



Cotton and Wool Outlook: August 2023

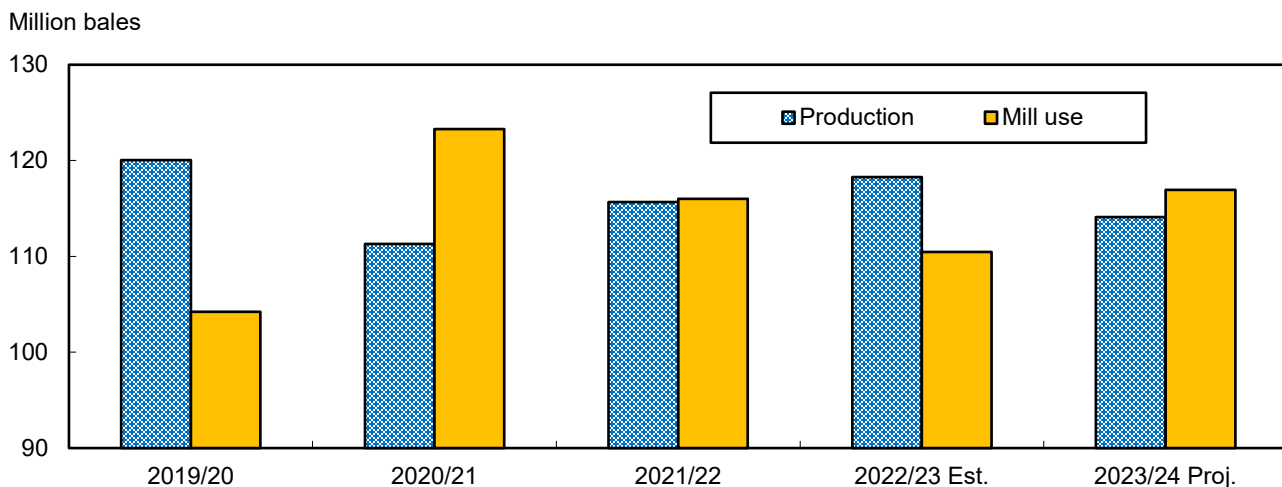
Leslie Meyer and Taylor Dew

Global 2023/24 Cotton Mill Use Forecast Above Production; Ending Stocks To Decline

The latest U.S. Department of Agriculture (USDA) cotton projections for 2023/24 (August–July) indicate that global cotton mill use will increase 6.5 million bales (6 percent) to 116.9 million bales, the highest since 2020/21 (figure 1). Pakistan and India show the largest growth in 2023/24 with gains of 1.4 million and 1.0 million bales, respectively. With global mill use forecast to outpace production in 2023/24, world cotton ending stocks are projected to decrease 2.5 million bales (2.7 percent) to 91.6 million bales.

World cotton production in 2023/24 is projected to decrease 4.2 million bales (3.5 percent) to 114.1 million bales. Although global cotton harvested area is forecast slightly higher, a 4-percent reduction from last season’s record yield results in the lower production. The 2023/24 global yield is forecast at 777 kilograms per hectare. World trade expectations (43.9 million bales) show a considerable increase (18 percent) from 2022/23 as increased cotton imports support the anticipated recovery in global cotton mill use in 2023/24.

Figure 1
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.

Domestic Outlook

U.S. Cotton Crop Forecast Lowest Since 2015/16

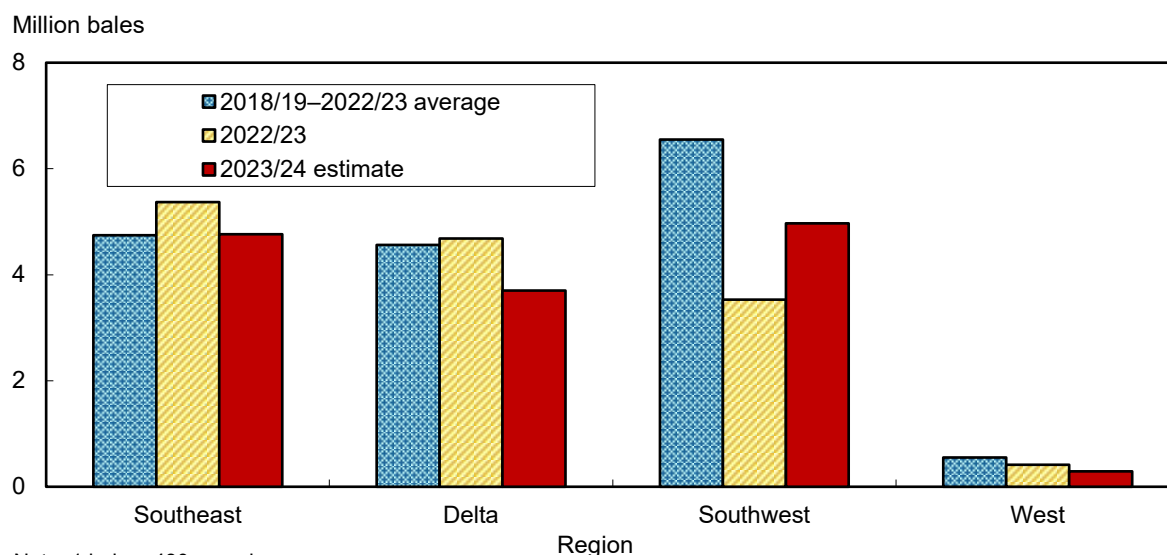
USDA's August forecast of the 2023/24 cotton crop projects U.S. production at 14 million bales, 3 percent below last season's final estimate of nearly 14.5 million bales and the smallest crop in 8 years. Based on the August forecast, 2023 cotton planted acreage is estimated at 11.1 million acres—the area indicated in USDA National Agricultural Statistics Service's (NASS) June *Acreage* report. This is the lowest cotton planted area in 7 years, as cotton prices heading into planting season were less favorable relative to other crops.

Although drought-reducing rainfall provided a better start to the growing season and reduced early-season abandonment compared with a year ago in the Southwest—the largest cotton region—hot and dry conditions since planting have diminished crop prospects. The U.S. abandonment rate projection of 22 percent is above the 10-year average but less than half last season's 47-percent record. U.S. cotton harvested acreage is forecast at 8.6 million acres. The U.S. cotton yield is forecast at 779 pounds per harvested acre in 2023/24, nearly 100 pounds below the 3-year average.

Upland cotton production in 2023/24 is forecast at 13.7 million bales, 2 percent below 2022/23 and the smallest crop in 8 years. During the past 20 years, the August upland production forecast was above the final estimate 11 times and below it 9 times. Past differences between the August forecast and the final production estimates indicate a two out of three chance for the 2023/24 upland crop to range between 12.4 million and 15.0 million bales.

U.S. upland production expectations are lower for three of the Cotton Belt regions this season compared with last year, with the Southwest crop higher than the drought-reduced production of 2022/23. Each region's crop this season is forecast at or below the 5-year average (figure 2).

Figure 2
U.S. regional upland cotton production



Note: 1 bale = 480 pounds.

Source: USDA, Economic Research Service using data from USDA, *Crop Production* reports.

Based on the August estimate, 2023/24 Southwest upland cotton production is forecast at 5 million bales, compared with 3.5 million bales last season, and the second lowest in a decade. Despite a better start this season, recent extensive heat has reduced crop conditions. Southwest abandonment is again projected above the long-term average in 2023/24 at 35 percent versus last season's 73 percent. The Southwest yield is forecast at 536 pounds per harvested acre in 2023/24, the lowest in 20 years. The Southwest is expected to account for 36 percent of total U.S. upland production in 2023/24, compared with 25 percent last season.

In the Southeast, 2023/24 production is projected at nearly 4.8 million bales, below last season but similar to the 5-year average, while the yield is forecast near 2022/23's level at 981 pounds per harvested acre. The Southeast region is forecast to produce nearly 35 percent of the U.S. upland crop this season. For the Delta, the 2023/24 cotton crop is estimated at 3.7 million bales, the lowest in 7 years. Decreased area this season coupled with a slight reduction in yield to 1,093 pounds per harvested acre is expected to lower Delta production by 1 million bales. The Delta region is forecast to contribute 27 percent of U.S. upland production in 2023/24.

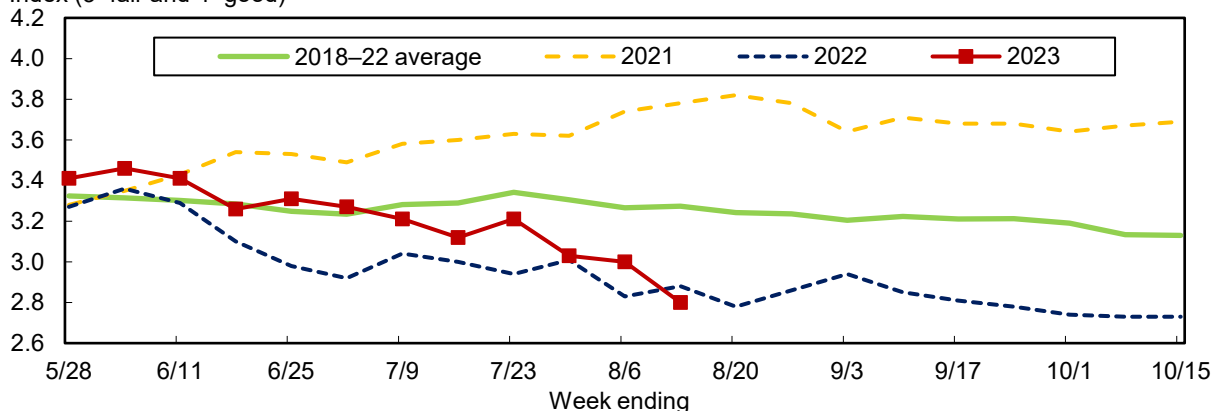
In the West, 2023/24 upland production is forecast at 289,000 bales, the lowest in 9 decades, as harvested area is projected to be the smallest in over a century and yield (1,252 pounds per harvested acre) is forecast at one of the lowest during the last 25 years. The West is expected to account for only 2 percent of the total U.S. upland crop. Extra-long staple (ELS) cotton production—primarily grown in the West—is forecast at 268,000 bales in 2023/24, considerably below last season as excessive rainfall and limited demand prospects decreased ELS area to its smallest in nearly 40 years. The lowest yield forecast (1,216 pounds per harvested acre) since 2010/11 is also contributing to the reduced 2023/24 ELS crop, projected at its smallest since 1986/87.

U.S. cotton crop development is running below last season and the 5-year average. Cotton area setting bolls reached 72 percent as of August 13, compared with 78 percent in 2022 and 77 percent for the 2018–22 average. In addition, 13 percent of the area had bolls opening, compared with 14 percent for last year and the 5-year average. Bolls opening in Arizona reached 47 percent by August 13, compared with the 2018–22 average of 32 percent, while Louisiana had bolls opening on 22 percent of its area, compared with a 5-year average of 28 percent. U.S. cotton crop conditions moved below the 5-year average in July and are near 2022 conditions (figure 3). As of August 13, 36 percent of the U.S. cotton area was rated “good” or “excellent,” compared with 34 percent in 2022, while 43 percent was rated “poor” or “very poor,” compared with 35 percent a year ago.

Figure 3

U.S. cotton crop conditions

Index (3=fair and 4=good)



Source: USDA, Economic Research Service using data from USDA, *Crop Progress* reports.

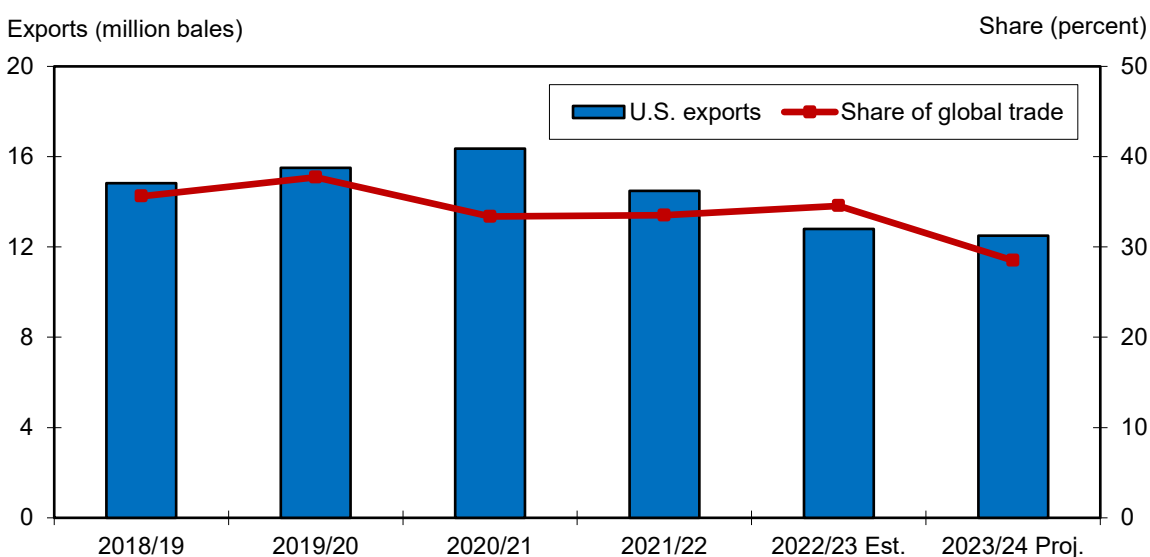
U.S. Cotton Demand and Stock Estimates Adjusted

U.S. cotton demand (mill use plus exports) and stocks for 2023/24 and 2022/23 were revised in August based on the latest available data. U.S. exports for 2023/24 are forecast at 12.5 million bales, 1.25 million below the July projection and the lowest in 8 years (figure 4). The lower forecast is attributable to the reduced crop estimate reported this month as well as increased prospects for cotton exports from Brazil this season. U.S. cotton mill use is projected at 2.15 million bales in 2023/24, down slightly from July's projection but 100,000 bales above last year.

The U.S. export estimate for 2022/23 was reduced slightly this month to 12.8 million bales, the lowest since the 2015/16 shipments of 9.2 million bales. Complete data for 2022/23 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 by the U.S. Department of Commerce, Bureau of the Census.

Figure 4

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.

The United States is forecast to remain the world's leading cotton exporter in 2023/24 despite this month's estimate reduction. The U.S. share of global trade is projected at 28 percent for 2023/24, compared with 34.5 percent the year before. U.S. cotton exports are forecast to account for 85 percent of U.S. cotton demand in 2023/24, slightly below the previous season.

With U.S. cotton demand forecast to exceed production in 2023/24, ending stocks are expected to decline to 3.1 million bales, 16 percent below the beginning level and the lowest in 7 years. The stocks-to-use ratio (21 percent) is projected at its lowest in 3 years. Along with the lower U.S. stocks, global cotton demand is also expected to exceed production in 2023/24 and is supportive of this month's higher U.S. price prospects. For 2023/24, the upland cotton farm price is forecast at 79 cents per pound, slightly below an estimated 82 cents per pound in 2022/23.

U.S. Cotton Product Trade Lower During First Half of 2023

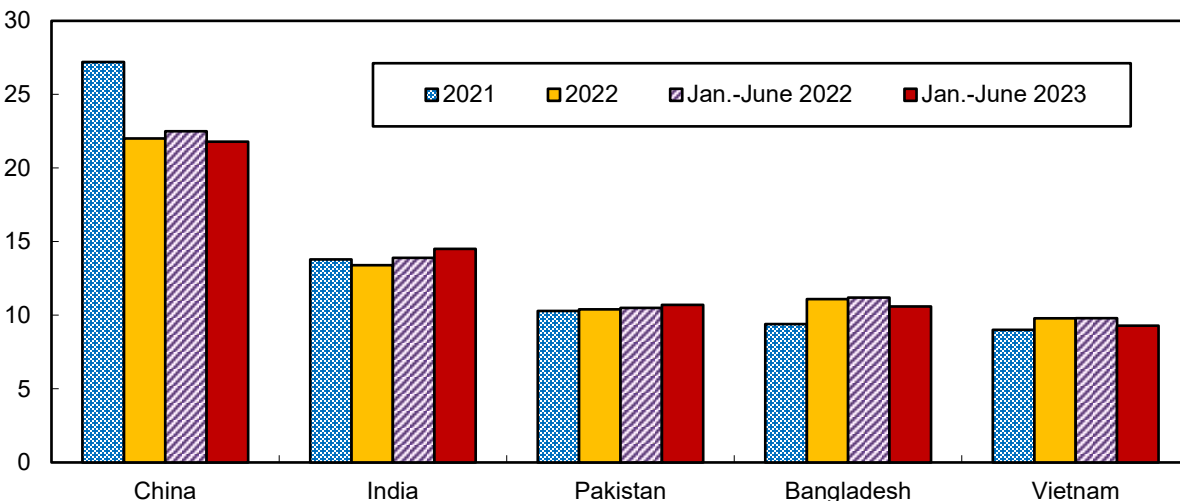
Total U.S. cotton textile and apparel trade decreased during the first half of 2023, compared with the corresponding 2022 period. U.S. cotton product imports totaled the equivalent of 7.4 million 480-pound bales of raw cotton during January–June 2023 versus 10.5 million bales during the first 6 months of 2022, a decline of nearly 30 percent. Cotton product exports decreased 21 percent to 1.22 million bale-equivalents. As a result, the cotton textile and apparel trade deficit fell 31 percent during the first half of 2023, reaching 6.2 million bale-equivalents.

U.S. cotton product imports are sourced from many countries, although most products are imported from a handful of suppliers. During the first half of 2023, the top 5 countries contributed 67 percent of total U.S. cotton product imports, slightly below the corresponding period in 2022. Although the total share is similar, changes are notable for a couple of individual countries (figure 5). China remains the leading cotton product supplier to the United States (22 percent market share in 2023), but this share has declined over the last several years in favor of other countries, with India being the most notable in 2023. During the first 6 months of 2023, India's share of cotton products imported by the United States rose to 14.5 percent, compared with less than 14 percent in recent years. Export opportunities are also increasing for Pakistan in 2023 while other suppliers like Bangladesh and Vietnam are expected to see lower shares than in 2022.

Figure 5

Leading suppliers of U.S. cotton textile and apparel imports

Percent share of total



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

International Outlook

Global 2023/24 Cotton Production Forecast Lower

World cotton production is projected at 114.1 million bales this season, 3.5 percent (4.2 million bales) below 2022/23 and the smallest crop in 3 years due to a lower global yield. Smaller cotton crops are projected for most of the major cotton-producing countries in 2023/24. Global cotton harvested area in 2023/24 is forecast slightly higher at 32 million hectares (79 million acres). The 2023/24 global yield is forecast at 777 kilograms (kg) per hectare (693 pounds per acre), down from 2022/23's record of 809 kg per hectare (722 pounds per acre) but near the previous 2 years.

For China and India—the leading cotton producers—2023/24 production is forecast at 27.0 million and 25.5 million bales, respectively, or a combined 46 percent of the global total. Cotton production in China is forecast 12 percent (3.7 million bales) lower in 2023/24, the result of reduced area and yield. Area is forecast at 2.9 million hectares—the lowest since 2016/17—while the national yield is projected to decline from 2022/23's record (2,122 kg per hectare) to 2,027 kg per hectare. India's 2023/24 cotton crop is projected to decrease 2 percent (500,000 bales) from a year earlier, as an area decline more than offsets an increase in the national yield. In 2023/24, India is expected to harvest 12.4 million hectares, 600,000 hectares below last season as competing crop prices appeared more attractive at planting. India's yield is forecast above the 3-year average at 448 kg per hectare.

Lower cotton crop prospects are also projected for Brazil and Australia in 2023/24, but Pakistan's crop is expected to rebound considerably from the devastating floods that occurred last season. Cotton production in Brazil is forecast at 13.25 million bales in 2023/24, 650,000 bales (4.7 percent) below 2022/23, as both area and yield are projected lower. Harvested area in Brazil is forecast 2 percent lower at 1.63 million hectares in 2023/24, while a 3-percent yield reduction from 2022/23's record (1,823 kg per hectare) to 1,770 kg per hectare is projected. Brazil is expected to remain the fourth largest producer in 2023/24, accounting for 12 percent of the global cotton crop.

Australia's 2023/24 cotton crop is projected at 5.4 million bales, 400,000 bales (7 percent) below 2022/23, as area is expected to decline 20 percent—the lowest in 3 years—for the crop that will be planted beginning in October. Australia's yield is projected higher at 2,283 kg per hectare as a larger share of the 2023/24 crop is expected to be devoted to irrigated area. Cotton production in Pakistan, on the other hand, is forecast to increase significantly to 6.5 million bales in 2023/24, 2.6 million bales above the year before. Harvested area is expected to rebound 39 percent to 2.5 million hectares, the highest in 6 years as crop conditions are much improved compared with a year ago. Pakistan's yield is also forecast to rebound to 566 kg per hectare in 2023/24, near the 5-year average.

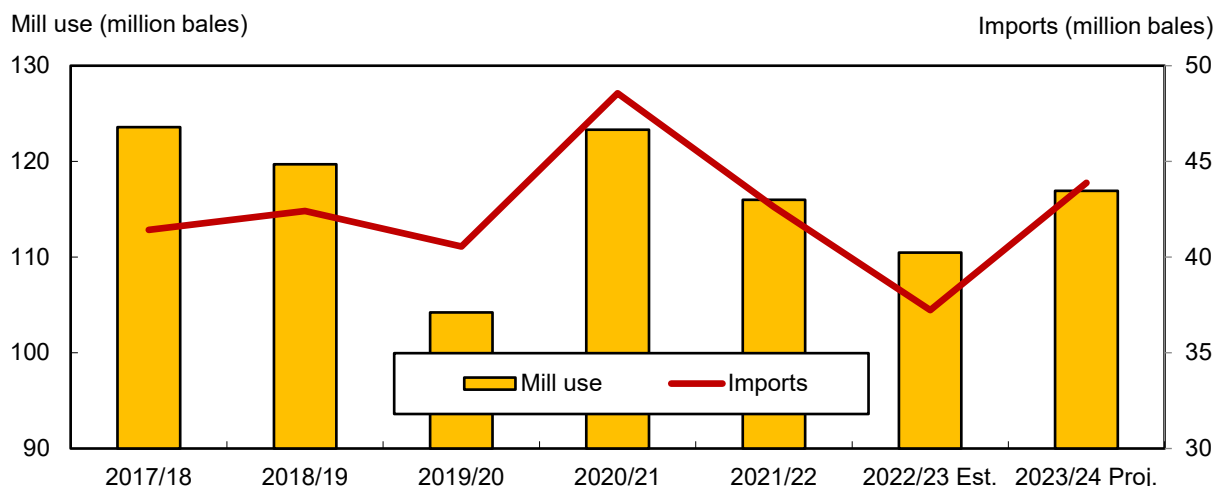
World 2023/24 Cotton Mill Use Increase Supported by Rising Global Imports

Global cotton mill use in 2023/24 is projected at 116.9 million bales, nearly 6 percent above 2022/23's revised estimate of 110.5 million bales and its highest in 3 years. Global economic growth expectations, including a rebound from textile and apparel inventory drawdowns, and relatively lower cotton fiber prices compared with a year ago are projected to support world

cotton mill use and imports in 2023/24. Global cotton imports are forecast to increase 18 percent to nearly 43.9 million bales in 2023/24, as most major spinning countries are expected to increase raw cotton imports to adequately cover mill use expectations (figure 6).

Cotton mill use in China—the leading cotton spinner—is projected at 37.5 million bales in 2023/24, 500,000 bales (nearly 1.5 percent) above 2022/23. China is forecast to account for 32 percent of global cotton mill use in 2023/24. Mill use in India is projected to rise 4 percent (1 million bales) to 24.5 million bales as cotton product exports support the increase. India is expected to account for 21 percent of the world mill use total in 2023/24. Pakistan’s 2023/24 cotton mill use is forecast at 10 million bales, 1.4 million bales above the year before as a larger crop will provide adequate supplies for local textile mills. Higher cotton mill use is also projected for Turkey (8 million bales), Bangladesh (8 million bales), and Vietnam (7 million bales), with growth rates above the world average for these countries in 2023/24.

Figure 6
Global cotton mill use and imports



Note: 1 bale = 480 pounds.

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

Global Cotton Trade Higher; Ending Stocks To Decline

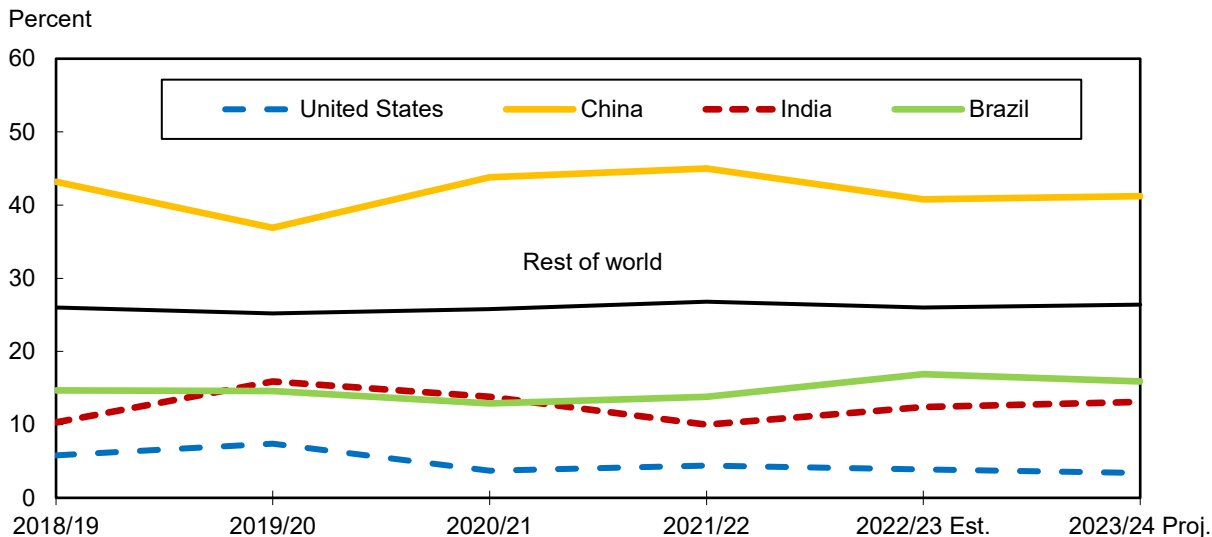
World cotton trade in 2023/24 is forecast at 43.9 million bales, compared with 37.1 million bales in 2022/23. With global cotton mill use projected to expand in 2023/24 to its highest level in 3 years, increased imports are expected this season by most major importing countries. China, Bangladesh, and Vietnam are forecast to lead the way, with imports of 10 million, 8 million, and 7 million bales, respectively. Export gains are seen for several countries outside the United States and Australia in 2023/24 as limited supplies are expected to reduce exports by 300,000 bales each from the United States and Australia. Larger exportable supplies in Brazil, India, and the African Franc Zone are projected to support higher cotton exports. Brazil is forecast to export a record 11.25 million bales (+4.6 million bales) in 2023/24, while India is projected to export 2.2 million bales (+1.1 million bales). Benin and Mali—the largest African Franc Zone exporters in 2023/24—are forecast to export 1.25 million (+250,000 bales) and 1.15 million bales (+400,000 bales), respectively.

Global cotton ending stocks for 2023/24 are projected at 91.6 million bales, 2.5 million bales (2.7 percent) below last season but the third highest in the last 8 years. The 2023/24 global stock decline is led by Brazil, the United States, and China, where stocks are forecast 1.3 million, 600,000, and 600,000 bales, respectively, below the year before. In China, ending stocks are estimated at 37.8 million bales in 2023/24, the lowest in 4 years. Brazil's stocks are forecast at 14.6 million bales at the end of 2023/24, a decrease of 8 percent year-over-year but the second highest on record. Cotton stocks in India and Pakistan, however, are expected to rise to 12.0 million and 2.2 million bales, respectively, by the end of 2023/24.

Ending stocks as a share of global supplies by country continue to vary from year-to-year depending on production and trade. Stocks for the top 4 producing countries are projected to account for about 74 percent of the global total, near the 5-year average. Brazil recently surpassed India as the second-largest cotton stockholder in 2021/22 and is estimated to contribute 16 percent of the total at the end of 2023/24 (figure 7).

China—the largest stockholder—is projected to hold approximately 41 percent of the global total in 2023/24, while India accounts for an additional 13 percent. In contrast, the United States is forecast to hold about 3.5 percent of the global cotton supplies at the end of 2023/24, down from 7 percent in 2019/20. The 2023/24 global stocks-to-use ratio is also forecast to decrease from last season's 85 percent to a projected 78 percent at season's end. This ratio is slightly above the 3-year average, offering limited support for prices. The world cotton price (A-Index) is expected to average near 97 cents per pound in 2023/24, compared with 2022/23's 101 cents per pound.

Figure 7
Share of global cotton ending stocks



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

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