



Oil Crops Outlook: October 2023

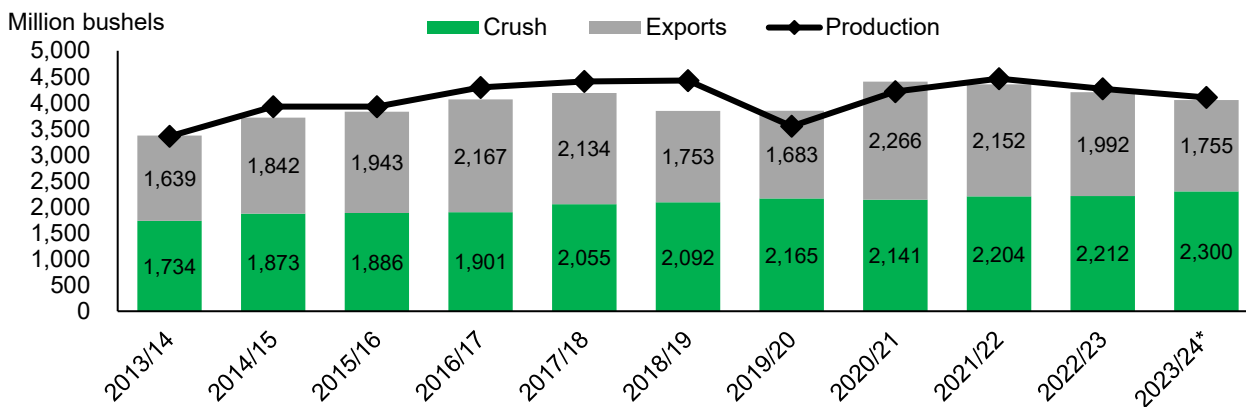
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U.S. Soybean Production Reduced on Lower Yields

This month, USDA, National Agricultural Statistics Service (NASS) lowered the 2023/24 U.S. soybean production forecast by 42 million bushels to 4.1 billion bushels on lower yield and unchanged acreage. The U.S. average soybean yield forecast stands at 49.6 bushels per acre, down 0.5 bushels per acre from last month’s projection. With lower soybean production partially offset by higher beginning stocks, total soybean supply is reduced by 24 million bushels to 4.4 billion bushels. Soybean exports are reduced by 35 million bushels to 1.76 billion bushels on lower supplies and increased competition from South America. Soybean crush is raised this month by 10 million bushels to 2.3 billion bushels on high product demand (figure 1). The soybean ending stocks for 2023/24 are forecast at 220 million bushels, unchanged from last month.

Figure 1
U.S. soybean supply and demand, MY 2013/14–2023/24



Note: An asterisk (*) represents forecast.
MY=Marketing year (Sep/Aug).

Sources: USDA, Economic Research Service using data from USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*, October 2023.

Domestic Outlook

Soybean Outlook

In its *Crop Production* report this month, USDA, National Agricultural Statistics Service (NASS) forecast the 2023/24 U.S. soybean production at 4.1 billion bushels, down 42 million bushels from last month's forecast. The U.S. average soybean yield forecast is down 0.5 bushels per acre and stands at 49.6 bushels per acre. The harvested acreage is unchanged this month at 82.8 million acres.

Lower soybean yield estimates for Alabama, Georgia, Kansas, Kentucky, Louisiana, Michigan, Nebraska, Ohio, and Wisconsin contributed to the decline in aggregate U.S. soybean production. Smaller harvests in these States are partially offset by higher production in Indiana. The yield in Indiana is forecast at a record high of 61 bushels per acre, up 1 bushel from last month's forecast. As of October 1, Indiana's good-to-excellent conditions were rated 73 percent, compared with the 5-year average of 70 percent. In contrast to Indiana's robust soybean condition ratings, Kansas' good-to-excellent ratings were 38 percent below the 5-year average, contributing to the smallest production since 2012/13. September was drier than normal in most soybean growing States. Parts of the upper Midwest, Great Plains, and Southwest recorded temperatures 4°F or more above normal for the month. On October 1, 52 percent of the U.S. soybean acreage was rated in good to excellent condition, 3 percentage points below the same time last year. The U.S. soybean harvest was 23 percent complete as of October 1, which is 3 percentage points ahead of last year, and 1 percentage point ahead of the 5-year average.

The beginning stocks for 2023/24 were higher than previously estimated. USDA, NASS indicated in its latest *Grain Stocks* report that the September 1 soybean inventory totaled 268.2 million bushels. Off-farm stocks were reported at 196.2 million bushels and accounted for 73 percent of total soybean stocks. The combination of a smaller soybean crop and higher beginning stocks shrinks the 2023/24 total supply from last month by 24 million bushels to 4.4 billion bushels.

U.S. Soybean Exports Reduced While Soybean Meal Exports Increased

U.S. export inspections of soybeans in September totaled 84.8 million bushels, 14.0 million bushels higher than the same period last year but nearly 34 percent below the prior 5-year

average as Brazil continues to ship large volumes. As of September 28, the U.S. total commitments (sales and shipments) are standing at 18.6 million metric tons, 32 percent below the same period last marketing year. Sales and shipments to China accounted for 44 percent of total commitments. Sales to unknown destinations have reported a sharp increase, although many sales commitments could also be for China. Sales to the European Union (EU) and Mexico have decreased compared with last year. Gains in other markets where the destination is known are modest. The soybean export forecast for MY 2023/24 is reduced by 35 million bushels this month to 1.76 billion bushels. Soybean crush for 2023/24 is raised by 10 million bushels this month to 2.3 billion bushels on higher demand for soybean products. With lower soybean exports more than offsetting lower supply, the MY 2023/24 ending soybean stocks are unchanged this month at 220 million bushels. The 2023/24 U.S. average farm price is forecast at \$12.90 per bushel, unchanged from last month's forecast.

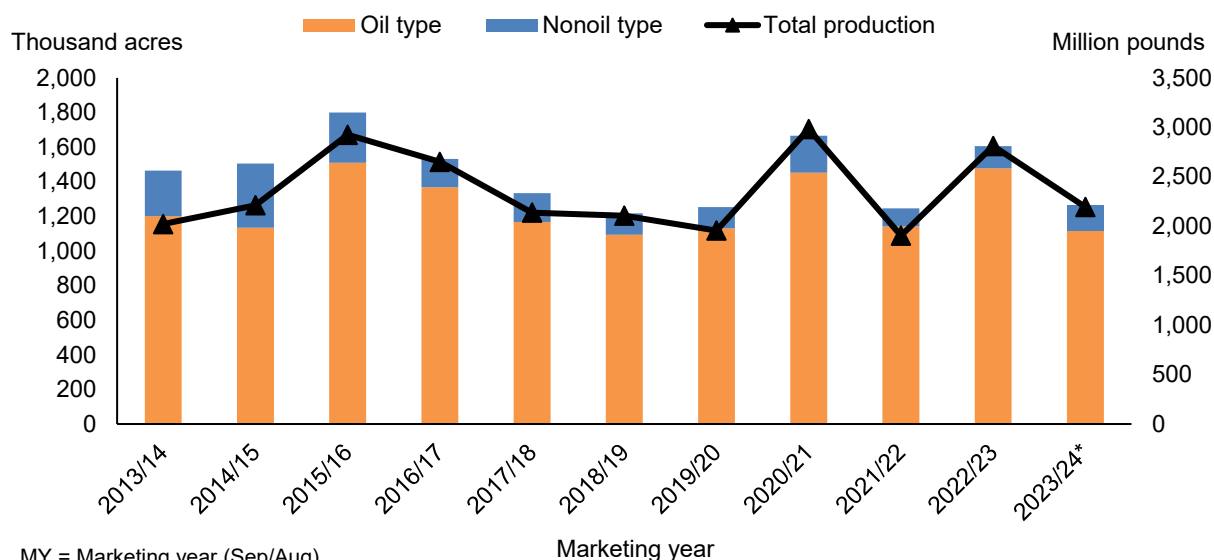
With a higher forecast for U.S. soybean crush this month, soybean meal production for MY 2023/24 is raised to 54.2 million short tons, up 0.2 million short tons. Soybean meal exports for MY 2023/24 is forecast at 15.3 million short tons, 0.2 million short tons higher than last month's forecast on lower foreign exportable supplies. Domestic soybean meal demand forecast is unchanged this month and stands at 39.4 million short tons. A record-low supply of cottonseed and limited availability of other mid-protein meals will likely support further use of soybean meal. Soybean meal prices in Decatur, Illinois, declined 6 percent during September and averaged \$411.00 per short ton. The soybean meal average price for MY 2023/24 is unchanged at \$380.00 per short ton.

The soybean oil production forecast for MY 2023/24 is increased by 115 million pounds this month to 27 billion pounds. Demand for soybean oil has stayed robust, particularly for biofuel consumption. The U.S. Department of Energy's U.S. Energy Information Administration's (EIA) *Feedstocks Consumed for Production of Biofuels* report, dated September 29, showed 1.27 billion pounds of soybean oil were used in biofuels during July 2023, a new monthly record high. This was 5.5 percent higher than the previous record observed in June 2023. For both MY 2022/23 and 2023/24, soybean oil for biodiesel is forecast higher to 12.1 billion pounds and 12.8 billion pounds, respectively. Soybean oil stocks have tightened nearby on a combination of higher use and a 10-month low for soybean oil production in August. Soybean oil ending stocks for MY 2023/24 are forecast at 1.7 billion pounds, 85 million pounds lower than last month's forecast. The 2023/24 average price for soybean oil is unchanged at 63 cents per pound.

Lower Acreage and Yield Lowered Sunflowerseed Output

The USDA, NASS *Crop Production* report also reported 2023/24 sunflowerseed production on October 12, 2023. Sunflowerseed production was lowered by 76 million pounds to 2.2 billion pounds. This is 22 percent lower than 2022/23 production, but 15 percent higher than the drought-affected crop in MY 2021/22. U.S. sunflowerseed harvested acreage is lowered from last month to 1.3 million hectares, whereas yields are cut by 24 pounds per acre to 1,738 pounds per acre. Total sunflowerseed harvested acreage is down 26 million acres, with 70 percent of the cut coming from oil type sunflowerseed (figure 2). This lower production forecast from last year is a result of a decrease in harvested acreage and lower yields, particularly in South Dakota, Kansas, and Texas.

Figure 2
U.S. sunflower harvested acreage by type and total production, MY 2013/14–2023/24



MY = Marketing year (Sep/Aug).

Note: An asterisk (*) represents forecast.

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Crop Production*, October 2023.

North Dakota and South Dakota account for over 80 percent of total sunflowerseed production on average. The weather conditions in this region significantly impacted total supply. According to the USDA, NASS *Crop Progress* report, North Dakota's sunflowerseed crop was rated 61 percent good-to-excellent as of October 1, 2023, 1 percent lower than MY 2022/23. On the other hand, South Dakota's crop was rated 50 percent good-to-excellent. Sunflowerseed production in North Dakota is projected at 1 billion pounds, down 263 million pounds from MY 2022/23 and driven by lower area harvested partially offset with higher yields. South Dakota's production is projected at 0.8 billion pounds, down 294 million pounds (27 percent). The

sunflower yield in South Dakota is forecast at 1,668 pounds per acre, down 4 percent from last year.

In the most recent USDA, NASS *Grain Stocks* report, September 1 sunflowerseed stocks were reported at 367 million pounds, up 73 million pounds from MY 2022/23. Oil type sunflower stocks accounted for 93 percent of the total. Overall supply is lowered to 2.9 billion pounds as lower production is only partially offset by higher stocks. This lower production led to a cut in sunflowerseed exports and other use. Sunflowerseed export forecast for MY 2023/24 is reduced by 20 million pounds to 115 million pounds. Sunflowerseed crush for MY 2023/24 is forecast at 1.1 billion pounds, down 13 percent from MY 2022/23 on lower supplies. Ending stocks are forecast to reach 274 million pounds, down 19 million pounds from last month.

U.S. Canola Production Reduced on Lower Yield

U.S. canola production is revised down 35 million pounds to 4.0 billion pounds, based on the most recent USDA, NASS *Crop Production* report. Canola harvested acreage is raised by 57,000 acres to 2.3 million from last month, while yields were lowered 59 pounds per acre to 1,741 pounds per acre. Canola supplies are unchanged this month as lower production was offset by higher imports from Canada. The canola imports are forecast at 967 million pounds, up 30 million pounds from last month but down 24 percent from MY 2022/23. While the canola crush forecast for MY (June-May) 2023/24 remains unchanged, the MY (October-September) 2023/24 canola crush forecast is raised.

Total canola oil supplies for MY 2023/34 (October-September) are raised with higher beginning stocks and production. Canola oil use in biofuel is raised by 0.1 million pounds to 3.4 billion pounds, which is partially offset with a reduction in food use. Ending canola oil stocks for MY 2023/24 are nearly unchanged from last month.

Outlook for Other Minor Oilseeds

U.S. cottonseed production forecast for MY 2023/24 is reduced by 0.1 million short tons to 3.9 million short tons on lower yield. This is the lowest cottonseed crop since MY 1986/87. With a lower cottonseed supply forecast for MY 2023/24, the cottonseed other use is reduced by 0.1 million short tons. The cottonseed crush is unchanged this month and stands at 1.35 million short tons.

The MY 2023/24 U.S. peanut production is forecast at 6.2 billion pounds, down 76 million pounds on lower yields. Peanut yields are forecast at 3,905 pounds per acre, down 1 percent from last month and 3 percent from MY 2022/23. A lower yield forecast for Alabama, Florida, and North Carolina contributed to this month's decline, only partially offset by a higher peanut yield for South Carolina. The peanut yield for South Carolina increased by 200 pounds to 4,200 pounds. The peanut yield for Georgia, a major peanut producing State, is unchanged this month and stands at 4,300 pounds per acre. The peanut yield for South Carolina increased this month by 200 pounds to 4,200 pounds. The peanut crop conditions further declined during September in most of the peanut-producing States. By October 1, 48 percent of U.S. peanut acreage was rated in good-to-excellent condition, 17 percentage points below the same time last year. Sixteen percent of U.S. peanut acreage was harvested as of October 1, 10 percentage points behind last year and 6 percentage points behind the 5-year average.

With lower supply and marginal reduction in feed seed residual, season-ending peanut stocks for 2023/24 are forecast at 2.1 billion pounds, 38 million pounds lower than last month's forecast but 115 million pounds higher than MY 2022/23.

International Outlook

Global Rapeseed Crush Reduced On Lower Supply

The MY 2023/24 global rapeseed production forecast is marginally lower this month by 0.1 million metric tons to 85.0 million metric tons on lower production in Canada, which is partially offset by a higher rapeseed crop in the European Union (EU). Global rapeseed trade is reduced by 0.5 million metric tons to 17.0 million metric tons for 2023/24 on lower exports from Canada and Russia. Rapeseed imports for Bangladesh, Japan, the EU, and Mexico are lowered this month on lower domestic demand.

Global rapeseed crush for MY 2023/24 is forecast at 81.1 million metric tons, 0.3 million metric tons lower than last month's forecast and marginally higher than estimated crush for MY 2022/23. The rapeseed crush forecast for Japan, Mexico, and Bangladesh is reduced this month on lower domestic rapeseed oil and rapeseed meal demand. The global 2023/24 rapeseed ending stocks are marginally higher this month and estimated at 6.2 million metric tons on higher rapeseed stocks in the EU.

The EU's rapeseed production is projected at 20 million metric tons, 0.3 million metric tons higher than last month's forecast on higher harvested acreage. Rapeseed harvested acreage is increased this month by 0.1 million hectares to 6.3 million hectares on higher area as reported by members of the EU. Rapeseed yields are forecast this month at 3.18 tons per hectare, marginally lower than last month. The higher-than-expected harvest area in the EU—especially in Poland—has contributed to a higher production forecast. The EU's rapeseed imports for MY 2023/24 are reduced by 0.2 million metric tons to 5.2 million metric tons on higher domestic supply. If realized, rapeseed imports would be the lowest since MY 2018/19. The EU's rapeseed crush forecast is unchanged this month and stands at 24.4 million metric tons.

Canada's rapeseed production forecast for 2023/24 is lowered this month by 0.4 million metric tons to 17.8 million metric tons on lower yields. The yields are reduced this month by 2 percent to 2.02 tons per hectare. The harvest results in Canada's Prairie Provinces, particularly in Alberta and Saskatchewan, are lower than anticipated.

As a result of lower supply, Canada's rapeseed export forecast for MY 2023/24 is reduced by 0.4 million metric tons to 7.5 million metric tons. Rapeseed crush forecast is unchanged this month, supported by strong demand for rapeseed oil. Canada's rapeseed ending stocks for MY

2023/24 are estimated at 1.2 million metric tons, unchanged from last month's forecast but 0.3 million metric tons lower than estimated rapeseed stocks for MY 2022/23.

Unfavorable Weather Impacts India's Oilseed Output

India's total oilseed production (i.e., peanut, rapeseed, soybean, sunflowerseed, copra, palm kernel, and cottonseed) for MY 2023/24 is forecast at 40.9 million metric tons, down 1.2 million metric tons from last month's forecast and down 1.4 million metric tons from production in MY 2022/23. Soybean, groundnut, and sunflowerseed production forecasts are lowered this month, while other oilseeds are unchanged. As a result of lower oilseed supply, India's total oilseed crush for 2023/24 is forecast at 33.5 million metric tons, down 0.6 million metric tons from last month's forecast and down 1.2 million metric tons from estimated crush in MY 2022/23. With lower domestic oil supply and growing domestic vegetable oil consumption, India's vegetable oil imports are raised this month.

India's soybean production for MY 2023/24 is forecast at 11 million metric tons, down 1.0 million metric tons from last month on lower yield. Yield is estimated at 0.85 tons per hectare, down nearly 8 percent from last month and 11 percent from MY 2022/23. The harvested soybean area is estimated at 13 million hectares, unchanged from last month, but up 7 percent from last year. The mixed weather conditions across the major soybean producing States of Madhya Pradesh, Maharashtra, and Rajasthan affected proper pod filling development. The soybean regions experienced near record low rainfall in August followed by near record high rainfall in September, which negatively impacted the yields.

India's groundnut production forecast for MY 2023/24 is reduced this month by 0.2 million metric tons to 6.4 million metric tons on a lower harvested area. The harvested area is estimated at 5.3 million hectares, down 0.2 million hectares from last month. Yield is forecast at 1.21 tons per hectare, down 4 percent from last year.

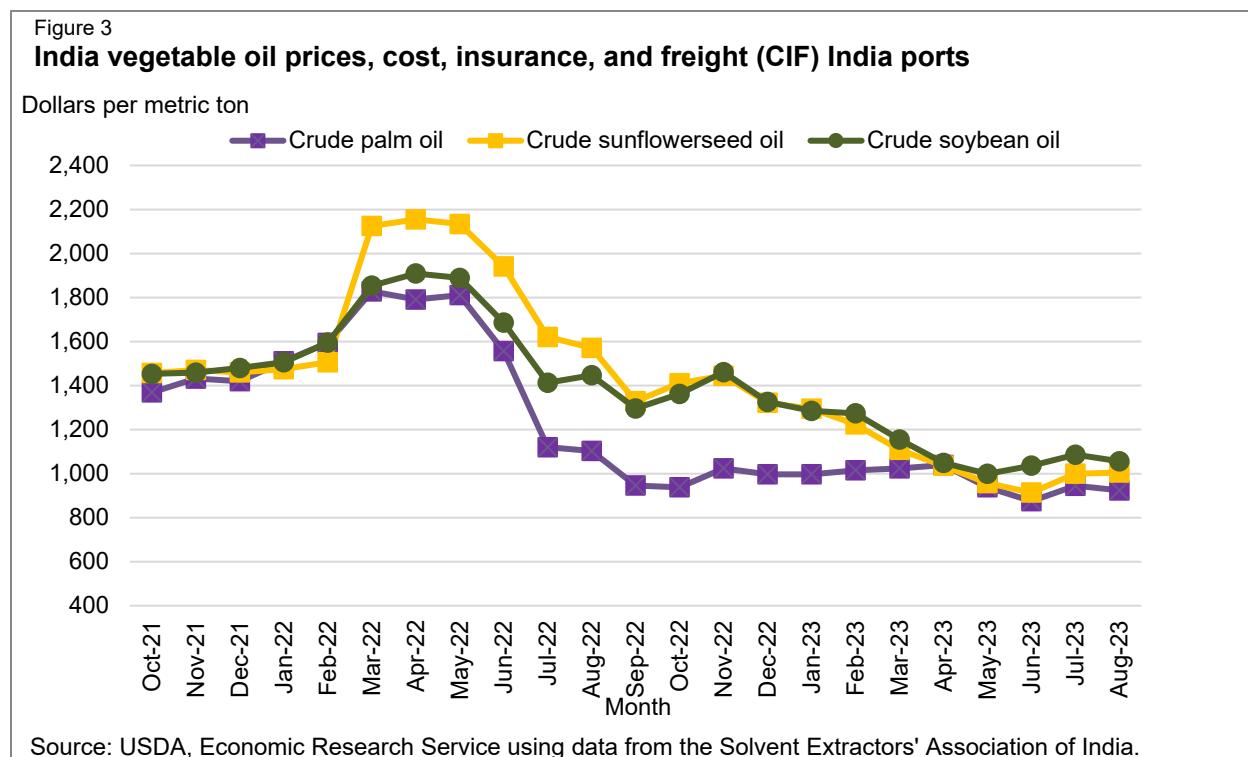
The sunflowerseed production forecast for MY 2023/24 is reduced by 50,000 metric tons from last month to 150,000 metric tons. Sunflowerseed harvested area is reduced by 50,000 hectares to 200,000 hectares. Yield is forecast at 0.75 tons per hectare, down 1 percent from last month's forecast, but 13 percent higher than the MY 2022/23 yield.

As a result of lower soybean supply, India's soybean crush forecast is reduced this month by 0.4 million metric tons to 9.5 million metric tons. Furthermore, ending stocks are expected to decline to 1.1 million metric tons, down 0.3 million metric tons from last month and 0.5 million metric tons lower from last year. With the lower soybean crush, the soybean meal and oil

production are reduced this month by 0.3 million metric tons and 70,000 metric tons to 7.6 million metric tons and 1.7 million metric tons, respectively. With lower soybean meal supply forecast, soybean meal exports are reduced this month by 0.3 million metric tons to 0.6 million metric tons. Reduced supply of soybean oil is likely to be offset by higher other vegetable oil imports.

India's total vegetable oil imports for MY 2023/24 are forecast to reach 15.4 million metric tons, up 0.8 million metric tons from last month but down 1.5 million metric tons from MY 2022/23. Sunflowerseed oil imports are increased this month by 0.5 million metric tons to 2.7 million metric tons on higher demand. Palm oil imports are raised this month to 9.3 million metric tons, up 0.3 million tons from last month's forecast.

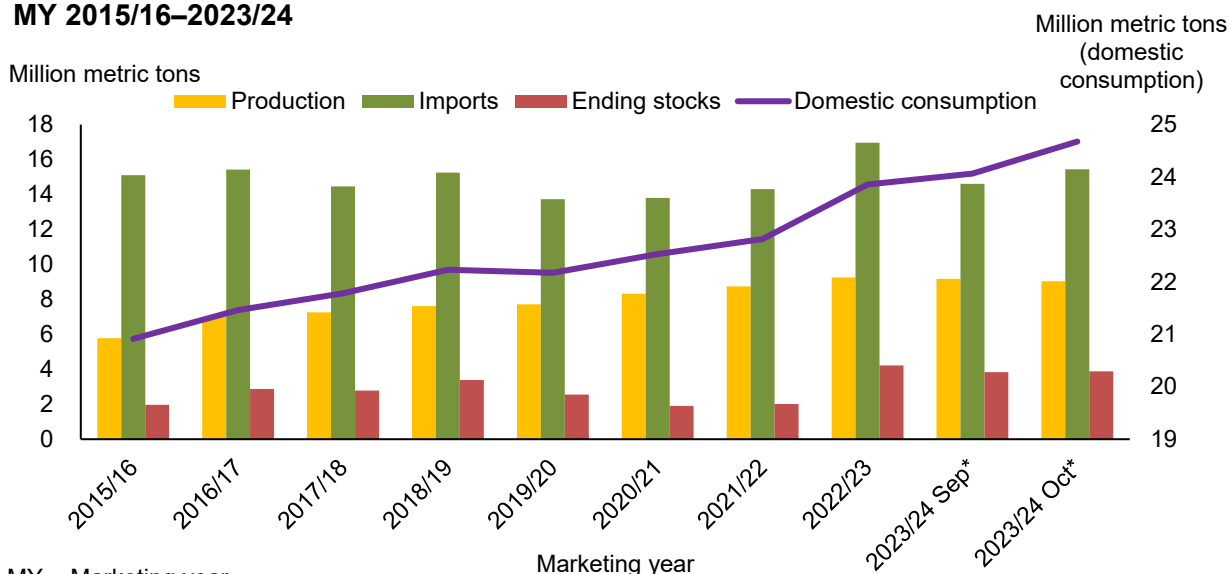
Notably, the MY 2022/23 vegetable oil imports increased this month by 0.5 million metric tons to a record of 17.0 million metric tons on higher arrivals. Palm oil imports topped near 10 million metric tons and accounted for 59 percent of the total vegetable oil imports. Soybean oil imports are estimated at 3.9 million metric tons, down 0.3 million metric tons from the previous year. Sunflower oil imports for MY 2022/23 are estimated to reach a record of 3 million metric tons on higher imports from the Black Sea. Due to higher sunflowerseed oil supply, the sunflowerseed oil price was near the level of palm oil prices in India last spring, which is atypical (figure 3). In addition, the higher imports of vegetable oil are supported by the current low 5.5-percent duty on crude palm oil, soybean oil, and sunflowerseed oil.



The lower vegetable oil prices boosted growth in domestic vegetable oil consumption and helped to replenish stocks in India. India's vegetable oils consumption is increased this month for MY 2022/23 by 0.2 million metric tons and for MY 2023/24 by 0.6 million metric tons and is estimated at 23.9 million metric tons and 24.7 million metric tons, respectively (figure 4). India's total vegetable oil ending stocks for MY 2023/24 are forecast at 3.9 million metric tons, marginally higher than last month but below a record level of 4.2 million metric tons in MY 2022/23.

Figure 4

Vegetable oils production, imports, consumption and stocks in India, MY 2015/16–2023/24



MY = Marketing year

Note: Asterisk (*) denotes forecast.

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

Global Sunflowerseed Crush Increases on Higher Supply

Global sunflowerseed production for MY 2023/24 is forecast at 56.4 million metric tons, up 0.6 million metric tons from last month and 4.0 million metric tons higher than estimated sunflowerseed production for MY 2022/23. Larger crop estimates for Argentina more than offset the lower sunflowerseed crop in Kazakhstan. Argentina's sunflowerseed crop is raised by 0.8 million metric tons this month to 4.7 million metric tons on higher sown area. Global sunflowerseed crush forecast for MY 2023/24 is raised this month by 0.9 million metric tons to 52.3 million metric tons on higher sunflowerseed supply. The higher sunflowerseed crush volume is forecast in Argentina, Russia, and Ukraine. Argentina sunflowerseed crush for MY 2023/24 is forecast at 4.0 million metric tons, 0.4 million metric tons higher than last month's forecast and 0.5 million metric tons higher than the estimated crush for MY 2022/23. Russia's

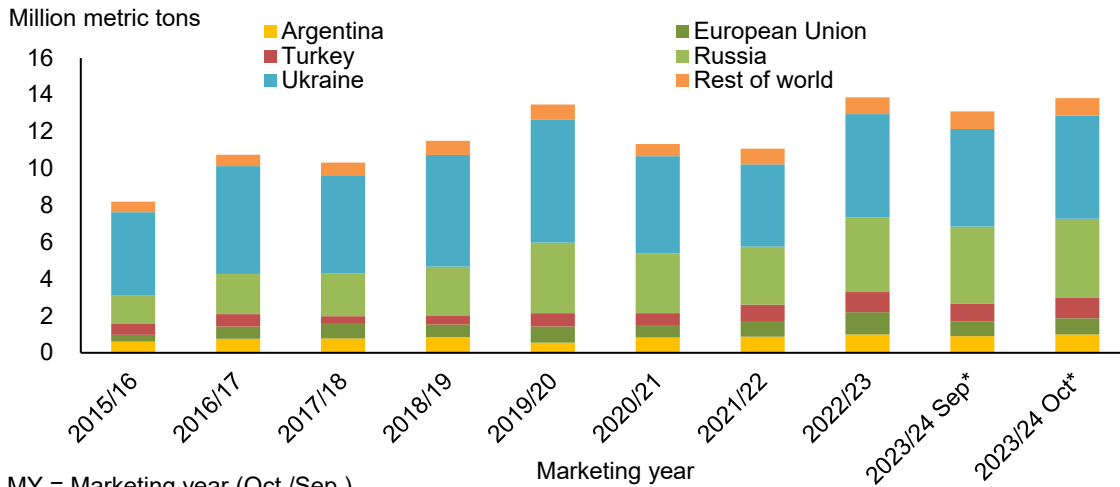
sunflowerseed and Ukraine's crush forecast are both raised this month by 0.4 million metric tons and 0.7 million metric tons, respectively, to 16.4 million metric tons and 14.0 million metric tons on higher sunflowerseed products demand. Notably, Ukraine's sunflowerseed crush for MY 2022/23 is estimated at 13.8 million metric tons, 0.8 million metric tons higher than last month's forecast and 3.0 million metric tons higher than the crush volume in MY 2021/22.

With a higher global sunflowerseed crush forecast for MY 2023/24, global sunflowerseed oil production in the MY 2023/24 is projected to reach 22.0 million metric tons, which is 0.4 million metric tons higher than last month's forecast and 0.5 million metric tons higher than last year. Russia and Ukraine are the leading producers of sunflowerseed oil and they are expected to contribute 30 percent and 27 percent of global production, respectively. Russia exports nearly 70 percent of the sunflowerseed oil production, whereas Ukraine exports over 90 percent of its sunflowerseed oil production. Consequently, global sunflowerseed oil trade for MY 2023/24 is raised this month by 0.7 million metric tons to 13.8 million metric tons with strong demand from India and the EU.

Ukraine's sunflowerseed oil exports for MY 2023/24 are raised this month by 0.3 million metric tons to 5.6 million metric tons. In addition, MY 2022/23 estimates for sunflowerseed oil exports are increased by 0.4 million metric tons to 5.6 million metric tons on higher year-to-date shipments. Ukraine's sunflowerseed oil exports accounted for 40 percent of the global sunflowerseed oil trade in MY 2022/23. Ukraine's sunflowerseed oil export price averaged \$770.00 per metric ton in September 2023, while Malaysian palm oil prices averaged \$833.00 per metric ton. Historically, sunflowerseed oil has traded at a premium to Malaysian palm oil. Russia's sunflowerseed oil export forecast is increased this month by 0.1 million metric tons to a record high of 4.3 million metric tons. Argentina's sunflowerseed oil exports are forecast to reach 1.0 million metric tons, 0.1 million metric tons higher than last month's forecast.

Figure 5

Sunflowerseed oil global trade by major exporters, MY 2015/16–2023/24



MY = Marketing year (Oct./Sep.)

Note: Asterisk (*) denotes forecast.

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

Global sunflowerseed meal production is also revised upwards this month by 0.3 million metric tons to 23.4 million metric tons. Consequently, the global sunflower meal export forecast for MY 2023/24 is raised to 9.4 million metric tons, 0.5 million metric tons higher than last month's forecast. Sunflowerseed meal imports for China, the EU, and Turkey are increased on higher domestic demand. China's sunflower meal imports for MY 2023/24 are forecast at a record 3.5 million metric tons, 0.2 million metric tons higher than last month and 0.5 million metric tons higher than MY 2022/23.

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