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United States Department of Agriculture

A banner for the Agricultural Outlook Forum. It features a dark green header with the USDA logo and text. Below this is a yellow section on the left with the text "USDA's 93rd Annual". The main part of the banner is orange and contains the title "Agricultural Outlook Forum" in a large, bold, serif font, followed by the subtitle "A New Horizon: The Future of Agriculture" in a smaller, bold, serif font. At the bottom of the banner, in a smaller font, it says "February 23-24, 2017 • Crystal Gateway Marriott Hotel, Arlington, Virginia".

USDA
United States Department of Agriculture

USDA's
93rd
Annual

Agricultural Outlook Forum
A New Horizon: The Future of Agriculture
February 23-24, 2017 • Crystal Gateway Marriott Hotel, Arlington, Virginia

Grains and Oilseeds Outlook

Friday, February 24, 2017

www.usda.gov/oc/forum

GRAINS AND OILSEEDS OUTLOOK FOR 2017¹

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 2017/18 supply, demand and prices for wheat, corn, rice, and soybeans and products. Projections presented in this paper include implications of the January 12th *Winter Wheat and Canola Seedings* report, which estimated winter wheat area at the lowest level in over a century. The projections assume normal weather conditions for spring planting and summer crop development and will be updated in the May 10th *World Agricultural Supply and Demand Estimates (WASDE)* report. The May WASDE will incorporate farmers' 2017 planting intentions as indicated 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.

Among the 3 major crops, for U.S. producers at present the relative fundamentals favor soybeans, particularly with expectations of continued growth in China's soybean imports. In contrast, corn is faced with only moderate growth in corn used for ethanol production and strong export competition from Argentina, Brazil and Ukraine. For wheat, continued large global supplies will maintain tough export competition. Given these respective fundamentals, soybean planted area is projected record high, in contrast to expected declines in corn and wheat. Soybean ending stocks for 2017/18 are forecast unchanged from a year ago, while corn and wheat ending stocks are expected to decline but remain large relative to recent history. Season average farm prices for all 3 crops in 2017/18 are expected to increase from last year, but remain well below the average of 2012/13 to 2014/15. This relatively low price level drives an expected reduction in total 3-crop planted area to 224.0 million acres, which if realized would be the lowest since 2011.

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 2017 (Table 1 & Figures 1-4)

The 2017 outlook for U.S. plantings of wheat, corn, and soybeans is driven by modestly improved price prospects, but still below the levels seen during 2011/12 to 2013/14. Plantings of the 3 crops in a given year, including prevented plant acres, are highly correlated with prices in the previous year after controlling for legislated Conservation Reserve Program acres, as shown in Figure 1. Forecasts for 2016/17 wheat, corn, and soybean prices, plus an assumption for a normal amount of prevented plant acres, suggest a slight decline in combined plantings in 2017. The forecast planted area for the 3 crops is projected at 224.0 million acres, not including an assumed 4.3 million in prevented plant acres as illustrated in Figure 2. Prevented plant acres for the 3 crops totaled just over 3 million acres in 2016, below the recent historical average.

Wheat planted area for 2017 is projected down 4.2 million acres to 46.0 million. Winter wheat seeded area in the January 12, 2017, *Winter Wheat and Canola Seedings* report was 32.4 million acres, down 3.8 million from last year mostly resulting from a drop in Hard Red Winter (HRW), which was estimated down 3.3 million acres at 23.3 million. Soft Red Winter (SRW) area was estimated down 0.3 million acres to 5.7 million. Winter White (WW) seedings were lowered 0.2 million acres to 3.4 million. Spring wheat (including Durum) plantings are expected to decline 3 percent.

Corn plantings for 2017 are projected at 90.0 million acres, down 4.0 million from last year and 3.6 million below 2016's intended plantings. Soybean plantings are expected to total 88.0 million acres, up 4.6 million from a year ago and 5.8 million above last year's intentions. Combined corn and soybean area, at 178.0 million acres, is up from a last year's record of 177.4 million and 2.2 million above 2016 planting intentions. Through more than half of February, new-crop corn futures have averaged close to \$4.00 per bushel, up about \$0.10 from all of February a year ago as shown in Figure 3. Soybean prices over the same time period have averaged about \$10.20 per bushel, nearly 2.6 times the corn price and about \$1.35 above a year ago. The last time the ratio during February was this favorable to soybeans was in 1997, which preceded the takeoff of corn ethanol in the United States and robust growth in China's soybean imports. A more recent historical comparison could be 2014, when a rapid increase in China's soybean import demand over the first half of 2013/14 drove the ratio up to nearly 2.5 during February, helping to pull soybean plantings up 8 percent while corn declined 5 percent.

Cash bids for fall 2017 delivery at Illinois elevators also underscore the increase in the relative competitiveness of soybeans. With more than half of February complete, corn prices have averaged about \$3.70 per bushel compared with \$3.50 per bushel for all of February a year ago based on Agricultural Marketing Service (AMS) data² as illustrated in Figure 4. Soybean prices over the same period have averaged about \$9.90 per bushel, up from \$8.50 during February a year ago and the highest since 2014. Although input prices such as nitrogen fertilizer have declined in the past year, total revenue per acre has fallen much more substantially for corn than soybeans following the apex of 2011/12 and 2012/13. For producers focused on managing costs in a relatively low price environment, this is expected to enhance the relative competitive position of soybeans.

Total 2017 rice planted acreage is projected at 2.6 million acres, down 17 percent from the prior year. Long grain plantings are expected to decline 22 percent to 1.9 million acres. Lower expected relative returns for long grain rice are behind the decline. Medium and short grain plantings in 2017 are projected to decline 1 percent to 700,000 acres.

²As reported in *Illinois Grain Prices in Country Elevators* (GX_GR113)

Wheat Supply, Demand, and Price Outlook for 2017/18 (Table 2)

Wheat Supplies: Wheat production for the 2017/18 marketing year is expected to decrease by more than 20 percent, to 1,837 million bushels, on expectations of both lower planted area and yields. The decline in all-wheat planted area stems from a 3.8-million-acre year-to-year decline in winter wheat planted area. For 2017, winter wheat seedings are estimated at just 32.4 million acres, the lowest in 108 years. All-wheat harvested area for 2017 is projected at 39 million acres, down from near 44 million for the current marketing year. The forecast 2017 harvested-to-planted ratio is 84.8 percent, down 3 percent from 2016/17 and on par with the 5-year average.

Following the record-high 52.6 bushels per acre yield for the 2016/17 wheat crop, the all-wheat yield for 2017 is projected down more than 10 percent to 47.1 bushels per acre. If realized, the 2017 yield will be equivalent to the 2013/14 all-wheat yield and slightly above the 5-year average.

Drought conditions in much of the Northwest and Northern Plains have largely abated while sections of the Hard Red Winter (HRW) wheat belt in the Central and Southern Plains are experiencing dry conditions. In particular, areas of Eastern Colorado, Western Kansas, and parts of Oklahoma are experiencing areas of moderate to severe drought.

Lower projected production in 2017 is partially offset by higher carryin leaving total 2017/18 supplies down 314 million bushels. A 9.2 percent decrease in total wheat supply, now projected at 3,096 million bushels, compares to total supply of 3,410 million forecast for the 2016/17 marketing year and the 5-year average of 3,050 million bushels.

Wheat Domestic Use: Projected total domestic wheat use for 2017/18 is 30 million bushels lower, all on reduced feed and residual usage. A 9 percent year-to-year reduction in wheat supplies and an increased wheat-corn price spread are factors expected to cause this contraction. Food and seed use for 2017/18 is projected 5 million bushels higher, all on increased seed use.

Wheat Exports: U.S. wheat exports in 2017/18 are projected to be down 50 million bushels from 2016/17 to 975 million. Lower domestic supplies and tough international competition will limit U.S. exports. After setting records in 4 consecutive years, world wheat production in 2017/18 is expected to decline. In addition to the large reduction in the U.S. crop, wheat output in both Australia and Russia is expected to be significantly lower following record crops in the previous year. Smaller crops are also expected in Canada and Ukraine. Conversely, the European Union is well positioned to have a larger crop and plentiful exports after unfavorable weather conditions last year. Global wheat trade and food consumption are both anticipated to increase. Larger imports in the Middle East and Sub-Saharan Africa will be partly offset by reduced import demand in Morocco and Algeria. Additionally, robust import demand and consumption is expected to continue in Asia.

Wheat Ending Stocks and Farm Prices: U.S. wheat ending stocks for 2017/18 are projected to decline 21 percent to 905 million bushels. This would be the lowest level for wheat stocks in 3 years but still above the 5-year average of the 835 million bushels. The stocks-to-use ratio, at 41.3 percent, is down from the projected 2016/17 ratio of 50.2 percent, but above the 5-year average. The 2017/18 season-average farm price is projected at \$4.30 per bushel, up \$0.45 from the midpoint of the range forecast for 2016/17. The prospect of lower 2017 HRW wheat acreage, as implied by the NASS *Winter Wheat and Canola Seedings* report and relatively tight supplies for Hard Red Spring wheat are supportive for U.S. wheat prices.

Corn Supply, Demand, and Price Outlook for 2017/18 (Table 3)

Corn Supplies: Corn production in 2017 is projected at 14,065 million bushels, 7 percent below a year ago on reduced planted area and a return to trend yield. Corn supplies for 2017/18 decline from last year's record high, but remain relatively large. Imports are forecast slightly lower but still somewhat high reflecting expectations of continued demand for imported organic corn. The national average corn yield is projected at 170.7 bushels per acre, below last year's record yield of 174.6 bushels. The yield projection is based on a weather-adjusted trend assuming normal growing season weather, estimated using the 1988-2016 time period, and includes a downward stochastic adjustment to account for the asymmetric response of yield to July precipitation.³

Corn Use: Total corn use for 2017/18 at 14,220 million bushels is down from 2016/17, but if realized would be the second highest on record. Lower exports are forecast to account for the bulk of the year-over-year decline. Feed and residual use is also expected to fall.

Corn Feed and Residual Use: Corn feed and residual use for 2017/18 is projected at 5,450 million bushels, down 150 million bushels from the 2016/17 forecast. The decline largely reflects lower residual disappearance with a smaller crop and an increase in the amount of corn used to produce ethanol, partially offset by expected growth in grain consuming animal units.

Corn Food, Seed, and Industrial Use: Food, seed and industrial (FSI) use of corn in 2017/18 is projected at a record 6,870 million bushels, 75 million bushels higher than 2016/17. Non-ethanol FSI categories are up 25 million bushels in 2017/18 with higher corn use for high fructose corn syrup, glucose and dextrose, and starch. 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 5,400 million bushels for 2017/18, 50 million bushels higher than 2016/17. If realized, this would represent 38 percent of total corn use, a marginal increase from the previous year but below the average of about 40 percent during 2010/11 to 2012/13. The Energy Information Administration forecast for gasoline consumption during 2017/18, on a September-August basis, is up about 1 percent from the prior year. Continued low gasoline prices and economic growth support an increase in per capita miles driven and greater consumer purchases of heavier, relatively less fuel efficient vehicles.

Corn Exports: Corn exports for 2017/18 are expected to fall 325 million bushels to 1,900 million, a sharp decline from 2016/17. While attractive prices relative to other feedstuffs are expected to boost feed use and sustain demand for exports to traditional markets, increased competition will limit gains for the U.S. share of global trade. Abundant supplies and stiffer competition are expected from major corn-exporting countries such as Argentina, Brazil and Ukraine. Exportable supplies in Argentina are forecast to rise as growers face reduced policy barriers. Early indications for Brazil's 2016/17 second-crop corn remain favorable, and exports of the crop will cut into the 2017/18 U.S. shipping season. Ukraine has expanded its exports to Asia and increased its market share in the region - a major destination for U.S. corn.

³For a more detailed explanation see Westcott and Jewison, *Weather Effects on Expected Corn and Soybean Yields*, USDA, Economic Research Service, July 2013, https://www.ers.usda.gov/webdocs/publications/fds13g01/39297_fds-13g-01.pdf.

Corn Ending Stocks and Farm Prices: U.S. corn ending stocks for 2017/18 are projected at 2,215 million bushels, down 5 percent from 2016/17. The 2017/18 stocks-to-use ratio of 15.6 percent is down from the 15.9 percent forecast for 2016/17, but above the levels during 2014/15 and 2015/16. The season-average farm price is projected at \$3.50 per bushel, up \$0.10 from the midpoint of the range for 2016/17, reflecting slightly improved forward pricing opportunities relative to this time a year ago.

Rice Supply, Demand, and Price Outlook for 2017/18 (Tables 4 & 5)

Rice Supplies: The 2017/18 outlook is for smaller total supplies as a substantial decline in production more than offsets a larger carryin of stocks and a slight increase in imports. Total 2017 rice planted acreage is projected to decline 17 percent from last year to 2.60 million acres. Long grain plantings are expected to decrease 22 percent to 1.9 million acres due to the large 2016 carryout and increased soybean prices relative to rice. Medium- and short-grain plantings in 2017 are expected to decline 1 percent from the prior year to 700,000 acres.

Assuming a normal harvested-to-planted area relationship, total harvested rice acreage is projected at 2.58 million acres, with 1.89 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 7 percent from 2016 to 7,716 pounds per acre, assuming normal weather and planting dates. This would be the highest yield on record. Average yields are forecast to return to trend for long-grain rice resulting in a record yield of 7,500 pounds per acre, up 8 percent from 2016. The medium- and short-grain rice yield is forecast to decline fractionally from the 2016 record to 8,300 pounds per acre. Total 2017 rice production is projected to decrease by 11 percent to 199.0 million cwt, as the area decline more than offsets the higher projected yield. Long grain rice accounts for almost all of the production decrease.

Total supplies of all rice in 2017/18 are projected to decrease by 6 percent to 275.1 million cwt, as a smaller crop more than offsets a larger carryin and a slightly higher imports. Supplies of both classes of rice are projected to be smaller in 2017/18. Long-grain supplies are projected to decrease 7 percent to 194.1 million cwt due to a much smaller crop. Medium- and short-grain supplies are projected at 78.2 million cwt, 4 percent lower than in 2016/17, mostly due to a smaller carryin.

Rice Domestic Use: All-rice total domestic and residual use for 2017/18 is projected to decline 3 percent from 2016/17 to 128.0 million cwt. Long-grain domestic and residual use is projected to decrease 3 percent to 99.0 million cwt, mostly due to smaller post-harvest and marketing losses associated with a smaller crop. Medium- and short-grain domestic and residual use is projected to decline 3 percent to 29.0 million cwt, a result of slightly tighter supplies.

Rice Exports: All-rice exports for 2017/18 are projected at 110.0 million cwt, unchanged from the current year. Long-grain exports are projected at 76.0 million cwt, also unchanged from 2016/17. The Western Hemisphere is again expected to account for the bulk of U.S. long-grain exports, with rough rice accounting for more than half of these shipments. U.S. medium- and short-grain rice exports are projected at 34.0 million cwt, unchanged from 2016/17, with Northeast Asia again expected to account for the majority of these exports and the Middle East and North Africa most of the remainder.

Rice Ending Stocks and Prices: Total all-rice ending stocks are projected at 37.1 million cwt, down 29 percent from the unusually high 2016/17 level. Stocks of both classes of rice are projected to be lower in 2017/18. Long-grain ending stocks are forecast to decrease by 40 percent to 19.1 million cwt. The season-average farm price for long-grain rice is projected at \$10.00 per cwt, up 20 cents from the 2016/17 midpoint. Medium- and short-grain ending stocks are forecast to decrease 14 percent to 15.2 million cwt. The season-average farm price for all medium- and short-grain rice is projected at \$12.90 per cwt, up 50 cents from the 2016/17 midpoint. The 2017/18 all rice price is projected at \$10.70 per cwt, up 20 cents from the midpoint of 2016/17.

Soybean Supply, Demand, and Price Outlook for 2017/18 (Tables 6, 7 & 8)

Soybean Supplies: Soybean supplies for 2017/18 are projected at 4,625 million bushels, up 2 percent from 2016/17 with higher beginning stocks more than offsetting lower production prospects. Soybean production for 2017 is forecast to fall to 4,180 million bushels, 3 percent lower than last year with lower yields more than offsetting higher harvested area. The national average soybean yield of 48.0 bushels per acre is down 4.1 from last year's record. The yield forecast is based on a weather-adjusted trend assuming normal growing season weather, estimated using the 1988-2016 time period, and includes a downward stochastic adjustment to account for the asymmetric response of yield to precipitation.⁴ Despite lower yields, area harvested is projected to be a record leading to the second largest crop, exceeded only by the previous year.

Soybean Domestic Use: Soybean domestic use is projected up 1 percent in 2017/18 to 2,080 million bushels. Crush is forecast to expand by 15 million bushels to 1,945 million mainly due to higher domestic disappearance for soybean meal. Gains in pork and poultry production are projected to raise domestic soybean meal use by 2 percent to 34.8 million short tons. Soybean meal prices for 2017/18 are expected to edge slightly higher to \$330 per short ton, supporting soybean crush margins.

Domestic use of soybean oil is projected up 1 percent for 2017/18 to 20.7 billion pounds primarily on expanding use for biodiesel. U.S. consumption of soybean oil for biodiesel production is forecast at 6.35 billion pounds, up 150 million from 2016/17. Edible consumption of soybean oil is expected to rise marginally as growth may be constrained by increasing supplies of other vegetable oils.

Soybean oil ending stocks are projected to increase 2 percent in 2017/18 to 1.71 billion pounds as an increase in production slightly exceeds the expected gains in use. Soybean oil prices are forecast to average 35 cents per pound, down 0.5 cents from 2016/17.

Soybean Exports: U.S. 2017/18 soybean exports are projected at 2,125 million bushels, up 75 million from the forecast 2016/17 record. Strong global demand is likely to continue into the new year boosting U.S. export volume and lending support to prices. Production gains in South America will support additional exports from the region leading to a slight decline in U.S. global export share despite higher shipments. Global trade will continue to be driven by China, which currently 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 will support a strong absolute increase in 2017/18. Continued demand growth in the rest of Asia and in the Middle East/North Africa region will provide additional support for the rise in global imports.

⁴See Westcott and Jewison, *Weather Effects on Expected Corn and Soybean Yields*, USDA, Economic Research Service, July 2013).

Global soybean meal trade is also forecast to expand in 2017/18. Current price levels, which remain low relative to the previous 5-year period, are projected to continue into next year and help maintain demand growth. However, growing competition from Argentina will limit export opportunities for U.S. processors. As a result, U.S. soybean meal exports in 2017/18 are projected to grow minimally to 11.7 million short tons.

U.S. soybean oil exports are projected to decline modestly in 2017/18 to 2.0 billion pounds as higher domestic use mostly offsets supply gains. Strong competition from expected larger supplies in Argentina will also reduce global demand for U.S. soybean oil exports.

Soybean Ending Stocks and Farm Prices: U.S. soybean stocks for 2017/18 are projected at 420 million bushels, unchanged from 2016/17. With a 2-percent increase in total soybean disappearance, the ending stocks-to-use ratio would be 10.0 percent, down slightly from 2016/17. Despite increased soybean supplies and ample ending stocks, the soybean season-average farm price is projected at \$9.60 per bushel, up slightly from 2016/17.

Table 1. Wheat, Corn, and Soybean Planted Acreage, 2010-2017

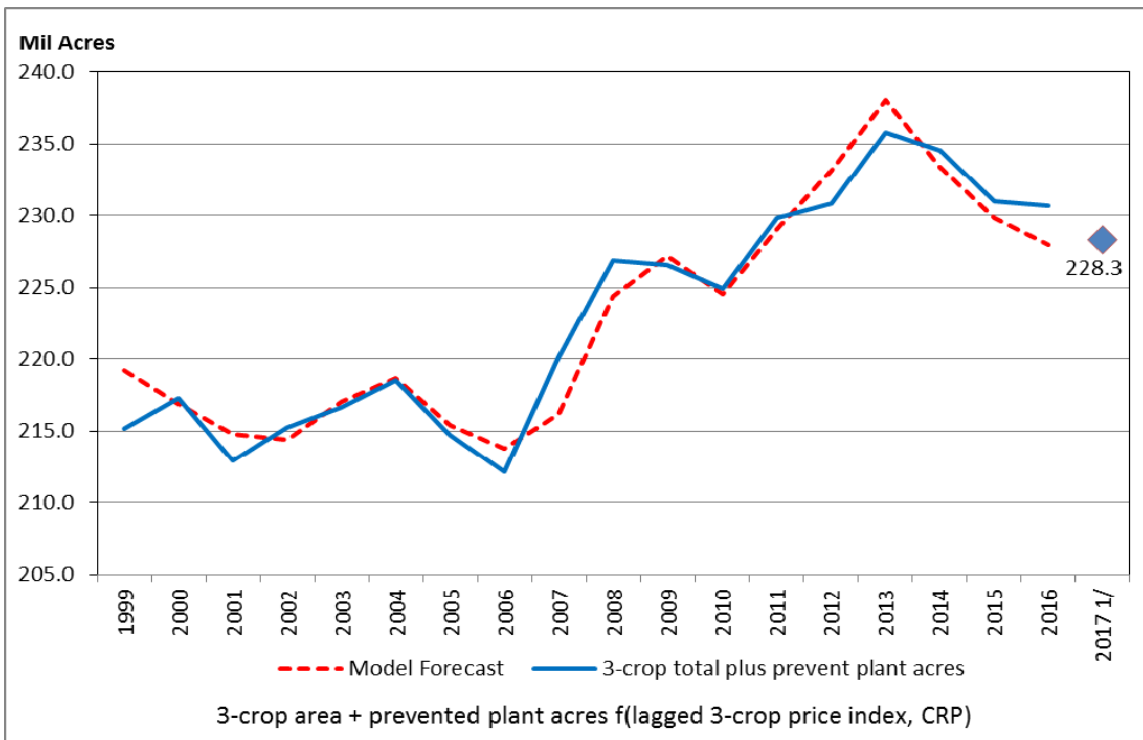
	2010	2011	2012	2013	2014	2015	2016	2017 1/
	- Million Acres -							
Wheat	52.6	54.3	55.3	56.2	56.8	55.0	50.2	46.0
Corn	88.2	91.9	97.3	95.4	90.6	88.0	94.0	90.0
Soybeans	77.4	75.0	77.2	76.8	83.3	82.7	83.4	88.0
Total	218.2	221.3	229.8	228.4	230.7	225.7	227.6	224.0

1/ Projection

Source: National Agricultural Statistics Service data 2010-2016.

Note: Totals may not add due to rounding.

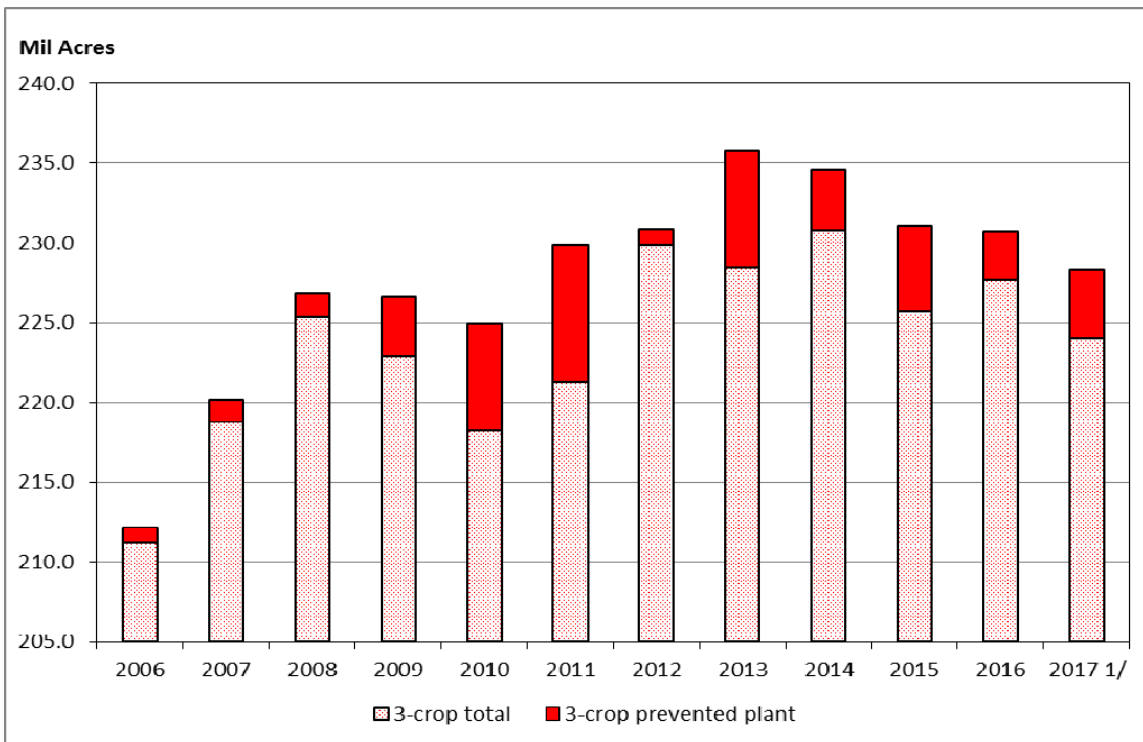
Figure 1. 3-Crop Planted Area + Prevented Plant as Function of Lagged Price Index and CRP



1/ Projection

Source: WAOB analysis of National Agricultural Statistics Service and Farm Service Agency data 1999-2016.

Figure 2. 3-Crop Planted Area & Prevented Plant Acres



1/ Projection

Source: National Agricultural Statistics Service and Farm Service Agency data 2006-2016.

Figure 3. New Crop Futures Soybean-to-Corn Ratio During February

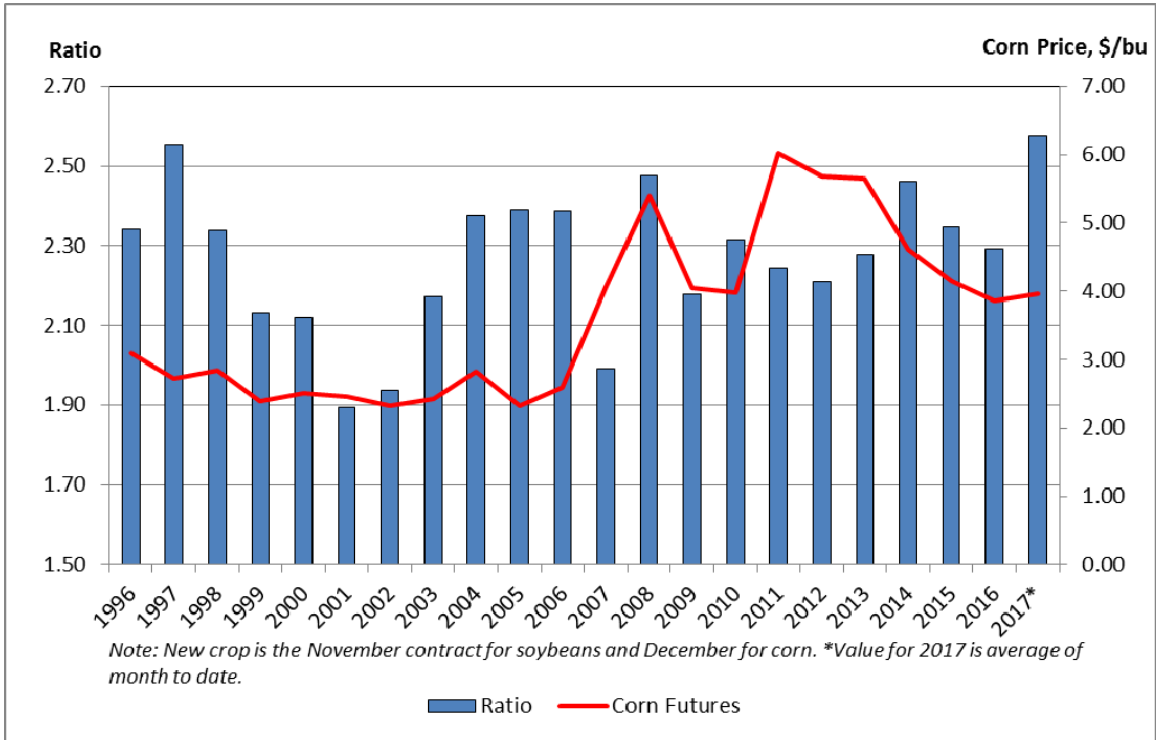


Figure 4. Illinois New Crop Delivery Soybean-to-Corn Ratio During February

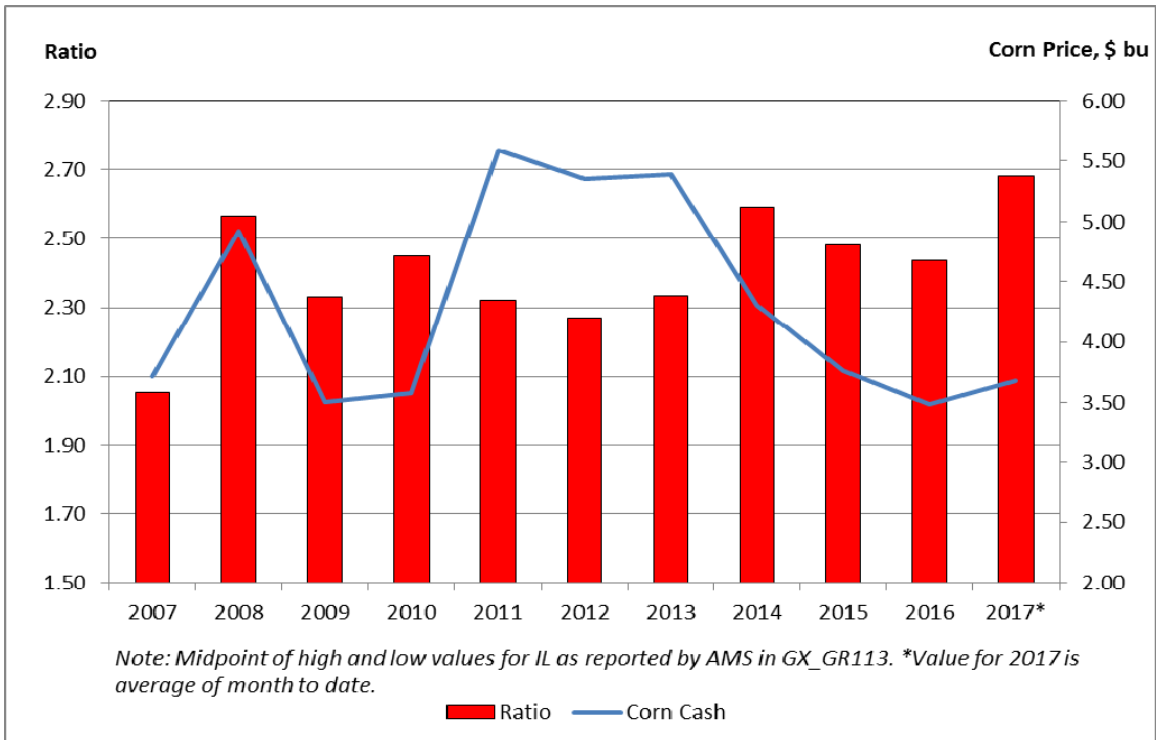


Table 2. Wheat Supply, Demand, and Price, 2014/15-2017/18

	2014/15	2015/16	2016/17 1/	2017/18 2/
Area planted (mil. ac.)	56.8	55.0	50.2	46.0
Area harvested	46.4	47.3	43.9	39.0
Yield (bu./ac.)	43.7	43.6	52.6	47.1
Production (mil. bu.)	2,026	2,062	2,310	1,837
Beginning stocks	590	752	976	1,139
Imports	151	113	125	120
Supply	2,768	2,927	3,410	3,096
Feed & residual	114	152	225	190
Food & seed	1,038	1,024	1,021	1,026
Total domestic use	1,151	1,177	1,246	1,216
Exports	864	775	1,025	975
Total use	2,015	1,952	2,271	2,191
Ending stocks	752	976	1,139	905
Stocks/use (percent)	37.3	50.0	50.2	41.3
Season-avg. farm price (\$/bu.)	5.99	4.89	3.85	4.30

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, 2017. 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 3. Corn Supply, Demand, and Price, 2014/15-2017/18

	2014/15	2015/16	2016/17 1/	2017/18 2/
Area planted (mil. ac.)	90.6	88.0	94.0	90.0
Area harvested	83.1	80.8	86.7	82.4
Yield (bu./ac.)	171.0	168.4	174.6	170.7
Production (mil. bu.)	14,216	13,602	15,148	14,065
Beginning stocks	1,232	1,731	1,737	2,320
Imports	32	67	55	50
Supply	15,479	15,401	16,940	16,435
Feed & residual	5,280	5,131	5,600	5,450
Ethanol 3/	5,200	5,206	5,350	5,400
Food, seed & other industrial	1,401	1,429	1,445	1,470
Total food, seed & industrial	6,601	6,635	6,795	6,870
Total domestic use	11,881	11,766	12,395	12,320
Exports	1,867	1,898	2,225	1,900
Total use	13,748	13,664	14,620	14,220
Ending stocks	1,731	1,737	2,320	2,215
Stocks/use (percent)	12.6	12.7	15.9	15.6
Season-avg. farm price (\$/bu.)	3.70	3.61	3.40	3.50

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, 2017. 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, 2014/15-2017/18

All Rice	2014/15	2015/16	2016/17 ^{1/}	2017/18 ^{2/}
Area planted (mil. ac.)	2.95	2.63	3.15	2.60
Area harvested	2.93	2.59	3.10	2.58
Yield (pounds/ac.)	7,576	7,472	7,237	7,716
Production (mil. cwt)	222.2	193.1	224.1	199.0
Beginning stocks	31.8	48.5	46.5	52.1
Imports	24.6	24.1	23.5	24.0
Supply	278.7	265.8	294.1	275.1
Total domestic & residual use	134.4	111.6	132.0	128.0
Exports	95.7	107.7	110.0	110.0
Total use	230.2	219.3	242.0	238.0
Ending stocks	48.5	46.5	52.1	37.1
Stocks/use (percent)	21.1	21.2	21.5	15.6
Season avg. farm price (\$/cwt.)	13.40	12.20	10.50	10.70

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, 2017. 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 5. Rice-by Class Supply, Demand, and Price, 2014/15-2017/18

Rice-by-class	2014/15	2015/16	2016/17 1/	2017/18 2/
<u>Long-grain</u>				
Area planted (mil. ac.)	2.21	1.88	2.44	1.90
Area harvested	2.20	1.85	2.40	1.89
Yield (pounds/ac)	7,407	7,219	6,927	7,500
Production (mil. cwt)	162.7	133.4	166.5	141.4
Beginning stocks	16.2	26.5	22.7	31.7
Imports	21.8	20.9	20.5	21.0
Supply	200.6	180.7	209.7	194.1
Total domestic & residual use	106.2	81.5	102.0	99.0
Exports	68.0	76.5	76.0	76.0
Total use	174.2	158.0	178.0	175.0
Ending stocks	26.5	22.7	31.7	19.1
Stocks/use (percent)	15.2	14.4	17.8	10.9
Season avg. farm price (\$/cwt.)	11.90	11.20	9.80	10.00
<u>Medium- and short-grain</u>				
Area planted (mil. ac)	0.74	0.75	0.71	0.70
Area harvested	0.74	0.74	0.69	0.69
Yield (pounds/ac)	8,080	8,107	8,311	8,300
Production (mil. cwt)	59.6	59.7	57.7	57.6
Beginning stocks	13.3	20.2	20.9	17.6
Imports	2.9	3.3	3.0	3.0
Supply	76.1	82.2	81.6	78.2
Total domestic & residual use	28.3	30.1	30.0	29.0
Exports	27.7	31.2	34.0	34.0
Total use	56.0	61.3	64.0	63.0
Ending stocks	20.2	20.9	17.6	15.2
Stocks/use (percent)	36.1	34.1	27.5	24.1
Season avg. farm price (\$/cwt)	18.30	15.30	12.40	12.90
California	21.60	18.10	13.50	14.00
Other States	14.40	11.20	9.90	10.20

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, 2017. 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, 2014/15-2017/18

	2014/15	2015/16	2016/17 /1	2017/18 /2
Area planted (mil. ac.)	83.3	82.7	83.4	88.0
Area harvested	82.6	81.7	82.7	87.1
Yield (bu./ac.)	47.5	48.0	52.1	48.0
Production (mil. bu.)	3,927	3,926	4,307	4,180
Beginning stocks	92	191	197	420
Imports	33	24	25	25
Supply	4,052	4,140	4,528	4,625
Crush	1,873	1,886	1,930	1,945
Seed and Residual	146	122	128	135
Total domestic use	2,019	2,008	2,058	2,080
Exports	1,842	1,936	2,050	2,125
Total use	3,862	3,944	4,108	4,205
Ending stocks	191	197	420	420
Stocks/use (percent)	4.9	5.0	10.2	10.0
Season-avg. farm price (\$/bu.)	10.10	8.95	9.50	9.60

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, 2017. 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, 2014/15-2017/18

	2014/15	2015/16	2016/17 /1	2017/18 /2
Production (thou. short tons)	45,062	44,672	45,411	46,200
Beginning stocks	250	260	264	300
Imports	333	403	325	300
Supply	45,645	45,335	46,000	46,800
Domestic Use	32,277	33,108	34,100	34,800
Exports	13,108	11,963	11,600	11,700
Total use	45,384	45,071	45,700	46,500
Ending stocks	260	264	300	300
Avg. price (\$/short ton) 3/	368.49	324.56	325.00	330.00

1/ Beginning stocks, production, imports, use, ending stocks, and average price are projections from the *World Agricultural Supply and Demand Estimates*, February 9, 2017. 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, 2014/15-2017/18

	2014/15	2015/16	2016/17 /1	2017/18 /2
Production (mil. lbs.)	21,399	21,950	22,390	22,485
Beginning stocks	1,165	1,855	1,687	1,677
Imports	264	288	300	275
Supply	22,828	24,093	24,377	24,437
Domestic Use	18,959	20,166	20,550	20,725
Biodiesel 3/	5,039	5,670	6,200	6,350
Food, Feed, Other Industrial	13,920	14,496	14,350	14,375
Exports	2,014	2,240	2,150	2,000
Total use	20,973	22,406	22,700	22,725
Ending stocks	1,855	1,687	1,677	1,712
Avg. price (cents/lb.) 4/	31.6	29.9	35.5	35.0

1/ Beginning stocks, production, imports, use, ending stocks, and average price are projections from the *World Agricultural Supply and Demand Estimates*, February 9, 2017. 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.