Cotton and Wool Outlook

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World Cotton Stocks Continue Decline in 2021/22

The latest U.S. Department of Agriculture (USDA) cotton projections for 2021/22 (August-July) indicate a decrease in global cotton ending stocks as mill use exceeds production for the second consecutive season. World stocks are projected at 89.3 million bales at the end of 2021/22, the lowest in 3 years (figure 1). Led by China, the stock decline is tempered somewhat by a projected increase for Brazil. China is forecast to account for 40 percent of the 2021/22 global cotton stock total, while India and Brazil contribute an additional 18 percent and 14 percent, respectively. The United States is expected to hold only 3 percent of the global stock total.

Global cotton production is forecast 5 percent higher at 118.9 million bales in 2021/22, the result of increased area. World cotton mill use is projected to rise nearly 4 percent to 122.5 million bales as the global economy expands. Consequently, 2021/22 world cotton trade is expected to remain at one of its highest levels on record, with the United States and Brazil the largest exporters. Along with lower stocks, a rising cotton demand is expected to keep 2021/22 world cotton prices above recent levels.

Figure 1
Global cotton ending stocks

Million bales

<table>
<thead>
<tr>
<th>Marketing year</th>
<th>Rest of world</th>
<th>Brazil</th>
<th>U.S.</th>
<th>India</th>
<th>China</th>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>80</td>
<td>10</td>
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<td>80</td>
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<td>20</td>
</tr>
<tr>
<td>2020 Est.</td>
<td>80</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>20</td>
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<tr>
<td>2021 Proj.</td>
<td>80</td>
<td>10</td>
<td>10</td>
<td>10</td>
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</tr>
</tbody>
</table>

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

U.S. Cotton Production Forecast Unchanged in June

USDA’s 2021 U.S. cotton production projection remains at 17.0 million bales in June, nearly 16.5 percent (2.4 million bales) above the 2020 crop that was at a 5-year low. Upland production is estimated at nearly 16.6 million bales—compared with 14.1 million bales last season—and the extra-long staple (ELS) crop is estimated at 415,000 bales—compared with 547,000 bales for the 2020 crop. Planting conditions were less than ideal this spring, with both drought and excessive rainfall delaying sowing in several States. Relatively favorable competing crop prices also affected cotton acreage this season. With 2021 planting still in progress, U.S. cotton area and the potential yield remain more tentative than usual.

The U.S. cotton planting estimate of 12.0 million acres will be updated in USDA’s Acreage report released on June 30. The report will include actual plantings as of early June, as well as estimates of any remaining cotton to be planted. As of June 6, 71 percent of the forecast cotton acreage was planted, down from last season’s 76 percent and below the 2016-20 average of 78 percent. Consequently, early cotton development was behind both 2020 and the 5-year average; as of June 6, 9 percent of the area was squaring, compared with 12 percent for last season and the 2016-20 average of 11 percent. Reporting of U.S. cotton crop conditions also began recently, with early indications confirming the less-than-ideal start to the 2021 season. As of early June, crop conditions were near 2020 but below the 5-year average (figure 2).

Based on current projections, U.S. cotton harvested area is forecast at 9.6 million acres in 2021, reflecting a 10-year weighted average abandonment by region. U.S. abandonment is projected at 20 percent, below 2020’s 31.6 percent. The 2021 U.S. cotton yield—based on a 5-year weighted average by region—is forecast at 847 pounds per harvested acre, equal to the final 2020 yield. USDA’s National Agricultural Statistics Service will begin in-field surveys in August.

Figure 2
U.S. cotton crop conditions

Index (3=fair and 4=good)

Source: USDA, Crop Progress reports.
U.S. Cotton Export and Stock Estimates Revised

U.S. cotton demand (exports plus mill use) for 2021/22 is projected at 17.3 million bales—up slightly from the May forecast—compared with the 2020/21 estimate that also increased in June to 18.7 million bales. The lower 2021/22 forecast is attributable to expectations for the smallest U.S. cotton supply in 6 years. As a result, the lower supply is projected to limit U.S. exports, while mill use continues to rebound from the COVID-19 impacts on cotton demand.

For 2021/22, U.S. cotton exports are forecast at only 14.8 million bales, 1.6 million below 2020/21 which was the second highest on record. In addition to lower domestic supplies, a less robust growth in global cotton mill use in 2021/22 is expected to keep U.S. cotton exports near the 2018/19 level (figure 3). Despite lower U.S. exports in 2021/22, the United States is forecast to remain the world’s leading cotton exporter, but other producing countries—like Australia and Mali—are expected to have considerably larger supplies to compete on the global market compared with the previous year. As a result, the U.S. share of global trade in 2021/22 is projected to decline to about 32 percent, the lowest since 2015/16. Nevertheless, U.S. cotton exports are forecast to account for more than 85 percent of U.S. cotton demand in 2021/22, similar to the average of the past 4 years. Meanwhile, U.S. cotton mill use is projected to rise 200,000 bales to 2.5 million in 2021/22 as U.S. spinning operations continue to recover with the reopening of the U.S. economy.

Based on USDA’s June supply and demand estimates, 2021/22 U.S. cotton ending stocks are projected at 2.9 million bales, 250,000 bales (nearly 8 percent) below the beginning level and the lowest in 5 years, when ending stocks were 2.75 million bales. Meanwhile, the stocks-to-use ratio is forecast at a relatively low 17 percent in 2021/22. Although equal to the 2020/21 level, the ratio is forecast well below the 41 percent recorded for 2019/20. With stocks at their lowest since 2016/17, the 2021/22 U.S. upland farm price is forecast to increase from 67 cents per pound estimated for 2020/21 to 75 cents per pound, which would be the highest since 2013/14.

Figure 3

U.S. cotton exports and share of global trade

Note: 1 bale = 480 pounds.
Source: USDA, World Agricultural Supply and Demand Estimates reports.
World Cotton Production Projected Higher in 2021/22

Global cotton production in 2021/22 is forecast at 118.9 million bales, 5 percent (5.6 million bales) above the previous year but 2 percent (2.5 million bales) below 2019/20 production (figure 4). Larger cotton crops are forecast for most of the major cotton-producing countries in 2021/22, led by the United States (+2.4 million bales), Brazil (+2.0 million bales), and Australia (+1.1 million bales). A smaller crop in China, however, is expected to partially offset these increases. Global cotton harvested area in 2021/22 is forecast at nearly 33.1 million hectares (81.8 million acres), approximately 4.5 percent above 2020/21. The world cotton yield is projected at 782 kilograms (kg) per hectare (698 pounds per acre) in 2021/22, slightly above the previous season.

India and China traded places as the top cotton-producing country for the past several years. For 2021/22, India is expected to produce the larger cotton crop, accounting for more than 24 percent of the world's production. India’s cotton crop—projected at 29.0 million bales—is 500,000 bales above 2020/21 and the result of an improvement in yield expectations to 486 kg per hectare. Area remains estimated at 13.0 million hectares for 2021/22.

Production in China is forecast 9 percent lower in 2021/22 at 26.75 million bales, as area is reduced approximately 4.5 percent to 3.1 million hectares and yield declines from 2020/21’s record (1,976 kg per hectare). For 2021/22, China’s yield is projected at 1,879 kg per hectare, as most of the area remains in the high-yielding Xinjiang region. China is expected to account for 22.5 percent of global cotton production in 2021/22.

In addition to the aforementioned U.S. crop prospects, cotton production is forecast higher for Brazil, Pakistan, and Australia. For Brazil, production is projected at 13.25 million bales in 2021/22, second only to 2019/20’s record of nearly 13.8 million bales. The increase is mainly attributable to a 14-percent rebound in area to 1.6 million hectares, with the yield rising slightly. Brazil is forecast to contribute 11 percent of the total world cotton crop in 2021/22.

Figure 4
Global cotton production and mill use

Note: 1 bale = 480 pounds.
Source: USDA, World Agricultural Supply and Demand Estimates reports.
For Pakistan, production is forecast at 5.3 million bales in 2021/22, 800,000 bales above the year before when production was at a 37-year low. Despite a higher yield, competing crop prospects limited Pakistan’s cotton area to a 4-decade low in 2021/22, keeping production there below average. Meanwhile, Australia’s 2021/22 cotton area and production are projected to rise for the second consecutive season as drought conditions continue to ease as rainfall and reservoir levels improved significantly. For 2021/22, Australia’s cotton area is forecast at 410,000 hectares, with the crop expected to reach 3.9 million bales—both at 4-year highs.

Global Cotton Mill Use Expands Further in 2021/22

As the global economy continues to recover from the COVID-19 pandemic, cotton mill use is also expected to rise. World cotton mill use is forecast at 122.5 million bales in 2021/22, 4.5 million bales (nearly 4 percent) above 2020/21, which experienced an unprecedented year-over-year growth (see figure 4 and the Highlight section in this report).

Each major cotton-spinning country is projected to expand their use in 2021/22, but at varying growth rates. For 2021/22, China, India, and Pakistan are expected to lead the way and account for a combined mill use forecast of 76.5 million bales, or 62 percent of the world total. Textile mills in these countries are expected to have access to plentiful supplies of domestic as well as imported cotton in 2021/22. Cotton mill use in China is projected at 41.0 million bales in 2021/22, 1 million bales (2.5 percent) above the year before and the highest since a similar amount was used in 2017/18. For India, cotton mill use is forecast to rise 1.5 million bales (nearly 6.5 percent) to a record 25.0 million bales in 2021/22. For Pakistan, 2021/22 cotton mill use is projected to expand modestly to 10.5 million bales, 200,000 bales (2 percent) above 2020/21 as their spinning industry volume remains below the pre-pandemic levels. Increases are also expected for Bangladesh, Turkey, and Vietnam, with cotton mill use forecast at 8.4 million bales (+300,000 bales), 8.2 million bales (+500,000 bales), and 7.5 million bales (+300,000 bales), respectively.

Global Cotton Trade and Stocks To Decrease

Despite a projected increase in world cotton mill use in 2021/22, global cotton trade is forecast to decrease slightly from the 47.4-million-bale record in 2020/21. World cotton trade in 2021/22 is forecast at 46.6 million bales, less than 2 percent below the year before. Lower trade expectations are projected mainly for the United States and Brazil, as lower supplies in these countries are expected to limit exports in 2021/22; somewhat offsetting these declines are increases for Australia and others (figure 5). While U.S. cotton exports are forecast to decrease 10 percent to 14.8 million bales in 2021/22, shipments from Brazil are projected to decline 16 percent from 2020/21’s record to 9.25 million bales. Meanwhile, Australia’s increased cotton supplies are forecast to push their exports 2 million bales higher to 3.4 million bales in 2021/22.

With global cotton mill use projected to exceed production in 2021/22, stocks are expected to decrease. World ending stocks are forecast at 89.3 million bales at the end of 2021/22, 4 percent (3.75 million bales) below the beginning level and the smallest in 3 years. Similarly, with world cotton mill use above production, the 2021/22 global stocks-to-use ratio is forecast to decline for the second consecutive year in 2021/22; at 73 percent, the stocks-to-use ratio would be the smallest since 2018/19 and is supportive of global cotton prices in 2021/22.
Figure 5
Leading global cotton exporters

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

Note: 1 bale = 480 pounds
Highlight

Global 2020/21 Cotton Mill Use Rebounds from Historic COVID-19 Impact

Cotton mill use generally follows world economic activity—when the global economy contracts (expands), consumers often decrease (increase) purchases of items such as clothing. The most recent examples include marketing year (MY) 2019 (August 2019-July 2020) and MY 2020. As the COVID-19 pandemic unfolded and weakened the world economy, numerous disruptions occurred across various industries, including textile and apparel operations where cotton is a major input. Correspondingly, MY 2019 world cotton mill use declined significantly from the year before to a 16-year low. Even more notable was cotton mill use’s 14.6-percent year-over-year decrease, unmatched during the previous 100 years. (For additional details, see the Highlight in the June 2020 Cotton and Wool Outlook.)

In contrast, a rebound in MY 2020 world cotton mill use ensued as the global economy continues to recover from the pandemic. Based on USDA’s June 2021 forecast, MY 2020 global cotton mill use is estimated to regain most of the past season’s lost volume. In addition, the projected 14.8 percent year-over-year expansion is one of the largest on record (figure 6). In fact, the MY 2020 percentage increase is slightly higher than the growth observed for MY 1946 and is the second highest during the past century. Global cotton mill use increased more than 10 percent year-over-year in only 7 other years since MY 1920, with most of those gains following significant declines associated with recessions. A recent exception was in MY 2004, when world cotton mill use expanded due to a number of factors, including growing world incomes, favorable relative cotton prices, and the continued benefits from lower trade barriers. Although the global economy and cotton mill use is still recovering from the significant impacts of the COVID-19 pandemic, the remarkable MY 2020 cotton mill use rebound is arguably just as dramatic—and historic—as the unprecedented decline of the previous year.

Figure 6

Largest percentage gains in world cotton mill use, 1920-2020

Percent change (annual)

0 5 10 15 20


Marketing year

Note: Marketing year begins August of year indicated.
Source: USDA, ERS calculations from USDA’s Statistics on Cotton and USDA, Foreign Agricultural Service.