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Cotton and Wool Outlook: March 2024

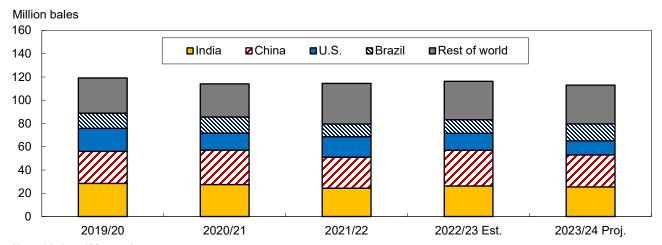
Leslie Meyer and Taylor Dew

Global 2023/24 Cotton Production Forecast Raised This Month, but Still Below Last Year

The latest U.S. Department of Agriculture (USDA) estimates indicate that global cotton production in 2023/24 (August–July) will total 113.0 million bales, nearly 3 percent below 2022/23 (figure 1). Pakistan and Brazil are the only major producing countries that show increases from last year, up 72 percent and 24 percent, respectively. Australia, the United States, China, and India all decreased production in 2023/24. China and India remain the leading cotton producers, accounting for a combined 47 percent of world production this season.

Global cotton mill use in 2023/24 is estimated at 113.0 million bales, less than 2 percent above 2022/23. Turkey is the only major cotton-spinning country to show a decline (-7 percent) from the previous year. While China's mill use is forecast unchanged in 2023/24 compared with last year, mill use in Pakistan, India, Vietnam, and Bangladesh is estimated to increase. World cotton trade is projected at 43.3 million bales this season, a 17-percent increase from 2022/23, as Brazil's exports and China's imports rise significantly. Global ending stocks are projected to remain about 83.3 million bales, marginally above 2022/23.

Figure 1 World cotton production



Note: 1 bale = 480 pounds.

Source: USDA, Economic Research Service using data from USDA, World Agricultural Supply and Demand Estimates reports.

Domestic Outlook

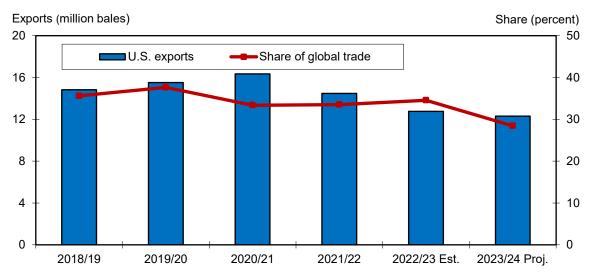
U.S. Cotton Production and Stocks Lowered in March

U.S. cotton production in 2023/24 was reduced 334,000 bales this month to 12.1 million bales (upland at 11.8 million bales and extra-long staple at 307,000 bales) based on data in the March *Cotton Ginnings* report. The current estimate is 16 percent below the 2022 crop and the lowest since 1986/87. USDA will release the final U.S. cotton production estimates for the 2023 crop on May 10. Based on the latest production estimate and beginning stocks of 4.25 million bales, the 2023/24 cotton supply totals nearly 16.4 million bales, about 2.2 million below last season and the lowest in nearly four decades.

U.S. cotton demand in 2023/24 is projected at nearly 14.1 million bales, 5 percent below 2022/23 and the lowest since 2015/16, with both U.S. mill use and exports forecast to decrease this season. U.S. cotton mill use is forecast at only 1.75 million bales for 2023/24—the lowest since 1884/85 when mill use was estimated at approximately 1.7 million bales. Based on data through the first 6 months of 2023/24, U.S. textile mills used approximately 0.9 million bales of cotton, 16 percent below the comparable period of 2022/23. Based on the latest estimate, U.S. cotton mill use is expected to perform at a similar pace during the last half of the season.

Lower U.S. cotton supplies and the limited growth forecast for the global economy and world cotton mill use have reduced export prospects this season. Through the first 7 months of 2023/24, U.S. cotton exports totaled 6.0 million bales, or 49 percent of the season's forecast. Over the next several months, however, shipments are expected higher. U.S. cotton exports are projected at 12.3 million bales in 2023/24, about 0.5 million bales below 2022/23 and the lowest shipments since 2015/16. As a result, the U.S. share of global trade is forecast at approximately 28.5 percent, compared with the 3-year average near 34 percent (figure 2).

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



Note: 1 bale = 480 pounds.

Source: USDA, Economic Research Service using data from USDA, *World Agricultural Supply and Demand Estimates* reports.

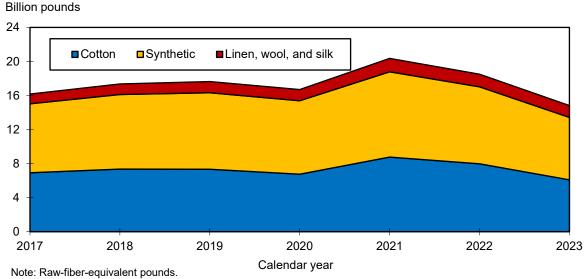
With U.S. cotton production below the demand projection, 2023/24 U.S. ending stocks are forecast nearly 11 percent (300,000 bales) smaller than the month before at 2.5 million bales—the lowest in a decade. As a result, the 2023/24 U.S. stocks-to-use ratio is forecast at about 18 percent, compared with 29 percent last season and 24 percent in 2021/22. Based on the U.S. and world cotton supply and demand estimates and recent prices, the 2023/24 average U.S. upland cotton farm price remains forecast at 77 cents per pound, compared with 2022/23's 84.8 cents per pound.

U.S. Net Textile and Apparel Imports Decline Further in 2023

U.S. net textile and apparel fiber imports decreased considerably in calendar year 2023. Net imports reached 14.8 billion raw-fiber-equivalent pounds in 2023, 20 percent below a year earlier and the decline follows 2022's decrease of 9 percent (figure 3). Total fiber product imports reached 17.2 billion pounds in 2023, compared with approximately 21.4 billion pounds in 2022. Meanwhile, 2023 textile and apparel exports decreased to 2.4 billion pounds, compared with 2.9 billion in 2022.

Net product imports for the major fibers (cotton and synthetics) and for the combined linen, wool, and silk fibers decreased in calendar year 2023; however, the import share for non-cotton fibers increased slightly. Cotton's share weakened 2 percentage points to 41 percent of the total in 2023. Meanwhile, synthetic textile and apparel products continue to account for the largest share—49 percent in both 2023 and 2022. Combined linen, wool, and silk products contributed the remaining 10 percent of net imports in 2023. 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 use in 2023.

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



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

International Outlook

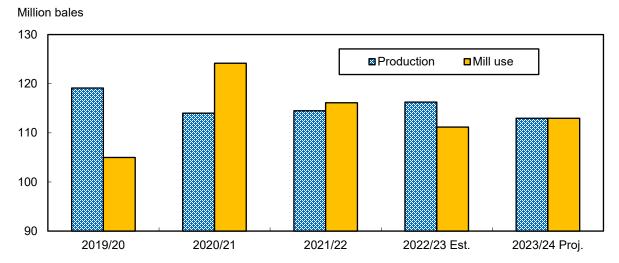
World Cotton Production Lower in 2023/24

Global cotton production in 2023/24 is forecast at 113.0 million bales, 3.3 million below last season's estimate of 116.3 million bales (figure 4). A lower world yield accounts for the decline as global harvested area is estimated unchanged this season. World cotton area is forecast at 31.7 million hectares (78.4 million acres) in 2023/24. The world cotton yield is projected at 776 kilograms (kg) per hectare (692 pounds per acre), down from last season's record of 798 kg per hectare (712 pounds per acre).

Cotton production for the major-producing countries this season is mixed compared with 2022/23, as reductions in China, India, the United States, and Australia more than offset gains for Brazil and Pakistan. Production in China—the leading global cotton producer in 2023/24—is forecast at 27.5 million bales, 10 percent (3.2 million bales) below 2022/23. Harvested area in China is estimated 8 percent lower at 2.9 million hectares in 2023/24, while the yield is projected at 2,065 kg per hectare, slightly below last season's record of 2,122 kg per hectare as most of China's crop is grown in the high-yielding Xinjiang region. China is expected to account for approximately 24 percent of global production this season.

For India, 2023/24 cotton production is projected at 25.5 million bales, 3 percent below last season's crop. A slightly lower harvested area and yield this season is expected to keep production 800,000 bales below 2022/23's estimate. Harvested area in India is estimated at 12.7 million hectares in 2023/24, while the yield is forecast at 437 kg per hectare. Both area and yield are marginally above the average of the previous 2 years. Nevertheless, India is forecast to account for approximately 22.5 percent of world cotton production in 2023/24, the same as the year before.

Figure 4
Global cotton production and mill use



Note: 1 bale = 480 pounds.

Source: USDA, Economic Research Service based on USDA, World Agricultural Supply and Demand Estimates reports.

Pakistan's cotton production is rebounding from the 2022/23 flood-damaged crop. For 2023/24, production is forecast at 6.7 million bales (+2.8 million), the highest in 5 years. Harvested area is estimated one-third larger at 2.4 million hectares, the highest in 4 years. In addition, a considerably higher yield of 608 kg per hectare is also projected. Pakistan is forecast to account for 6 percent of the global cotton crop in 2023/24, nearly double the share recorded last season.

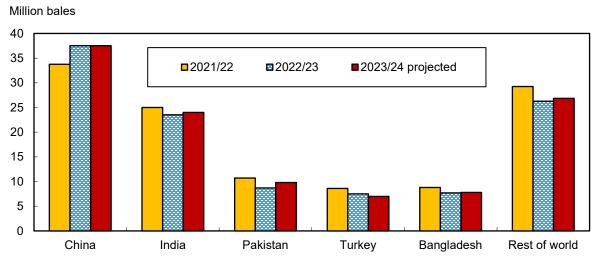
In the Southern Hemisphere, a significant increase in cotton production is expected for Brazil, while a smaller crop is forecast for Australia in 2023/24. Brazil's cotton production is estimated at nearly 14.6 million bales—2.8 million above 2022/23—with a higher yield contributing most of the increase. Brazil's yield is forecast at a record 1,910 kg per hectare in 2023/24, while area is forecast slightly higher at 1.66 million hectares. Brazil is expected to account for nearly 13 percent of the world's cotton production this season. For Australia, cotton production of 4.8 million bales is projected for 2023/24, with the reduction in area more than offsetting an increase in the national yield. Australia's area is estimated at 515,000 hectares, while the yield is forecast at 2,029 kg per hectare, the highest in 3 years. Australia's share of the global crop is forecast at 4 percent in 2023/24.

World Cotton Mill Use Growth Forecast in 2023/24

Global cotton mill use in 2023/24 is projected to rise slightly after declining considerably during the previous 2 years. Mill use in 2023/24 is forecast at 113.0 million bales, 1.6 percent above 2022/23 but well below the 2020/21 record of nearly 124.2 million bales (figure 4). With the global economic headwinds that reduced cotton mill use over the previous 2 years expected to diminish somewhat, 2023/24 cotton mill demand is forecast to grow above the long-run (1999/00–2022/23) average rate of 1.4 percent. This season's world mill use is forecast to rise 1.8 million bales, but the 2023/24 level remains among the lowest over the last decade.

Cotton mill use remains highly concentrated, with China and India accounting for nearly 55 percent of global mill use once again in 2023/24, and the top five countries contributing more than 75 percent of the world total. In 2023/24, small increases are expected for most of the major cotton-spinning countries—with China unchanged and Turkey modestly lower (figure 5).

Figure 5 **Leading global cotton consumers**



Note: 1 bale = 480 pounds.

Source: USDA, Economic Research Service using data from USDA, *World Agricultural Supply and Demand Estimates* reports.

For China—the leading cotton spinner—2023/24 cotton mill use is forecast at 37.5 million bales, equal to 2022/23 and the 3-year average. China is expected to account for 33 percent of global cotton mill use this season. Cotton mill use in India is projected 2 percent (500,000 bales) higher year-over-year, at 24.0 million bales, as textile mill activity recovers slightly. Cotton mill use in India is forecast to account for 21 percent of the global total in 2023/24.

Higher cotton mill use is also forecast for Pakistan, Bangladesh, and Vietnam in 2023/24. In Pakistan—the third largest spinner of cotton—mill use is projected to rebound 1.1 million bales to 9.8 million this season. Despite larger supplies boosting Pakistan's mill use, financing issues continue to limit cotton spinning prospects below the 3-year average. Mill use in Bangladesh is forecast to improve 100,000 bales from a 3-year low to 7.8 million bales in 2023/24. In Vietnam, 2023/24 cotton mill use is forecast to rise 5 percent (350,000 bales) from last year to 6.8 million bales, the highest in 3 years. In contrast, 2023/24 cotton mill use in Turkey was reduced this month and is expected to decline 500,000 bales year-over-year to 7.0 million bales as the textile industry struggles to recover. Combined, these four countries are forecast to account for 28 percent of global cotton mill use in 2023/24.

Global Cotton Trade Higher; Stocks To Increase in 2023/24

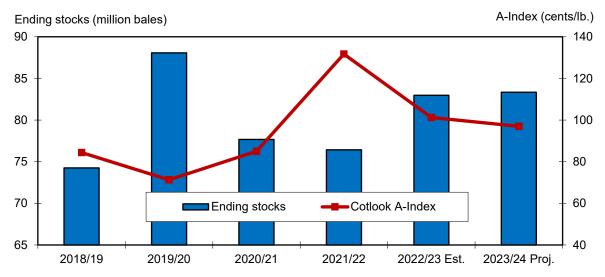
World cotton trade in 2023/24 is projected to rise as cotton mill use expands slightly and importers' inventories are replenished. Global cotton trade is forecast at nearly 43.3 million bales in 2023/24—17 percent above 2022/23—as most of the leading cotton importers are expected to need additional supplies this season. China is by far the leading cotton importer in 2023/24, with imports raised this month and now projected to more than double to 12.9 million bales. However, the increased imports are mainly to restock the national reserve, as mill use is forecast to remain flat this season. China is expected to account for 30 percent of global imports in 2023/24. Other major importers include Bangladesh and Vietnam, where cotton imports are projected to rise year-over-year to 7.5 million bales (+7 percent) and 6.8 million bales (+5 percent), respectively.

For the major suppliers—the United States and Brazil—exports are forecast to correspond with respective supplies. U.S. cotton exports are forecast at 12.3 million bales (-470,000 bales) in 2023/24 as two consecutive small crops have reduced exportable supplies. For Brazil, exports are forecast at a high of 11.2 million bales (+4.5 million bales) this season as a record cotton crop is estimated. In addition, smaller supplies in Australia are seen reducing cotton exports from 2022/23's record of nearly 6.2 million bales to about 5.8 million bales this season.

Based on the latest cotton supply and demand projections, world cotton stocks are reduced slightly this month, but still forecast marginally higher in 2023/24 at 83.3 million bales, the highest in 4 years (figure 6). For the major producing countries, 2023/24 ending stocks are forecast to increase in China, India, and Pakistan, with stocks in Brazil nearly unchanged and a decrease forecast for the United States.

Stocks in China are projected at approximately 40.3 million bales, compared with 37.4 million bales last season. At the end of 2023/24, China is projected to hold 48 percent of the global supplies. In India, ending stocks are forecast at 12.3 million bales, or 15 percent of the global total in 2023/24. For Pakistan, 2023/24 stocks are expected higher—approaching 1.8 million bales—but they remain below the recent average. Meanwhile, cotton stocks in Brazil are forecast to remain at approximately 5.8 million bales, or 7 percent of the 2023/24 global total. With world stocks and the global stocks-to-use ratio relatively flat in 2023/24, the global economic uncertainty surrounding cotton demand is projected to keep the 2023/24 world cotton price (Cotlook A-Index) below the 2022/23 average of 101 cents per pound.

Figure 6 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.

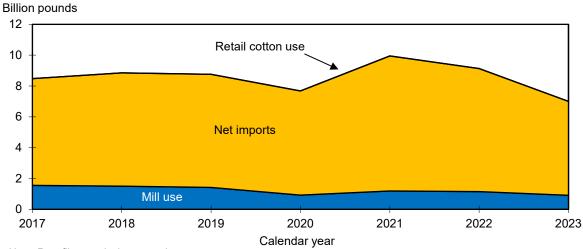
Highlight

U.S. 2023 Apparent Retail Cotton Use Shrunk

U.S. apparent retail cotton use (mill use plus net textile imports) decreased 23 percent in calendar year 2023—after experiencing an 8-percent decline in 2022 (figure 7). In 2023, U.S. consumer demand for cotton products was estimated to have fallen below the Coronavirus pandemic-related decline of 2020. The pandemic impacts reduced U.S. apparent retail cotton use by 12 percent year-over-year to its lowest level in more than 25 years. Retail cotton use in 2023 was estimated at 7.0 billion raw-fiber-equivalent pounds, or 14.6 million 480-pound bale-equivalents, the lowest since 1991.

In calendar year 2023, U.S. cotton textile and apparel product imports declined an estimated 23 percent to approximately 7.25 billion pounds, the lowest in more than two decades. At the same time, synthetic product imports fell more than 18 percent. U.S. cotton mill use in calendar year 2023 declined 21 percent to less than 1.0 billion pounds. As a result, U.S. cotton product exports were 19 percent lower in 2023—at 1.15 billion pounds—the second lowest in nearly three decades. Meanwhile, the U.S. per capita estimate of retail cotton use slipped from nearly 27.5 pounds in 2022 to 21 pounds in 2023. For calendar year 2024, world and U.S. economic growth are respectively projected flat or slightly lower. Consequently, U.S. retail cotton use, including textile and apparel trade, may be constrained once again in 2024.

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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