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Feed Outlook

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U.S. Corn Production Raised on Higher Yield

The next release is December 13, 2016.

Approved by the World Agricultural Outlook Board.

USDA's National Agricultural Statistics Service raised the projected 2016/17 corn yield 1.9 bushels to 175.3 bushels per acre from last month's forecast, resulting in a 168-million-bushel gain in production to 15.2 billion bushels. Supply is projected at 17.0 billion bushels, a record. Food, seed, and industrial use (FSI) is raised 85 million bushels this month on higher use for ethanol, sweeteners, and starch. Corn stocks are projected the highest since 1987/88 at 2.4 billion bushels. Despite large supplies, the season-average price received by farmers was raised 5 cents per bushel on both the high and low ends for a midpoint estimate of $3.30 per bushel, given early-season price strength.

World coarse grain production is projected higher this month, led by the increase in U.S. production. Changes in the foreign coarse grain balance are relatively minor this month. Lower beginning stocks more than offset the increase in coarse grains production and small growth in projected consumption, leaving foreign ending stocks marginally lower. Foreign trade in coarse grains is projected up slightly.

Domestic Outlook

Higher Projected Yield Boosts Corn Crop

USDA's National Agricultural Statistics Service (NASS) objective yield survey (as of November 1, published in the November 9 *Crop Production*) reported an increase of 1.9 bushels per acre in projected 2016/17 corn yield to 175.3 bushels per acre, raising production 168 million bushels this month to 15,226 million bushels. The increased supply—partially offset by a 85-million-bushel increase in corn food, seed, and industrial use (FSI)—results in ending stocks of 2,403 million bushels, 83 million higher than last month's projection. If achieved, this will be the highest since 1987/88, and at a level greater than total EU corn production for the year.

Feed and Residual Use

On a September-August basis, 2016/17 U.S. feed and residual use for the four feed grains plus wheat is projected to total 157.1 million tons, 100,000 tons lower than last month's forecast and 18.0 million tons above the adjusted total of 139.2 million for 2015/16. Corn is estimated to account for 91 percent of feed and residual use in 2016/17, compared with 94 percent in 2015/16.

Grain consuming animal units (GCAU) are projected to total 95.49 million in 2016/17, down from 95.51 units in October and up from an adjusted 93.84 million units in 2015/16. Feed and residual use per GCAU for 2016/17 is estimated at 1.65 million tons, nearly unchanged from last month and up 0.16 million tons from 2015/16. Among the GCAU index components, unit totals are raised this month for dairy cattle, with several small offsetting changes in other categories.

Food, Seed, and Industrial Use Revisions

Corn food, seed, and industrial (FSI) use in 2016/17 is projected 85 million bushels higher this month due to increases in starch and glucose projections for the last two quarters of 2016/17 and a 25-million-bushel boost in corn for ethanol use. This brings total projected FSI for 2016/17 to 6,735 million bushels. Corn used for high-fructose corn syrup (HFCS) is raised 10 million bushels to 480 million. Starch is raised 30 million bushels to 250 million bushels and glucose and dextrose are raised 15 million bushels to 325 million. Corn use for ethanol is raised 25 million bushels to 5,300 million.

FSI use for 2015/16 is raised 62 million bushels on increases in sweetener and starch use; feed and residual use is reduced by the same amount, falling to 5.13 billion bushels. FSI for 2014/15 is revised up 34 million bushels to 6,601 million. Total use is unchanged due to an offsetting reduction in feed and residual to 5.28 billion bushels. FSI for 2013/14 was also revised upward on higher corn use for sweetener and starch, also with an offsetting adjustment in feed and residual.

Corn Price Raised

The forecast average price received by corn producers for 2016/17 was raised 5 cents on both the low and high ends of the range to $3.00 to $3.60 per bushel, for a midpoint of $3.30 per bushel.

Sorghum Crop Projected Slightly Lower This Month

The projected 2016/17 sorghum crop is lowered 4 million bushels this month to 462 million bushels, based on a reduction in yield of 0.7 bushel per acre to 76.5 bushels per acre.

International

Record World Coarse Grains Crop Projected Higher This Month

World coarse grain production is projected to reach 1.32 billion tons in 2016/17, up 4.9 million tons this month as an increase in foreign production adds modestly to the healthy advance in U.S. coarse grain output. Changes in global, foreign, and U.S coarse grain production by type of grain are shown in table A1, while changes in coarse grain production by country are presented in table A2.

Table A1 - World and U.S. coarse grain production at a glance (2016/17), November 2016

Region or country	Production	Change[1]	Comments
	Million tons		
Coarse grains production (total)			
World	1,319.7	+4.9	
Foreign	915.5	+0.7	
United States	404.1	+4.2	See section on U.S. domestic feed grains.
World production of coarse grains by type of grain			
CORN			
World	1030.5	+4.8	
Foreign	643.8	+0.6	Increased corn production in Ukraine and Russia is partly offset by reductions in Vietnam and Bolivia. See table A2.
United States	386.8	+4.3	See section on U.S. domestic feed grains.
SORGHUM			
World	64.2	-0.2	
Foreign	52.5	-0.1	A small decline in Bolivia (see table A2).
United States	11.7	-0.1	See section on U.S. domestic feed grains.
BARLEY			
World	144.0	+0.3	
Foreign	139.7	+0.3	Small increases in the EU and Ukraine and a fractional decline in Japan. See table A2.
United States	4.3	*No change*	
OATS			
World	22.6	-0.1	
Foreign	21.6	-0.1	A fractional decline in Ukraine (less than 0.1 million tons).
United States	0.9	*No change*	

[1]Change from previous month. **For changes by country, see table A2.**

Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Table A2 - Coarse grain production by country at a glance, November 2016					
	Type of crop	Crop year	Production	Change[1]	Comments
			Million tons		
Coarse grain production by country and by type of grain (2016/17)					
UKRAINE					
↑	**Corn**	*Oct-Sep*	**27.0**	**+1.0**	Based on recent harvest results. Yields reported at the beginning of November are at near-record level, and accumulated yields closely trace 2013/14 yields that are on par with the current projection.
↑	**Barley**	*July-June*	**9.8**	**+0.1**	Based on harvest results, barley harvest is virtually over.
RUSSIA					
↑	**Corn**	*Oct-Sep*	**14.5**	**+0.5**	Corn yields in Russia are increased based on harvest reports. Imports of improved seeds are down, but local hybrid seeds are getting better.
EUROPEAN UNION					
↑	**Barley**	*July-June*	**59.7**	**+0.2**	Additional harvest results in Germany and Hungary suggest a small upside adjustment in their barley production estimates that are partly offset by lower projections for France and Estonia.
VIETNAM					
↓	**Corn**	*May-Apr*	**5.0**	**-0.5**	Based on historical multi-year revision of the data.
BOLIVIA					
↓	**Corn**	*July-June*	**0.4**	**-0.3**	With drought conditions over the last 4 months, both harvested area and yields are projected lower.
↓	**Sorghum**	*Oct-Sep*	**0.1**	**-0.1**	With drought conditions over the last 4 months, both harvested area and yields are projected lower.
Coarse grain production by country and by type of grain (2015/16)					
ARGENTINA					
↑	**Corn**	*Mar-Feb*	**29.0**	**+1.0**	Based on observed high volumes of exports during Argentine local marketing year.
BELARUS					
↓	**Corn**	*July-June*	**0.2**	**-0.6**	A 75 percent drop in corn output, as harvested area and yields turned out to be much lower than originally reported. Corn was affected by extremely dry conditions experienced last year in western Ukraine as well. Official statistics.
↓	**Barley**	*July-June*	**1.8**	**-0.2**	Official statistics.
↑	**Oats**	*July-June*	**0.5**	**+0.1**	Official statistics.
VIETNAM					
↑	**Corn**	*May-Apr*	**5.3**	**+0.3**	Data series revision going back to 2001.

[1]Change from previous month. Fractional changes for corn, sorghum, and barley are also made for a number of countries.

Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

World Coarse Grain Use Projected Higher This Month

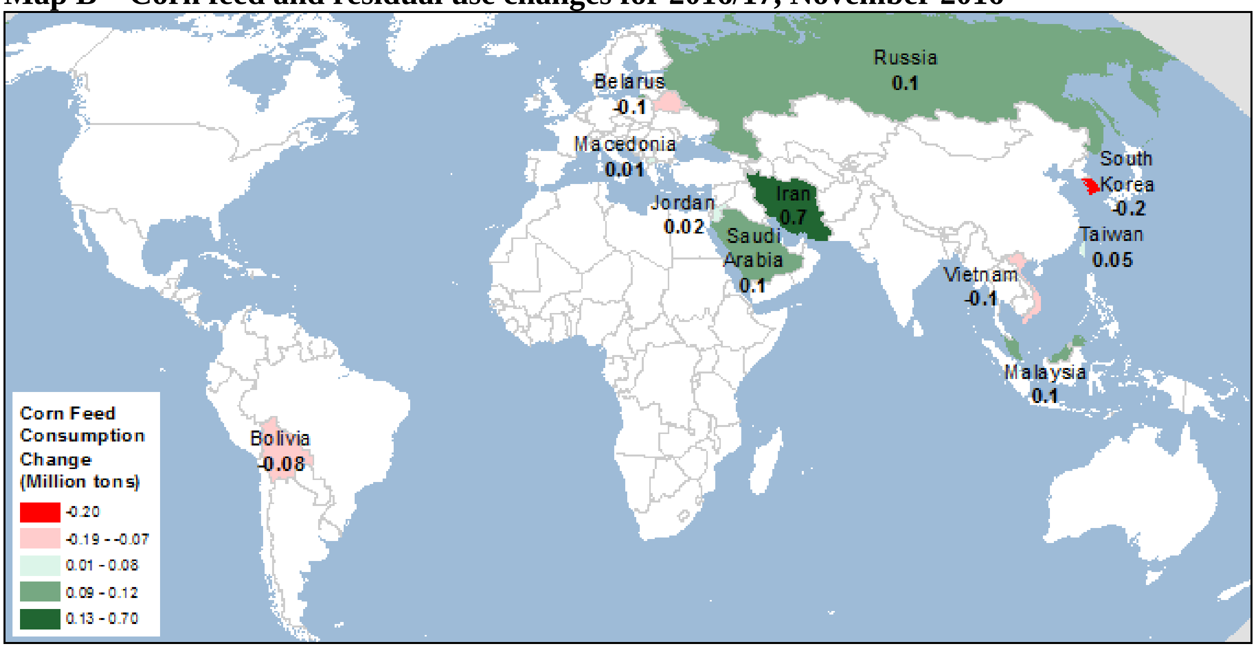
Global coarse grain consumption in 2016/17 is up 2.6 million tons this month to 1,314.5 million, with the major change coming from the United States. Foreign use projections for many countries are revised this month, but the changes are mostly offsetting, with total foreign use up just 0.5 million tons to 986.8 million. Feed use is also adjusted for a number of countries with mostly offsetting small changes, increasing the aggregate estimate of world feed and residual use by 0.3 million tons. The largest change is for Iran, where total coarse grain feeding is projected up 0.7 million tons based on sizeable recent imports of corn from Brazil and Ukraine and Iran's expanded poultry production. All other country changes are 200,000 tons or smaller. For information on this month's changes in coarse grain and corn feed and residual use, see table B and map B.

Table B - Coarse grain feed and residual use at a glance (2016/17), November 2016				
	Country or region	Feed and residual	Change[1]	Comments
		Million tons		
	World	790.6	+0.3	Multiple offsetting changes in each type of coarse grain.
	Foreign	641.7	+0.3	
	United States	148.9	*No change*	
	Iran	15.0	+0.7	Massive recent imports of ***corn*** from Brazil and Ukraine and an expansion of poultry production.

[1]Change from previous month. Numerous small changes are made for a number of countries, see map B for changes in ***corn*** feeding.

Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Map B – Corn feed and residual use changes for 2016/17, November 2016



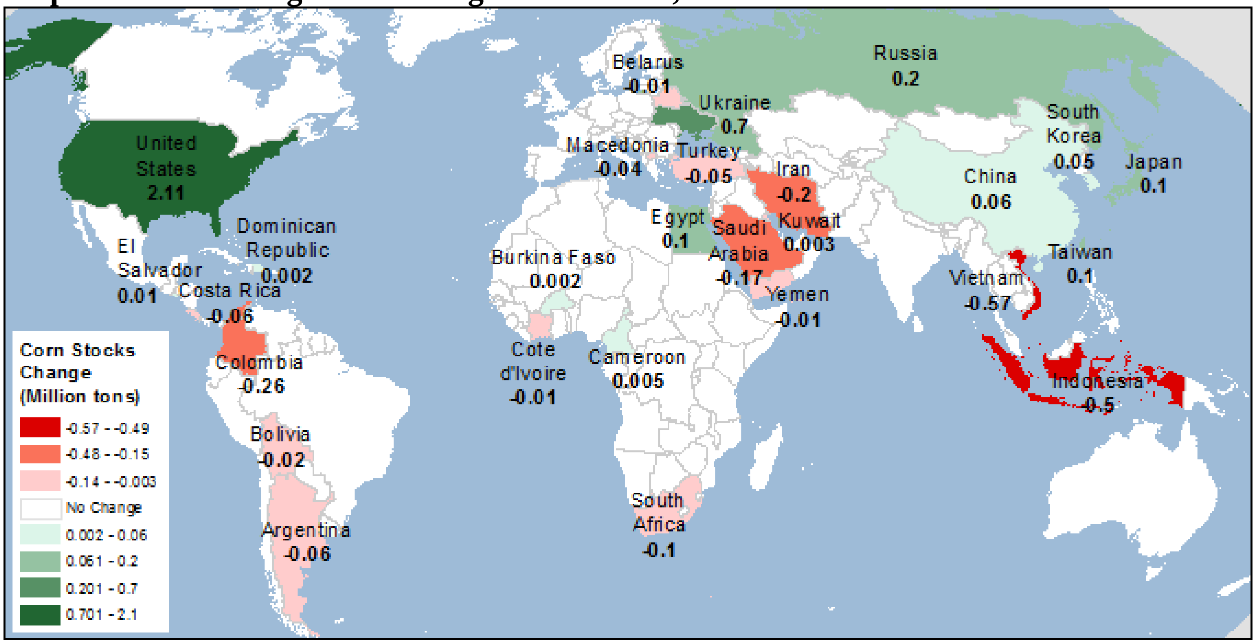
Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Coarse Grain Stocks Are Up

World coarse grain ending stocks for 2016/17 are projected up 1.2 million tons this month to 250.5 million, as the reduction in foreign stocks partly offsets higher U.S. stocks. Foreign coarse grain stocks are projected down 0.8 million tons to 185.6 million, with a 0.5-million-ton decline in corn stocks in

Vietnam (series revision) and a 0.5-million-ton reduction in Indonesian corn stocks where corn import restrictions support higher use of domestically produced corn. The largest change is a projected increase in coarse grain stocks for Ukraine, up 0.7 million tons to 2.4 million, due to sharply increased corn production prospects and a small increase in barley output. All other country changes are much smaller (see map C).

Map C – Corn ending stocks changes for 2016/17, November 2016



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

World Corn Trade Up

Projected 2016/17 world coarse grain trade for the international trade year (October-September) is up by 0.5 million tons to 177.7 million this month. Export prospects for Ukrainian and Russian corn are revised up to reflect changes in supplies and competitiveness.

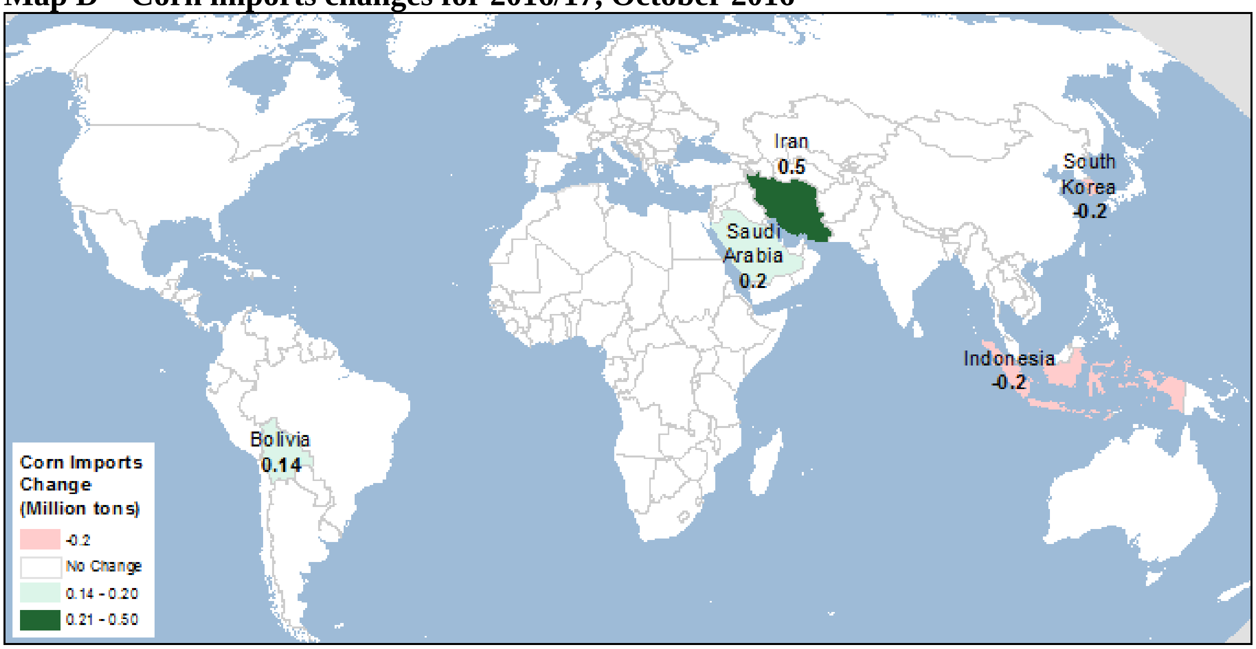
The U.S corn export forecast for 2016/17 is unchanged this month at 56.5 million tons, the highest level since 2007/08 and more than 5 million tons ahead of last year's exports. Outstanding sales at the beginning of November are nearly twice as large as last year, and October inspections are 80 percent higher than in 2015. For information on this month's main changes in 2016/17 corn trade with country-specific details, see table D; for changes in corn imports, see map D.

Table D - Corn trade at a glance (2016/17), November 2016			
Country or region	Trade	Change[1]	Comments
	Million tons		*October-September international trade year*
World	139.7	+0.4	
Foreign	83.2	+0.4	
Corn Exports (2016/17)			
Ukraine	18.0	+0.3	Substantial increase in corn production. Highly competitive with depreciated currency.
Russia	4.7	+0.2	Higher projected corn output.
Bolivia	Virtually no exports left	-0.1	A more than 40 percent cut in corn output. See table A2.
Corn Imports (2016/17)			
Iran	6.0	+0.5	Further increase in projected imports. Expansion of Iranian poultry sector that increase feed demand for corn, high domestic corn prices, and a swift pace of corn imports support the increase.

[1]Change from previous month. Smaller corn imports changes of 0.2 million tons or less are made for several more countries, see map D.

Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Map D – Corn imports changes for 2016/17, October 2016



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

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Data

Feed Grains Database (http://ers.usda.gov/data-products/feed-grains-database.aspx) is a queryable database that contains monthly, quarterly, and annual data on prices, supply, and use of corn and other feed grains. This includes data published in the monthly Feed Outlook and the annual Feed Yearbook reports.

Related Websites

Feed Outlook
(http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1273
WASDE)
(http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1194)
Grain Circular
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Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 11/14/2016

Commodity, market year, and quarter 1/			Beginning stocks	Production	Imports	Total supply	Food, seed, and industrial use	Feed and residual use	Exports	Total disappear-ance	Ending stocks	Farm price 2/ (dollars per bushel)
Corn	2013/14	Sep-Nov	821	13,829	15	14,665	1,550	2,312	350	4,212	10,453	4.66
		Dec-Feb	10,453		7	10,459	1,602	1,459	390	3,451	7,008	4.40
		Mar-May	7,008		9	7,017	1,684	845	636	3,165	3,852	4.63
		Jun-Aug	3,852		6	3,858	1,696	385	544	2,626	1,232	4.06
		Mkt yr	821	13,829	36	14,686	6,532	5,001	1,921	13,454	1,232	4.46
	2014/15	Sep-Nov	1,232	14,216	5	15,452	1,615	2,225	401	4,241	11,211	3.57
		Dec-Feb	11,211		6	11,217	1,622	1,445	400	3,468	7,750	3.80
		Mar-May	7,750		10	7,760	1,675	1,092	540	3,307	4,453	3.75
		Jun-Aug	4,453		11	4,464	1,690	517	526	2,733	1,731	3.69
		Mkt yr	1,232	14,216	32	15,479	6,601	5,280	1,867	13,748	1,731	3.70
	2015/16	Sep-Nov	1,731	13,601	13	15,345	1,631	2,175	301	4,107	11,238	3.65
		Dec-Feb	11,238		18	11,256	1,652	1,445	340	3,437	7,819	3.64
		Mar-May	7,819		20	7,838	1,645	920	561	3,126	4,713	3.60
		Jun-Aug	4,713		17	4,730	1,706	590	695	2,992	1,738	3.55
		Mkt yr	1,731	13,601	67	15,400	6,635	5,130	1,898	13,662	1,738	3.61
	2016/17	Mkt yr	1,738	15,226	50	17,013	6,735	5,650	2,225	14,610	2,403	3.00-3.60
Sorghum	2013/14	Sep-Nov	15.15	392.33	0.01	407.49	45.00	97.71	33.39	176.10	231.39	4.28
		Dec-Feb	231.39		0.01	231.40	10.00	6.52	39.15	55.67	175.73	4.22
		Mar-May	175.73		0.01	175.74	12.01	0.25	71.05	83.32	92.42	4.68
		Jun-Aug	92.42		0.07	92.49	2.88	-11.81	67.39	58.46	34.03	4.11
		Mkt yr	15.15	392.33	0.09	407.57	69.89	92.67	210.98	373.54	34.03	4.28
	2014/15	Sep-Nov	34.03	432.58	0.21	466.82	10.60	149.98	83.64	244.23	222.59	3.63
		Dec-Feb	222.59		0.12	222.71	1.80	2.37	98.69	102.86	119.86	4.17
		Mar-May	119.86		0.00	119.86	1.43	-14.99	99.13	85.57	34.29	4.41
		Jun-Aug	34.29		0.04	34.33	1.18	-55.54	70.28	15.92	18.41	
		Mkt yr	34.03	432.58	0.38	466.98	15.01	81.82	351.75	448.57	18.41	4.03
	2015/16	Sep-Nov	18.41	596.75	3.60	618.76	22.14	159.96	114.44	296.54	322.22	3.54
		Dec-Feb	322.22		0.98	323.20	47.05	-11.34	86.33	122.05	201.15	3.17
		Mar-May	201.15		0.01	201.15	42.75	-5.44	73.47	110.79	90.37	3.10
		Jun-Aug	90.37		0.01	90.37	29.75	-40.36	64.35	53.73	36.64	3.33
		Mkt yr	18.41	596.75	4.59	619.75	141.70	102.83	338.59	583.11	36.64	3.31
	2016/17	Mkt yr	36.64	462.17	1.00	499.80	120.00	90.00	250.00	460.00	39.80	2.80-3.40

Table 1--Feed grains: U.S. quarterly supply and disappearance, cont. (million bushels), 11/14/2016

Commodity, market year, and quarter 1/			Beginning stocks	Production	Imports	Total supply	Food, seed, and industrial use	Feed and residual use	Exports	Total disappear-ance	Ending stocks	Farm price 2/ (dollars per bushel)
Barley	2013/14	Jun-Aug	80	217	2	299	40	61	3	103	196	6.22
		Sep-Nov	196		5	201	39	-11	3	31	169	5.98
		Dec-Feb	169		4	173	37	10	4	52	122	6.03
		Mar-May	122		8	129	37	6	4	47	82	5.93
		Mkt yr	80	217	19	316	153	66	14	234	82	6.06
	2014/15	Jun-Aug	82	182	7	271	39	48	4	91	180	5.69
		Sep-Nov	180		5	184	38	-14	4	28	156	5.25
		Dec-Feb	156		6	163	37	5	3	44	118	5.07
		Mar-May	118		6	124	37	4	4	45	79	4.86
		Mkt yr	82	182	24	287	151	43	14	209	79	5.30
	2015/16	Jun-Aug	79	218	4	301	40	38	3	82	219	5.39
		Sep-Nov	219		4	223	38	0	4	42	181	5.52
		Dec-Feb	181		7	188	37	10	3	50	138	5.66
		Mar-May	138		4	141	38	1	1	39	102	5.43
		Mkt yr	79	218	19	315	153	50	11	213	102	5.52
	2016/17	Jun-Aug	102	199	2	304	40	33	1	74	230	4.99
		Mkt yr	102	199	20	321	153	60	10	223	98	4.55-5.15
Oats	2013/14	Jun-Aug	36	65	17	118	17	37	0	55	63	3.72
		Sep-Nov	63		28	91	18	25	1	43	48	3.56
		Dec-Feb	48		20	68	16	16	0	33	35	3.71
		Mar-May	35		32	67	22	20	0	43	25	4.03
		Mkt yr	36	65	97	198	73	98	2	173	25	3.75
	2014/15	Jun-Aug	25	70	27	122	18	30	1	48	74	3.34
		Sep-Nov	74		25	99	18	14	0	32	67	3.16
		Dec-Feb	67		32	99	17	22	0	40	59	3.08
		Mar-May	59		25	84	24	6	1	31	54	2.89
		Mkt yr	25	70	109	204	77	71	2	150	54	3.21
	2015/16	Jun-Aug	54	90	18	161	18	49	0	68	94	2.15
		Sep-Nov	94		26	120	18	18	1	37	83	2.08
		Dec-Feb	83		25	108	17	15	0	33	75	2.09
		Mar-May	75		16	91	24	10	1	34	57	2.11
		Mkt yr	54	90	86	229	77	93	2	172	57	2.12
	2016/17	Jun-Aug	57	65	21	142	18	45	1	64	79	1.86
		Mkt yr	57	65	90	212	78	85	2	165	47	1.70-2.00

Latest market year is projected; previous market year is estimated. Totals may not add due to rounding.
1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year.
2/ Average price received by farmers based on monthly price weighted by monthly marketings. For the latest market year, quarterly prices are calculated by using the current monthly prices weighted by the monthly marketings for those months for the previous 5 years divided by the sum of marketings for those months.
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Data run: 11/10/2016

Table 2--Feed and residual use of wheat and coarse grains, 11/14/2016

Market year and quarter 1/		Corn (million metric tons)	Sorghum (million metric tons)	Barley (million metric tons)	Oats (million metric tons)	Feed grains (million metric tons)	Wheat (million metric tons)	Energy feeds (million metric tons)	Grain consuming animal units (millions)	Energy feeds per grain consuming animal unit (tons)
2014/15	Q1 Sep-Nov	56.5	3.8	-0.3	0.3	60.3	-2.5	57.8		
	Q2 Dec-Feb	36.7	0.1	0.1	0.4	37.3	0.2	37.5		
	Q3 Mar-May	27.7	-0.4	0.1	0.2	27.6	-1.6	26.0		
	Q4 Jun-Aug	13.1	-1.4	0.8	0.8	13.3	8.1	21.4		
	MY Sep-Aug	134.1	2.1	0.7	1.6	138.5	4.2	142.7	92.3	1.5
2015/16	Q1 Sep-Nov	55.2	4.1	0.0	0.3	59.6	-2.9	56.7		
	Q2 Dec-Feb	36.7	-0.3	0.2	0.3	36.9	-0.0	36.9		
	Q3 Mar-May	23.4	-0.1	0.0	0.2	23.4	-1.0	22.4		
	Q4 Jun-Aug	15.0	-1.0	0.7	0.7	15.4	7.7	23.1		
	MY Sep-Aug	130.3	2.6	1.0	1.5	135.4	3.7	139.2	93.8	1.5
2016/17	MY Sep-Aug	143.5	2.3	1.5	1.4	148.7	8.4	157.1	95.5	1.6

1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year.
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Table 3--Cash feed grain prices, 11/14/2016

Mkt year and month 1/	Corn, No. 2 yellow, Central IL (dollars per bushel)			Corn, No. 2 yellow, Gulf ports, LA (dollars per bushel)			yellow, Gulf ports, LA (dollars per cwt)	
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16
Sep	3.16	3.55	3.09	4.14	4.22	3.78	7.91	8.08
Oct	3.09	3.67	3.27	4.15	4.36	3.88	8.52	8.23
Nov	3.45	3.62		4.54	4.22		9.04	7.89
Dec	3.75	3.62		4.55	4.17		9.85	
Jan	3.67	3.55		4.44	4.09		10.41	
Feb	3.65	3.56		4.41	4.06		10.70	
Mar	3.66	3.54		4.43	4.05			
Apr	3.59	3.61		4.38	4.17		9.97	
May	3.49	3.74		4.23	4.30		7.44	
Jun	3.52	3.91		4.24	4.62			
Jul	3.85	3.28		4.56	4.11			
Aug	3.51	3.09		4.14	3.82		8.09	
Mkt year	3.53	3.56		4.35	4.18		9.10	8.07

	Barley, No. 2 feed, Minneapolis, MN (dollars per bushel)			malting, Minneapolis, MN (dollars per bushel)		Oats, No. 2 white heavy, Minneapolis, MN (dollars per bushel)		
	2014/15	2015/16	2016/17	2014/15	2015/16	2014/15	2015/16	2016/17
Jun	3.49	2.59	2.36	5.71		3.88	2.89	2.58
Jul	3.01	2.70	2.33	5.62		3.85	2.82	2.61
Aug	2.58	2.41	2.08	5.79		3.83	2.63	2.34
Sep	2.30	2.39	1.95	5.98	4.95	3.86	2.70	2.29
Oct	2.44	2.57	2.00	7.28	4.95	3.68	2.58	2.67
Nov	2.48	2.60		7.35		3.53	2.67	
Dec	2.68	2.60		7.35		3.49	2.64	
Jan	2.79	2.58		7.10		3.26	2.60	
Feb	2.73	2.50		6.75		3.11	2.60	
Mar	2.75	2.46				3.14	2.43	
Apr	2.81	2.45		6.35		2.94	2.49	
May	2.76	2.44		6.23		2.75	2.49	
Mkt year	2.74	2.52		6.50	4.95	3.44	2.63	

1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year. Simple average of monthly prices for the marketing year.
Source: USDA, Agricultural Marketing Service, http://marketnews.usda.gov/portal/lg.

Data run: 11/10/2016

Table 4--Selected feed and feed byproduct prices (dollars per ton), 11/14/2016

Mkt year and month 1/	Soybean meal, high protein, Central Illinois, IL			Cottonseed meal, 41% solvent, Memphis, TN			Corn gluten feed, 21% protein, Midwest			Corn gluten meal, 60% protein, Midwest		
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Oct	381.50	327.97	323.26	346.88	292.50	241.88	90.13	96.00	77.00	549.38	509.38	466.13
Nov	441.40	308.60		313.13	291.88		105.13	109.63		581.88	477.50	
Dec	431.74	289.78		334.38	265.00		143.30	113.13		613.50	482.25	
Jan	380.03	279.57		313.75	248.75		135.25	109.63		632.50	452.50	
Feb	370.39	273.61		302.50	238.13		117.25	102.38		631.25	457.50	
Mar	357.83	276.23		310.50	216.50		107.20	87.00		613.00	445.50	
Apr	336.61	303.81		288.13	207.50		83.13	73.25		575.63	434.00	
May	320.23	376.36		274.38	242.50		72.25	87.00		549.38	464.10	
Jun	335.03	408.58		281.00	284.00		74.40	107.13		571.60	568.13	
Jul	375.48	371.49		299.38	280.00		91.25	95.01		560.00	573.13	
Aug	357.85	340.80		295.63	280.00		88.75	90.30		550.63	507.20	
Sep	333.63	337.95		293.50	285.00		95.50	85.38		525.00	469.38	
Mkt yr	368.48	324.56		304.43	260.98		100.29	96.32		579.48	486.71	

	Meat and bone meal, Central US			Distillers dried grains, Central Illinois, IL			Wheat middlings, Kansas City, MO			Alfalfa hay, weighted-average farm price 2/	
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16
Oct	385.00	291.88	237.50	96.00	123.13	116.25	111.48	105.93	79.43	193.00	155.00
Nov	383.79	266.25		113.13	132.63		106.87	106.53		182.00	147.00
Dec	424.22	221.67		159.30	133.13		135.83	99.55		180.00	149.00
Jan	382.49	200.13		186.50	132.50		140.93	104.16		170.00	141.00
Feb	370.63	193.75		187.13	136.63		124.85	97.89		167.00	137.00
Mar	376.00	261.00		189.50	134.50		1,118.55	68.64		169.00	139.00
Apr	390.63	316.25		191.00	122.38		81.93	65.12		175.00	154.00
May	368.75	310.10		178.50	141.10		64.25	60.72		187.00	147.00
Jun	313.50	345.00		157.50	170.50		60.27	57.94		178.00	142.00
Jul	333.75	381.67		153.50	149.38		77.96	61.48		172.00	140.00
Aug	388.75	347.00		115.13	130.90		92.72	60.61		161.00	138.00
Sep	344.00	285.63		139.30	127.75		112.67	64.43		160.00	137.00
Mkt yr	371.79	285.03		155.54	136.21		185.69	79.42		196.00	158.00

1/ October 1-September 30 except for hay. Simple average of monthly prices for the marketing year except for hay.

2/ May 1-April 30 marketing year. U.S. season-average price based on monthly price received by farmers weighted by monthly marketings.

Source: USDA, Agricultural Marketing Service, http://marketnews.usda.gov/portal/lg, and USDA, National Agricultural Statistics Service, http://www.nass.usda.gov/Data_and_Statistics/Quick_Stats/index.asp.

Table 5--Corn: Food, seed, and industrial use (million bushels), 11/14/2016

Mkt year and qtr 1/		High-fructose corn syrup (HFCS)	Glucose and dextrose	Starch	Alcohol for fuel	Alcohol for beverages and manufacturing	Cereals and other products	Seed	Total food, seed, and industrial use
2014/15	Q1 Sep-Nov	116.78	74.64	62.41	1,276.24	34.52	50.11	0.00	1,614.69
	Q2 Dec-Feb	110.32	71.95	59.76	1,293.93	36.18	49.95	0.00	1,622.10
	Q3 Mar-May	123.73	77.43	63.20	1,294.53	37.85	50.47	27.72	1,674.93
	Q4 Jun-Aug	128.24	78.13	62.11	1,335.39	33.64	50.68	1.54	1,689.73
	MY Sep-Aug	479.08	302.14	247.48	5,200.09	142.19	201.21	29.26	6,601.44
2015/16	Q1 Sep-Nov	110.81	72.34	62.30	1,300.20	34.89	50.62	0.00	1,631.16
	Q2 Dec-Feb	115.06	76.77	59.91	1,313.32	36.58	50.43	0.00	1,652.05
	Q3 Mar-May	124.71	92.65	59.70	1,251.13	38.27	50.92	27.93	1,645.30
	Q4 Jun-Aug	127.31	88.73	61.67	1,341.42	33.27	51.13	2.63	1,706.16
	MY Sep-Aug	477.89	330.49	243.57	5,206.06	143.00	203.10	30.56	6,634.66
2016/17	MY Sep-Aug	480.00	325.00	250.00	5,300.00	144.00	204.00	29.40	6,732.40

1/ September-August. Latest data may be preliminary or projected.

Source: Calculated by USDA, Economic Research Service.

Date run: 11/10/2016

Table 6--Wholesale corn milling product and byproduct prices, 11/14/2016

Mkt year and month 1/	Corn meal, yellow, Chicago, IL (dollars per cwt)		Corn meal, yellow, New York, NY (dollars per cwt)		Corn starch, Midwest 3/ (dollars per cwt)		Dextrose, Midwest (cents per pound)		High-fructose corn syrup (42%), Midwest (cents per pound)	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
Sep	17.80	16.71	19.47	18.38	14.20	13.21	37.00	39.00	23.25	26.75
Oct	17.96	17.06	19.63	18.73	14.29	13.39	37.00	39.00	23.25	26.75
Nov	17.53		19.20		14.95		37.00		23.25	
Dec	17.50		19.17		14.80		37.00		23.25	
Jan	17.42		19.09		14.62		39.00		26.75	
Feb	17.44		19.11		14.35		39.00		26.75	
Mar	17.13		18.92		14.71		39.00		26.75	
Apr	17.70		19.37		14.71		39.00		26.75	
May	18.21		19.88		15.10		39.00		26.75	
Jun	18.27		19.94		15.40		39.00		26.75	
Jul	17.03		18.70		15.43		39.00		26.75	
Aug	16.64		18.31		13.63		39.00		26.75	
Mkt year 2/	17.55		19.23		14.68		38.33		25.58	

1/ September-August. Latest month is preliminary.
2/ Simple average of monthly prices for the marketing year.
3/ Bulk-industrial, unmodified.
Source: Milling and Baking News, except for corn starch which is from private industry.

Date run: 11/10/2016

Table 7--U.S. feed grain imports by selected sources (1,000 metric tons) 1/, 11/14/2016

Import and country/region		---------- 2014/15 ---------- Mkt year	Jun-Sep	---------- 2015/16 ---------- Mkt year	Jun-Sep	2016/17 Jun-Sep
Oats	Canada	1,731	556	1,379	474	544
	Sweden	72		62		
	Finland	62	40	34	18	10
	All other countries	12	5	0	0	0
	Total 2/	1,876	601	1,475	492	554
Malting barley	Canada	334	130	283	70	18
	All other countries	28	0	0	0	17
	Total 2/	362	130	284	70	34
Other barley 3/	Canada	147	63	116	40	23
	All other countries	4	1	4	1	1
	Total 2/	152	64	119	41	24

1/ Grain only. Market year (June-May) and market year to date.
2/ Totals may not add due to rounding.
3/ Grain for purposes other than malting, such as feed and seed use.
Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Statistics.

Date run: 11/10/2016

Table 8--U.S. feed grain exports by selected destinations (1,000 metric tons) 1/, 11/14/2016

Export and country/region		---------- 2014/15 ---------- Mkt year	Sep	---------- 2015/16 ---------- Mkt year	Sep	2016/17 Sep
Corn	Japan	12,003	979	10,392	809	1,644
	Mexico	11,333	1,079	13,337	986	1,252
	Colombia	4,371	349	4,548	455	345
	South Korea	3,934	352	2,964	64	982
	Peru	2,555	204	2,383	131	287
	China (Taiwan)	1,839	49	2,049	41	311
	Canada	1,490	201	1,006	184	121
	Egypt	1,235	231	852	124	119
	Saudi Arabia	1,185		1,389		134
	Guatemala	852	47	883	66	86
	Costa Rica	774	87	552	70	51
	China (Mainland)	747	8	321		
	Venezuela	710	70	1,155	166	90
	Dominican Republic	607	31	253		38
	El Salvador	538	17	654	43	46
	Panama	450	49	392	0.038	28
	Honduras	428	19	550	26	45
	European Union-27	361	75	417	0.046	44
	Morocco	298	0.542	450	0.368	194
	Jamaica	282	19	283	9	9
	Algeria	239		663		
	Nicaragua	191	24	258	29	16
	Iran	138		0.095		
	New Zealand, No Islands	106	0.001	55	0.001	0.003
	Trinidad And Tobago	89	13	92	4	3
	All other countries	666	52	2,305	158	520
	Total 2/	47,421	3,956	48,202	3,367	6,363
Sorghum	China (Mainland)	8,328	664	7,008	1,055	264
	Sub-Saharan Africa	486	86	593	19	80
	Japan	83	12	79	16	19
	Mexico	21	2	625	10	47
	All other countries	17	2	296	0.837	2
	Total 2/	8,935	767	8,600	1,101	412
		---------- 2014/15 ---------- Mkt year	Jun-Sep	---------- 2015/16 ---------- Mkt year	Jun-Sep	2016/17 Jun-Sep
Barley	Mexico	99	42	142	38	0.257
	Japan	90	20	5	1	3
	Canada	52	7	52	32	11
	China (Taiwan)	32	8	7	3	1
	All other countries	38	34	30	19	1
	Total 2/	311	112	235	92	18

1/ Grain only. Market year (September-August for corn and sorghum, June-May for barley) and market year to date.
2/ Totals may not add due to rounding.
Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Statistics.