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In this report:

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Reductions to Foreign Coarse Grains Output Overshadow Gains in the United States for 2024/25

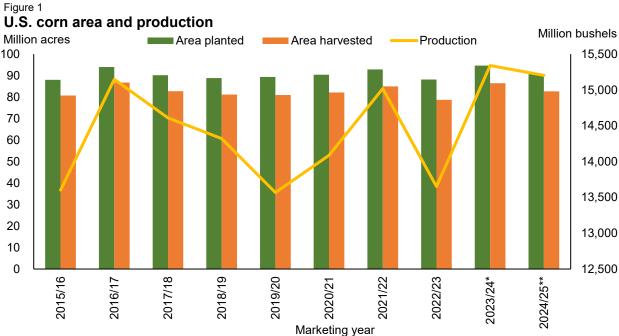
This month's 2024/25 U.S. coarse grains outlook is for reduced supplies, despite an increase in output. Although sorghum supplies are raised on higher production and beginning stocks, lower corn carry-in for 2024/25 more than offsets these gains—including a corn production bump. A decrease in 2024/25 barley yields slightly reduces output, placing further downward pressure on U.S. coarse grains supplies. Total coarse grains use is raised slightly this month, as an increase in corn use—reflecting greater exports—and oats use is offset by a reduction in barley use (feed and residual).

World 2024/25 coarse grains production is projected lower this month. A reduced foreign coarse grains output projection outpaces gains in U.S. coarse grains output, as lower corn and barley outputs are slightly offset by increases in sorghum and oats. 2023/24 foreign corn trade (international trade year) is forecast lower and elevates the 2024/25 foreign corn-beginning stocks. 2024/25 global domestic corn use is forecast higher, while projected 2024/25 foreign trade is forecast lower. 2024/25 global corn stocks are projected lower.

Domestic Outlook

2024/25 U.S. Corn-Ending Stocks Are Down on Lower Supplies and Greater Use

In its October *Crop Production* report, the USDA, National Agricultural Statistics Service (NASS) indicated 2024/25 corn production will be 15.2 billion bushels, up 17.8 million bushels from last month. This increase is the result of an unchanged harvested area at 82.7 million acres, and a 0.2-bushel-per-acre increase in the yield forecast to 183.6 bushels per acre (see figure 1).



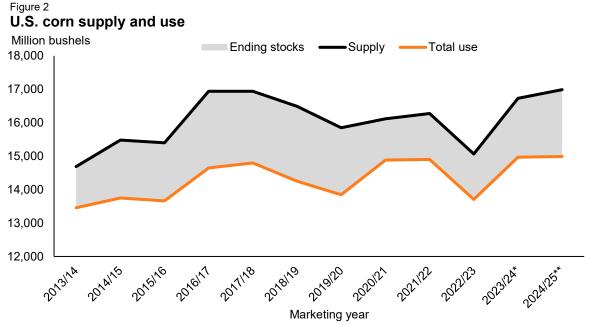
Note: Asterisk (*) denotes estimate and two asterisks (**) denote forecast.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Crop Production*.

A 51.3-million-bushel reduction in 2024/25 beginning stocks to 1.76 billion bushels, as reported in the NASS September *Grain Stocks* report, offsets production gains and reduces prospective corn supply to 17 billion bushels. This estimate represents a record U.S. corn supply if realized.

Despite a downward revision to 2024/25 marketing year (MY) supplies, implied U.S. corn exports are off to a strong start. Through October 3, U.S. corn export inspections exceeded 2023 volumes by 22 percent. This is noteworthy, considering Argentina's corn export prices are now the cheapest of the U.S.'s main competitors in the global market, with the United States remaining competitive with Brazil. These price dynamics are reflected in sluggish U.S. corn export sales and inspections volumes to China—a top five U.S. corn export destination—early in

2024/25. However, stagnant import demand by China is replaced by heightened year-over-year demand for U.S. corn by other major export destinations—like Japan, Colombia, and Mexico. In fact, U.S. export sales data reported in the USDA, Foreign Agricultural Service (FAS) *U.S. Export Sales* indicate 48 percent of accumulated corn exports through October 3 are destined for Mexico—a country recovering from a drought-induced underperforming crop. These early season shipments to Mexico contribute to a total-commitments (accumulated + outstanding-export sales) estimate that is nearly 2.4 million tons higher than this time last year, at 17.7 million tons. Hence, a weakening position in the global market, as it pertains to U.S. export prices, does not dampen 2024/25 corn export prospects.

By law, export inspections reporting requirements do not necessitate that U.S. truck and rail shipments to Canada or Mexico be inspected. Thus, it is pertinent to assess both export sales and inspections volumes as leading indicators (but not fully representative values) of realized exports. Bearing these factors in mind, elevated volumes for both future U.S. export indicators—particularly shipments to Mexico—suggest the United States will maintain strong corn exports heading into 2024/25. As a result, the 2024/25 U.S. corn export forecast is raised by 25 million bushels this month to 2,325 million bushels. No changes are made this month to any other use categories. The result of these supply and use changes conveys a lower ending-stocks forecast of 2 billion bushels (see figure 2). The 2024/25 season average price received by U.S. corn farmers remains unchanged at \$4.10 per bushel.



Note: Asterisk (*) denotes estimate and two asterisks (**) denote forecast. Source: USDA, Economic Research Service using data from USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*. Indicated domestic corn disappearance was higher than anticipated in the final quarter of the 2023/24 marketing year, at 3.24 billion bushels—nearly 500 million bushels higher than the same time the prior year. This estimate is represented by the year-over-year decline in on-farm corn stocks, accounting for nearly 70 percent of indicated fourth-quarter domestic disappearance for 2023/24 (see figure 3).

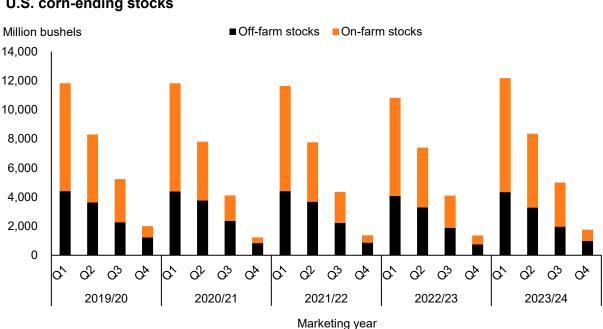


Figure 3 **U.S. corn-ending stocks**

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Grain Stocks*.

June 1 on-farm stock levels were historically high this year. Although farmers planted fewer corn acres in 2024 than in 2023, ideal weather and (consequently improving) crop conditions throughout the growing season signaled the potential for a record national yield. Combined with relatively low prices, these factors contributed to robust fourth quarter corn use expectations for 2023/24. This use estimate is supported by corn sales (marketing percentages) reported by NASS in its September *Agricultural Prices* report. Nearly 23 percent of the 2023/24 U.S. corn crop was marketed in the fourth quarter, with just over 9 percent of total sales occurring in August. For reference, this is more than 3 percentage points higher than the 5-year average. Simply put, when considering the size of the U.S. corn crop, this represents a large volume of corn—as evidenced by the indicated disappearance.

Much like last year, fourth-quarter (June-August) corn use for ethanol production exceeded third-quarter (March-May) volumes by roughly 50 million bushels. Similarly, quarterly changes among other food, seed, and industrial corn-use categories mirrored prior years. U.S. corn

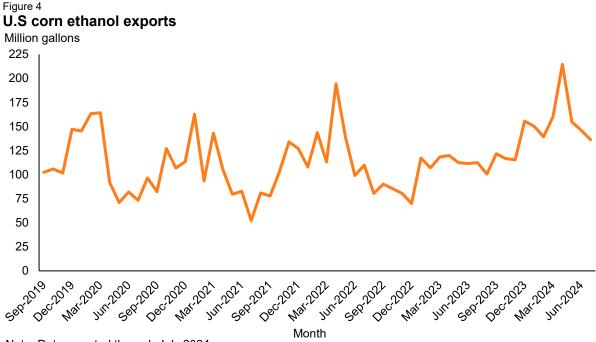
export volumes, however, remained strong in the final quarter of the 2023/24 marketing year. Competitive corn export prices contributed to a fourth-quarter corn export total of nearly 630 million bushels, down 95 million bushels from the prior quarter. For reference, fourth-quarter U.S. corn exports were on average 270 million bushels lower than third-quarter totals over the past 5 years. This year's fourth-quarter export volume exceeded 2022/23 final quarter levels by more than this amount (280 million bushels), accounting for a larger than anticipated portion of total fourth-quarter use (nearly 20 percent). The slightly stronger than expected fourth-quarter U.S. corn exports lifts the 2023/24 export estimate by 2.3 million bushels to 2,292.3 million bushels.

Although blend rates softened a bit during the fourth quarter, U.S. ethanol exports remained elevated—especially relative to prior years. These factors contributed to a slightly higher fourth-quarter corn use for ethanol-production estimate, compared with last month (up 6.5 million bushels). The monthly change in this forecast is largely attributed to statistical noise associated with weekly ethanol production reported by the Department of Energy's Energy Information Administration (EIA) and realized corn use for ethanol production. Nonetheless, the impact of U.S. ethanol exports throughout 2024/25 is noteworthy (see figure 4). Although not fully realized, ethanol export volumes through July exceed last year's total (through August) by 385 million gallons, at 1.6 billion gallons. Ultimately, corn use for ethanol production is raised by 6.5 million bushels this month, to 5,471.5 million bushels.

Once a major U.S. ethanol trade partner, Brazil has grown its ethanol production infrastructure in recent years—reducing its reliance on foreign supplies. For reference, Brazil has accounted for more than 30 percent of U.S. ethanol trade in prior years but has thus far contributed to 1 percent of total U.S. ethanol trade in 2023/24. Other major U.S. trade partners have more than compensated for Brazil's declining demand for U.S. ethanol—such as Canada, the United Kingdom, India, and Colombia. In 2023/24, 37 percent of U.S. ethanol exports were shipped to Canada, the United Kingdom nearly doubled last year's trade volume (at 210 million gallons), and trade volumes to India and Colombia grew by more than 250 and 170 percent, respectively, from last year.

Overall, this month's increase in corn use for ethanol production accounts for most of the increase in total corn food, seed, and industrial (FSI) use for MY 2023/24. Other FSI components contributed to a near 1-million-bushel increase in overall corn FSI use for 2023/24. While fourth-quarter corn use for glucose and dextrose, starch, and cereals and other products was lower than expected, stronger use for high fructose corn syrup results in a net positive

increase of just over 300,000 bushels. An increase of just over 1 million bushels for corn use in beverage and manufacturing provides the final bump in overall corn FSI use for 2023/24.



Note: Data reported through July 2024.

Source: USDA, Economic Research Service using data from US Department of Energy, Energy Information Administration, *Fuel Ethanol Exports by Destination*.

Feed and residual use in the fourth quarter of MY 2023/24 exceeded prior expectations by 44 million bushels. However, after adjusting for realized supply and use changes, this month's 2023/24 feed and residual estimate is 40 million bushels higher than was represented in the September *World Agricultural Supply and Demand Estimates (WASDE)* report. This increase could be attributed to declining corn prices and an upward revision to the 2023/24 hog herd. Ultimately, these use changes bring the 2023/24 total U.S. corn-use projection 48.7 million bushels higher than last month, at 15 billion bushels.

The effects of stronger than expected fourth-quarter corn use on a slight reduction to supply (through a 1.5-million-bushel decrease to imports and 7,000-acre reduction to harvested area), lowers ending stocks by 51.3 million bushels for 2023/24 to 1,760.5 million bushels. The average price received for corn by U.S. farmers in 2023/24 was \$4.55 per bushel.

2024/25 U.S. Sorghum Supplies Lift Ending Stocks

Sorghum supplies for 2024/25 are moved higher in the October *WASDE* report on higher beginning stocks and increased production. The slight bump in this month's production projection is the product of a 0.4-bushel-per-acre increase in the yield projection to 57.7 bushels

per acre, on unchanged harvested acreage. Accounting for a slight increase of 5.5 million bushels in beginning stocks, sorghum supplies are expected to reach 335 million bushels in 2024/25. The slight change in supply is not expected to impact domestic use. Consequently, ending stocks are raised to 30 million bushels from 22 million. Sorghum prices remain unchanged from the previous forecast at \$4.10 per bushel.

In response to multiple reports, slight adjustments were made to the 2023/24 sorghum balance sheet. USDA, NASS reported that sorghum-ending stocks totaled 30.5 million bushels (see figure 5). Despite the 107-million-bushel year-over-year increase in total sorghum supplies, this estimate is 6.3 million bushels higher than the prior year. This highlights the strong demand for U.S. sorghum in 2023/24. With much of the disappearance occurring at the front end of the marketing year, indicated fourth-quarter disappearance (June-August 2024) is 18.9 million bushels, down 34 percent from the same period a year ago and 5.9 million bushels shy of last month's projection.

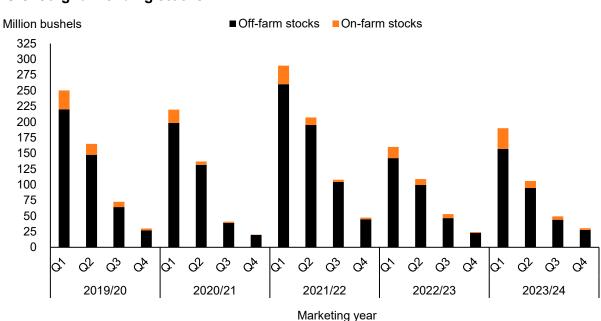


Figure 5 U.S. sorghum ending stocks

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Grain Stocks*.

August 2024 sorghum exports came in slightly higher than expected at 42 million bushels, lifting the estimate by 4.2 million bushels to 239.2 million bushels. After accounting for a slight reduction in import volumes, and FSI change, the 2023/24 sorghum feed and residual forecast was lowered by 11.7 million bushels this month to 48.3. A slight bump of 2 million bushels was applied to the sorghum FSI forecast this month, after July's reported sorghum use for ethanol

production exceeded all other months during the marketing year except September 2023, bringing the fourth-quarter sorghum FSI use estimate close to 8 million bushels.

Applying marketing year sales volumes to monthly prices received by U.S. sorghum farmers in 2023/24, the average price was \$4.93 per bushel—\$0.03 higher than the previous projection (see figure 6).

2023/24 marketing weight ——2023/24 sorghum price Price, dollars per Marketing percentage bushel 7.50 22 7.00 20 6.50 18 6.00 5.50 16 5.00 14 4.50 12 4.00 3.50 10 3.00 8 2.50 6 2.00 1.50 1.00 2 0.50 0.00 My. Pal. Nay 404. Oec. ¢_{δρ.} Oç, Mar. MIG. Seg. PQ. My. Month

Figure 6
U.S. sorghum price received and marketing percentages

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Agricultural Prices*.

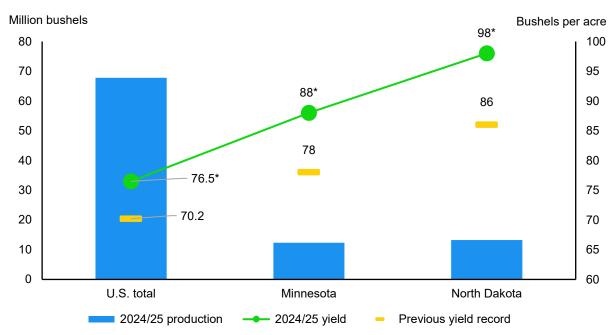
Revisions to the 2023/24 Pig Crop Impact Grain Consuming Animal Units

Grain consuming animal units (GCAUs) are estimated at 100.5 million units for 2023/24 and are projected to be slightly lower in 2024/25, at 100.1 million units. A month-to-month increase in 2024/25 GCAUs is primarily attributed to a revised pig crop, up 1.1 million head. This increase is further complemented by an increase in poultry, where an increase in broilers more than offsets reductions to turkeys and layers.

Record Yields Across the United States Support Higher Oat Supplies in 2024/25

At the end of September, USDA, NASS published its *Small Grains Annual Summary* report—which tallies the final production estimates for both barley and oats. Favorable growing conditions through the 2024 crop season drove the United States to a record oat yield of 76.5 bushels per acre, which outshined the country's previous best (set in 2015) by 6.3 bushels per acre. The national record was buoyed by banner yields across the country, especially in North Dakota (at 98 bushels per acre) which surpassed the State's previous record by 10 bushels per acre—and in Minnesota (at 88 bushels per acre) which beat the State's previous record by 12 bushels per acre (see figure 7).

Figure 7
U.S. 2024/25 oat production and yield by State



Note: North Dakota and Minnesota were the two largest oats-producing States in 2024/25 (June through May marketing year). Asterisk (*) denotes a new record yield.

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service,

2024 Small Grains Annual Summary report.

Together, these two States comprised 38 percent of total oat production in 2024, with North Dakota at number 1 (harvesting 13.2 million bushels, up 1.53 million bushels from last month) and Minnesota at number 2 (with 12.3 million bushels, up 1.66 million bushels from last month). Above-average yields were also clocked in the third and fourth largest oats-producing States of

South Dakota (at 88 bushels per acre) with a harvest of 7.7 million bushels, and of Iowa (at a near-record of 82 bushels per acre) with a final production tally of 6 million bushels in 2024.

This year's high national yield augments a strong turnout in harvested oat area of 886,000 acres in 2024, a 7-percent-jump from last year and 6 percent higher than the 5-year average (which partially offset a lower planted area year over year of 2.2 million acres). Starting in 2024, NASS removed Arkansas, California, Missouri, and Oklahoma from its oat production surveys which further illustrates the magnitude of national harvested area in the remaining States that were surveyed this marketing year. All told, the 2024/25 ratio of oat area harvested to oat area planted is estimated at 40 percent, an 8-percentage-point increase from last year and a 9-percentage point lead over the 5-year average—signaling that U.S. oat farmers favored harvesting oats for grain (at maturity) this year, as opposed to oats for a nurse crop or hay (which is typically cut before the crop reaches maturity).

Together, strong yields and a higher harvested area lifted U.S. oat production to 67.8 million bushels in 2024/25, up 10.7 million bushels from last year and 24 percent more than the 5-year average. Though a slight downward revision was applied this month to oat imports (now forecast at 74 million bushels) and oat beginning stocks (now estimated at 36.3 million bushels), the new 2024/25 oat supply forecast (of 178 million bushels) is 12 million bushels greater than last year and 4 million bushels more than the 5-year average.

September 1 inventories provided by NASS's September 30 *Grain Stocks* report provide insight for domestic oat use in 2024/25. As of September 1 (which captures the first quarter of the June-May marketing year), on-farm oat inventories (of 38.6 million bushels) were up 3.15 million bushels from the same quarter last year but were substantially offset by the 13.3-million-bushel decline in off-farm inventories (of 26.7 million bushels) over the same period. Consequently, total U.S. oat inventories of 65.2 million bushels were down 10.1 million bushels from the first quarter in 2023 (see figure 8).

Considering the strong first quarter (June-August) indicated disappearance (38.8 million bushels), feed and residual oats use is revised up 9 percent this month to 60 million bushels in 2024/25. U.S. oats used domestically for FSI are minimally lowered this month, to 81 million bushels, while exports are unchanged from the September *WASDE* report.

Reflecting robust oat supplies (which thus far surpass indicated demand over the first quarter of 2024/25) and a NASS-reported oat price received of \$3.19 per bushel in August (down \$0.75 from June, and in a month when farmers typically market a significant percentage of their

crop)—the season-average price projected to be received by U.S. oat farmers is revised downward from last month by \$0.10 to \$3.50 per bushel in 2024/25.

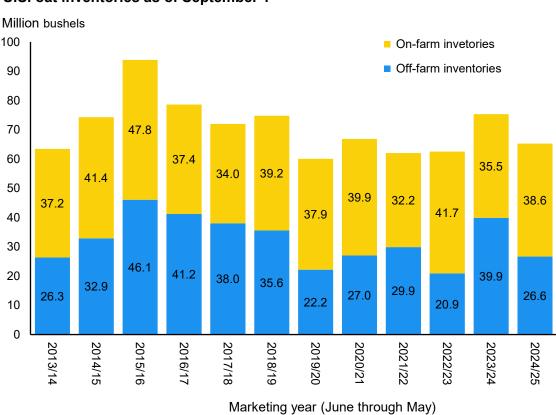


Figure 8
U.S. oat inventories as of September 1

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Grain Stocks* report.

Barley Supplies Are Reduced on Cuts to Yield and Harvested Area, Prices Are Lifted in all Categories

This year's *Small Grain Annual Summary* report shows that barley area was revised down this month, with planted acreage at 2.37 million acres in 2024 (32,000 acres less than NASS's August forecast and 24 percent less than last year) and harvested acreage at 1.88 million acres (revised down 7,000 acres from August and 27 percent less than in 2023). The largest year-over-year declines in harvested area were realized in Montana (the second largest barley-producing State)—where acreage fell 31 percent on the year to 710,000 acres—and in North Dakota (the third largest barley-producing State)—where harvested area was cut in half from the year prior to 285,000 acres in 2024. Significant declines in area throughout the country can be tied, in part, to reduced production contracts between malting companies and barley farmers

at the time of planting—reflecting continued uncertainty about the future of U.S. consumer demand for beer.

According to NASS, not even a strong national barley yield of 76.7 bushels per acre (a 4.4-bushel-per-acre increase from last year and 4.8 bushels per acre above the 5-year average) could offset such large declines in acreage. This scenario is particularly evident, again, in both Montana and North Dakota. Montana farmers saw a final yield estimate of 51 bushels per acre in 2024 (up 1 bushel per acre from last month and 2 bushels per acre from last year), though total barley production (of 36.2 million bushels) fell 28 percent from last year and 11 percent from the 5-year average. North Dakota's final barley-yield estimate in 2024 was 4 percent higher than last year at 74 bushels per acre (which more than offsets a 7-bushel-per-acre decline from last month), but could not offset the State's dramatic declines in acreage. As a result, North Dakota's 2024 barley harvest (of 21.1 million bushels) was nearly half the size of last year's and 38 percent short of the 5-year average.

Total U.S. barley production in 2024/25 was estimated at 144 million bushels, down 23 percent from last year and 13 percent short of the 5-year average. With a slight month-to-month upward revision in beginning stocks from NASS (to 78.2 million bushels) and unchanged imports (at 12.0 million bushels), the total barley supply is forecast at 234 million bushels for the 2024/25 marketing year.

In its *Grain Stocks* report, NASS estimated total barley inventories (including both on-farm and off-farm positions) for the first quarter of the June-May marketing year at 154 million bushels, down 14 percent from this time last year and 10 percent lower than the 5-year average—propelled mainly by a small harvest. Lower supplies, and consequently weaker first quarter indicated disappearance, result in a 5-million-bushel-decline in the October feed and residual use forecast (of 40 million bushels). This month's barley supply and use changes are mostly offsetting, and result in a relatively unchanged ending-stocks projection of 69 million bushels for 2024/25.

The national malt-barley price (which is the main driver of the all-barley price) saw a \$0.28-per-bushel increase between July and August to \$6.95 per bushel for the 2024/25 marketing year, according to data from NASS's September *Agricultural Prices* report (see figure 9). Coupled with a slight increase in the national feed-barley price received over the same period (of \$3.89 per bushel), the season-average farm price for all-barley is now forecast at \$6.50 per bushel (up 20 cents from last month).

While all three barley prices saw gains between July and August (which rounds out the first quarter of the June-May marketing year), they still fall short of values seen both in June 2024 and over the first quarter of marketing year 2023/24. The average malt-barley price over the first quarter of the current marketing year was \$7.10 per bushel (with a peak of \$7.67 in June), down \$0.54 per bushel from the same period last year—and the average feed-barley price between June and August (of \$3.96) was down \$1.74 per bushel, compared to the same period in 2023. This downward pressure on barley prices, relative to last year (and the year prior), tracks the broader softening of commodity prices across the global grains complex.

All-barley - 2023 All-barley - 2024 • • Feed - 2023 Dollars per bushel Feed - 2024 • • Malt - 2023 Malt - 2024 9.00 8.00 7.00 6.00 5.00 4.00 3.00 2.00 1.00 0.00 Jun. Jul. Aug. Sep. Oct. Nov. Dec. Jan. Feb. Mar. Apr. Mav 1 2 3

Figure 9
U.S. price received for malting-, feed-, and all-barley

Month and marketing year quarter

Note: The barley marketing year is June-May.

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, September 2024 *Agricultural Prices* report.

International Outlook

2024/25 Foreign Coarse Grains Output Is Reduced, While U.S. Output Is Slightly Up

Global coarse grains production for 2024/25 is forecast 2.3 million tons lower this month, to 1,500.1 million tons. An increase in the U.S. corn, sorghum, oats, and rye output forecasts (see the domestic section) partially offsets a 2.8-million-ton decrease in **foreign** coarse grains output. Reductions to foreign corn, barley, and rye outputs are partially offset by an increase in sorghum output and a minimal increase in oats output.

Over the course of the last month, harvests have been underway in the Northern Hemisphere's producing countries. Although ongoing, (preliminary) harvest results have contributed to this month's updated 2024/25 foreign corn and barley output projections, lowered by 1.8 and 1.3 million tons—respectively. Early harvest results in the Black Sea region reflect the challenging growing conditions caused by the summer drought and warrant a reduction in both *Ukraine's* and *Russia's* corn output forecasts. Furthermore, Russia's 2024/25 reported barley yields have steadily declined throughout the country's barley harvest (which is almost finished). This decline in yields leads to a further cut in Russia's *barley* output forecast. The reductions in corn output for Ukraine and Russia, and barley output in Russia, are expected to impact corn and barley trade (see trade section below). Much like Russia and Ukraine, heat and challenging growing conditions negatively impacted *Egypt's* 2024/25 corn yields (despite the use of irrigation). Additionally, Egypt's 2024/25 corn area is also revised lower. Thus, 2024/25 Egypt's corn output is reduced this month.

With a favorable growing season for India's Kharif corn crop harvested in the fall—generally representing 75 percent of India's corn production—*India's* 2024/25 corn output forecast is projected higher. India's 2023/24 **corn** and **sorghum** outputs are also revised higher, aligning with reports from India's Ministry of Agriculture. India's 2023/24 larger corn and sorghum outputs, as well as its higher-than-expected 2024/25 corn output, are expected to be consumed domestically for both feed use and for growing ethanol demand. India's 2024/25 barley yields were reportedly higher after tallying the **barley** harvest, leading to an increase in India's 2024/25 barley output forecast. India is expected to use the larger barley supply mostly for domestic feed consumption.

2024/25 major coarse grains production changes include a further cut to *EU* barley output, following harvest results in France and Finland. The *UK* barley output was also lowered

because of lower reported yields. Decreases in barley production for the European Union and the United Kingdom are expected to result in lower domestic feed and Food, Seed, and Industrial (FSI) consumption and exports. Reductions in 2024/25 barley production forecasts for major barley exporters—Russia (see above), the European Union, and United Kingdom (for a combined total of 1.6 million tons)—are marginally offset by expectations of increased barley production in *Argentina*. Raised this month on above-average crop conditions in the main growing province of Buenos Aires, Argentina's 2024/25 barley output is expected to exceed the 5-year average but remains slightly below 2023/24 output levels. After a dry winter, recent precipitation levels have benefited Argentina's 2024/25 barley crop. This increase in production forecast contributes to an increase in Argentina's 2024/25 barley export prospects.

Closing the list of major coarse grains production changes for 2024/25, Argentina's **sorghum** output is raised, with an increase in sorghum area. Following the leafhopper outbreak on corn, farmers diversified 2024/25 plantings. Moreover, lower sorghum production costs (relative to other competing crops) contributed to the decision-making process.

Other sizeable changes are made to production for 2023/24 coarse grains crops. *Mexico's* 2023/24 corn output is revised higher, aligning with reports by Mexico's Secretariat of Agriculture and Rural Development of a higher than anticipated winter corn output. Drought conditions resulted in lower plantings of Mexico's winter corn relative to the prior year. Nonetheless, irrigation (even though on reduced cycles due to drought conditions) had a positive effect on final yields for Mexico's 2023/24 corn winter crop. Spurred by an increase in area, Mexico's 2023/24 sorghum production is raised by 5 percent. Conversely, *Brazil's* 2023/24 sorghum output is lowered on reduced yields, following dryness in the sorghum producing areas. Brazil's 2023/24 sorghum decrease in production is expected to be absorbed by lower domestic sorghum consumption. An increase in *Burma's* 2023/24 corn production is supported by larger corn shipments from Burma to Asian countries (see trade section below). 2023/24 corn production is also raised for *Venezuela*, allowing for higher domestic consumption. Finally, *South Africa's* 2023/24 corn output was further reduced this month, resulting in lower domestic consumption.

For more information and a visual display of this month's changes in coarse grains production, see tables A1 and A2 below. The changes in global, foreign, and U.S. coarse grains production (by type of grain) are shown in table A1—while changes in coarse grains production by country are given in table A2. For barley and corn production changes, see maps A and B, respectively.

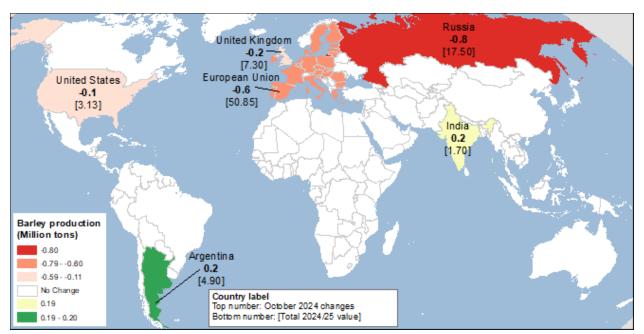
	Region or country	Production	Change from previous month	YoY change ¹	Comments
			Million tons		
0	arse grain prod	uction (total)			
L	World	1,500.1	-2.3	-1.2	
ļ	Foreign	1,101.7	-2.8	+3.3	Changes are made for a number of countries and commodities, mainly in corn and barley. See table A2.
	United States	398.4	+0.5	-4.5	See section on U.S. domestic output.
Vo	orld production	of coarse gra	ains by type of gr	ain	
				co	RN
	World	1217.2	-1.4	-8.7	
	Foreign	oreign 831.0 -1.8		-5.2	Reductions in production for Ukraine, Russia, Egypt, and the Philippines are partially offset by an increase in production in India.
	United States	386.2	+0.5	-3.5	See section on U.S. domestic output.
		,		BAR	LEY
	World	142.9	-1.4	+0.3	
ļ	Foreign	139.8	-1.3	+1.2	Reductions in production for Russia, the European Union, and the United Kingdom are partially offset by an increase for Argentina.
	United States	3.1	-0.1	-0.9	See section on U.S. domestic output.
•		•		SOR	GHUM
1	World	62.6	+0.5	+4.4	
Ì	Foreign	54.9	+0.5	+4.7	Increase in Argentina's output is slightly offset by minimal reductions in other countries.
	United States	7.7	+0.1	-0.3	See section on U.S. domestic output.
		•		OA	ATS
1	World	21.9	small increase	+2.6	
•	Foreign	20.9	small increase	+2.4	Reduced oats output in Brazil is offset by higher output in Kazakhstan and Canada.
	United States	1.0	small increase	+0.2	See section on U.S. domestic output.
		•		R	YE
Î	World	10.9	small increase	-0.8	
ļ	Foreign	10.6	small decrease	-0.9	A small reduction in Brazil's ouput.
	United States	0.4	small increase	+0.1	See section on U.S. domestic output.

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Type of crop	Crop year	Production	Change in forecast ¹	YoY ² change	Comments				
				2024/2	5 crop year				
					KRAINE				
Corn	Oct–Sep	26.2	-1.0	-6.3	Reduction in yields based on early harvest results to date.				
				R	LUSSIA				
Corn	Oct-Sep	13.0	-0.5	-3.6	Yield revised lower based on harvest results.				
Barley	Jul–Jun	17.5	-0.8	-3.0	Yield revised lower based on harvest results.				
<u> </u>				Е	GYPT				
Corn	Oct-Sep	7.0	-0.6	-0.2	Reduction in area and yields because of excessive heat during the				
growing season and high insect pressure. PHILIPPINES									
Corn	Jul–Jun	8.3	-0.2	+0.2	Reduction in area based on preliminary updates of the first quarter.				
					INDIA				
Corn	Nov-Oct	38.0	+0.5	+0.3	Increase in yields, partially offset by a decrease in area, aligning with India's Ministry of Agriculture data.				
Barley	Apr-Mar	1.7	+0.2	-0.2	Higher yields, aligning with India's Ministry of Agriculture data.				
			Е	UROPEA	N UNION (EU) ³				
Barley	Jul–Jun	50.9	-0.6	+3.0	Reduction in yields, following harvest results in France and Finland, combined with a reduction in area in Finland.				
<u>. </u>	ı			UNITE	D KINGDOM				
Barley	Jul–Jun	7.3	-0.2	+0.3	Reduction in yields, aligning with the United Kingdom's Government data.				
. 1				AR	GENTINA				
Barley	Dec-Nov	4.9	+0.2	-0.2	Yields are increased with above average crop conditions.				
Sorghum	Mar-Feb	3.6	+0.6	+1.1	Increase in area marginally offset by lower yields.				
				2023/2	4 crop year				
				M	EXICO				
Corn	Oct-Sep	23.5	+0.8	-4.6	Winter crop yields are revised higher, aligning with Mexico's Secretariat of Agriculture and Rural Development data.				
Sorghum	Oct-Sep	4.5	+0.2	-0.4	Winter crop yields are revised higher, aligning with Mexico's				
	ļ			В	Secretariat of Agriculture and Rural Development data.				
Corn	Oct-Sep	2.9	+0.6	+0.2	Area and yields are revised higher.				
				VEN	NEZUELA				
Corn	Oct-Sep	1.4	+0.5	+0.4	Higher area and yields.				
-1	!				INDIA				
Corn	Nov-Oct	37.7	+0.2	-0.4	Increase in area, aligning with India's Ministry of Agriculture data.				
Sorghum	Nov-Oct	4.7	+0.3	+0.9	Increase in yields, aligning with India's Ministry of Agriculture data.				
- !				SOUT	TH AFRICA				
Corn	May-Apr	13.4	-0.3	-3.7	Yields are revised lower, in line with the latest report of the Crop Estimates Committee (CEC).				
	1			Е	Area and yields are revised lower following drynoss in key gross				
Sorghum	Oct-Sep	4.4	-0.5	-0.4	Area and yields are revised lower following dryness in key areas,				

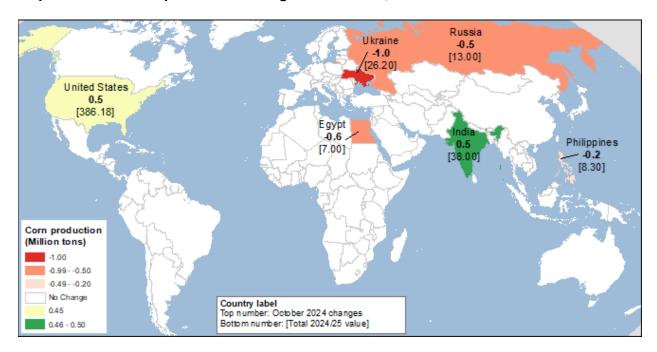
¹ Change from previous month. Smaller changes for coarse grain output are made for several countries. Changes less than 0.2 million metric tons are not ir ² YoY: year-over-year changes. ³ EU=European Union, doesn't include United Kingdom (UK).
Source: USDA, Foreign Agricultural Service, *Production, Supply, and Distribution database*.

Map A – Global barley production changes for 2024/25, October 2024



Source: USDA, Economic Research Service using data from USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Map B - Global corn production changes for 2024/25, October 2024



Source: USDA, Economic Research Service using data from USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Global 2024/25 Beginning Coarse Grains Stocks Are Larger, While U.S. Stocks Tighten

World coarse grains beginning stocks for 2024/25 are forecast 3.6 million tons higher this month. While U.S. 2024/25 coarse grains beginning stocks decline on lower corn stocks, **foreign** coarse grains beginning stocks are up 4.7 million tons on higher corn, barley, and sorghum (to a small extent) stocks.

Foreign countries' **corn**-beginning stocks are forecast 4.3 million tons larger. The largest individual country increases for 2024/25 corn-beginning stocks are for *Argentina* (up 2.6 million tons) and *Brazil* (up 1.0 million tons), where 2023/24 corn exports are reduced (see trade section below). *Mexico's* 2024/25 beginning stocks are forecast 0.8 million tons higher, following its larger winter 2023/24 corn crop production.

Foreign countries' **barley**-beginning stocks are up 0.4 million tons. This increase is attributable to larger barley stocks in Argentina, following lower than expected barley domestic consumption in previous years.

Global 2024/25 Coarse Grains Domestic Use Is Slightly Higher; Ending Stocks Are Lower

Global coarse grains domestic use is forecast higher for 2024/25, up 2.8 million tons, with an increase in corn and sorghum consumption partially offset by a decrease in barley consumption.

Argentina's and Brazil's 2023/24 and 2024/25 domestic corn uses are increased this month, while Argentina's and Brazil's export-volumes forecasts are reduced for 2023/24 and 2024/25 trade years (see the trade section below). Brazil is expected to increase domestic corn use to produce ethanol and Argentina is expected to increase domestic corn use for feed consumption for 2024/25. Brazil's and Argentina's 2023/24 domestic feed-use estimates are raised. As domestic corn prices have become more competitive versus the export markets, export volumes are displaced by domestic use—albeit with some volume going to stocks instead of being marketed.

India's domestic corn use is raised for both 2023/24 and 2024/25, following higher corn production expectations for both years. Demand for corn coming from both the feed and ethanol domestic sectors is strong. This strengthening of demand is supported by India's becoming a net corn importer in 2023/24.

The 2023/24 domestic corn use estimate was also increased for the *United States*, following the September 30 stocks report (see domestic section).

Lower than expected corn- and barley-trade flows to Iran in 2023/24 warrant a reduction in Iran's 2023/24's corn and barley domestic consumption. Russia supplies both corn and barley to Iran, while Brazil supplies corn to Iran. With this month's reduced 2024/25 projections of corn and barley production from Russia and lower corn-export expectations from Brazil, Iran's 2024/25 corn and barley imports are lowered. With lower supplies, Iran's 2024/25 domestic corn and barley consumption estimates are reduced this month. Because of its 2024/25 reduced barley-crop prospect, *the European Union* is also expected to lower domestic consumption of barley for 2024/25. Nonetheless, the EU 2024/25 barley consumption projection remains 7 percent above the 2023/24 lower consumption level.

China's 2024/25 sorghum domestic consumption is increased further this month. This increase is supported by higher expectations for China's sorghum imports, with greater global supplies available.

Numerous smaller changes were also made to 2023/24 and 2024/25 coarse grains consumption, following production and trade changes.

World 2024/25 coarse grains-ending stocks are forecast down 1.5 million tons, driven by a reduction in U.S. coarse grains-ending stocks (mostly corn), coupled with a decline of 0.2 million tons in foreign coarse grains stocks. An increase in 2024/25 foreign coarse grains beginning stocks more than offsets the 2024/25 foreign coarse grains production decrease. Foreign cornending stocks are projected 0.3 million tons lower. A projected decrease in *China's* corn stocks is partly offset by increases in *Argentina's* and *Mexico's* corn-stocks forecasts. Small stocks reductions (0.1 million tons) are projected for Egypt's and Ukraine's corn-ending stocks and other changes in foreign countries stocks are smaller and offsetting.

2023/24 Global Corn Trade Is Lowered; U.S. Corn Exports Are Increased

Projected 2023/24 **world coarse grains** trade for the October-September international trade year is projected to be lower, down 1.5 million tons. Lower projections in foreign corn trade are driving the decrease in world coarse grains trade, with a 3.0-million-ton reduction in **foreign corn** trade partially offset by an increase in U.S. corn trade.

The international coarse grains trade year for 2023/24 ended September 30. However, the publication schedule of official trade data differs by country. For instance, official September trade data (albeit that may be revised and refined later) are available for Brazil, while Argentina's September trade data will be available at the end of October. While some countries do not publish reliable official trade statistics, other methods are utilized, such as partner country data or other sources.

The largest reduction in 2023/24 world coarse grains exports this month is for *Brazil's* corn exports, lowered by 2.5 million tons, to 46.5 million tons, based on available trade data to date. Based on September shipment volumes, *Argentina's* 2023/24 corn export forecast is cut by 1.5 million tons, to 31.5 million tons. *Paraguay's* 2023/24 corn exports are also lowered 0.2 million tons, based on official export data available through August. Conversely, *U.S.* corn exports for the October-September trade year of 2023/24 are estimated 1.0 million tons higher. Census export data available through the month of August from the U.S. Department of Commerce and September U.S. export inspections data reported by USDA, Agricultural Marketing Service's (AMS) Federal Grain Inspection Service (FGIS), support the increase in 2023/24 U.S. corn exports. *Burma's* 2023/24 corn exports are also raised 1.0 million tons after accounting for larger than expected volumes exported to India, the Philippines, and Thailand.

Recorded corn-trade flows to *Bangladesh and Egypt* in 2023/24 have been higher than expected. These countries' corn import forecasts are increased by 0.6 and 0.5 million tons—respectively. Partly offsetting the higher 2023/24 import forecasts for Bangladesh and Egypt, 2023/24 *Iran's* corn imports are cut 0.5 million tons based on lower-than-expected recorded trade flows. Nonetheless, 2023/24 Iran's corn import forecast is 19 percent higher than 2022/23 and stands above the 5-year import average volume.

Global **barley** trade for the 2023/24 is projected 0.2 million tons higher. This increase is driven by larger barley exports from *Australia* (up 0.3 million tons). *China's* barley imports are raised this month by 0.5 million tons, based on available data. This increase is largely offset by a decrease of 0.4 million tons in 2023/24 *Iran's* barley imports, reaching their lowest levels in 10 years at 1.1 million tons.

Numerous smaller and largely offsetting changes were also made to 2023/24 corn and barley trade.

2024/25 Foreign Coarse Grains Trade Prospects Are Lower; U.S. Corn and Sorghum Trade Prospects Are Higher

Projected 2024/25 world coarse grains trade for the October-September international trade year is projected 2.3 million tons lower this month. The decrease is driven by reduced corn and barley export prospects and partially offset by increased sorghum export prospects (see figure 10).

Figure 10

Global coarse grain exports by commodity (trade year)
2024/25 2024/25

Attribute	Commodity	Sep (MMT)	Oct (MMT)		Мо	nth-to-m	onth cha	nges (Mi	MT)	
Global	Coarse grains	232.3	230.0		(2.3)					
	Corn	192.8	190.7		(2.1)					
	Barley	27.9	27.2			(0.	7)			
	Oats	2.3	2.4					0.0		
	Sorghum	8.9	9.4					0	.5	
	Rye	0.4	0.4					-		
				(3.5)	(2.5)	(1.5)	(0.5)	0.5	1.5	2.5
Foreign	Coarse grains	168.9	165.7	(3.3)						
	Corn	134.8	131.7	(3.1)						
	Barley	27.8	27.1			(0.7	7)			
	Oats	2.3	2.3					0.0		
	Sorghum	3.7	4.2					0.	5	
	Rye	0.4	0.4					-		
				(3.5)	(2.5)	(1.5)	(0.5)	0.5	1.5	2.5
United States	Coarse grains	63.3	64.3						1.0	
	Corn	58.0	59.0						1.0	
	Barley	0.1	0.1					-		
	Oats	0.0	0.0					-		
	Sorghum	5.2	5.2					-		
	Rye	0.0	0.0					-		

MMT=million metric tons.

Note: Change compared to the September 2024 projection for 2024/25.

Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, Production, Supply and Distribution database.

Lower output related changes reduce *Ukraine's* and *Russia's* 2024/25 corn export forecasts. Corn export projections for 2024/25 for *Argentina* and *Brazil* are down this month for the October-September 2024/25 international trade year based on revised lower estimates for their local 2023/24 March-February marketing year that started in March 2024 and will end in February 2025.

The trade year is October-September for coarse grains, corn, barley, sorghum, oats, and rye.

China is expected to further reduce its 2024/25 corn imports. Corn imports for China are expected to be less attractive, with the deflationary pressures in the country. Furthermore, a reduction in corn exports to China manifests itself in exporting countries' data through September (which would appear in China's customs data in October), and 2024/25 corn export forecasts are reduced from its current main suppliers—Brazil and Ukraine. Iran's 2024/25 corn import forecast is reduced this month on lower import expectations from Russia, its major corn supplier, and Brazil (see above production and trade sections). Offsetting lower corn imports for China and Iran, Egypt's 2024/25 corn import forecast is increased following the reduction in their corn output (see figure 11).

Figure 11 2024/25 global corn trade

Attribute	Counry/region	2024/25 Sep (MMT)	2024/25 Oct (MMT)		Мо	nth-to-m	onth char	nges (MM	T)	
Trade-year	Argentina	37.0	36.0	-		(1.0)				
exports	Brazil	51.0	50.5			((0.5)			
	Russia	3.8	3.3			((0.5)			
	Ukraine	24.0	23.0			(1.0)				
	United States	58.0	59.0						1.0	
	World	192.8	190.7		(2.1)					
				(3.5)	(2.5)	(1.5)	(0.5)	0.5	1.5	2.5
Trade-year	China	21.0	19.0		(2.0)					
imports	Egypt	7.8	8.2					0.4		
	Iran	7.8	7.6				(0.2)			
	World	186.1	184.1		(2.0)					

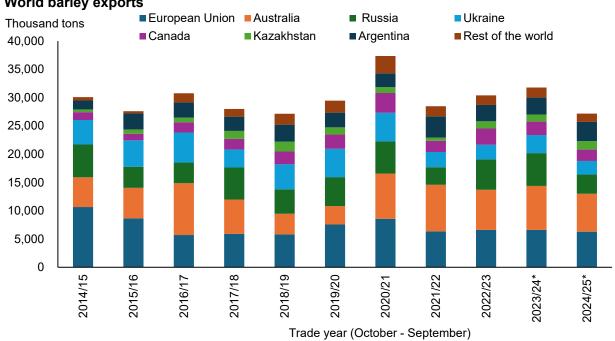
MMT=million metric tons.

Note: Change compared to the September 2024 projection for 2024/25. Changes less than 0.2 MMT are not included. Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, *Production, Supply and Distribution database.*

Because of lower 2024/25 expected **barley** supplies for major exporters—namely the European Union and Russia, 2024/25 global barley trade is projected to be a close second to its lowest level in 10 years (see figure 12). The increase in *Argentina's* 2024/25 barley supplies forecast is expected to lead to an increase in Argentina's barley exports for 2024/25. However, the increase in Argentina's barley export forecast is more than offset by lower expected 2024/25 barley exports from *Russia*, *the European Union*, and *the United Kingdom* (see figure 13). The reductions in these countries' exports follow their lower expected barley output, despite reductions in the EU's and UK's expected domestic consumption. *Iran's* 2024/25 barley import forecast is reduced by 0.6 million tons this month, on lower exportable supplies from Russia, its major supplier of barley.

The increase in 2024/25 global sorghum trade reflects higher projected output and exports for Argentina. China's 2024/25 import forecast for sorghum is raised by 0.5 million tons, on larger supplies of sorghum in Argentina.

Figure 12 World barley exports



(*) denotes forecast.
Source: USDA, Economic Research Service using data from USDA, Foreign Agricultural Service, *Production, Supply, and* Distribution database.

Figure 13 2024/25 global barley trade

Attribute	Counry/region	2024/25 Sep (MMT)	2024/25 Oct (MMT)	Month-to-month changes (MMT)				
Trade-year	Argentina	3.2	3.4	0.2				
exports	European Union	6.5	6.3	(0.2)				
	Russia	4.0	3.4	(0.6)				
	World	27.9	27.2	(0.7)				
				(3.5) (2.5) (1.5) (0.5) 0.5 1.5 2.5 3.5				
Trade-year	Iran	1.8	1.2	(0.6)				
imports	World	27.1	26.5	(0.6)				

MMT=million metric tons.

Note: Change compared to the September 2024 projection for 2024/25. Changes less than 0.2 MMT are not included. Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, Production, Supply and Distribution database.

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