2020/21.

Global cotton ending stocks for 2020/21 are projected at 104.9 million bales, nearly 4.4 million bales (4 percent) higher than last season and the highest since 2014/15’s record of 106.7
million bales. While China’s cotton stocks have generally decreased over the past several years, India’s stocks have risen dramatically. At the end of 2020/21, China’s cotton stocks are projected at 35.6 million bales (-1.1 million bales), or 35 percent of global supplies, their lowest share since 2010/11 (fig. 6). Meanwhile, India’s 2020/21 stocks are forecast at a record 22.5 million bales (+3.3 million bales), with its share of global stocks increasing significantly to an estimated 22 percent. Although U.S. cotton stocks are projected to increase to 7.6 million bales in 2020/21, the U.S. share of world supplies is expected to remain at 7 percent. With stocks shifting among the three leading producing countries, the share outside of China, India, and the United States has remained relatively flat for several years. In 2020/21, the share of rest of world stocks is projected near 37 percent, with 13 percentage points attributable to Brazil.

![Figure 6](image-url)

**Share of global cotton ending stocks**

Source: USDA, World Agricultural Supply and Demand Estimates reports.

**Suggested Citation**


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