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Cotton and Wool Outlook: September 2024

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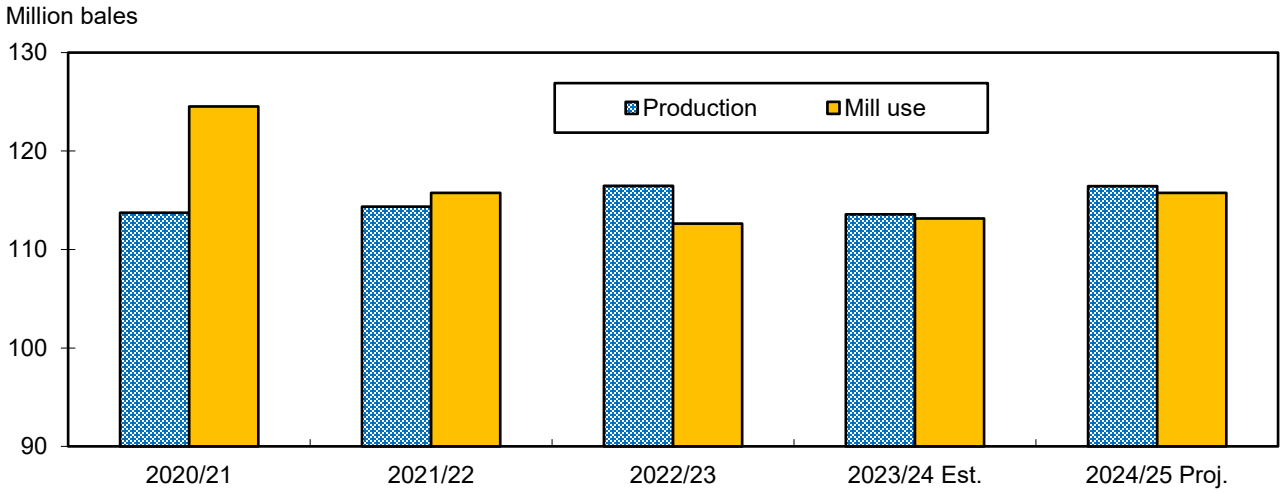
Global 2024/2025 Cotton Production To Rebound, Nearly Matching 2022/2023 Level

The latest U.S. Department of Agriculture (USDA) cotton projections for 2024/2025 (August–July) indicate that world cotton production is expected to increase nearly 2.9 million bales (2.5 percent) from the previous year to 116.4 million bales, similar to 2022/2023 (figure 1). The United States and Brazil are expected to be the major contributors to the higher global production in 2024/2025.

World cotton mill use is projected to rise 2.6 million bales (2.3 percent) in 2024/25 to 115.7 million bales. All major cotton-spinning countries, except for Pakistan, are projected to expand, with China and India remaining the largest users of raw cotton. Although global mill use is expected to increase, 2024/25 world production is forecast to outpace mill use and result in slightly higher year over year global cotton ending stocks of 76.5 million bales, the highest in 5 years. Global cotton trade expectations (43.0 million bales) decline 4 percent in 2024/25, as China's cotton import demand forecast is reduced 37 percent (5.5 million bales) from last year.

Figure 1
Global cotton production and mill use



Note: 1 bale = 480 pounds.
Source: USDA, Economic Research Service based on USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates* reports.

Domestic Outlook

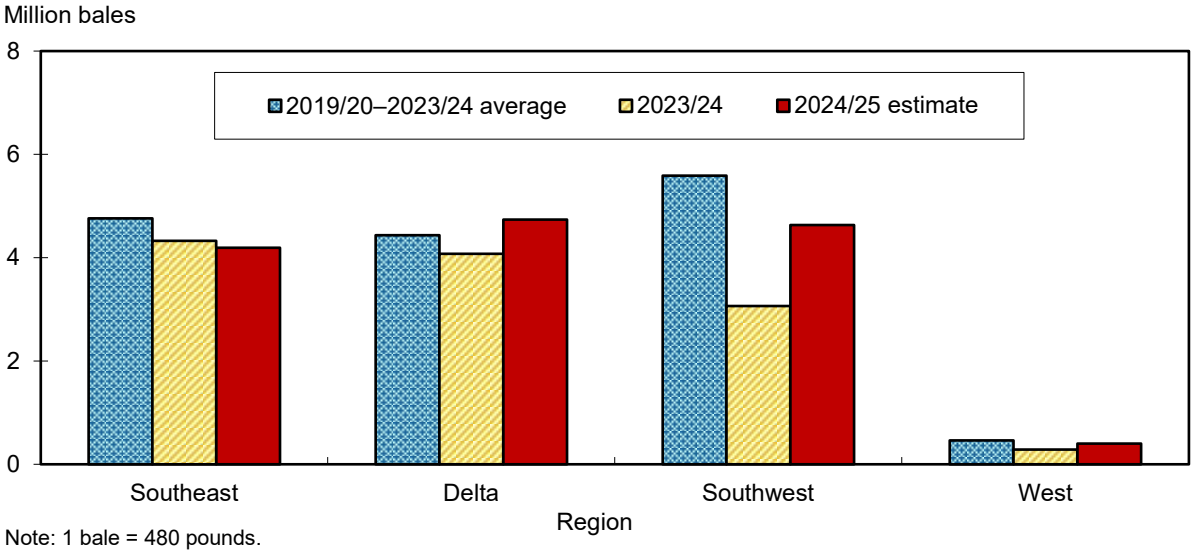
U.S. Cotton Crop Forecast Lower in September

USDA's September *Crop Production* report forecasts 2024/25 U.S. cotton production at 14.5 million bales, nearly 600,000 bales lower than the August estimate but 2.4 million bales (20 percent) above the 2023/24 crop. The smaller September forecast is largely attributable to a yield reduction in the Southwest region. If realized, the 2024/2025 U.S. cotton crop would be similar to that of 2022/2023.

U.S. cotton planted and harvested area for 2024/25 were both unchanged in September. Planted acreage is estimated at nearly 11.2 million acres by USDA's National Agricultural Statistics Service (NASS), while harvested area is projected at 8.6 million acres. U.S. 2024/25 abandonment is expected to approach 23 percent, compared with last season's 37 percent. The national yield is forecast at 807 pounds per harvested acre this season, compared with the 3-year average of 890 pounds. (For current production estimates by State, see table 10 associated with this report.)

Upland cotton production in 2024/25 is forecast at 14.0 million bales, nearly 19 percent (2.2 million bales) above 2023/24 and the largest crop since 2021/22. During the past 20 years, the September upland production forecast was above the final estimate 12 times and below it 8 times. Compared with last season, 2024/25 upland production is expected to increase in three of the four Cotton Belt regions, with the Southeast the exception (figure 2).

Figure 2
U.S. regional upland cotton production



Note: 1 bale = 480 pounds.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Crop Production* reports.

Upland cotton production in the Delta in 2024/25 is expected to reach 4.7 million bales, 16 percent above a year earlier and the highest in 5 years. Area and yield are each above their respective 5-year averages. The Delta harvested area is forecast at 1.9 million acres, while the region's yield is expected to reach 1,176 pounds per harvested acre, the second highest on record. The 2024/25 Delta crop is projected to account for 34 percent of U.S. upland production.

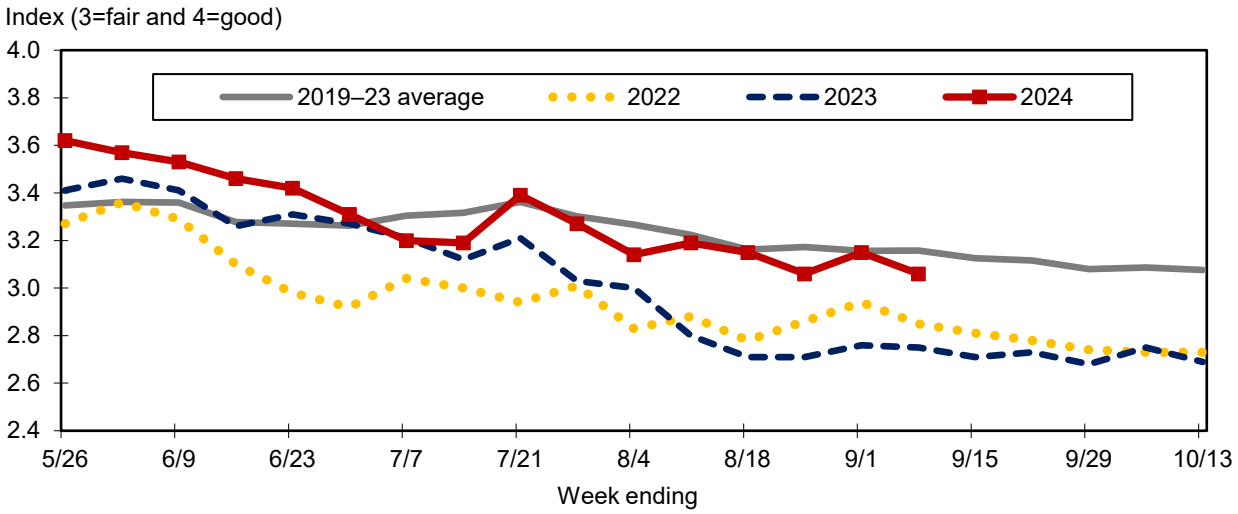
In the Southwest, 2024/25 upland cotton production is forecast at 4.6 million bales,1.5 million above last season's drought-reduced crop. The 2023/24 Southwest production was the lowest since 1989/90 as yield was below the 5-year average and the third-highest abandonment rate on record (61 percent) materialized. For 2024/25, upland cotton planted area in the region is estimated at 6.5 million acres and harvested acreage is projected at approximately 4.1 million acres, or an abandonment rate of 37 percent. The Southwest yield is forecast at 544 pounds per harvested acre in 2024/25, the lowest since 2003/04. The region's upland crop is expected to contribute one-third of U.S. production in 2024/25.

The 2024/25 Southeast cotton crop is forecast at 4.2 million bales, 3 percent below 2023/24 and the lowest in 4 years. Although area is near the year-ago level, the regional yield is expected to be the lowest since 2020/21—forecast at 884 pounds per harvested acre. The Southeast is estimated to produce 30 percent of the U.S. upland crop this season.

In the West, 2024/25 upland cotton production is projected at 400,000 bales, up dramatically from the previous year's nine-decade low of 285,000 bales. An above-average yield of 1,337 pounds per harvested acre is forecast for the region this season despite reduced area. Upland output in 2024/25 is projected to contribute only 3 percent of the U.S. total. Extra-long staple (ELS) cotton—primarily grown in the West—is forecast at 547,000 bales in 2024/25, the highest in 5 years. ELS harvested area is expected to reach 192,000 acres, and yield is estimated at 1,368 pounds per harvested acre in 2024/25.

U.S. cotton crop development in early September is running above last season and the 5-year average. As of September 8, 45 percent of the cotton area had bolls opening, compared with 40 percent noted for both last season and the 2019–23 average. Texas and Georgia—the States with the largest area—had bolls opening on 40 and 44 percent of their respective area, slightly above the 5-year averages. Arizona, Arkansas, and Louisiana have the fastest developing crop as of early September, with bolls opening on 87 percent, 83 percent, and 72 percent, respectively. U.S. cotton crop conditions in 2024 continue above the previous 2 years but are near the 2019–23 average (figure 3). As of September 8, 40 percent of the cotton area was rated "good" or "excellent," compared with 29 percent last year, while 28 percent was rated "poor" or "very poor," compared with 41 percent a year earlier.

Figure 3
U.S. cotton crop conditions



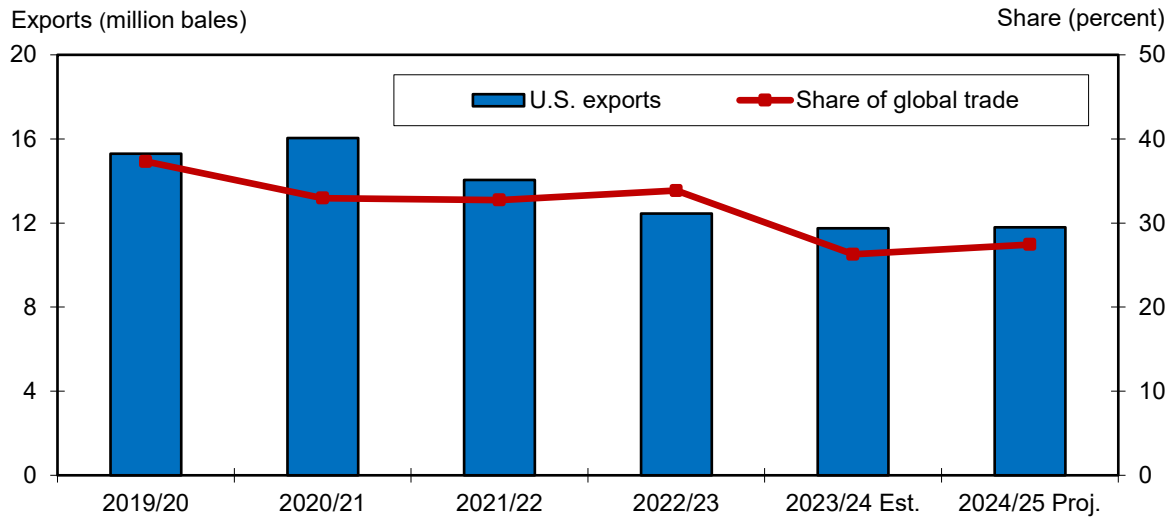
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Crop Progress* reports.

U.S. Cotton Demand and Stock Estimates Revised

The estimate for U.S. cotton demand (mill use plus exports) for 2024/25 was reduced slightly (200,000 bales) in September to 13.7 million bales, with the U.S. export forecast declining month-over-month. U.S. cotton exports are projected at 11.8 million bales in 2024/25, marginally above the previous year as global trade competition from other exporters—mainly Brazil—is expected to limit U.S. export growth despite increased supplies this season. With world trade prospects lower in 2024/25—especially decreased import prospects from China, a major destination for U.S. cotton—the U.S. share of global trade is projected to remain near that of 2023/24. For 2024/25, the U.S. share is forecast at 27 percent, marginally above 2023/24 but below the 5-year average of approximately 32.5 percent (figure 4). U.S. cotton mill use is projected at 1.9 million bales in 2024/25, unchanged from August but slightly above 2023/24.

Based on the latest supply and demand estimates, the U.S. ending stocks estimate for 2024/25 is projected at 4.0 million bales, 11 percent lower this month due to the reduction to the U.S. crop. Ending stocks, however, are 27 percent above the 2024/25 beginning level of 3.15 million bales. The U.S. stocks-to-use ratio is expected to be 29 percent at the end of the season, compared with 23 percent for 2023/24. With larger supplies, a higher stocks-to-use ratio, and the current global outlook, the 2024/25 average farm price is expected to decline moderately this season. The 2024/25 upland cotton farm price is forecast at 66 cents per pound, 10 cents below the 2023/24 price estimate. The final 2023/24 upland farm price estimate will be released by USDA, NASS at the end of September.

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.

Revisions to Historical U.S. Cotton Exports and Stocks

Historical estimates for 2018/2019–2022/2023 U.S. cotton supply and demand were reexamined and revised in September 2024 (table A). With the United States exporting most of its cotton crop each year, reliable shipment data are a key component of the U.S. cotton balance sheet. An imbalance in recent years between the U.S. balance sheet's ending stock calculation and the surveyed stocks reported at the end of the season implied an overstatement of demand (exports). (See the Highlight section of this report for additional details about the U.S. cotton ending stocks calculation.) The discrepancy led to a residual or "unaccounted" stocks category reported in the U.S. cotton balance sheet in USDA's *World Agricultural Supply and Demand Estimates* (*WASDE*) report that was large in magnitude.

The inclusion of additional internal cotton export data and an amended methodology for estimating U.S. exports and stocks motivated the revision implemented in September. (See *Cotton: World Markets and Trade* report published in September 2024 by USDA's Foreign Agricultural Service for additional details.) Based on this month's historical revisions, U.S. cotton exports over 2018/2019–2022/2023 were reduced a combined 1.4 million bales, ending stocks were revised 400,000 bales higher by the end of 2022/2023, and the residual or "unaccounted" category was reduced for each year, most notably for 2021/2022 and 2022/2023. Previous estimates for U.S. cotton production and mill use were unchanged.

The methodology implemented this month for marketing years 2018/2019–2022/2023 provides a better balance between U.S. cotton supply and demand than previously published. For the subsequent 2023/24 season, data for the entire year are also now available. U.S. cotton exports are estimated at 11.75 million bales—unchanged from the August estimate—and 6 percent below the revised 2022/2023 shipments of 12.45 million bales. The unaccounted category, however, was lowered significantly for 2023/24, with reductions similar to the previous 2 years. Ending stocks for 2023/2024 are estimated at 3.15 million bales, compared with the adjusted 2022/2023 estimate of 4.65 million bales.

Table A–U.S. Department of Agriculture's historical U.S. cotton balance sheet revisions, 2018/19–2023/24

Marketing year	Exports		Unaccounted		Ending stocks	
	Aug. 2024	Sep. 2024	Aug. 2024	Sep. 2024	Aug. 2024	Sep. 2024
			1,000 bales			
2018/19	14,833	14,700	88	55	4,850	4,950
2019/20	15,512	15,300	146	34	7,250	7,450
2020/21	16,352	16,050	42	40	3,150	3,650
2021/22	14,481	14,050	403	22	4,050	4,600
2022/23	12,766	12,450	546	80	4,250	4,650
2023/24 1/	11,750	11,750	429	32	3,150	3,150

Note: 1 bale = 480 pounnds. Revisions incorporated in September 2024.

1/ September 2024 estimates for U.S. cotton exports and ending stocks were unchanged from previous month.

Source: USDA, Economic Research Service using data from USDA, World Agricultural Outlook Board.

Last update: 9/16/24.

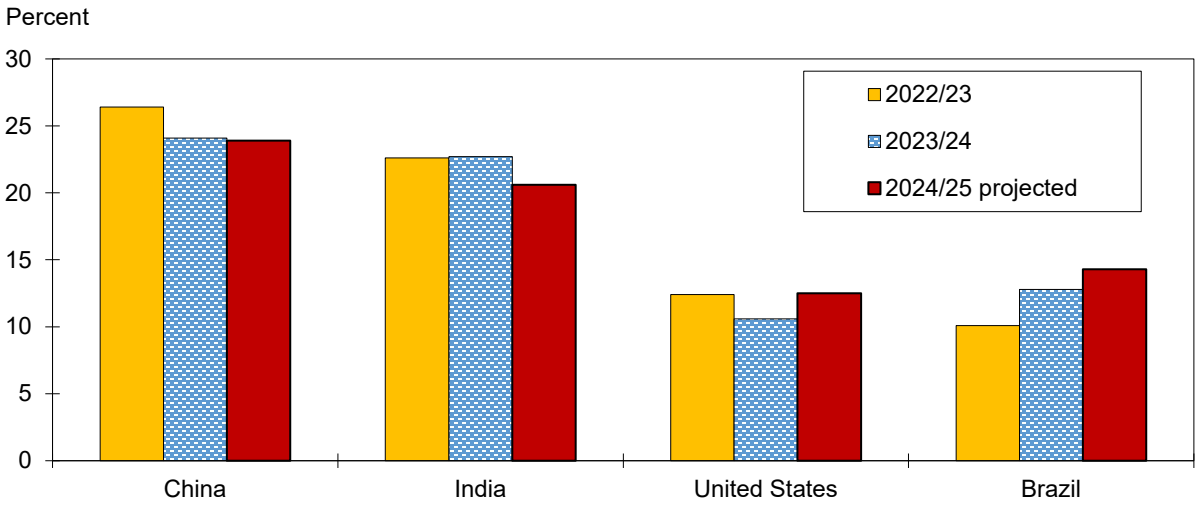
International Outlook

Global 2024/25 Cotton Production Forecast Higher

Global cotton production in 2024/25 is projected at 116.4 million bales, 2.5 percent (2.85 million bales) above the previous year and less than 1 percent above the 5-year average. For 2024/25, cotton production prospects are mixed for the major producing countries. The United States and Brazil were largely responsible for the year-over-year global increase which was somewhat offset by declines for India and Pakistan. World 2024/25 cotton harvested area is forecast at 31.1 million hectares (76.9 million acres), less than 1 percent below the previous year. The 2024/25 global cotton yield is forecast at 814 kilograms (kg) per hectare (726 pounds per acre), 3 percent above the 3-year average and a record high.

World cotton production is concentrated among a few countries, with the top four accounting for 71 percent of total expected production in 2024/25, similar to the previous season. China and India are expected to remain the leading cotton producers in 2024/25, accounting for 24 percent and 21 percent, respectively, of the global total (figure 5). China is projected to produce 27.8 million bales of cotton, just under a 2-percent increase from 2023/24. China's harvested area is expected to be unchanged in 2024/25 at 2.85 million hectares. With no change to harvested area, an increase in yield is responsible for the gain in production. China's yield is projected at 2,124 kg per hectare, the second highest on record and just below 2022/2023. Production in India is forecast at 24.0 million bales, 7 percent (1.8 million bales) below 2023/24, with lower harvested area primarily responsible for the decrease. India's area is expected to decline 7 percent (900,000 hectares) to 11.8 million hectares while the national yield remains relatively flat at 443 kg per hectare.

Figure 5
Share of total cotton production by major producer



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

Brazil's 2024/25 cotton production is estimated to increase nearly 15 percent over the previous year, to a record 16.7 million bales. The 2.1-million-bale larger crop projection for Brazil is the result of increased area that more than offsets a decline in yield. Brazil's harvested area is estimated at 1.9 million hectares, a 17-percent increase from 2023/24 and 26 percent above the

3-year average. Brazil's yield is projected at 1,874 kg per hectare, down 2 percent from last year's record of 1,911 kg per hectare. Brazil is expected to account for approximately 14 percent of total global cotton production in 2024/25, up nearly 2 percent from the previous year, and remain the third largest producer for the second consecutive year.

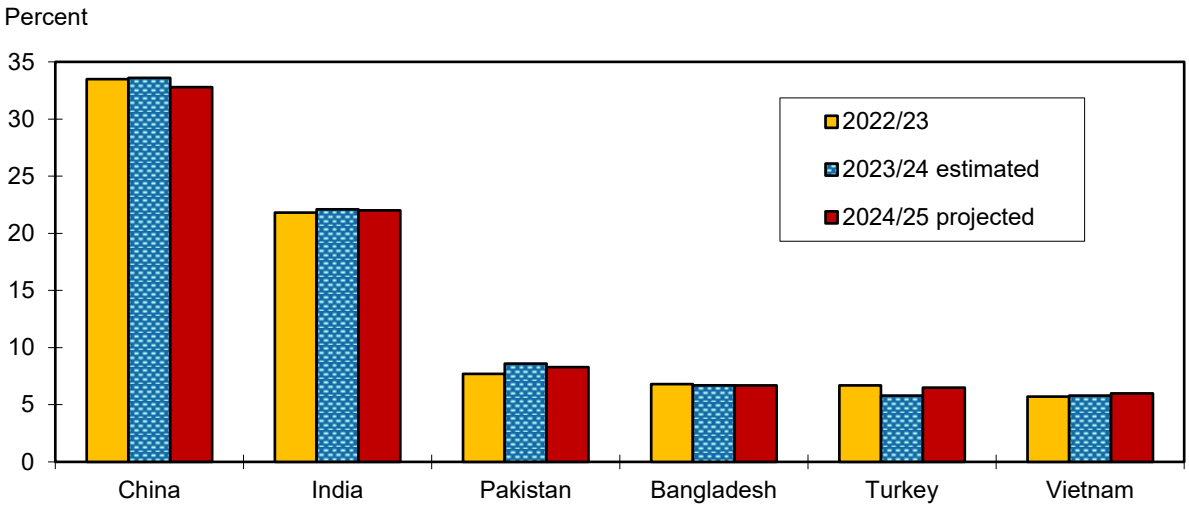
For Pakistan, 2024/25 cotton production is expected to decline 1.3 million bales (19 percent) from 2023/24 to 5.7 million bales. Harvested area in Pakistan is expected to decrease nearly 17 percent (400,000 hectares) to 2.0 million hectares in 2024/25, while a lower projected yield also will contribute to the production decline this season. Yield is expected to decline 2 percent in 2024/25 to 621 kg per hectare. Australia's 2024/25 cotton production is expected to be unchanged from the previous year with offsetting changes to area and yield. Australia's harvested area is expected to increase 8 percent (45,000 hectares) to 550,000 hectares in 2024/25, while the yield is forecast 177 kg per hectare lower (9-percent decline) to 1,979 kg per hectare.

Global Cotton Mill Use Projected Higher in 2024/25

World cotton mill use in 2024/25 is forecast at 115.7 million bales, 2.6 million (2.3 percent) above 2023/24 and similar to the 2021/22 level. Lower cotton fiber prices and the expectation for a slight improvement for textile manufacturing is forecast to support the increase. Cotton mill use is forecast to equal or exceed last season for each of the major cotton-spinning countries in 2024/25, with Pakistan being the exception.

For the top six cotton-spinning countries—China, India, Pakistan, Bangladesh, Turkey, and Vietnam—mill use is projected to account for a combined 82 percent of the world total in 2024/25, slightly below last season. Cotton mill use in China is forecast at 38.0 million bales in 2024/25, unchanged from the previous year. China remains the leading cotton spinner, accounting for approximately one-third of world cotton mill use (figure 6).

Figure 6
Share of total cotton consumption by major spinner



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

Mill use in India is projected at 25.5 million bales for 2024/25, 2 percent (500,000 bales) above the year before and supported by rising product exports. India is expected to account for 22 percent of the world mill use total in 2024/25. For Pakistan, 2024/25 cotton mill use is forecast to contribute 8 percent (9.6 million bales) of the global total, slightly below 2023/24. Above-average growth rates are forecast for cotton mill use in Turkey and Vietnam. In Turkey, 2024/25 cotton mill use is projected to increase 900,000 bales (+13.5 percent) to 7.5 million bales (6.5 percent of the world total). Mill use in Vietnam is forecast 300,000 bales higher (+4.5 percent) at 6.9 million bales. Bangladesh's mill use is projected slightly higher at 7.7 million bales in 2024/25.

Lower World Cotton Trade Forecast; Ending Stocks Higher

Global cotton trade is forecast at 43.0 million bales in 2024/25, nearly 4 percent (1.7 million bales) below last season. Reduced imports by China—the largest raw cotton importer—more than offset the gains expected for the other major importing countries this season. With U.S. cotton supplies limited again this season, Brazil is expected to benefit and secure a larger share of global trade in 2024/25. Brazil is forecast to export a record 12.5 million bales of cotton this season, accounting for 29 percent of the world total, due in part to a record crop. Cotton exports for the United States in 2024/25 are forecast at 11.8 million, or 27 percent of the global total. Australia's 2024/25 cotton exports are expected 6 percent below a year ago at 5.4 million bales based on a similar crop but increased competition. Exports for India are projected to decrease 1 million bales year over year to 1.3 million due to a production decline.

Higher cotton imports are forecast this season for each of the major importing countries except China. For China, cotton imports are projected at 9.5 million bales in 2024/25, down from 15.0 million bales last season when China replenished its national reserve. China is expected to account for 22 percent of the world cotton imports in 2024/25. Imports by Bangladesh are forecast at 7.7 million bales (+400,000 bales) and contribute 18 percent of the global total. Imports by Vietnam, Turkey, and Pakistan are also expected to expand in 2024/25 to support each country's textile industry; cotton imports are projected at 6.9 million bales (+300,000 bales), 4.7 million bales (+1.1 million bales), and 4.0 million bales (+800,000 bales), respectively.

Based on the latest cotton supply and demand estimates, global cotton ending stocks for 2024/25 are forecast at 76.5 million bales, slightly (880,000 bales) above last season and the highest level in 5 years. While stocks in China and India are expected to decline in 2024/25, higher stocks elsewhere—particularly in Brazil and the United States—more than offset the lower stocks in the two largest producing countries. China and India are expected to hold a combined 61 percent of the global cotton ending stocks in 2024/25, with China's stocks forecast at 36.8 million bales and India holding an estimated 9.7 million bales. In 2024/25, Brazil and the United States are projected to have similar stock levels at the end of the season, with Brazil's stocks reaching 4.1 million bales and the U.S. stocks rising to 4.0 million bales.

Highlight

The U.S. Cotton Ending Stocks Calculation for 2023/24

U.S. cotton supply, demand, and stocks estimates are updated monthly in USDA's *World Agricultural Supply and Demand Estimates (WASDE)* report. During most of the marketing year, the ending stocks estimate is a function of the cotton supply estimate for the season minus the cotton demand estimate. In addition, in most months a nominal quantity is added or subtracted to allow ending stocks to round to the nearest 100,000 bales. However, once the season has ended, USDA's cotton Interagency Commodity Estimates Committee (ICEC) is tasked with finalizing ending stocks based on actual stock surveys and other relevant data.

Historically, the U.S. Department of Commerce, Bureau of the Census surveyed and reported end-of-season cotton stocks in three categories: stocks in public warehouses, stocks in consuming establishments, and stocks "elsewhere." The elsewhere category was partially estimated, as it included cotton in private storage and cotton in transit (including stocks at ports). The Census Bureau report was used by the cotton ICEC as "official" stocks at the end of each season, with the difference between USDA's supply and demand estimate and the Census Bureau estimate placed in a residual "unaccounted" category in the *WASDE*. The Census Bureau survey was eliminated in the fall of 2011, however, and the cotton ICEC had to rely on incomplete data to estimate U.S. cotton ending stocks for several seasons. Beginning in 2015, USDA's NASS assumed responsibility for reporting the previously unavailable data—ELS cotton stocks in consuming establishments and all cotton stocks in private storage at season's end.

Table B shows the components used to calculate the 2023/2024 and 2022/2023 U.S. cotton ending stocks. Adjustments were made to reflect the lag between the report dates and the July 31 end of the marketing year. In addition, the calculation includes a deduction for any reported new crop cotton ginnings prior to the end of the marketing year to prevent double counting production in the subsequent season's supplies. Since the establishment of the USDA, NASS survey in 2015, reports exist for all stock categories except for stocks in transit. This category is estimated by the cotton ICEC. Previously, the source utilized to calculate in-transit stocks was USDA, Foreign Agricultural Service's (FAS) *Export Sales* shipment data. However, a review of the in-transit data implications—coupled with a methodology adjustment for calculating marketing year cotton exports—indicated the need for higher in-transit stocks than previously estimated during the last 5 years. The revised estimates for in-transit cotton stocks include data from USDA, Agricultural Marketing Service's (AMS) *Bales Made Available for Shipment (BMAS)* report.

The ending stocks calculations shown in table B incorporate these revised in-transit stocks as well as the historical revisions to U.S. cotton supply and demand estimates dating to 2018/19 and updated in September. The conversion factor from running bales to statistical 480-pound bales was also reduced from 1.03 to 1.025 to more closely match the recent weights reported in the NASS *Cotton Ginnings 2023 Summary* report.

Based on the available data, U.S. cotton stocks on July 31, 2024—the end of the 2023/24 marketing year—are computed to be approximately 3.1 million running bales or 3.15 million statistical (480-pound) bales. The 2023/2024 U.S. ending stocks estimate is 1.5 million bales below the revised 2022/2023 estimate of 4.65 million bales. U.S. cotton ending stocks in 2023/2024 are nearly one-third lower than 2022/2023, and the stocks-to-use ratio is 9 percentage points lower at 23 percent. The 2023/24 stocks and stocks-to-use ratio are also below the respective 3-year averages.

Table B–U.S. Department of Agriculture's U.S. cotton ending stocks calculation, 2022/23 and 2023/24

Item	Units	2022/23	2023/24
Cotton stocks components:			
(a) Stocks held in public storage and compresses 1/	1,000 running bales	3,399	2,495
(b) Preseason ginnings 2/	1,000 running bales	21	68
(c) Upland cotton mill stocks 3/	1,000 running bales	102	84
(d) Extra-long staple (ELS) cotton mill stocks 4/	1,000 running bales	3	1
(e) Stocks held in private storage 4/	1,000 running bales	346	160
(f) Stocks subtotal (a minus b plus c, d, and e)	1,000 running bales	3,829	2,672
Further adjustments:			
(g) Stocks in transit and at ports 5/	1,000 running bales	708	401
(h) Estimated ending stocks (f plus g)	1,000 running bales	4,537	3,073
(i) Adjusted cotton ending stocks (h multiplied by 1.025)	1,000 480-lb. bales	4,650	3,150

1/ Inventory data (adjusted to July 31) from the Agricultural Marketing Service's (AMS) *Bales Made Available for Shipment (BMAS)* report.

2/ Data from the National Agricultural Statistics Service's (NASS) August 2024 *Cotton Ginnings* report.

3/ Data from Farm Service Agency's (FSA) *Economic Adjustment Assistance Program* report.

4/ Data from National Agricultural Statistics Service's (NASS) September 2024 *Cotton System Consumption and Stocks* report.

5/ Estimated based on AMS' *BMAS* cotton shipment data during the last 2-3 weeks of the season.

Source: USDA, Economic Research Service based on various USDA reports.

Last update: 9/16/24.

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