Grains and Oilseeds Outlook

Friday, February 26, 2016

www.usda.gov/oce/forum
GRAINS AND OILSEEDS OUTLOOK FOR 2016
Prepared by Members of the
Wheat, Feed Grains, Rice, and Oilseeds Interagency Commodity Estimates Committees
U.S. Department of Agriculture

Introduction

This paper provides USDA’s projections of 2016/17 supply and demand for wheat, corn, rice, and soybeans and products. Projections presented in this paper include implications of the January 12th Winter Wheat Seedings report and assume normal weather conditions for spring planting and summer crop development this year. These projections will be updated in the May 10th World Agricultural Supply and Demand Estimates (WASDE) report. The May WASDE will incorporate farmers’ 2016 planting intentions as reported in the March 31st Prospective Plantings report and survey-based forecasts for winter wheat production, as well as global, country-by-country supply and demand projections.

Summary

The early 2016/17 outlook for grains and oilseeds reflects large domestic and world supplies with reduced prospects for prices and producer returns. Lower returns reduce incentives for plantings of wheat and soybeans, but shifts in relative prices and lower input costs support a year-to-year increase in expected corn plantings. Wheat production is projected to decline on lower planted area, which is only partially offset by higher yields. Higher carryin stocks, however, raise expected supplies from 2015/16. Larger supplies are only partially offset by higher use, boosting ending stocks to the highest level in 29 years. Corn plantings are projected to increase slightly with lower prices for fertilizer and fuel. With higher production and larger beginning stocks, corn supplies are projected to be record high. Growth in usage is driven mostly by higher projected feed and residual use, largely reflecting expansion in the livestock sector. Strong competition from South America limits the increase in exports. U.S. corn ending stocks are projected at a 12-year high. Soybean planted area is projected to decline slightly from last year on lower expected prices and producer returns. With sharply higher beginning stocks more than offsetting lower production, soybean supplies, as with corn, are projected to be record high. With a significant rebound in exports and modest crush gains, 2016/17 soybean ending stocks are projected to decline slightly from the previous year. Rice planted acreage and production for 2016 are projected to increase from 2015. In the southern states, long-grain area is expected to expand, whereas medium- and short-grain area is expected to decline. Total use is projected to be the highest in 6 years, as both exports and domestic use are expected to increase. All-rice ending stocks are projected to reach the lowest level in 3 years as lower expected medium- and short-grain stocks more than offset higher long-grain stocks. The all-rice price is projected unchanged from 2015/16. Prices for wheat, corn, and soybeans are all expected to fall in 2016/17.

---

1This paper incorporates contributions by analysts from the World Agricultural Outlook Board, the Economic Research Service, the Farm Service Agency, and the Foreign Agricultural Service.
Planted Acreage Outlook for 2016 (Figure 1 & Table 1)

The 2016 outlook for U.S. plantings of wheat, corn, and soybeans is driven by reduced prospects for producer returns as large global supplies and modest demand growth for all three crops keep downward pressure on prices. Plantings of the three crops in a given year are highly correlated with prices in the previous year as shown in Figure 1. Forecasts for 2015/16 wheat, corn, and soybean prices suggest a continued drop in combined plantings in 2016, falling from their recent high just 2 years ago. The combined planted area for the three crops is projected at 223.5 million acres, down 1.8 million from last year with wheat accounting for most of the decline. Wheat area is projected lower reflecting the sharp drop in winter wheat seedings and lower expected spring wheat area. Soybean plantings are projected slightly lower due to lower prices, reduced opportunities for double cropping with the decline in winter wheat area, and a projected increase in corn plantings. Corn plantings are expected to increase slightly as lower prices for fertilizer and fuel support returns for corn relative to other crops.

Wheat planted area for 2016 is projected down 3.6 million acres to 51.0 million. Winter wheat seeded area in the January 12, 2016, Winter Wheat Seedings report was 36.6 million acres, down 2.9 million from last year mostly resulting from a drop in Hard Red Winter (HRW), which was estimated down 2.5 million acres at 26.5 million. Soft Red Winter (SRW) area was estimated down 0.4 million acres to 6.7 million. Winter White (WW) seedings were raised fractionally to 3.4 million acres. Spring wheat (including Durum) plantings are expected to decline 5 percent.

Corn plantings for 2016 are projected at 90.0 million acres, up 2.0 million from the 2015 final estimate, and 0.8 million above last year’s intended plantings from the March Prospective Plantings report. Relative returns are expected to favor increased corn plantings even though prices are down again this year. New-crop futures during the first half of February averaged $3.88 per bushel, down $0.27 from early February last year. Reported cash bids for fall 2016 delivery at Central Illinois elevators averaged $3.60 per bushel the first half of February 2016 compared with $3.78 per bushel for the same period last year based on the Agricultural Marketing Service (AMS) Illinois Grain Prices in Country Elevators (GX_GR113) report. Input prices, however, have also fallen with AMS reporting nitrogen fertilizer prices down 19-23 percent and farm diesel fuel down 35 percent from last year at this time in the bi-weekly Illinois Production Cost Report (GX_GR210).

Soybean plantings for 2016 are projected at 82.5 million acres, slightly below last year and 2.1 million below the record intentions in the March 2015 Prospective Plantings report as prices and returns decline for the third consecutive year. New-crop futures prices during the first half of February 2016 averaged just over $8.85 per bushel, down 8 percent from last year and down 21 percent from 2014. Cash bids for fall delivery in Central Illinois during the first half of February 2016, at $8.52 per bushel, are sharply below new-crop bids in 2014 that soared to above $12 during spring planting and pushed soybean area to a record 83.3 million acres.

Total 2016 rice planted acreage is projected at 2.8 million acres, up 7 percent from the prior year. Long grain plantings are expected to rise 12 percent to 2.1 million acres. Lower expected returns for most competing crops and significantly lower energy costs support long grain acreage expansion. Medium and short grain plantings in 2016 are projected to decline 5 percent to 700,000 acres.
Wheat Supply, Demand, and Price Outlook for 2016/17 (Table 2)

**Wheat Supplies:** Wheat production is expected to decrease 3 percent to 1,991 million bushels on lower planted area. The production decrease occurs despite a higher projected yield. The projected 2016 harvested-to-planted ratio is down slightly from last year’s above average ratio. The multi-year drought in the Plains has been broken and the drought in the Northwest has improved. The greater concern this year has been excessive moisture in the SRW wheat belt in the Southern Midwest and Ohio Valley, although this has improved recently. In general, wheat growing conditions for 2016 have been mostly favorable. Harvested area for 2016 is projected at 43.4 million acres, down 3.7 million acres from the previous year. The 2016 all-wheat yield is projected at 45.9 bushels per acre, up from 43.6 bushels per acre in 2015 and the highest since 2013.

Crop conditions for winter wheat are significantly improved from this time last year. Weighted by seeded area, the HRW states of Colorado, Kansas, Nebraska, Oklahoma, and Texas have 57 percent of their crop rated good to excellent compared to 44 percent last year at this time. Concerns for SRW have eased following a period of excessive rain earlier in the season. As an indication for SRW, 65 percent of the Illinois winter wheat crop is rated as good to excellent, compared to 49 percent a year ago.

Production is expected to decrease in 2016 for HRW wheat, Hard Red Spring (HRS) wheat, and Durum, which will be partly offset by an increase in WW. SRW production is projected mostly flat on the year, but below the 5-year average. HRW wheat seedings are down 9 percent, but improved weather conditions are expected to increase yields this year. Acreage for spring wheat (including Durum) is expected to decrease and a return to more normal yields will further reduce production.

The smaller wheat crop (down 61 million bushels) is more than offset by much larger beginning stocks and a small import increase. Total supplies for 2016/17 are raised 158 million bushels (5 percent) to 3,082 million.

**Wheat Domestic Use:** Domestic wheat use for 2016/17 is expected to increase 60 million bushels year-to-year, mostly due to higher feed and residual use. Wheat feed and residual use is projected at 200 million bushels, up 50 million bushels from the 2015/16 forecast supported by the rise in expected supplies and lower prices. The wheat-to-corn price ratio is projected lower in 2016/17, also encouraging expanded wheat feeding.

Food and seed use for 2016/17 is projected 10 million bushels higher driven mostly by population growth. Per capita flour consumption is expected to be nearly unchanged from 2015/16.

**Wheat Exports:** U.S. wheat exports in 2016/17 are projected to rise 75 million bushels from 2015/16 to 850 million. Despite this increase, competition from other wheat exporters will continue to limit gains in the U.S. share of world trade. World wheat production in 2016/17 is expected to drop following 3 consecutive records. Canada’s production is expected to be higher and farmers in Argentina are likely to plant more wheat due to the Government’s recent removal of export restrictions. The European Union is well positioned to have another bumper crop. Wheat output in both Russia and Ukraine is expected lower as adverse weather at planting time reduced winter wheat area. Global wheat trade is anticipated to be slightly lower than in 2015/16. Both China and Iran are expected to reduce imports on new government policies while Morocco’s import demand should climb due to unfavorable weather. Major exporting country ending stocks are expected to be abundant for the fifth straight year.
Wheat Ending Stocks and Farm Prices: U.S. wheat ending stocks for 2016/17 are projected to increase 2 percent to 989 million bushels. These would be the highest stocks since 1987/88. The stocks-to-use ratio, at 47.3 percent, is down from the projected 2015/16 ratio of 49.3 percent, but above the 5-year average of 34.8 percent. The 2016/17 season-average farm price is projected at $4.20 per bushel, down $0.80 from the midpoint of the range projected for 2015/16. Wheat prices are expected to remain under substantial pressure from large world supplies of wheat and corn.

Corn Supply, Demand, and Price Outlook for 2016/17 (Table 3)

Corn Supplies: Corn production in 2016 is projected at 13,825 million bushels, 2 percent higher than in 2015 as an increase in planted area more than offsets a small reduction in expected yield. Corn supplies for 2016/17 are projected 320 million bushels higher at a record 15,702 million as increases in beginning stocks and production more than offset a small reduction in imports. Imports are expected to decline as eastern Corn Belt supplies are more competitive in southeastern feed markets—noneetheless imports remain relatively high reflecting continued demand for imported organic corn. The national average corn yield is projected at 168.0 bushels per acre, just below the 2015 yield of 168.4 bushels, and assumes trend yield growth and normal growing season weather. Despite excessive rainfall in June and early-July that damaged crops in a swath from northeast Missouri to northwest Ohio last year, yields were above trend in many areas as cooler than normal July temperatures and adequate rainfall supported crop development. (For a more detailed explanation of factors underlying the yield outlook, see Westcott and Jewison, Weather Effects on Expected Corn and Soybean Yields, USDA, Economic Research Service, July 2013, http://www.ers.usda.gov/publications/fds-feed-outlook/fds-13g-01.aspx.)

Corn Use: Total corn use for 2016/17 is projected at 13,725 million bushels, up 180 million from 2015/16, but down slightly from the record 13,748 million in 2014/15. Higher feed and residual use is expected to account for the largest share of the year-to-year gain. Exports are projected to rise slightly in 2016/17, but remain below the levels of 2013/14 and 2014/15.

Corn Feed and Residual Use: Corn feed and residual use for 2016/17 is projected at 5,425 million bushels, up 125 million bushels from the 2015/16 forecast. The increase reflects higher residual disappearance with a larger crop and higher feeding with lower corn prices and growth in animal inventories. The number of cattle on feed is expected to increase in 2016 and again in 2017 as the cattle herd rebuilds. Gains in pork and broiler production are also expected with lower feed prices.

Corn Food, Seed, and Industrial Use: Food, seed, and industrial (FSI) use of corn in 2016/17 is projected at 6,600 million bushels, just 5 million bushels higher than the record forecast for 2015/16. Non-ethanol FSI categories are projected to increase 5 million bushels in 2016/17 as higher corn use for glucose and dextrose offsets a small decline for high fructose corn syrup (HFCS). Corn use for beverage and industrial alcohols, as well as use for food, cereals, and other products continue an upward trend mostly based on population growth.

Corn Used in Ethanol Production: Corn used for ethanol production is projected at 5,225 million bushels for 2016/17, unchanged from the 2015/16 forecast. The Energy Information Administration forecast for gasoline consumption, on a September-August basis, is nearly unchanged from 2015/16 to 2016/17. While lower gasoline prices boost miles driven, continuing increases in vehicle efficiency limit growth in fuel consumption.
**Corn Exports:** U.S. corn exports for 2016/17 are projected up 50 million bushels to 1,700 million. The modest increase from 2015/16 is supported by expected demand from traditional markets in Asia and Central America. U.S. exports face intense competition from Brazil, where the export of second-crop corn overlaps with the 2016/17 U.S. shipping season, and from Argentina, where the recent removal of export taxes and quotas and currency depreciation stimulate production and exports. Ukraine’s expected increase in 2016/17 summer-crop area also contributes to expected competition. For other exporters, low prices and continued strong domestic use are likely to limit incentives to export. Attractive prices and growth in foreign feed use are expected to support global corn import demand.

**Corn Ending Stocks and Farm Prices:** U.S. corn ending stocks for 2016/17 are projected at 1,977 million bushels, up 8 percent from 2015/16 and the highest since 2004/05 when stocks last topped 2 billion bushels. The 2016/17 stocks-to-use ratio is projected at 14.4 percent, up from the 13.6 percent forecast for 2015/16, but well below the 19.8 percent ratio in 2004/05. The 2016/17 season-average farm price is projected at $3.45 per bushel, down $0.15 from the midpoint of the projected range for 2015/16, reflecting the rising supplies and limited growth in demand.

**Rice Supply, Demand, and Price Outlook for 2016/17** (Tables 4 & 5)

**Rice Supplies:** The 2016/17 outlook is for larger total supplies as increased production more than offsets lower carryin stocks. Total 2016 rice planted acreage is projected up 7 percent from last year at 2.80 million acres. Long grain plantings are expected to rise 12 percent to 2.10 million acres as area impacted by prevented planting last year is anticipated to be returned to production. Furthermore, lower expected returns for most competing crops and lower energy costs support the long grain acreage expansion. In contrast, medium- and short-grain plantings are expected to decline 5 percent from the prior year to 700,000 acres. Plantings in southern states are expected to decline as more area is returned to long-grain production. California, which produces the majority of the U.S. medium and short grain rice, is expected to increase acreage on improved prospects for water availability.

Assuming a normal harvested-to-planted relationship, total harvested rice acreage is projected at 2.77 million acres, with 2.08 million acres of long-grain and 0.69 million acres of medium- and short-grain. For all rice, average field yields are forecast to rebound 2 percent from 2015 to 7,633 pounds per acre, assuming normal weather and planting dates. This would be the second-highest yield on record, slightly below the 2013 record. Average yields are forecast to return to trend for long-grain rice at 7,456 pounds per acre, up 3 percent from the prior year. The medium- and short-grain rice yield is forecast up 1 percent to 8,168 pounds per acre as a larger proportion of this class is expected to be grown in California, where yields are typically higher. Total 2016 rice production is projected to increase by 10 percent to 211.5 million cwt, based on the larger area and higher yields. Long grain rice accounts for all of the production increase with the crop projected at 155.0 million cwt, up 17 percent from 2015. Medium- and short-grain rice production is projected at 56.5 million cwt, down 5 percent from 2015.

All-rice total supplies for 2016/17 are projected to increase by 5 percent to 277.9 million cwt with production gains partially offset by lower projected carryin. All of the supply increase occurs in long-grain rice, where supplies are projected to increase 11 percent to 198.9 million cwt as larger projected production and higher imports more than offset lower beginning stocks. Medium- and short-grain supplies are projected to be 7 percent lower in 2016/17 at 77.0 million cwt due to a smaller crop, smaller carryin, and only marginally higher imports. Total rice imports in 2016/17 are projected at 24.5 million cwt, up 2 percent from last year. Long-grain imports are forecast at 21.0 million cwt, with aromatic varieties from Thailand, India, and Pakistan accounting for most U.S. long-grain rice imports.
Rice Domestic Use: All-rice total domestic and residual usage for 2016/17 is projected 7 percent higher at 130.0 million cwt. Long-grain domestic and residual use is projected to increase to 100.0 million cwt. In contrast, medium- and short-grain domestic and residual use is projected to decline 9 percent to 30.0 million cwt.

Rice Exports: All-rice exports for 2016/17 are projected at 107.0 million cwt, up 5 percent from a year earlier. The increase is due to greater exportable supplies of long-grain rice and increased price competitiveness. Long-grain exports are projected at 74.0 million cwt, up 7 percent. Despite lower projected supplies, U.S. medium- and short-grain rice exports are projected at 33.0 million cwt, unchanged from 2015/16, as Australia’s supplies are expected to remain constrained because of drought.

Rice Ending Stocks and Prices: Total all-rice ending stocks are projected at 40.9 million cwt, down 2 percent from 2015/16, as higher long-grain stocks are more than offset by a decline in medium- and short-grain stocks. Long-grain ending stocks are forecast to rise by 8 percent to 24.9 million cwt. The season-average farm price for long-grain rice is projected at $11.30 per cwt, unchanged from 2015/16. Medium- and short-grain ending stocks are forecast to decrease 18 percent to 14.0 million cwt. The season-average farm price for medium- and short-grain rice is projected at $16.60 per cwt, up 10 cents from the 2015/16 midpoint. The 2016/17 all rice price is projected at $12.90 per cwt, unchanged from the midpoint of 2015/16.

Soybean Supply, Demand, and Price Outlook for 2016/17 (Tables 6, 7 & 8)

Soybean Supplies: Soybean supplies for 2016/17 are projected at 4,289 million bushels, up 3 percent from 2015/16 with sharply higher beginning stocks more than offsetting lower production prospects. Soybean production for 2016 is projected to fall to 3,810 million bushels, 3 percent lower than last year mainly due to lower yields. The national average soybean yield is projected at 46.7 bushels per acre, down 1.3 bushels from last year’s record. The trend projection is based on a weather-adjusted yield model that accounts for temperature and rainfall during the growing season. (See Westcott and Jewison, Weather Effects on Expected Corn and Soybean Yields, USDA, Economic Research Service, July 2013). Despite lower yields and slightly lower harvested area, the projected 2016 harvest would be the third largest, exceeded only by the previous 2 years.

Soybean Domestic Use: Soybean domestic use is projected up 1 percent in 2016/17 to 2,025 million bushels. Crush is projected to expand by 20 million bushels to 1,900 million mainly due to higher domestic demand for soybean meal. With gains in pork and poultry production and lower soybean meal prices, domestic soybean meal use is projected up 2 percent at 34.2 million short tons. Soybean meal prices for 2016/17 are projected to fall to a 10-year low at $280 per short ton, in part reflecting strong export competition from South America. Despite a lower value for soybean meal, soybean crush margins will be supported by higher soybean oil prices.

Domestic use of soybean oil is projected up 2 percent for 2016/17 to 20.0 billion pounds primarily on expanding use for biodiesel. U.S. consumption of soybean oil for biodiesel production is projected at 5.8 billion pounds, up 300 million from 2015/16. The projection reflects increases in biofuel requirements under the Renewable Fuel Standard for 2016 and the extension of a federal biodiesel blending credit through the end of the calendar year. Edible consumption of soybean oil is also projected to rise, though growth will be limited by larger supplies of canola oil.
With higher soybean oil use exceeding supply gains, 2016/17 ending stocks are projected to decrease 3 percent to 2.0 billion pounds. Soybean oil prices are projected to average 32 cents per pound, up 2 cents from 2015/16.

**Soybean Exports:** U.S. soybean exports are expected to reach 1,825 million bushels in 2016/17, a significant increase over 2015/16 and the second-largest volume on record. Lower soybean prices will continue to spur growth in global demand, with U.S. exports sharing gains in trade with South American producers. Global soybean trade will continue to be driven by China, which accounts for nearly two-thirds of world trade. Although the year-to-year increase for China soybean imports is expected to slow on a percentage basis after nearly two decades of double-digit growth, China’s large soybean import market should support a strong absolute increase in 2016/17. In other markets, where import growth has been more gradual, modest gains in response to lower prices are expected.

Global soybean meal trade is forecast to expand in 2016/17 as lower prices stimulate additional demand. However, growing competition from Argentina, especially in light of the country’s recent peso depreciation, is expected to meet the increase in global demand. As a result, U.S. soybean meal exports in 2016/17 are projected unchanged at 11.2 million short tons.

U.S. soybean oil exports are projected to remain unchanged at 2.3 billion pounds in 2016/17 as increased domestic use more than offsets supply gains. Strong competition from expected larger supplies in Argentina will also limit prospects for growth in U.S. soybean oil exports.

**Soybean Ending Stocks and Farm Prices:** U.S. soybean stocks for 2016/17 are projected at 440 million bushels, down 10 million from 2015/16. With a 4-percent increase in total soybean disappearance, the ending stocks-to-use ratio would be 11.4 percent, down slightly from the 9-year high projected for 2015/16. With increased soybean supplies, ample ending stocks, and lower corn prices, the soybean season-average farm price is projected at $8.50 per bushel, down 3 percent from the $8.80 mid-point of the 2015/16 projected range.
Figure 1. Wheat, Corn, and Soybean Plantings vs. Lagged Prices

Table 1. Wheat, Corn, and Soybean Planted Acreage, 2009-2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>59.0</td>
<td>52.6</td>
<td>54.3</td>
<td>55.3</td>
<td>56.2</td>
<td>56.8</td>
<td>54.6</td>
<td>51.0</td>
</tr>
<tr>
<td>Corn</td>
<td>86.4</td>
<td>88.2</td>
<td>91.9</td>
<td>97.3</td>
<td>95.4</td>
<td>90.6</td>
<td>88.0</td>
<td>90.0</td>
</tr>
<tr>
<td>Soybeans</td>
<td>77.5</td>
<td>77.4</td>
<td>75.0</td>
<td>77.2</td>
<td>76.8</td>
<td>83.3</td>
<td>82.7</td>
<td>82.5</td>
</tr>
<tr>
<td>Total</td>
<td>222.9</td>
<td>218.2</td>
<td>221.2</td>
<td>229.8</td>
<td>228.4</td>
<td>230.7</td>
<td>225.3</td>
<td>223.5</td>
</tr>
</tbody>
</table>

1/ Projection
Table 2. Wheat Supply, Demand, and Price, 2013/14-2016/17

<table>
<thead>
<tr>
<th></th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16 1/</th>
<th>2016/17 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area planted (mil. ac.)</td>
<td>56.2</td>
<td>56.8</td>
<td>54.6</td>
<td>51.0</td>
</tr>
<tr>
<td>Area harvested</td>
<td>45.3</td>
<td>46.4</td>
<td>47.1</td>
<td>43.4</td>
</tr>
<tr>
<td>Yield (bu./ac.)</td>
<td>47.1</td>
<td>43.7</td>
<td>43.6</td>
<td>45.9</td>
</tr>
<tr>
<td>Production (mil. bu.)</td>
<td>2,135</td>
<td>2,026</td>
<td>2,052</td>
<td>1,991</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>718</td>
<td>590</td>
<td>752</td>
<td>966</td>
</tr>
<tr>
<td>Imports</td>
<td>173</td>
<td>149</td>
<td>120</td>
<td>125</td>
</tr>
<tr>
<td>Supply</td>
<td>3,026</td>
<td>2,766</td>
<td>2,924</td>
<td>3,082</td>
</tr>
<tr>
<td>Feed &amp; residual</td>
<td>228</td>
<td>122</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Food &amp; seed</td>
<td>1,032</td>
<td>1,037</td>
<td>1,033</td>
<td>1,043</td>
</tr>
<tr>
<td>Total domestic use</td>
<td>1,260</td>
<td>1,159</td>
<td>1,183</td>
<td>1,243</td>
</tr>
<tr>
<td>Exports</td>
<td>1,176</td>
<td>854</td>
<td>775</td>
<td>850</td>
</tr>
<tr>
<td>Total use</td>
<td>2,436</td>
<td>2,014</td>
<td>1,958</td>
<td>2,093</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>590</td>
<td>752</td>
<td>966</td>
<td>989</td>
</tr>
<tr>
<td>Stocks/use (percent)</td>
<td>24.2</td>
<td>37.3</td>
<td>49.3</td>
<td>47.3</td>
</tr>
<tr>
<td>Season-avg. farm price ($/bu.)</td>
<td>6.87</td>
<td>5.99</td>
<td>5.00</td>
<td>4.20</td>
</tr>
</tbody>
</table>

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates*, February 9, 2016. The season-average price is the midpoint of the projected range from the same report.

2/ Projections based on analysis by USDA’s Wheat Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.
<table>
<thead>
<tr>
<th></th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16 1/</th>
<th>2016/17 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area planted (mil. ac.)</td>
<td>95.4</td>
<td>90.6</td>
<td>88.0</td>
<td>90.0</td>
</tr>
<tr>
<td>Area harvested</td>
<td>87.5</td>
<td>83.1</td>
<td>80.7</td>
<td>82.3</td>
</tr>
<tr>
<td>Yield (bu./ac.)</td>
<td>158.1</td>
<td>171.0</td>
<td>168.4</td>
<td>168.0</td>
</tr>
<tr>
<td>Production (mil. bu.)</td>
<td>13,829</td>
<td>14,216</td>
<td>13,601</td>
<td>13,825</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>821</td>
<td>1,232</td>
<td>1,731</td>
<td>1,837</td>
</tr>
<tr>
<td>Imports</td>
<td>36</td>
<td>32</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Supply</td>
<td>14,686</td>
<td>15,479</td>
<td>15,382</td>
<td>15,702</td>
</tr>
<tr>
<td>Feed &amp; residual</td>
<td>5,040</td>
<td>5,315</td>
<td>5,300</td>
<td>5,425</td>
</tr>
<tr>
<td>Ethanol 3/</td>
<td>5,124</td>
<td>5,209</td>
<td>5,225</td>
<td>5,225</td>
</tr>
<tr>
<td>Food, seed &amp; other industrial</td>
<td>1,369</td>
<td>1,359</td>
<td>1,370</td>
<td>1,375</td>
</tr>
<tr>
<td>Total food, seed &amp; industrial</td>
<td>6,493</td>
<td>6,568</td>
<td>6,595</td>
<td>6,600</td>
</tr>
<tr>
<td>Total domestic use</td>
<td>11,534</td>
<td>11,883</td>
<td>11,895</td>
<td>12,025</td>
</tr>
<tr>
<td>Exports</td>
<td>1,920</td>
<td>1,864</td>
<td>1,650</td>
<td>1,700</td>
</tr>
<tr>
<td>Total use</td>
<td>13,454</td>
<td>13,748</td>
<td>13,545</td>
<td>13,725</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>1,232</td>
<td>1,731</td>
<td>1,837</td>
<td>1,977</td>
</tr>
<tr>
<td>Stocks/use (percent)</td>
<td>9.2</td>
<td>12.6</td>
<td>13.6</td>
<td>14.4</td>
</tr>
<tr>
<td>Season-avg. farm price ($/bu.)</td>
<td>4.46</td>
<td>3.70</td>
<td>3.60</td>
<td>3.45</td>
</tr>
</tbody>
</table>

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates*, February 9, 2016. The season-average price is the midpoint of the projected range from the same report.

2/ Projections based on analysis by USDA’s Feed Grains Interagency Commodity Estimates Committee.

3/ Corn used to produce ethanol and by-products including, distillers’ grains, corn gluten feed, corn gluten meal, and corn oil.

Note: Totals may not add due to rounding.
Table 4. Rice Supply, Demand, and Price, 2013/14-2016/17

<table>
<thead>
<tr>
<th>All Rice</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area planted (mil. ac.)</td>
<td>2.49</td>
<td>2.95</td>
<td>2.61</td>
<td>2.80</td>
</tr>
<tr>
<td>Area harvested</td>
<td>2.47</td>
<td>2.93</td>
<td>2.58</td>
<td>2.77</td>
</tr>
<tr>
<td>Yield (pounds/ac.)</td>
<td>7,694</td>
<td>7,576</td>
<td>7,470</td>
<td>7,633</td>
</tr>
<tr>
<td>Production (mil. cwt)</td>
<td>190.0</td>
<td>222.2</td>
<td>192.3</td>
<td>211.5</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>36.4</td>
<td>31.8</td>
<td>48.5</td>
<td>41.9</td>
</tr>
<tr>
<td>Imports</td>
<td>23.1</td>
<td>24.7</td>
<td>24.0</td>
<td>24.5</td>
</tr>
<tr>
<td>Supply</td>
<td>249.5</td>
<td>278.7</td>
<td>264.9</td>
<td>277.9</td>
</tr>
<tr>
<td>Total domestic &amp; residual use</td>
<td>124.4</td>
<td>129.9</td>
<td>121.0</td>
<td>130.0</td>
</tr>
<tr>
<td>Exports</td>
<td>93.3</td>
<td>100.3</td>
<td>102.0</td>
<td>107.0</td>
</tr>
<tr>
<td>Total use</td>
<td>217.7</td>
<td>230.2</td>
<td>223.0</td>
<td>237.0</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>31.8</td>
<td>48.5</td>
<td>41.9</td>
<td>40.9</td>
</tr>
<tr>
<td>Stocks/use (percent)</td>
<td>14.6</td>
<td>21.1</td>
<td>18.8</td>
<td>17.3</td>
</tr>
<tr>
<td>Season avg. farm price ($/cwt.)</td>
<td>16.30</td>
<td>13.40</td>
<td>12.90</td>
<td>12.90</td>
</tr>
</tbody>
</table>

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates*, February 9, 2016. The season-average farm price is the midpoint of the projected price range from the same report. 2/ Projections based on the analysis by USDA’s Rice Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.
<table>
<thead>
<tr>
<th>Rice-by-class</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long-grain</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area planted (mil. ac.)</td>
<td>1.78</td>
<td>2.21</td>
<td>1.87</td>
<td>2.10</td>
</tr>
<tr>
<td>Area harvested</td>
<td>1.77</td>
<td>2.20</td>
<td>1.84</td>
<td>2.08</td>
</tr>
<tr>
<td>Yield (pounds/ac)</td>
<td>7,464</td>
<td>7,407</td>
<td>7,218</td>
<td>7,456</td>
</tr>
<tr>
<td>Production (mil. cwt)</td>
<td>131.9</td>
<td>162.7</td>
<td>133.0</td>
<td>155.0</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>21.9</td>
<td>16.2</td>
<td>26.5</td>
<td>23.0</td>
</tr>
<tr>
<td>Imports</td>
<td>19.6</td>
<td>21.1</td>
<td>20.5</td>
<td>21.0</td>
</tr>
<tr>
<td>Supply</td>
<td>173.3</td>
<td>200.0</td>
<td>180.0</td>
<td>198.9</td>
</tr>
<tr>
<td>Total domestic &amp; residual use</td>
<td>95.3</td>
<td>102.7</td>
<td>88.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Exports</td>
<td>61.9</td>
<td>70.8</td>
<td>69.0</td>
<td>74.0</td>
</tr>
<tr>
<td>Total use</td>
<td>157.1</td>
<td>173.5</td>
<td>157.0</td>
<td>174.0</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>16.2</td>
<td>26.5</td>
<td>23.0</td>
<td>24.9</td>
</tr>
<tr>
<td>Stocks/use (percent)</td>
<td>10.3</td>
<td>15.3</td>
<td>14.6</td>
<td>14.3</td>
</tr>
<tr>
<td>Season avg. farm price ($/cwt.)</td>
<td>15.40</td>
<td>11.90</td>
<td>11.30</td>
<td>11.30</td>
</tr>
<tr>
<td><strong>Medium- and short-grain</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area planted (mil. ac)</td>
<td>0.71</td>
<td>0.74</td>
<td>0.74</td>
<td>0.70</td>
</tr>
<tr>
<td>Area harvested</td>
<td>0.70</td>
<td>0.74</td>
<td>0.73</td>
<td>0.69</td>
</tr>
<tr>
<td>Yield (pounds/ac)</td>
<td>8,270</td>
<td>8,080</td>
<td>8,103</td>
<td>8,168</td>
</tr>
<tr>
<td>Production (mil. cwt)</td>
<td>58.1</td>
<td>59.6</td>
<td>59.3</td>
<td>56.5</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>12.2</td>
<td>13.3</td>
<td>20.2</td>
<td>17.0</td>
</tr>
<tr>
<td>Imports</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Supply</td>
<td>73.8</td>
<td>76.8</td>
<td>83.0</td>
<td>77.0</td>
</tr>
<tr>
<td>Total domestic &amp; residual use</td>
<td>29.1</td>
<td>27.1</td>
<td>33.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Exports</td>
<td>31.4</td>
<td>29.5</td>
<td>33.0</td>
<td>33.0</td>
</tr>
<tr>
<td>Total use</td>
<td>60.5</td>
<td>56.7</td>
<td>66.0</td>
<td>63.0</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>13.3</td>
<td>20.2</td>
<td>17.0</td>
<td>14.0</td>
</tr>
<tr>
<td>Stocks/use (percent)</td>
<td>22.0</td>
<td>35.6</td>
<td>25.8</td>
<td>22.2</td>
</tr>
<tr>
<td>Season avg. farm price ($/cwt)</td>
<td>19.20</td>
<td>18.30</td>
<td>16.50</td>
<td>16.60</td>
</tr>
<tr>
<td>California</td>
<td>20.70</td>
<td>21.60</td>
<td>19.50</td>
<td>19.50</td>
</tr>
<tr>
<td>Other States</td>
<td>15.70</td>
<td>14.40</td>
<td>12.00</td>
<td>12.30</td>
</tr>
</tbody>
</table>

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the World Agricultural Supply and Demand Estimates, February 9, 2016. The season-average farm price is the midpoint of the projected price range from the same report. 2/ Projections based on analysis by USDA’s Rice Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.
Table 6. Soybean Supply, Demand, and Price, 2013/14-2016/17

<table>
<thead>
<tr>
<th></th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16 1/</th>
<th>2016/17 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area planted (mil. ac.)</td>
<td>76.8</td>
<td>83.3</td>
<td>82.7</td>
<td>82.5</td>
</tr>
<tr>
<td>Area harvested</td>
<td>76.3</td>
<td>82.6</td>
<td>81.8</td>
<td>81.6</td>
</tr>
<tr>
<td>Yield (bu./ac.)</td>
<td>44.0</td>
<td>47.5</td>
<td>48.0</td>
<td>46.7</td>
</tr>
<tr>
<td>Production (mil. bu.)</td>
<td>3,358</td>
<td>3,927</td>
<td>3,930</td>
<td>3,810</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>141</td>
<td>92</td>
<td>191</td>
<td>450</td>
</tr>
<tr>
<td>Imports</td>
<td>72</td>
<td>33</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Supply</td>
<td>3,570</td>
<td>4,052</td>
<td>4,150</td>
<td>4,289</td>
</tr>
<tr>
<td>Crush</td>
<td>1,734</td>
<td>1,873</td>
<td>1,880</td>
<td>1,900</td>
</tr>
<tr>
<td>Seed and Residual</td>
<td>107</td>
<td>145</td>
<td>131</td>
<td>125</td>
</tr>
<tr>
<td>Total domestic use</td>
<td>1,841</td>
<td>2,018</td>
<td>2,011</td>
<td>2,025</td>
</tr>
<tr>
<td>Exports</td>
<td>1,638</td>
<td>1,843</td>
<td>1,690</td>
<td>1,825</td>
</tr>
<tr>
<td>Total use</td>
<td>3,478</td>
<td>3,862</td>
<td>3,701</td>
<td>3,850</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>92</td>
<td>191</td>
<td>450</td>
<td>440</td>
</tr>
<tr>
<td>Stocks/use (percent)</td>
<td>2.6</td>
<td>4.9</td>
<td>12.1</td>
<td>11.4</td>
</tr>
<tr>
<td>Season-avg. farm price ($/bu.)</td>
<td>13.00</td>
<td>10.10</td>
<td>8.80</td>
<td>8.50</td>
</tr>
</tbody>
</table>

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, crush, exports, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates* report, February 9, 2016. The season-average price is the midpoint of the projected range from the same report. 2/ Projections based on analysis by the USDA’s Oilseeds Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.
### Table 7. Soybean Meal Supply, Demand, and Price, 2013/14-2016/17

<table>
<thead>
<tr>
<th></th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16 1/</th>
<th>2016/17 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (thou. short tons)</td>
<td>40,685</td>
<td>45,062</td>
<td>44,415</td>
<td>45,100</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>275</td>
<td>250</td>
<td>260</td>
<td>300</td>
</tr>
<tr>
<td>Imports</td>
<td>383</td>
<td>333</td>
<td>325</td>
<td>300</td>
</tr>
<tr>
<td>Supply</td>
<td>41,343</td>
<td>45,645</td>
<td>45,000</td>
<td>45,700</td>
</tr>
<tr>
<td>Domestic Use</td>
<td>29,547</td>
<td>32,235</td>
<td>33,500</td>
<td>34,200</td>
</tr>
<tr>
<td>Exports</td>
<td>11,546</td>
<td>13,150</td>
<td>11,200</td>
<td>11,200</td>
</tr>
<tr>
<td>Total use</td>
<td>41,093</td>
<td>45,384</td>
<td>44,700</td>
<td>45,400</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>250</td>
<td>260</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Avg. price ($/short ton) 3/</td>
<td>489.94</td>
<td>368.49</td>
<td>290.00</td>
<td>280.00</td>
</tr>
</tbody>
</table>

1/ Beginning stocks, production, imports, use, ending stocks, and average price are projections from the *World Agricultural Supply and Demand Estimates*, February 9, 2016. Price is the midpoint of the projected range from the same report.
2/ Projections based on analysis by the USDA’s Oilseeds Interagency Commodity Estimates Committee.
3/ The average price is for 48-percent protein meal at Decatur, Illinois.
Note: Totals may not add due to rounding.

### Table 8. Soybean Oil Supply, Demand, and Price, 2013/14-2016/17

<table>
<thead>
<tr>
<th></th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16 1/</th>
<th>2016/17 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (mil. lbs.)</td>
<td>20,130</td>
<td>21,399</td>
<td>21,845</td>
<td>21,985</td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>1,655</td>
<td>1,165</td>
<td>1,820</td>
<td>2,065</td>
</tr>
<tr>
<td>Imports</td>
<td>165</td>
<td>264</td>
<td>300</td>
<td>275</td>
</tr>
<tr>
<td>Supply</td>
<td>21,950</td>
<td>22,828</td>
<td>23,965</td>
<td>24,325</td>
</tr>
<tr>
<td>Domestic Use</td>
<td>18,908</td>
<td>18,994</td>
<td>19,600</td>
<td>20,025</td>
</tr>
<tr>
<td>Biodiesel 3/</td>
<td>5,010</td>
<td>5,037</td>
<td>5,500</td>
<td>5,800</td>
</tr>
<tr>
<td>Food, Feed, Other Industrial</td>
<td>13,898</td>
<td>13,958</td>
<td>14,100</td>
<td>14,225</td>
</tr>
<tr>
<td>Exports</td>
<td>1,877</td>
<td>2,014</td>
<td>2,300</td>
<td>2,300</td>
</tr>
<tr>
<td>Total use</td>
<td>20,785</td>
<td>21,008</td>
<td>21,900</td>
<td>22,325</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>1,165</td>
<td>1,820</td>
<td>2,065</td>
<td>2,000</td>
</tr>
<tr>
<td>Avg. price (cents/lb.) 4/</td>
<td>38.2</td>
<td>31.6</td>
<td>30.0</td>
<td>32.0</td>
</tr>
</tbody>
</table>

1/ Beginning stocks, production, imports, use, ending stocks, and average price are projections from the *World Agricultural Supply and Demand Estimates*, February 9, 2016. Price is the midpoint of the projected range from the same report.
2/ Projections based on analysis by the USDA’s Oilseeds Interagency Commodity Estimates Committee.
3/ Reflects only biodiesel made from methyl ester as reported by the U.S. Energy Information Administration.
4/ The average price is for crude soybean oil at Decatur, Illinois.
Note: Totals may not add due to rounding.