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Cotton and Wool Outlook: March 2023

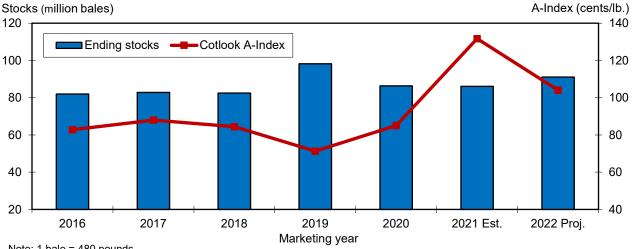
Leslie Meyer and Taylor Dew

Global 2022/23 Cotton Stocks Rise as Mill Use **Declines**

The latest U.S. Department of Agriculture (USDA) cotton projections for 2022/23 (August-July) indicate a 5-million-bale (6 percent) increase in global ending stocks—compared with 2021/22—as mill use falls below production. World cotton stocks are projected at 91.1 million bales, the second highest since 2015/16 (figure 1). Stocks are forecast larger in most of the major producing countries, with Pakistan and Australia the exceptions. China—the largest stockholder—is forecast to account for 39.4 million bales, or 43 percent of the 2022/23 total, while Brazil and India contribute a combined 27 percent.

Global cotton production is forecast slightly lower at 115.1 million bales in 2022/23, the result of decreased harvested area. World cotton mill use is projected 6.2 million bales (5.3 percent) lower at 110.1 million bales, as high clothing inventories depress importers' orders. World cotton trade is forecast at 39.6 million bales, the lowest since 2016/17. Two of the top three exporters, the United States and India, account for most of the decline. Meanwhile, cotton prices are forecast to decline from the remarkably elevated levels of 2021/22, as the stocks-to-use ratio climbs to its highest level (83 percent) in 3 years.

Figure 1 Global cotton stocks and prices



Note: 1 bale = 480 pounds.

Source: USDA, Economic Research Service using data from Cotlook and USDA, Interagency Commodity Estimates Committee.

Domestic Outlook

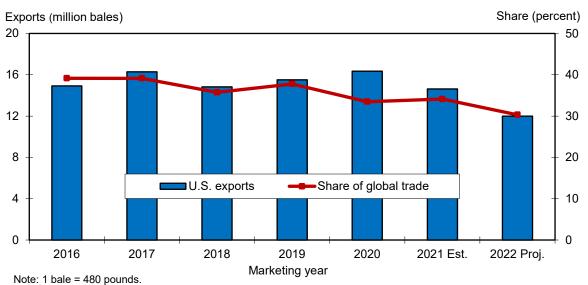
U.S. Cotton Supply and Use Estimates Unchanged in March

U.S. cotton production in 2022/23 remains estimated at approximately 14.7 million bales (upland at 14.2 million bales and extra-long staple at 474,000 bales). The current estimate is 16 percent below the 2021 crop but similar in size to 2020. USDA will release the final U.S. cotton production estimates for the 2022 crop on May 12. Based on the latest production estimate and beginning stocks of 3.75 million bales, the 2022/23 cotton supply totals 18.4 million bales, about 2.2 million below last season and the lowest since 2015/16.

U.S. cotton demand in 2022/23 is projected at 14.1 million bales, 18 percent below 2021/22 and—like supply—the lowest in 7 years, with both U.S. mill use and exports declining similar percentages. U.S. cotton mill use is forecast at 2.1 million bales for 2022/23, the lowest in over a century, as a sluggish global economy and the effects of burdensome inventories have reduced demand for yarn. Based on data through the first 6 months of 2022/23, U.S. textile mills used approximately 1.1 million bales of cotton, 14 percent below the comparable period of 2021/22. Based on the latest estimate, U.S. cotton mill use is expected to continue to underperform last season's pace during the last half of the season.

Lower U.S. cotton supplies and the uncertainty surrounding the global economy have reduced export prospects this season. Through the first 7 months of 2022/23, U.S. cotton exports totaled 5.9 million bales, or 49 percent of the season's forecast. However, shipments are expected to move higher over the next several months. U.S. cotton exports are projected at 12 million bales in 2022/23, 2.6 million below 2021/22 and the lowest shipments since 2015/16. As a result, the U.S. share of global trade is forecast at 30 percent, compared with the 3-year average near 35 percent (figure 2).

Figure 2 U.S. cotton exports and share of global trade



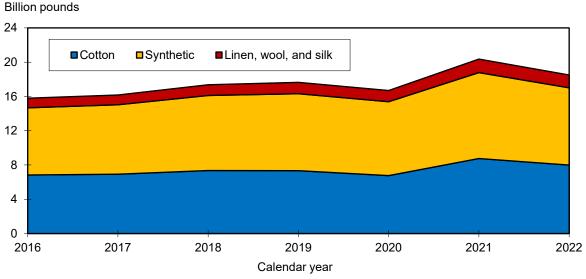
With U.S. cotton production above the demand projection, 2022/23 U.S. ending stocks are forecast nearly 15 percent (550,000 bales) higher at 4.3 million bales—the highest in 3 years. As a result, the 2022/23 U.S. stocks-to-use ratio is forecast at 30.5 percent, compared with 22 percent last season and 17 percent in 2020/21. Based on the U.S. and world cotton supply and demand estimates and recent prices, the 2022/23 average U.S. upland cotton farm price remains forecast at 83 cents per pound, down from 2021/22's record of 91.4 cents.

U.S. Net Textile and Apparel Imports Decline in 2022

U.S. net textile and apparel fiber imports decreased moderately in calendar year 2022, a year after they rose 22 percent. Net imports reached 18.5 billion raw-fiber-equivalent pounds in 2022, 9 percent below a year earlier (figure 3). Total fiber product imports approached 21.4 billion pounds in 2022, compared with approximately 23.5 billion pounds in 2021. Meanwhile, 2022 textile and apparel exports declined to 2.9 billion pounds, compared with 3.1 billion in 2021.

Net product imports for the major fibers (cotton and synthetics) and for the combined linen, wool, and silk fibers decreased in calendar year 2022; however, the share for each fiber group remained near the previous year's level. Although cotton's share had declined in recent years through 2020, the 2021 share improved to 43 percent of the total and remained at that level in 2022. Meanwhile, synthetic textile and apparel products continue to account for the largest share—49 percent in both 2021 and 2022—but was the lowest share in 8 years. Combined linen, wool, and silk products contributed the remaining 8 percent of net imports in 2022. For supplemental data about U.S. annual trade of cotton products by country, see tables 11 and 12 associated with this report. In addition, see the Highlight section in this report featuring U.S. retail cotton consumption in 2022.

Figure 3
U.S. net imports of textile and apparel fiber products



Note: Raw-fiber-equivalent pounds.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

International Outlook

World Cotton Production Lower in 2022/23

Global cotton production in 2022/23 is forecast at 115.1 million bales, slightly below last season's estimate of 115.9 million bales. Lower world harvested area more than offset a rebound in the global yield this season. World cotton area is forecast at 31.6 million hectares (78.1 million acres) in 2022/23—nearly 1 million hectares below 2021/22. The world cotton yield, however, is projected at 793 kilograms (kg) per hectare (707 pounds per acre), the highest since 2017/18's record of 804 kg per hectare.

Cotton production expectations for the major-producing countries this season are mixed compared with 2021/22 as gains in China, India, and Brazil mostly offset reductions for the United States and Pakistan (figure 4). Production in China—the leading global cotton producer in 2022/23—is forecast at 29.5 million bales, 10 percent (2.7 million bales) above 2021/22. Harvested area is estimated marginally lower at nearly 3.1 million hectares in 2022/23, while favorable growing conditions in China pushed this season's yield to a record 2,106 kg per hectare, with most of the crop in the high-yielding Xinjiang region. China is expected to account for approximately 25.5 percent of global production this season.

For India, 2022/23 cotton production is projected at 24.5 million bales, slightly above last season's crop. Despite a modest rebound in area this season, a national yield that is forecast at its lowest in nearly two decades is expected to keep production similar to 2021/22's estimate. Harvested area in India is estimated at 12.7 million hectares in 2022/23, near the average of the previous 2 years. However, India's yield (420 kg per hectare) is expected to decrease for the third consecutive year and is forecast at its lowest since 2003/04. Nevertheless, India is forecast to account for 21 percent of world cotton production in 2022/23. Pakistan's cotton production is forecast at only 3.9 million bales (-35 percent), as flood related damage reduced the crop significantly this season. With harvested area estimated 10 percent lower at 1.8 million hectares, a considerably lower yield of 472 kg per hectare is also projected. Pakistan is forecast to account for only 3 percent of the global cotton crop in 2022/23.

Million bales 160 140 ■ India China ■U.S. ■ Brazil ■ Rest of world 120 100 80 60 40 20 0 2016 2017 2018 2019 2020 2021 Est. 2022 Proj. Marketing year

Figure 4
World cotton production

Note: 1 bale = 480 pounds.

In the Southern Hemisphere, larger cotton production is projected for Brazil, while a slightly smaller crop is expected in Australia in 2022/23. Brazil's cotton production is projected at 13.3 million bales, 1.6 million above 2021/22, with area forecast 2 percent higher at 1.63 million hectares. Brazil's yield is also forecast higher at 1,777 kg per hectare in 2022/23, but below 2019/20's record of 1,802 kg per hectare. Brazil is expected to contribute 11.5 percent of the world's cotton production in 2022/23. For Australia, cotton production of 5.5 million bales is projected for 2022/23, with area rising to 675,000 hectares as improved reservoir levels support increased plantings. Australia's yield is projected at 1,774 kg per hectare, below the last several seasons. Australia's share of the global crop is forecast to remain near 5 percent in 2022/23.

Reduced World Cotton Mill Use Forecast in 2022/23

Global cotton consumption in 2022/23 is projected at 110.1 million bales, 5 percent below 2021/22 as overall global economic conditions and textile mill demand for cotton have weakened this season. Higher inflation, declining yarn orders, and lower profit margins for spinning mills have all contributed to the reduced forecast for 2022/23. This season's world mill use is forecast to decrease 6.2 million bales, reaching the second lowest since 2013/14.

Cotton mill use remains highly concentrated, however, with China and India accounting for more than half of the global mill use in 2022/23, and the top 5 countries contributing more than 75 percent of the world total. In 2022/23, declines are expected for most of the major cotton-spinning countries—with China being the exception (figure 5). For China, 2021/22 cotton mill use was at its lowest in nearly two decades as the pandemic lockdowns reduced mill use nearly 18 percent. In this context, the 2022/23 increase of more than 6.5 percent (2.25 million bales) to 36 million bales is less impressive. However, China is expected to account for 33 percent of global cotton mill use this season. Cotton mill use in India is projected 10 percent lower year-over-year, at 22.5 million bales, as lower supplies and a less competitive textile industry have reduced prospects there. Cotton mill use in India is forecast to account for 20 percent of the global total in 2022/23.

Million bales 45 40 **2**020/21 **2021/22** ■2022/23 projected 35 30 25 20 15 10 5 0 China India Pakistan Bangladesh Turkey Rest of world

Figure 5 **Leading global cotton consumers**

Note: 1 bale = 480 pounds.

Lower cotton mill use is also forecast for Pakistan, Bangladesh, Turkey, and Vietnam in 2022/23. In Pakistan—the third largest spinner of cotton—mill use is projected at only 8.6 million bales (-2.1 million bales) this season, the lowest since 2001/02. Reduced production and financing issues in Pakistan have limited cotton spinning prospects this season. Mill use in Bangladesh is forecast at 8.1 million bales (-400,000 bales), the lowest in 3 years. Cotton mill use in Turkey in 2022/23 is expected to decline 1 million bales to 7.7 million, with use returning to the 2020/21 level as the country deals with the recent earthquake impacts in addition to the global economic conditions affecting demand for cotton products. In Vietnam, cotton mill use is forecast to slip 400,000 bales to 6.3 million bales in 2022/23, the lowest in 6 years. Combined, these 4 countries are forecast to account for 28 percent of global cotton mill use this season.

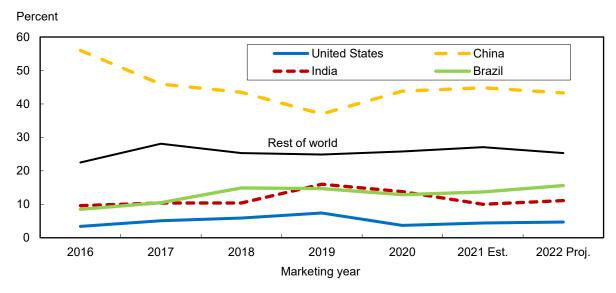
Global Cotton Trade Lower; Stocks To Increase in 2022/23

World cotton trade for 2022/23 is forecast to decrease as cotton mill use declines for a second consecutive season. Global cotton trade is forecast at only 39.6 million bales in 2022/23—approximately 7.5 percent below 2021/22—as all the leading cotton importers are expected to need fewer supplies this season. Consequently, the major suppliers—the United States and Brazil—are forecast to export smaller quantities. U.S. cotton exports are forecast at 12 million bales (-18 percent) in 2022/23. For Brazil, exports are forecast at 7.7 million bales, marginally below 2021/22. However, larger supplies in Australia are seen boosting 2022/23 cotton exports to 6.1 million bales, mostly offsetting the U.S. decrease.

Based on the latest cotton supply and demand projections, world cotton stocks are forecast 6 percent higher in 2022/23 at 91.1 million bales, the highest in 3 years. Stocks as a share of the world total are forecast to increase for each of the largest producing countries except for China (figure 6). Although 2022/23 stock levels in China are projected modestly higher—at 39.4 million bales—its share (43 percent) of global stocks is expected to be the lowest in 3 years. In contrast, the share of total stocks for Brazil, India, and the United States are forecast to rise to near 16 percent, 11 percent, and 5 percent, respectively. The stock share for the rest of the world combined has remained relatively stable in recent years.

Figure 6

Share of global cotton ending stocks



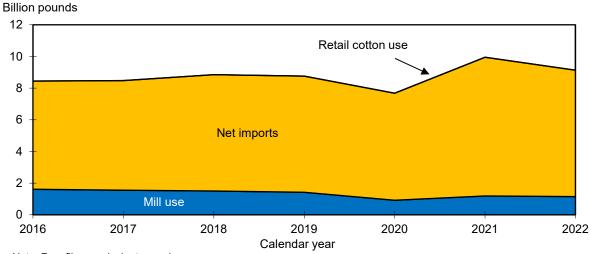
Highlight

U.S. 2022 Apparent Retail Cotton Consumption Smaller

U.S. apparent retail cotton consumption (mill use plus net textile imports) declined 8 percent in calendar year 2022—after a nearly 30-percent increase in 2021—but was still the second highest in over a decade. In 2022, U.S. consumer demand for cotton products returned to near its pre-pandemic trend after experiencing the 2021 dramatic increase associated with substantial growth for the U.S. and global economies. In 2020, the pandemic effects reduced U.S. apparent retail cotton use by 12 percent year to year, to its lowest level in more than 25 years. Retail cotton use in 2022 was estimated at 9.1 billion raw-fiber-equivalent pounds, or 19 million 480-pound bale-equivalents (figure 7).

In calendar year 2022, U.S. cotton textile and apparel product imports declined 8 percent to approximately 9.4 billion pounds but was still the second highest in 12 years. Despite this moderate decrease for cotton, synthetic product imports fell more than 10 percent, and as a result, cotton's share of total fiber imports rose slightly in 2022. U.S. cotton product exports were marginally lower in 2022—at 1.4 billion pounds—the second lowest in more than 25 years. U.S. cotton mill use in calendar year 2022 declined nearly 3 percent to approximately 1.2 billion pounds. As a result, the U.S. per capita estimate of retail cotton consumption slipped from nearly 30 pounds in 2021 to 27.5 pounds in 2022. With U.S. and world economic expansion projected smaller in calendar year 2023, limited growth is expected for U.S. apparent retail cotton use in 2023.

Figure 7 **U.S. apparent retail cotton use**



Note: Raw-fiber-equivalent pounds.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

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