

U.S. Corn Production, Uses, and Exports (11/10/2016)

The USDA released the November report of the World Agricultural Supply and Demand Estimates (WASDE, November 9, 2016), forecasting higher corn production, increased food, seed and industrial (FSI) use, including corn for ethanol use, larger ending stocks, and slightly higher prices during the 2016/17 marketing year compared with the October 2016 WASDE.

Due to increased expected yield, now at record 175.3 bushels per acre or 1.9 more bushels per acre than last month's projection, the production forecast for the 2016/17 marketing year now stands at 15,226 million bushels, 169 million bushels up from last month's projection and a record high. If realized, production would be up 1,625 million bushels from the 2015/16 marketing year estimate. Ending stocks were up 83 million bushels to 2,403 million bushels from the October forecast and 665 million bushels above from last year's estimate. The projected price, now at \$3.30/bushel, is up \$0.05/bushel from last month's projection but down \$0.31/bushel from last year's estimate.

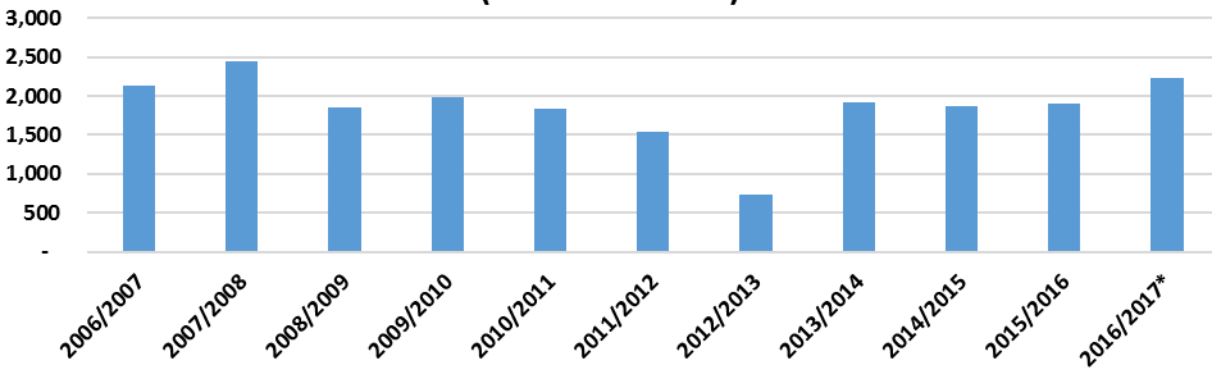
The new report also included an upward revision to the non-ethanol food, seed and industrial (FSI) use for the 2014/15 and 2015/16 based on updated usage estimates. Given that stocks are known, reductions were made in feed and residual use during those years.

Meanwhile 2016/17 FSI use was up 85 million bushels compared with last month forecast, with 60 million bushels increase for non-ethanol FSI use and 25 million bushels for corn for ethanol use. The latest NASS Grain Crushings and Co-Products Production report published by USDA on November 1, 2016, indicates corn consumed in September 2016 for dry mill ethanol production declined 6% to 388.4 million bushels compared with last month's estimate (411.2 million bushels), but increased 2% from last year's estimate (382.2 million bushels). With lower corn use for dry mill ethanol production during the month of September 2016, corn distillers oil (CDO) production declined 5% to 134,269 tons from last month's estimate but was 16% ahead of the September 2016 production. Distillers dried grains with solubles (DDGS) was also down 5% to 1.964 million tons from August production but up 5% year-over-year. 2016/17 corn use for feed and residual remained the same as last month forecast at 5,650 million bushels.

Total corn exports in 2015/16 reached a volume of 1,898 million bushels (see Figure 1). The main U.S. corn exports destinations during the 2015/16 marketing year (September to August) were Mexico and Japan importing 525 million bushels (28%) and 410 million bushels (22%) of total U.S. foreign demand for corn in 2015/16, respectively. Colombia, South Korea, and Taiwan imported 179, 117, and 81 million bushels, respectively. These three countries combined represented 18% of total U.S. corn exports in 2015/16. 2015/16 U.S. corn exports were valued at \$8.671 billion. Impacted by low corn prices, this value declined by \$279.5 million from the 2014/15 estimate (\$8.951 billion).

2016/17 corn exports projection was unchanged from last month's USDA WASDE projection at 2,225 million bushels (see Figure 1). If realized, corn exports this year would increase by 327 million bushels (up 17%) relative to the estimate for the 2015/16 marketing year (1,898 million bushels) and would represent 14.6% of 2016/17 expected production.

**Figure 1. U.S. Marketing Year Corn Exports
(Million Bushels)**



Source: USDA-FAS.

2016/2017* is projected (WASDE November 9, 2016).

The latest U.S. export sales reported by USDA-FAS on November 10, 2016 were based on reports from exports for the weekly period of October 27, 2016 to November 3, 2016. Net corn sales¹ for 2016/17 of 48.6 million bushels (1,233,849 MT) were down 16% from the previous week (58.0 million bushels) but rose 19% from the previous four-week average (40.9 million bushels).

Weekly exports increased 3% to 35.1 million bushels compared with the previous week (34.2 million bushels) and the previous four-week average (34.3 million bushels). Among the main corn export destinations during the week of October 27 to November 3 were, Mexico (12.2 million bushels), Colombia (5.7 million bushels), Japan (5.6 million bushels), Peru (3.2 million bushels), and Chile (1.8 million bushels). Total commitments² increased 5% to 1,023 million bushels, with 386.0 million bushels from accumulated exports³ and 637.2 million bushels in outstanding sales⁴.

According to the Grain-World Markets and Trade report published by USDA-FAS on November 9, 2016, world corn production is expected to increase 7.4% to a record 40,570 million bushels in 2016/17 from 37,789 million bushels last year, with the U.S. leading global corn production, followed by China, Brazil, the European Union, and Argentina. All these projections were estimated based on local marketing year (see Table 1 and note 1 in that Table). Brazil corn production in 2016/17 is forecast to increase to 3,287 million bushels, recovering from last year's production decline due to a late season drought. Argentina is also forecast to increase corn production in the 2016/17 from 1,142 million bushels in 2015/16 to 1,437 million bushels in 2016/17. According to the report, current market conditions in both Brazil and Argentina favor corn over soybean plantings. For Argentina, the removal of export taxes and quantitative restrictions, which have not been the case for soybeans, is encouraging corn plantings. Due to tight corn supplies, domestic corn prices in Brazil have been elevated, encouraging second crop plantings set to start at the beginning of

¹Net sales or net changes is the sum total resulting from new export sales, increases resulting from changes in destination, decreases resulting from changes in destination, decreases resulting from purchases from foreign sellers, and cancellations resulting from contract adjustments, buybacks, loading tolerances, changes in marketing year, or change in commodity.

² Total Commitments: The sum of accumulated exports plus outstanding sales.

³ Accumulated exports: Accumulated shipments of reportable commodities from the beginning of the marketing year (for each commodity) to the current week ending date.

⁴ Outstanding Sales: The total outstanding export sales contracts by country and/or commodity that have not been shipped at any given time during the marketing year.

2017 (USDA-FAS, Grain: World Markets and Trade, November 9, 2016). 2016/17 corn production projection for the U.S., Ukraine, and Russia were increased from last month projections (see Table 1). Ukraine production was increased based on near-record yields and Russia's production is projected to increased based on forecast record yield.

Table 1. World Corn Production (Million Bushels)

Production (Local Marketing Year) ¹	2014/15	2015/16	2016/17Oct ²	2016/17Nov ³	Change from Oct 2016 Projection	Change from Last Year estimate ⁴
Argentina	1,130	1,142	1,437	1,437	-	295
Brazil	3,346	2,638	3,287	3,287	-	650
Canada	452	535	492	492	-	(43)
China	8,490	8,843	8,504	8,504	-	(340)
Ethiopia	285	199	248	248	-	49
European Union	2,986	2,302	2,373	2,373	-	71
India	952	858	965	965	-	106
Indonesia	354	366	378	378	-	12
Mexico	1,003	1,016	965	965	-	(51)
Nigeria	296	276	283	283	-	8
Philippines	302	295	311	311	-	16
Russia	446	518	551	571	20	52
Serbia	303	236	276	276	-	39
South Africa	418	311	512	512	-	201
Ukraine	1,120	919	1,024	1,063	39	144
Others	3,822	3,733	3,718	3,681	(37)	(53)
Subtotal	25,705	24,188	25,322	25,344	22	1,157
United States	14,216	13,601	15,057	15,226	168	1,624
World Total	39,920	37,789	40,380	40,570	190	2,781

Source: USDA-FAS (Grain: World Markets and Trade, November 9, 2016)

¹Estimates are based on local marketing years (LMYs). LMY refers to the 12-month period at the onset of the main harvest, when the crop is marketed (i.e., consumed, traded, or stored). The year first listed begins a country's LMY for that commodity (2015/16 starts in 2015); except for summer grains in certain Southern Hemisphere countries and for rice in selected countries, where the second year begins the LMY (2015/16 starts in 2016).

<http://apps.fas.usda.gov/psdonline/circulars/grain-corn-coarsegrains.pdf>

²USDA October 2016 projection for 2016/17. ³USDA November 2016 projection for 2016/17. ⁴ Is the difference between 2016/17Nov projection and last year estimate

Table 2 shows world corn exports estimated based on trade year (TY). TY data puts all countries on a uniform, 12-month period of analytical comparison (Grain-World Markets and Trade report, November 2016). For corn the TY goes from October to September. According to the USDA-FAS's November 2016 projections for 2016/17, U.S. corn export projection (TY) remained unchanged from last month's projection at 2,224 million bushels. But projected 2016/17 exports are up 209 million bushels compared with last year and are based on strong early season sales and shipments. Ukraine's exports were increased this month to 709 million bushels due to stronger demand from markets in the Middle East, whereas Russia's corn exported were raised to 185 million bushels based on record forecast crop.

Table 2. World Corn Exports (Million Bushels)

Exports (Corn Trade Year) ¹	2014/15	2015/16	2016/17Oct ²	2016/17Nov ³	Change from Oct 2016 Projection	Change from Last Year estimate ⁴
Argentina	726	853	1,004	1,004	-	151
Brazil	863	1,393	827	827	-	(566)
Burma	33	35	37	37	-	2
European Union	158	71	67	67	-	(4)
Mexico	31	39	31	31	-	(8)
Paraguay	119	106	91	91	-	(16)
Russia	126	173	177	185	8	12
Serbia	117	63	87	87	-	24
South Africa	29	30	51	51	-	21
Ukraine	774	650	697	709	12	59
Others	220	237	190	187	(3)	(50)
Subtotal	3,197	3,651	3,259	3,276	17	(375)
United States	1,844	2,016	2,224	2,224	-	209
World Total	5,040	5,666	5,483	5,500	17	(166)
United States Share of World Trade	37%	36%	41%	40%		0

Source: USDA-FAS (Grain: World Markets and Trade, November 9, 2016).

¹Corn Trade Year=Oct/Sep which is different from the U.S. marketing year (Sep/Aug). ²USDA October 2016 projection for 2016/17.

³USDA November 2016 projection for 2016/17. ⁴ Is the difference between 2016/17Nov projection and last year estimate

With large U.S. corn production forecast for 2016/17, the U.S. is expected to continue as the global leader in corn production and exports. Brazil and Argentina exports are also expected to rebound in 2016/17. With projected large ending stocks, corn prices, although projected slightly higher this month, continued below last year's estimate and could lead to negative returns for many producers.