Cotton and Wool Outlook: August 2022

Leslie A. Meyer and Taylor Dew

Global 2022/23 Stocks Decline as Mill Use Exceeds Production for Third Consecutive Year

The latest U.S. Department of Agriculture (USDA) cotton projections for 2022/23 (August–July) indicate that global cotton mill use is projected to exceed production for the third consecutive year (figure 1). As a result, 2022/23 ending stocks and the global stocks-to-use ratio are slightly lower than in 2021/22. World cotton mill use is projected marginally lower at 119.1 million bales in 2022/23, but remains at a relatively high level.

World cotton production is projected at 117 million bales in 2022/23, 1 percent higher than the previous year, the result of increased harvested area. The top 4 producers are expected to contribute 69 percent of the total. Projected high abandonment in the United States limits the global production increase. Global cotton trade is forecast to expand to 44.6 million bales, with gains for Brazil and Australia more than offsetting declines for the United States and India. China and Bangladesh continue as the leading cotton importers in 2022/23. With world cotton mill use projected to exceed production this season, above-average prices are expected to continue into 2022/23.

Figure 1
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>2017</td>
<td>130</td>
<td>125</td>
</tr>
<tr>
<td>2018</td>
<td>120</td>
<td>115</td>
</tr>
<tr>
<td>2019</td>
<td>110</td>
<td>105</td>
</tr>
<tr>
<td>2020</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>2021 Est.</td>
<td>110</td>
<td>105</td>
</tr>
<tr>
<td>2022 Proj.</td>
<td>120</td>
<td>115</td>
</tr>
</tbody>
</table>

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

U.S. 2022 Cotton Crop Forecast Lowest Since 2009

According to USDA’s August forecast of the 2022 cotton crop, U.S. production is projected at 12.6 million bales, considerably below last season’s final estimate of 17.5 million bales and the lowest crop estimate in 13 years. Compared with 2021, cotton harvested area is also forecast significantly (31 percent) lower, but a higher national yield limits a further production decline.

Based on the August forecast, 2022 cotton planted acreage is estimated at nearly 12.5 million acres—the area indicated in the June Acreage report and the highest in 3 years, as cotton prices heading into planting season were at historically high levels. However, drought conditions this season in the Southwest—the largest cotton region—is expected to reduce harvested area there dramatically. As a result, a substantially lower U.S. cotton harvested acreage estimate (7.1 million acres) is forecast, the smallest in over 150 years. However, the U.S. abandonment rate projection (43 percent) is the highest on record. The U.S. cotton yield is forecast at 846 pounds per harvested acre in 2022, slightly above the 3-year average.

Upland cotton production in 2022 is forecast at 12.2 million bales, 29 percent (5 million bales) below 2021 and the smallest crop since 2009. 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 a 2 out of 3 chance for the 2022 upland crop to range between 11 million and 13.3 million bales.

Compared with 2021, U.S. upland production expectations are slightly different for three of the Cotton Belt regions in 2022, with the Southwest crop considerably lower than 2021 (figure 2). Based on the August estimates, 2022 Southwest upland production is forecast at 3.3 million bales, compared with 8.6 million bales last season and the smallest crop since 1989. With inadequate moisture conditions limiting plant growth this season, the 2022 Southwest

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>4.5</td>
</tr>
<tr>
<td>Delta</td>
<td>4.1</td>
</tr>
<tr>
<td>Southwest</td>
<td>8.4</td>
</tr>
<tr>
<td>West</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Note: 1 bale = 480 pounds.
Source: USDA, National Agricultural Statistics Service, Crop Production reports.
abandonment is projected at a record 67 percent. The Southwest yield is forecast at 621 pounds per harvested acre in 2022, the lowest in 3 years. The Southwest is expected to account for about 28 percent of total U.S. upland production in 2022, compared with 50 percent last season.

In the Southeast, 2022 production is projected at 4.6 million bales, 5 percent above 2021 but similar to the 5-year average, while the 2022 yield is forecast slightly lower at 900 pounds per harvested acre. The Southeast region is forecast to produce the largest share of the U.S. upland crop in 2022, accounting for 38 percent of the total. For the Delta, the 2022 cotton crop is estimated slightly higher at 3.8 million bales, but below the 5-year average of 4.5 million bales. Increased harvested area this season is more than offsetting a lower yield, with the Delta region expected to account for 31 percent of U.S. upland production in 2022.

In the West, upland production is forecast at 386,000 bales in 2022, the lowest in 90 years, as harvested area is projected to be the smallest since 1921 and yield is forecast at one of the lowest during the last 25 years. The West accounts for 3 percent of the total U.S. upland crop. In addition, extra-long staple (ELS) cotton production—primarily grown in the West—is forecast at 407,000 bales in 2022, up from 2021. However, below-average area—limited by water availability issues—and a decade-low yield are expected to keep the 2022 ELS crop at one of the lowest during the previous 20 years.

U.S. cotton crop development is running ahead of both last season and the 5-year average. As of August 14, 80 percent of the cotton area was setting bolls, compared with 73 percent in 2021 and 78 percent for the 2017–21 average. In addition, 15 percent of the area had bolls opening, compared with 9 percent last year and 14 percent for the 5-year average. Of note, Texas had bolls opening on 21 percent of the area, compared with only 11 percent last season, as drought conditions have sped up the development of the crop that remains standing. Meanwhile, 2022 U.S. cotton crop conditions moved lower much of the season (figure 3). As of August 14, 34 percent of the U.S. cotton area was rated “good” or “excellent,” compared with 67 percent in 2021, while 35 percent was rated “poor” or “very poor,” compared with 5 percent a year ago.

Figure 3

U.S. cotton crop conditions

Index (3=fair and 4=good)

Source: USDA, Crop Progress reports.

U.S. Cotton Demand and Stock Estimates Adjusted

U.S. cotton demand (mill use plus exports) and stocks for 2022/23 and 2021/22 were revised in August based on the latest available data. For 2022/23, U.S. exports are forecast at 12 million bales, 2 million below the July projection. The lower forecast is attributable to the reduced crop expectations reported this month. And, with relatively low beginning stocks, the smallest U.S. cotton supply since 1984/85 is projected to limit cotton exports in 2022/23.

For 2021/22, the U.S. export estimate was reduced slightly this month to 14.65 million bales, the lowest since the 2015/16 shipments of 9.2 million bales. Complete data for 2021/22 U.S. cotton exports will be available in September, as the final estimate is based on reported shipments in USDA’s U.S. Export Sales and reports by the U.S. Department of Commerce, Bureau of the Census.

The United States is forecast to remain the world’s leading cotton exporter in 2022/23 despite this month’s estimate reduction. The U.S. share of global trade is projected near 27 percent for 2022/23, compared with 34 percent the year before. U.S. cotton exports are forecast to account for 84 percent of U.S. cotton demand in 2022/23, slightly below the previous season. Meanwhile, U.S. cotton mill use is projected at 2.3 million bales in 2022/23, 10 percent below the year before.

With U.S. cotton demand forecast to exceed production in 2022/23, ending stocks are expected to decline to 1.8 million bales, about half the beginning level and the lowest in nearly a century. Similarly, the stocks-to-use ratio (12.6 percent) is projected at its lowest since 1924/25. Along with the low U.S. stocks, global cotton demand is also expected to exceed production in 2022/23 and is supportive of prices. For 2022/23, the upland cotton farm price is forecast at a record 97 cents per pound, up from an estimated 92 cents per pound in 2021/22.

U.S. Cotton Product Trade Higher During First Half of 2022

Total U.S. cotton textile and apparel trade increased during the first half of 2022, compared with the corresponding 2021 period. U.S. cotton product imports totaled the equivalent of 10.5 million 480-pound bales of raw cotton during January-June 2022 versus 9.7 million bales during the first 6 months of 2021. At the same time, cotton product exports rose 3 percent to 1.55 million bale-equivalents. Overall, the cotton textile and apparel trade deficit increased 10 percent during the first half of 2022, reaching 9 million bale-equivalents.

U.S. cotton product imports are sourced from many countries, although the majority of products are imported from a handful of suppliers. During the first half of 2022, the top 5 countries contributed 68 percent of total U.S. cotton product imports, slightly below the corresponding period in 2021. Although the total share is similar, changes are notable for a couple of individual countries (figure 4). While China remains the leading cotton product supplier to the United States (23 percent market share in 2022), this share has declined over the last several years in favor of other countries, with Bangladesh being the most notable in 2022. During the first 6 months of 2022, Bangladesh’s share of cotton products imported by the United States rose to 11 percent, compared with 9 percent in recent years. Export opportunities are also increasing for other suppliers over the last several years, including India, Pakistan, and Vietnam.
Figure 4
Leading suppliers of U.S. cotton textile and apparel imports

Percent share of total

International Outlook

Global Cotton Production Projected Higher in 2022/23

World cotton production is projected at 117 million bales this season, 1 percent (1.1 million bales) above 2021/22 and the largest crop in 3 years despite the 28-percent reduction in the U.S. crop forecast this season. Larger cotton crops are projected for most of the major cotton-producing countries in 2022/23. Global cotton harvested area in 2022/23 is forecast to rise slightly to nearly 32.8 million hectares (80.9 million acres). The 2022/23 global yield is forecast near the previous 2 seasons at 778 kilograms (kg) per hectare (694 pounds per acre).

For India and China—the leading cotton producers—production is forecast at 27.5 million bales for each country in 2022/23, or a combined 47 percent of the global total. India’s cotton crop is projected to increase 12 percent (3 million bales) from a year earlier, as both area and yield rebound from 2021/22’s recent lows. In 2022/23, India is expected to harvest 13.2 million hectares (+1.1 million) while the yield is slightly above the 3-year average at 454 kg per hectare. Cotton production in China is forecast to rise 2 percent (500,000 bales) in 2022/23, the result of a marginally higher area and yield. Area is forecast at 3.15 million hectares while the national yield is projected at 1,901 kg per hectare, but below the 2020/21 record of 1,976 kg per hectare.

Higher crop prospects are also projected for Brazil and Pakistan in 2022/23, with Australia’s crop unchanged from the year before. For Brazil, production is forecast at 13 million bales in 2022/23, 1 million bales above 2021/22, as a rebound in yield to 1,769 kg per hectare is expected to raise the crop 8 percent, with area unchanged at 1.6 million hectares. With the drought-reduced U.S. crop expectations this season, Brazil is forecast to be the third largest producer in 2022/23, accounting for 11 percent of the global cotton crop. For Pakistan, cotton production is forecast at 6.2 million bales in 2022/23, 200,000 bales above the year before. Area is expected to rebound to the 2020/21 level this season (2.2 million hectares), but output is likely limited by a lower yield prospect in 2022/23. Australia’s 2022/23 cotton crop is projected at 5.5 million bales, the same as 2021/22, which saw a dramatic recovery due to easing of drought conditions and reservoir levels have remained sufficient this season. A slightly lower 2022/23 area (~50,000 hectares) is offset by an increase in the national yield to 2,177 kg per hectare.

World Cotton Mill Use Marginally Lower in 2022/23, Global Imports Forecast To Rise

Global cotton mill use in 2022/23 is projected at 119.1 million bales, about unchanged from 2021/22’s revised estimate of 119.2 million bales. Uncertainties surrounding the global economic conditions, including consumer demand for cotton textile and apparel products, and the relatively high cotton fiber prices are expected to limit growth for most cotton-spinning countries in 2022/23. Despite these uncertainties, global cotton imports are forecast to increase more than 3.5 percent to 44.6 million bales in 2022/23, as textile mills in several major-spinning countries are expected to add imports to adequately cover mill use expectations (figure 5).

Cotton mill use in China—the leading cotton spinner—is projected at 37.5 million bales in 2022/23, 500,000 bales (nearly 1.5 percent) above 2021/22. China is forecast to account for 31 percent of global cotton mill use in 2022/23. For India, cotton product exports are supporting cotton mill use at 25 million bales this season, with India contributing 21 percent of the world total. In Pakistan, 2022/23 cotton mill use is expected to reach 10.9 million bales, 100,000 bales
above the year before. Higher cotton mill use is also projected for Vietnam (6.9 million bales), while Bangladesh’s mill use is unchanged at 8.5 million bales and Turkey’s use decreases slightly to 8.5 million bales in 2022/23.

Global Cotton Trade Higher; Stocks Decrease

World cotton trade in 2022/23 is forecast at 44.6 million bales, compared with 43.3 million bales in 2021/22. Although global cotton mill use is projected to remain relatively stable in 2022/23, increased imports are expected this season by China, Bangladesh, Vietnam, and Pakistan. Meanwhile, export gains are seen for several countries outside the United States and India in 2022/23. Limited supplies are expected to reduce exports from the United States and India by 18 percent and 5 percent, respectively. Relatively large crops in Brazil, Australia, Benin, and Mali are projected to support cotton exports there. Brazil is forecast to export 9.3 million bales (+1.6 million bales) in 2022/23, while Australia exports an estimated 6.2 million bales (+2.3 million bales). Benin and Mali are forecast to export 1.5 million and 1.4 million bales, respectively, this season.

Global cotton ending stocks for 2022/23 are projected at 82.8 million bales, nearly 2 million bales (2 percent) below last season and the third consecutive annual decrease. World stocks are also forecast to be the lowest in 4 years. In 2022/23, the global stock decline is led by the United States and China, where stocks are 1.7 million and 1.1 million bales, respectively, below the year before. In China, ending stocks are estimated at 36.2 million bales in 2022/23, the lowest in 4 years. Brazil’s stocks, on the other hand, are forecast at 12.7 million bales at the end of 2022/23, an increase of 4 percent and the highest in 3 years. Cotton stocks are also expected to rise in India after back-to-back declines, reaching 8.8 million bales by the end of 2022/23.

As a share of global supplies, however, stocks in China and India recently have been relatively flat, accounting for 44 percent and 11 percent, respectively (figure 6). Brazil’s share of global supplies have risen slightly for several seasons and are forecast to approach 15.5 percent in 2022/23, similar to 2018/19. In contrast, the United States is forecast to hold only 2 percent of
the global cotton supplies at the end of 2022/23, down from 7 percent in 2019/20. Meanwhile, the stock share in the rest of the world has steadily increased during the last several seasons. Like stocks, the 2022/23 stocks-to-use ratio is forecast to decrease slightly and continue to support price expectations. The world cotton price (A-Index) is expected to average near 120 cents per pound in 2022/23, compared with 2021/22’s 132 cents per pound.

Figure 6
Share of global cotton ending stocks

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

Suggested Citation

Use of commercial and trade names does not imply approval or constitute endorsement by USDA.

In accordance with Federal civil rights law and USDA civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.