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Cotton and Wool Outlook: December 2022

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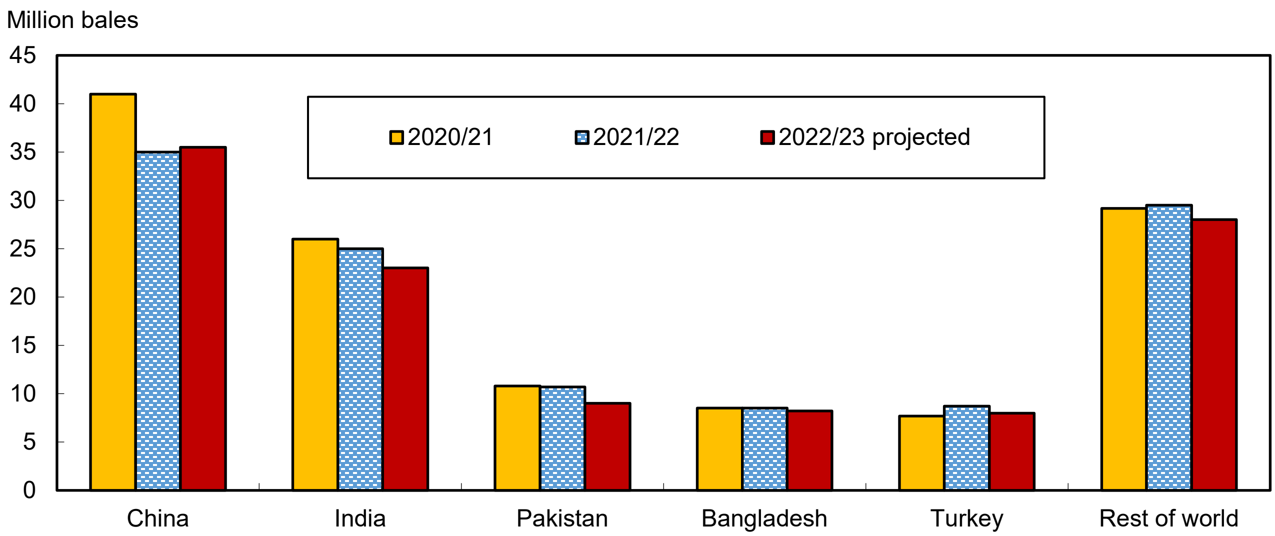
India Leads World 2022/23 Cotton Mill Use Decline

The latest U.S. Department of Agriculture (USDA) estimates indicate that world cotton mill use in 2022/23 (August–July) will total 111.7 million bales, a 4.9-percent decrease from 2021/22. India, Pakistan, and Turkey are primarily responsible for the global decline, offset slightly by China's increase (figure 1). China and India remain the leading cotton-spinning countries, with the top 5 countries projected to account for 75 percent of world cotton mill use in 2022/23, similar to 2021/22.

Global cotton production is forecast at 115.7 million bales in 2022/23, equal to the 2021/22 estimate. Among the top 6 producing countries, declines are expected for the United States, Pakistan, and Australia, while larger crops are projected for China, India, and Brazil. World cotton trade is forecast at 42.3 million bales this season, a 1.4-percent decrease from 2021/22. With world production expected to exceed mill use in 2022/23, global ending stocks and the stocks-to-use ratio are forecast to increase to their highest level since 2019/20.

Figure 1
Leading global cotton consumers



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

Approved by USDA's World Agricultural Outlook Board

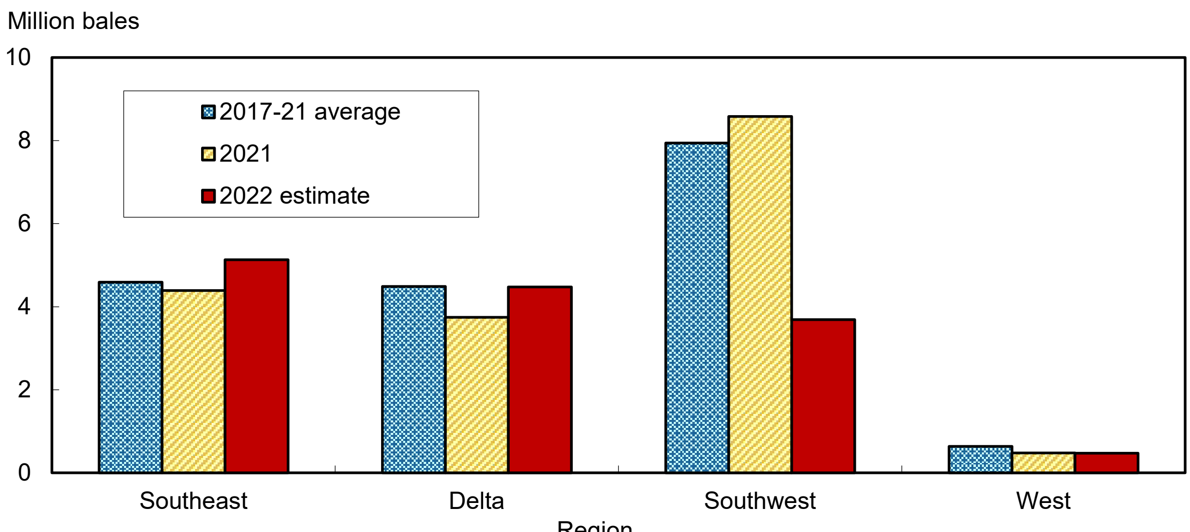
Domestic Outlook

U.S. Cotton Crop Forecast Higher in December

USDA's December *Crop Production* report forecasts 2022 U.S. cotton production at 14.2 million bales, slightly above last month's forecast but 19 percent (3.3 million bales) below the 2021 crop. Harvested area this season is estimated at only 7.9 million acres—the lowest since 2013—as drought conditions in the Southwest reduced the area harvested and crop size significantly. The implied U.S. abandonment rate for 2022 is estimated at a record 43 percent, compared with the previous record of 36 percent in 2011. The 2022 national yield, however, is forecast at a relatively high 868 pounds per harvested acre, the highest in 4 years. Upland cotton production is estimated at approximately 13.8 million bales, while the extra-long staple (ELS) crop is forecast at 470,000 bales. For current production estimates by State, see table 10 published separately with this report.

Upland cotton production is forecast higher compared with 2021 in two of the four Cotton Belt regions, dramatically lower in one region, and unchanged in the fourth region (figure 2). In the Southeast, 2022 cotton production is projected at 5.1 million bales—17 percent (745,000 bales) above 2021 and one of the largest crops on record. Cotton harvested area in 2022 is estimated above the 5-year average at 2.6 million acres. Meanwhile, the Southeast yield is projected at 941 pounds per harvested acre in 2022, the third highest on record behind 2012's 1,033 pounds and 2019's 946 pounds. For the 2022 Delta cotton crop, production is estimated at nearly 4.5 million bales, 20 percent above a year ago but similar to the 5-year average. Despite this season's harvested area—2 million acres—at its highest in 3 years, the region's yield—the lowest in 5 years—kept production from rising further this season. The Delta yield is forecast at 1,094 pounds per harvested acre in 2022, compared with 1,131 pounds in 2021.

Figure 2
U.S. regional upland cotton production



Note: 1 bale = 480 pounds.

Source: USDA, Economic Research Service based on USDA, National Agricultural Statistics Service, *Crop Production* reports.

In the Southwest, the 2022 upland crop is projected at 3.7 million bales, the lowest since a similar crop was produced in 2011. Although 2022 planted area (8.7 million acres) was the highest since 1954, this season's drought conditions raised abandonment substantially and lowered crop prospects. Harvested area in 2022 is estimated at approximately 3 million acres, a record low. As a result, 2022 Southwest abandonment is projected at a record 66 percent, compared with last season's 12 percent. The 2022 Southwest upland yield is forecast lower at 597 pounds per harvested acre, compared with last season's 676 pounds and the lowest since 2011's 588 pounds.

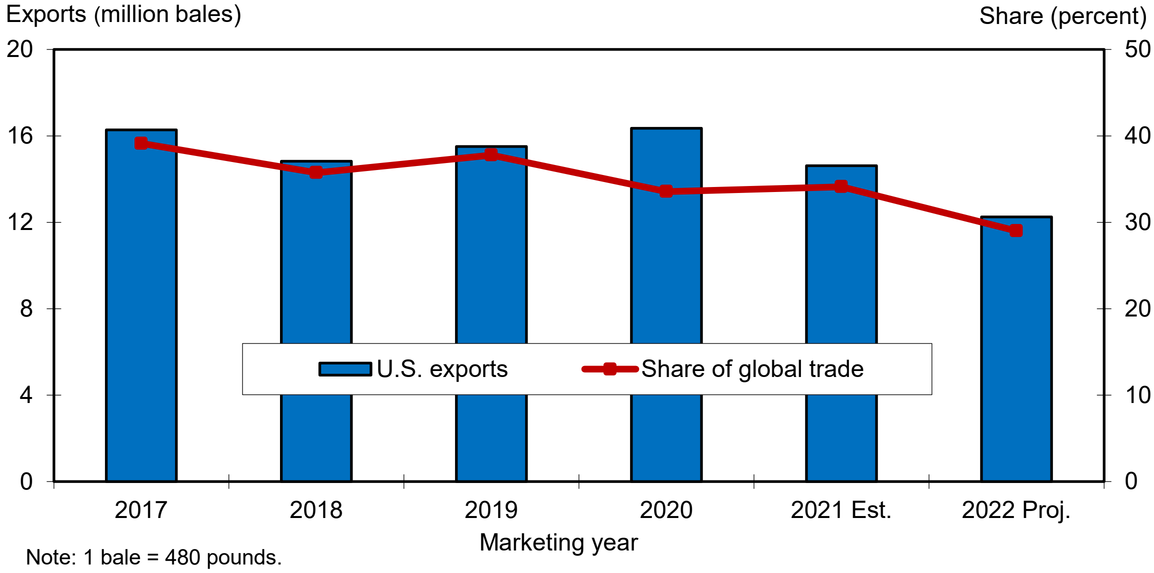
In the West, 2022 upland production is projected at only 475,000 bales, similar to 2021 and one of the smallest upland crops since 1935. Harvested area (167,000 acres) is the lowest since 2015, while this season's yield (1,369 pounds per harvested acre) is the highest in 5 years when an identical yield was achieved. The U.S. ELS crop (470,000 bales)—grown mainly in the West—is projected to rise more than 40 percent versus 2021. However, the projected ELS crop would still be one of the smallest over the past decade. Although harvested area in 2022 increased by one-third, last season's area was at its lowest in 35 years. Meanwhile, the ELS yield is forecast at the 3-year average of 1,371 pounds per harvested acre.

U.S. Cotton Demand and Stocks Estimates Revised

U.S. cotton demand for 2022/23 is projected at 14.45 million bales in December, 16 percent below 2021/22 and the lowest level since 2015/16. U.S. cotton exports account for most of the demand and are projected at 12.25 million bales in 2022/23, with mill use forecast to contribute the remaining 2.2 million bales. Uncertainties regarding world cotton mill use prospects amid current global economic conditions have reduced cotton trade expectations for 2022/23. In addition, increased foreign competition and the smallest U.S. cotton supply in 7 years is expected to limit U.S. exports this season. Based on the December projections, the 2022/23 U.S. share of global trade is forecast at 29 percent—5 percentage points below last season and the smallest in 7 years (figure 3).

With both U.S. cotton export and mill use projections for 2022/23 reduced this month and a slight increase in the production estimate, the U.S. ending stocks forecast rose 500,000 bales to 3.5 million, compared with last season's 3.75 million bales. The stocks-to-use ratio is estimated at 24 percent at the end of 2022/23, slightly above last season but below the 5-year average of nearly 26 percent. 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 is forecast at 85 cents per pound, below last season's record of 91.4 cents per pound but still one of the highest averages ever recorded.

Figure 3
U.S. cotton exports and share of global trade



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

International Outlook

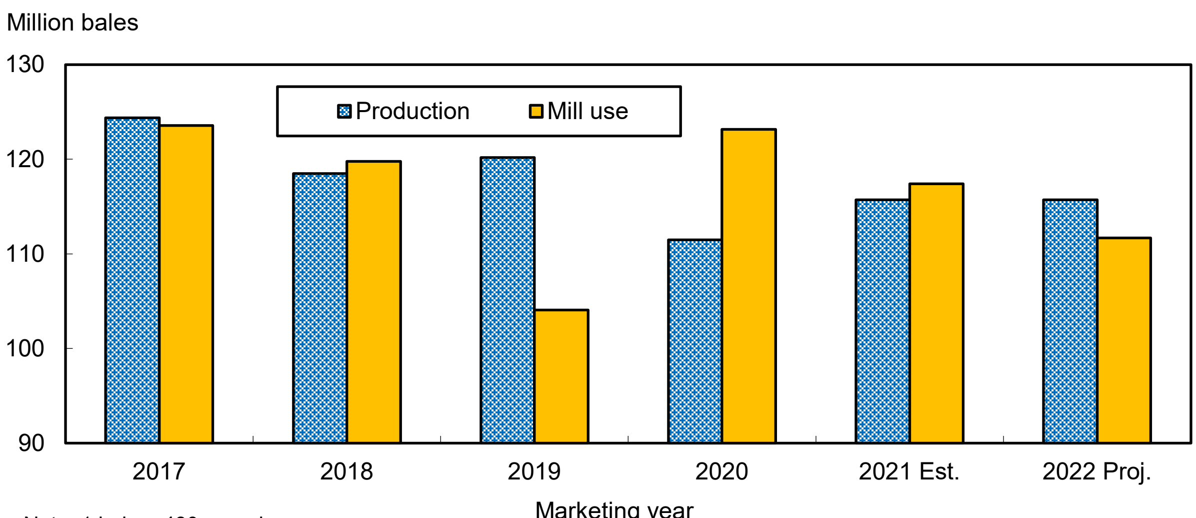
World 2022/23 Cotton Production Reduced to 2021/22 Level

Global cotton production in 2022/23 is projected at 115.7 million bales, 700,000 bales below the November projection but equal to the 2021/22 estimate (figure 4). The December 2022/23 production estimate includes an increase for Turkey and the United States but decreases for Pakistan, Australia, and Mali. Global harvested area is forecast at 32.1 million hectares (79.2 million acres) in 2022/23, 260,000 hectares (1 percent) below last year. The world cotton yield is estimated at 786 kilograms (kg) per hectare (701 pounds per acre), compared with the 3-year average of 771 kg per hectare (688 pounds per acre).

Cotton production prospects for the major-producing countries this season are mixed compared with 2021/22. Production in China—the leading cotton producer—is forecast at 28 million bales, up 1.2 million bales from 2021/22. Harvested area is forecast at 3 million hectares (-3 percent), however with favorable growing conditions this season the national yield (2,032 kg per hectare) tops the 2020/21 record. China is expected to account for over 24 percent of global production this season.

For India, 2022/23 cotton production is projected at 27.5 million bales, nearly 13 percent (3.1 million bales) above the year before, with increases in both area and yield. Harvested area is forecast at 13 million hectares (+7 percent), with India the only major country projected to have increased area. India’s yield (461 kg per hectare) is 2 percent above the 3-year average. In 2022/23, India is forecast to account for 24 percent of the global cotton crop. In contrast, Pakistan’s cotton production is forecast lower (-38 percent) at 3.7 million bales in 2022/23. Flooding in key cotton regions reduced projected area harvested and yield. Harvested area for Pakistan is estimated at 1.8 million hectares for 2022/23, 10 percent lower than 2021/22. Yield for Pakistan is also projected to decline to 448 kg per hectare, a 31-percent decrease from the previous year. Pakistan is forecast to account for about 3 percent of the global cotton crop.

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.

For the Southern Hemisphere countries of Brazil and Australia, 2022/23 cotton production is projected higher for Brazil and lower for Australia. Brazilian cotton production is forecast at 13 million bales, 1.3 million bales above 2021/22, as area is expected unchanged at 1.6 million hectares, but yield is projected higher. Yield is projected at 1,769 kg per hectare, a rebound from the previous year's reduced level and a 4-percent increase from the 3-year average. Heavy Australia rainfall in key dryland cotton areas reduced production prospects by 13 percent to 5 million bales. Harvested area is projected at 500,000 hectares, 17 percent lower than 2021/22, while yield is expected to increase slightly to 2,177 kg per hectare.

World Cotton Mill Use Forecast To Decline in 2022/23

Global cotton mill use in 2022/23 is projected to decrease nearly 5 percent from the year before to 111.7 million bales, the lowest since the Coronavirus (COVID-19) impacts affecting 2019/20 and the second lowest since 2013/14. With the slowdown in the global economy and operating rates at mills reduced due to decreased product demand, world cotton mill use is expected to decline 5.7 million bales in 2022/23, similar to last season's decrease.

Cotton mill use remains highly concentrated, with the top 6 countries accounting for 81 percent of global mill use in 2022/23. For most of the leading cotton-spinning countries, 2022/23 mill use is expected lower—compared with the year before—except for China, where cotton use improves from the dramatic decline in 2021/22. China's 2022/23 cotton mill use is estimated at 35.5 million bales, 500,000 bales above the previous year, which was one of the lowest of the past decade. China is forecast to contribute nearly one-third of total global cotton consumption in 2022/23. In contrast, India's cotton mill use is projected to decrease 8 percent (2 million bales) from 2021/22 as its textile industry contracts for the second consecutive year. In 2022/23, India's mill use is forecast at 23 million bales, or 21 percent of the global total.

Mill use is also expected lower in Pakistan, Bangladesh, Turkey, and Vietnam in 2022/23. For Pakistan, a dramatic reduction in the 2022/23 crop is expected to reduce mill use there to only 9 million bales this season, 16 percent (1.7 million bales) below 2021/22 and the lowest since 2001/02. Mill use in Bangladesh is forecast at 8.2 million bales, down slightly (3.5 percent) from the record use in each of the previous 2 seasons. In Turkey, cotton mill use is also expected below 2021/22's record, declining 8 percent (700,000 bales) to 8 million bales this season. In addition, 2022/23 mill use in Vietnam is forecast 3 percent (200,000 bales) lower at 6.5 million bales. As a result, these 4 countries are forecast to account for 28 percent of the global cotton mill use this season.

World Cotton Trade Lower; Stocks To Rise in 2022/23

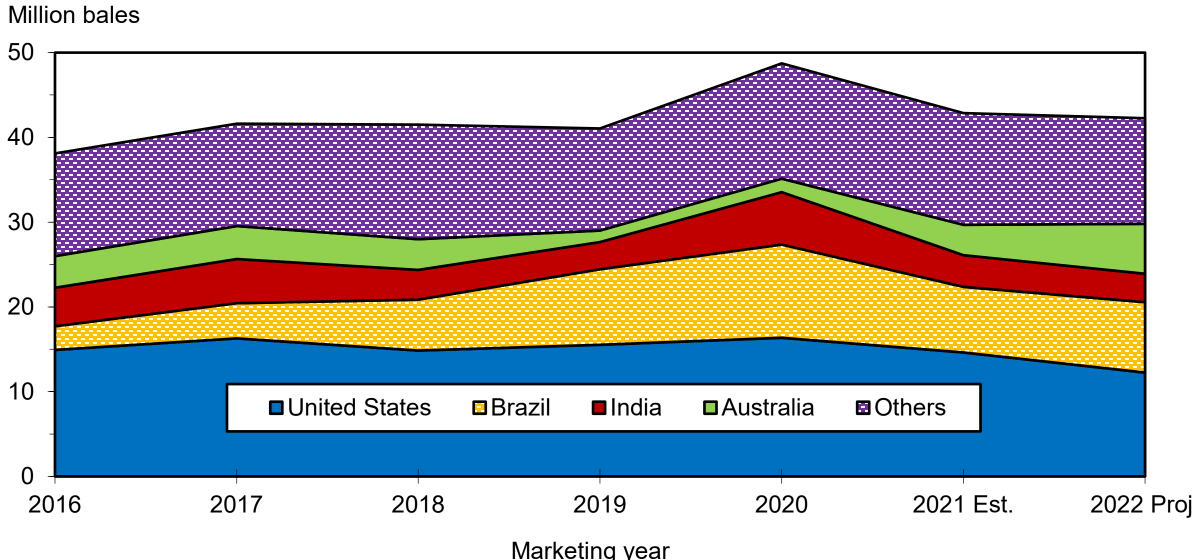
Global cotton trade in 2022/23 is forecast to decrease slightly this season as cotton spinners are expected to limit imports with the decline in world cotton mill use. Global imports are forecast at 42.3 million bales in 2022/23, the lowest in 3 years. Bangladesh and China—the leading cotton importers—are expected to each import 8 million bales in 2022/23, compared with 8.2 million and 7.8 million bales, respectively, a year ago. Meanwhile, Pakistan's imports are forecast to rise 11 percent (500,000 bales) to 5 million bales due to this season's crop shortage there.

As with imports, global cotton exports are projected to decrease this season, but various suppliers are indicating mixed results compared with 2021/22 (figure 5). U.S. cotton exports—somewhat limited by reduced supplies this season—are declining nearly 2.4 million bales to 12.25 million. In contrast, increased supplies in Brazil and Australia are raising export prospects. For Brazil, 2022/23 cotton exports are forecast at 8.3 million bales, nearly 600,000 bales above

2021/22 and the third largest on record. Australia's exports are projected at 5.9 million bales, up from nearly 3.6 million bales in 2021/22 to the second highest on record behind 2012/13's 6.2 million bales. For India, this season's cotton exports are projected to decline about 400,000 bales to 3.35 million bales as higher prices compared with competitors limit export prospects in 2022/23.

Figure 5

Leading global cotton exporters



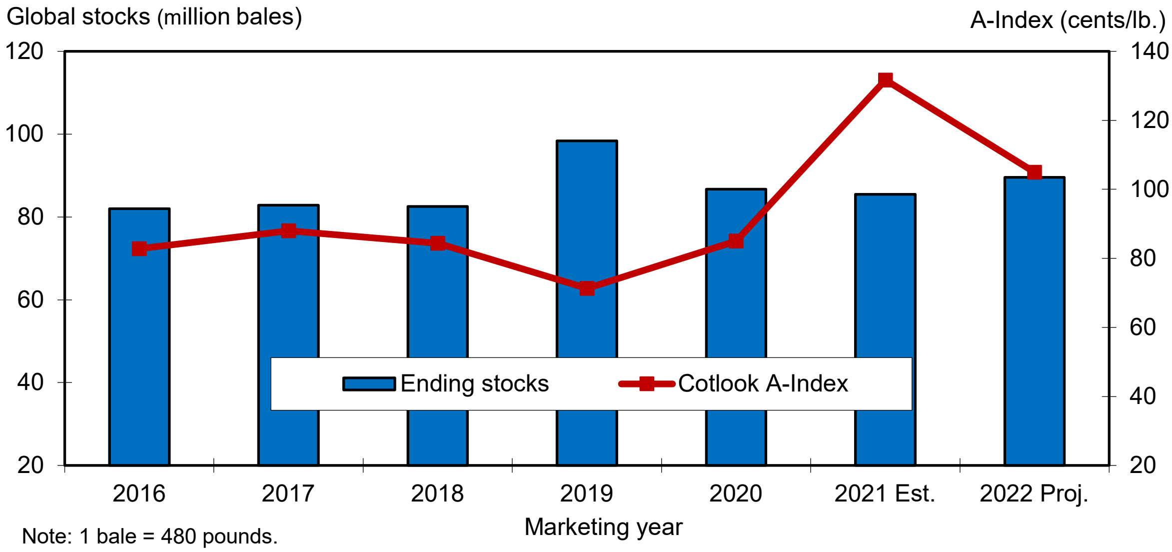
Note: 1 bale = 480 pounds.

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

Meanwhile, global cotton stocks are projected at approximately 89.6 million bales at the end of 2022/23, compared with 85.4 million bales last season (figure 6). World cotton stocks are expected to increase in numerous countries this season, but these increases will be partially offset by declines in Pakistan and the United States. China's cotton stocks—forecast at 37.7 million bales—are slightly higher this season. China remains the largest stockholder in 2022/23, accounting for 42 percent of the global total. In Brazil, cotton stocks are expected to reach 13.45 million bales at the end of 2022/23, the highest in 3 years and contributing 15 percent of world stocks. For India, cotton stocks are expected to increase considerably (2.8 million bales) to 11.4 million bales, or nearly 13 percent of the total as a rebound in production increases supplies. However, ending stocks for Pakistan are projected to decline 350,000 bales due to a smaller crop, with stocks forecast at 1.5 million bales, the lowest since a similar stock level in 1997/98. Meanwhile, stocks in the United States are forecast 250,000 bales lower at 3.5 million bales.

Based on the latest cotton supply and demand projections, 2022/23 global cotton stocks are projected to rise nearly 5 percent to the largest in 3 years. Likewise, the global stocks-to-use ratio is expected to increase, reaching 80 percent in 2022/23 and the highest since 2019/20's 95 percent. With world cotton production exceeding mill use this season and stocks increasing, the 2022/23 Cotlook A-Index price is expected to decrease from 2021/22's average of nearly 132 cents per pound to around 105 cents per pound.

Figure 6
Global cotton stocks and prices



Note: 1 bale = 480 pounds.
Sources: USDA, Economic Research Service based on Cotlook and USDA, Interagency Commodity Estimates Committee.

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