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Baseline Update for U.S. Agricultural Markets

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Summary

Prices for grains, oilseeds, cotton, milk and hogs have declined sharply from record levels set in recent years, and no quick price recovery is expected. This report provides an update of the 2015 FAPRI-MU long-term baseline to reflect information available in mid-August 2015.

The baseline update uses 2015 acreage, yield and production estimates included in USDA's August 2015 *Crop Production* report. It assumes that current agricultural and biofuel policies will continue, and that the global economy will evolve as forecast by IHS Global Insight in July 2015.

Given all of the assumptions of the analysis, here are a few highlights of the results:

- Projected corn prices remain near the 2014/15 level of \$3.70 per bushel for another two years, and only exceed \$4 per bushel in 2018/19. U.S. corn acreage increases to more than 90 million acres in 2016 at the expense of other crops.
- Large global oilseed supplies contribute to a reduction in projected soybean prices, which fall to \$9.12 per bushel in 2015/16 and remain near that level in 2016/17.
- Projected wheat prices also decline, to \$5.10 per bushel for the 2015/16 crop, as U.S. stocks rise to the highest levels since 2010.
- A smaller U.S. crop contributes to a modest increase in cotton prices in 2015/16 to 65 cents per pound, but larger Chinese stock levels continue to weigh on global markets.
- Ethanol production prospects depend, in part, on EPA decisions about how to implement the Renewable Fuel Standard (RFS). Lower oil prices increase gasoline consumption and the use of ethanol in 10-percent blends, but discourage higher-level blends and ethanol exports.
- Increased production and a stronger dollar have contributed to sharply lower U.S. hog and milk prices in 2015. Projected prices for both remain far below the record levels of 2014.
- As U.S. cattle numbers and beef production expand, cattle prices decline from record levels. Projected fed cattle prices decline from \$157 per hundredweight in 2015 to \$122 by 2020.
- As retail prices for meat, milk and other products moderate, projected consumer food price inflation drops to 1.9 percent in 2015 and 1.3 percent in 2016.

This baseline update provides a snapshot of what agricultural markets might look like under a particular set of assumptions. As more is learned about the size of the 2015 crop, the implementation of policies and the outlook for the general economy, these projections will need to be updated. In the meantime, they can be used as a point of reference in examining alternative scenarios.

For more detail on the livestock, poultry and dairy sectors and on consumer food prices, see a companion report by the MU Agricultural Markets and Policy team, at <http://amap.missouri.edu/>.

Table of contents

Macroeconomic assumptions	3
Policy assumptions	3
U.S. corn supply and use	4
U.S. soybean supply and use	5
U.S. wheat supply and use	6
U.S. upland cotton supply and use	7
U.S. rice supply and use	8
Other U.S. feed grains supply and use	9
Other U.S. oilseeds supply and use	10
U.S. hay supply and use	11
U.S. crop farm prices	12
U.S. soybean product supply and use	13
U.S. biomass-based diesel supply and use	13
U.S. ethanol supply and use	14
U.S. beef sector	15
U.S. pork sector	15
U.S. poultry supply and use	16
U.S. per-capita meat consumption	16
U.S. dairy sector	17
U.S. consumer food price inflation	17

A few words about policy and macroeconomic assumptions

The baseline update incorporates current policies, including provisions of the Agricultural Act of 2014 (the 2014 farm bill) and the Energy Independence and Security Act of 2007. The estimates here reflect available information about program implementation, such as the result of elections made by crop producers who had to choose between Price Loss Coverage (PLC) and Agriculture Risk Coverage (ARC).

There remains considerable uncertainty about future implementation of the Renewable Fuel Standard (RFS). This baseline assumes RFS requirements for 2014-2016 (and 2017 in the case of biomass-based diesel) are implemented as proposed by the EPA in May 2015. Beyond 2016, modest growth rates are assumed for the overall and advanced requirements while the biomass-based diesel requirement is held steady at the 2017 level. Furthermore, the expired biodiesel blenders tax credit is not renewed or reflected in these market projections.

The macroeconomic forecast underlying this baseline was prepared by IHS Global Insight before the market turbulence of August 2015. As a result, there may be more uncertainty than usual regarding assumed levels of economic growth, exchange rates, oil prices and other indicators.

Macroeconomic assumptions*

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
Real GDP growth								
United States	2.2	2.4	2.2	3.1	2.7	2.5	2.5	2.5
China	7.7	7.4	6.5	6.3	6.5	6.5	6.8	6.8
World	2.6	2.8	2.6	3.3	3.4	3.5	3.6	3.6
U.S. CPI inflation	1.5	1.6	0.2	1.8	2.3	2.5	2.4	2.0
U.S. interest rates								
Federal funds rate	0.1	0.1	0.3	1.2	2.7	3.5	3.5	3.5
Prime rate	3.3	3.3	3.3	4.2	5.7	6.5	6.5	6.5
Exchange rates								
(Currency per dollar)								
Euro	0.75	0.75	0.91	0.90	0.84	0.78	0.75	0.74
Brazilian real	2.16	2.35	3.08	3.18	3.22	3.25	3.30	3.39
Chinese yuan	6.15	6.16	6.21	6.29	6.31	6.27	6.21	6.14

*Source: IHS Global Insight forecast, July 2015

Policy assumptions

Year	2013	2014	2015	2016	2017	2018	2019	2020
ARC participation rate								
Corn	n.a.	93.40	93.40	93.40	93.40	93.40	93.40	93.40
Soybeans	n.a.	96.90	96.90	96.90	96.90	96.90	96.90	96.90
Wheat	n.a.	57.54	57.54	57.54	57.54	57.54	57.54	57.54
Target or reference prices								
(Dollars per bushel)								
Corn	2.63	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Soybeans	6.00	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Wheat	4.17	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Conservation reserve area								
(Million acres)								
Biodiesel tax credit	26.8	25.4	24.2	24.0	23.0	23.0	23.0	23.0
Renewable fuel standard								
(Billion gallons)								
Overall	16.4	15.4	15.8	17.0	17.3	17.4	17.5	17.6
Advanced biofuels	2.7	2.5	2.8	3.3	3.3	3.3	3.3	3.3
Biomass-based diesel	1.3	1.6	1.6	1.7	1.8	1.8	1.8	1.8
Conventional biofuel "gap"	13.7	12.8	13.0	13.6	14.0	14.1	14.1	14.2

U.S. corn supply and use

September-August year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Area								
Planted area	95.4	90.6	88.9	90.5	89.2	90.1	90.3	90.2
Harvested area	87.5	83.1	81.1	82.6	81.3	82.1	82.3	82.3
(Million acres)								
Yield								
	158.1	171.0	168.8	166.8	168.6	170.1	171.9	173.7
(Bushels per harvested acre)								
Supply								
Beginning stocks	14,686	15,477	15,488	15,522	15,474	15,606	15,754	15,899
Production	821	1,232	1,772	1,720	1,734	1,612	1,574	1,577
Imports	13,829	14,216	13,686	13,772	13,710	13,964	14,150	14,292
	36	30	30	30	30	30	30	30
Domestic use								
Feed and residual	11,534	11,855	11,883	11,916	11,915	11,969	11,994	12,012
Ethanol and coproducts	5,030	5,300	5,269	5,319	5,270	5,276	5,291	5,286
HFCS	5,134	5,200	5,253	5,240	5,283	5,321	5,325	5,341
Seed	477	470	471	462	464	469	470	470
Food and other	23	23	23	23	23	23	23	23
	869	862	868	873	875	880	886	892
Exports								
	1,920	1,850	1,886	1,872	1,947	2,063	2,183	2,281
Total use								
	13,454	13,705	13,769	13,788	13,861	14,032	14,177	14,293
Ending stocks								
Under loan	1,232	1,772	1,720	1,734	1,612	1,574	1,577	1,606
Other stocks	78	120	118	115	94	86	84	85
	1,154	1,652	1,602	1,619	1,519	1,489	1,493	1,520
Prices, program provisions								
Farm price	4.46	3.70	3.68	3.71	3.96	4.09	4.14	4.13
Loan rate	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Target or reference price	2.63	3.70	3.70	3.70	3.70	3.70	3.70	3.70
(Dollars per bushel)								
ARC participation rate								
	n.a.	93.40	93.40	93.40	93.40	93.40	93.40	93.40
(Percent of base acres)								
Market returns								
Gross market revenue/a.	705.28	632.67	620.87	619.35	667.80	696.32	711.34	716.82
Variable expenses/a.	358.72	360.08	340.05	339.58	346.23	356.44	368.44	375.84
Market net return/a.	346.56	272.59	280.82	279.77	321.58	339.87	342.90	340.98

U.S. soybean supply and use

September-August year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Area								
Planted area	76.8	83.7	84.3	82.4	83.5	83.7	83.7	83.8
Harvested area	76.3	83.1	83.5	81.6	82.7	82.9	82.9	83.0
(Bushels per harvested acre)								
Yield	44.0	47.8	46.9	44.9	45.4	45.8	46.2	46.6
(Million bushels)								
Supply	3,570	4,091	4,186	4,096	4,085	4,106	4,132	4,170
Beginning stocks	141	92	240	401	301	280	273	270
Production	3,358	3,969	3,916	3,665	3,754	3,796	3,830	3,870
Imports	72	30	30	30	30	30	30	30
Domestic use	1,840	2,026	2,013	2,010	2,009	2,009	2,023	2,034
Crush	1,734	1,845	1,867	1,867	1,867	1,868	1,880	1,890
Seed and residual	106	181	145	143	142	142	143	144
Exports	1,638	1,825	1,773	1,785	1,796	1,824	1,839	1,867
Total use	3,478	3,851	3,786	3,794	3,805	3,833	3,862	3,902
Ending stocks	92	240	401	301	280	273	270	268
Under loan	3	11	16	15	12	11	11	11
Other stocks	89	229	385	286	268	262	259	257
Prices, program provisions								
(Dollars per bushel)								
Farm price	13.00	10.05	9.12	9.15	9.98	10.31	10.42	10.50
Illinois processor price	13.82	10.13	9.51	9.42	10.22	10.55	10.65	10.73
Loan rate	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Target or reference price	6.00	8.40	8.40	8.40	8.40	8.40	8.40	8.40
(Percent of base acres)								
ARC participation rate	n.a.	96.90	96.90	96.90	96.90	96.90	96.90	96.90
Market returns								
(Dollars)								
Gross market revenue/a.	572.49	480.21	427.35	410.98	453.01	472.09	481.34	489.85
Variable expenses/a.	183.21	183.20	170.93	170.58	174.72	180.21	185.60	187.79
Market net return/a.	389.28	297.01	256.42	240.40	278.28	291.88	295.75	302.06
Other indicators								
Soybean/corn price ratio	2.91	2.72	2.48	2.46	2.52	2.52	2.52	2.55
48% soymeal price, \$/ton	489.94	370.00	326.73	330.67	352.09	360.38	365.85	364.19
Soybean oil price, cents/lb.	38.23	32.00	30.47	29.25	31.78	32.47	32.86	33.87
Crushing margin, \$/bu.	2.11	2.39	1.79	1.84	1.84	1.79	1.86	1.85

U.S. wheat supply and use

June-May year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Area								
Planted area	56.2	56.8	56.1	53.9	54.2	54.0	54.3	54.6
Harvested area	45.3	46.4	48.5	45.5	45.7	45.5	45.8	46.0
(Bushels per harvested acre)								
Yield	47.1	43.7	44.1	45.9	46.3	46.6	46.9	47.3
(Million bushels)								
Supply	3,022	2,760	3,017	3,053	3,086	3,087	3,094	3,111
Beginning stocks	718	590	753	837	844	835	811	798
Production	2,135	2,026	2,136	2,088	2,113	2,120	2,149	2,179
Imports	169	144	128	128	129	132	134	135
Domestic use	1,255	1,154	1,257	1,272	1,281	1,276	1,274	1,278
Feed and residual	223	115	213	220	223	211	201	198
Seed	77	81	76	76	76	77	77	78
Food and other	955	958	969	975	982	988	995	1,002
Exports	1,176	854	923	938	970	1,000	1,023	1,038
Total use	2,431	2,008	2,180	2,209	2,251	2,276	2,297	2,316
Ending stocks	590	753	837	844	835	811	798	796
Under loan	8	21	33	33	30	25	24	23
Other stocks	582	731	804	811	805	785	774	772
Prices, program provisions								
(Dollars per bushel)								
Farm price	6.87	5.99	5.10	5.05	5.24	5.55	5.72	5.76
Loan rate	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94
Target or reference price	4.17	5.50	5.50	5.50	5.50	5.50	5.50	5.50
ARC participation rate	n.a.	57.54	57.54	57.54	57.54	57.54	57.54	57.54
(Percent of base acres)								
Market returns								
(Dollars)								
Gross market revenue/a.	323.55	261.61	224.79	231.86	242.47	258.48	268.51	272.65
Variable expenses/a.	130.33	128.78	120.76	120.25	122.95	126.76	130.63	132.11
Market net return/a.	193.22	132.83	104.04	111.62	119.53	131.71	137.87	140.54

U.S. upland cotton supply and use

August-July year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Area								
Planted area	10.21	10.85	8.75	9.09	9.47	9.27	9.26	9.27
Harvested area	7.35	9.16	7.75	7.56	7.89	7.71	7.71	7.72
(Million acres)								
Yield								
	802	826	784	812	823	832	842	851
(Pounds per harvested acre)								
Supply								
Beginning stocks	15.89	18.09	16.09	15.83	16.61	16.69	16.66	16.75
Production	3.61	2.33	3.43	3.04	3.07	3.31	3.13	3.07
Imports	12.28	15.75	12.65	12.78	13.53	13.37	13.52	13.68
	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Domestic use								
Mill use	3.53	3.53	3.66	3.76	3.81	3.80	3.77	3.73
Exports	9.85	10.80	9.38	9.00	9.48	9.76	9.82	9.90
Total use	13.38	14.33	13.05	12.75	13.29	13.56	13.59	13.63
Unaccounted	0.19	0.33	0.00	0.00	0.00	0.00	0.00	0.00
Ending stocks	2.33	3.43	3.04	3.07	3.31	3.13	3.07	3.12
Prices, program provisions								
(Cents per pound)								
Farm price	77.9	60.5	65.1	63.8	63.1	65.8	67.1	67.2
Loan rate	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
Direct payment or CTAP	6.7	9.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
User payment	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Market returns								
(Dollars)								
Gross market revenue/a.	765.66	608.16	613.55	623.95	632.73	666.90	686.50	695.33
Variable expenses/a.	512.08	534.17	505.91	509.36	524.82	542.46	559.66	569.07
Market net return/a.	253.58	73.99	107.64	114.59	107.91	124.44	126.84	126.26

U.S. rice supply and use

August-July year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Area								
Planted area	2.49	2.94	2.77	2.91	2.89	2.88	2.88	2.90
Harvested area	2.47	2.92	2.74	2.89	2.86	2.86	2.85	2.88
(Million acres)								
Yield								
	7,694	7,572	7,472	7,603	7,685	7,757	7,813	7,879
(Pounds per harvested acre)								
Supply								
Beginning stocks	249.5	277.9	278.4	288.5	292.2	295.4	297.7	302.2
Production	36.4	31.8	47.9	43.3	46.3	47.5	48.0	48.4
Imports	190.0	221.0	205.0	219.7	220.1	221.6	223.0	226.7
	23.1	25.0	25.5	25.5	25.8	26.2	26.7	27.1
Domestic use								
	124.4	129.0	129.4	129.7	130.9	131.3	132.0	133.1
Exports								
	93.3	101.0	105.7	112.5	113.8	116.1	117.2	119.4
Total use								
	217.7	230.0	235.1	242.2	244.7	247.4	249.3	252.5
Ending stocks								
	31.8	47.9	43.3	46.3	47.5	48.0	48.4	49.7
Prices, program provisions								
(Dollars per hundredweight)								
Farm price	16.30	13.30	13.78	13.84	13.71	14.06	14.26	14.32
Long grain	15.40	11.90	11.95	12.45	12.33	12.79	13.08	13.16
Medium and short grain	19.20	17.90	18.65	17.73	17.62	17.56	17.71	17.83
Adjusted world price								
Long grain	11.77	10.56	10.17	11.39	11.60	12.18	12.60	12.83
Medium and short grain	12.08	10.78	10.45	10.29	10.22	10.18	10.27	10.35
Loan rate	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Target or reference price								
Long grain	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Japonica	10.50	16.10	16.10	16.10	16.10	16.10	16.10	16.10
Other medium, short grain	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00
(Percent of base acres)								
ARC participation rate								
	n.a.	4.90	4.90	4.90	4.90	4.90	4.90	4.90
Market returns								
(Dollars)								
Gross market revenue/a.	1254.05	1007.11	1029.98	1052.12	1053.24	1090.83	1113.87	1128.54
Variable expenses/a.	581.78	574.13	505.46	515.06	532.88	557.48	579.46	582.87
Market net return/a.	672.27	432.98	524.52	537.06	520.35	533.34	534.41	545.67

Other U.S. feed grains supply and use

Marketing year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Sorghum								
(Million acres)								
Planted area	8.08	7.14	8.74	8.33	7.95	7.91	7.85	7.81
Harvested area	6.59	6.40	7.67	6.81	6.51	6.48	6.44	6.40
(Bushels per harvested acre)								
Yield	59.6	67.6	74.6	64.0	64.1	64.1	64.3	64.5
(Million bushels)								
Production	392	433	573	436	418	416	414	413
Imports	0	0	0	0	0	0	0	0
Domestic use	162	100	118	122	130	131	131	126
Exports	211	350	434	318	293	287	283	286
Ending stocks	34	17	38	35	30	28	27	28
(Dollars per bushel)								
Farm price	4.28	4.00	3.90	3.73	3.90	4.02	4.04	4.04
Target or reference price	2.63	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Barley								
(Million acres)								
Planted area	3.53	2.98	3.41	3.58	3.44	3.44	3.39	3.38
Harvested area	3.04	2.44	2.92	3.10	2.97	2.97	2.92	2.92
(Bushels per harvested acre)								
Yield	71.3	72.4	71.8	71.6	72.3	72.7	73.3	73.8
(Million bushels)								
Production	217	177	210	222	215	216	214	215
Imports	19	24	21	17	16	16	16	16
Domestic use	219	190	212	216	213	213	212	212
Exports	14	14	16	19	20	19	19	19
Ending stocks	82	79	81	85	83	82	81	82
(Dollars per bushel)								
Farm price	6.06	5.30	4.58	4.40	4.62	4.75	4.83	4.83
Target or reference price	2.63	4.95	4.95	4.95	4.95	4.95	4.95	4.95
Oats								
(Million acres)								
Planted area	2.98	2.72	3.06	2.95	2.95	2.89	2.84	2.83
Harvested area	1.01	1.03	1.22	1.16	1.15	1.11	1.09	1.09
(Bushels per harvested acre)								
Yield	64.1	67.7	70.0	65.0	65.6	66.0	66.5	67.0
(Million bushels)								
Production	65	70	85	76	75	74	73	73
Imports	97	107	93	98	99	100	100	99
Domestic use	172	146	172	169	172	171	171	170
Exports	2	2	2	2	2	2	2	2
Ending stocks	25	54	59	62	63	62	62	62
(Dollars per bushel)								
Farm price	3.75	3.21	2.35	2.66	2.72	2.77	2.80	2.80
Target or reference price	1.79	2.40	2.40	2.40	2.40	2.40	2.40	2.40

Other U.S. oilseeds supply and use

Marketing year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Peanuts								
(Million acres)								
Planted area	1.07	1.35	1.60	1.45	1.38	1.37	1.40	1.42
Harvested area	1.04	1.33	1.57	1.42	1.34	1.34	1.36	1.38
(Pounds per harvested acre)								
Yield	4,001	3,932	3,950	3,827	3,880	3,931	3,987	4,042
(Million pounds)								
Production	4,173	5,210	6,181	5,431	5,206	5,259	5,439	5,580
Imports	88	85	85	85	85	85	85	85
Domestic use	4,079	4,179	4,438	4,399	4,371	4,392	4,437	4,507
Exports	1,096	1,110	1,150	1,151	1,137	1,119	1,106	1,118
Ending stocks	1,858	1,864	2,542	2,507	2,291	2,124	2,105	2,146
(Cents per pound)								
Farm price	24.90	22.00	20.02	19.61	21.27	22.36	23.13	22.95
Target or reference price	24.75	26.75	26.75	26.75	26.75	26.75	26.75	26.75
Sunflowerseed								
(Million acres)								
Planted area	1.58	1.56	1.68	1.80	1.77	1.74	1.72	1.72
Harvested area	1.46	1.51	1.61	1.67	1.65	1.62	1.60	1.59
(Pounds per harvested acre)								
Yield	1,380	1,469	1,474	1,559	1,568	1,572	1,579	1,588
(Million pounds)								
Production	2,022	2,215	2,376	2,610	2,589	2,544	2,518	2,533
Imports	143	163	163	163	163	163	163	163
Domestic use	2,039	2,133	2,194	2,323	2,351	2,341	2,329	2,352
Exports	265	265	354	422	410	369	355	343
Ending stocks	201	181	171	201	191	189	186	187
(Cents per pound)								
Farm price	21.40	22.25	19.10	19.02	19.84	20.18	20.60	20.79
Target or reference price	12.68	20.15	20.15	20.15	20.15	20.15	20.15	20.15
Canola								
(Million acres)								
Planted area	1.35	1.71	1.57	1.68	1.65	1.63	1.63	1.64
Harvested area	1.26	1.56	1.52	1.60	1.57	1.56	1.55	1.56
(Bushels per harvested acre)								
Yield	1,748	1,614	1,648	1,686	1,695	1,702	1,709	1,717
(Million bushels)								
Production	2,211	2,511	2,511	2,704	2,657	2,646	2,651	2,676
Imports	2,044	1,698	1,676	1,582	1,637	1,659	1,666	1,674
Domestic use	3,798	3,907	3,858	3,910	3,936	3,954	3,970	4,002
Exports	351	344	338	374	358	351	347	347
Ending stocks	285	243	235	238	238	238	237	238
(Dollars per bushel)								
Farm price	20.60	17.00	16.68	16.54	17.05	17.52	18.06	18.26
Target or reference price	12.68	20.15	20.15	20.15	20.15	20.15	20.15	20.15

U.S. hay supply and use

May-April year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
(Million acres)								
Area harvested	57.90	57.09	56.54	56.92	57.18	57.47	57.69	57.85
(Tons per acre)								
Yield	2.33	2.45	2.51	2.41	2.42	2.43	2.44	2.46
(Million tons)								
Production	135.0	139.8	142.1	137.4	138.6	139.9	141.0	142.1
Disappearance	130.0	134.5	140.9	138.6	139.3	140.3	141.1	141.9
Ending stocks	19.2	24.5	25.7	24.5	23.8	23.4	23.3	23.5
(Dollars per ton)								
All hay price	176.00	172.00	155.90	155.39	164.16	170.35	173.84	174.46

U.S. planted and idled area

Marketing year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
(Million acres)								
Planted area								
Corn	95.37	90.60	88.90	90.45	89.18	90.06	90.29	90.22
Soybeans	76.84	83.70	84.34	82.36	83.46	83.74	83.68	83.77
Wheat	56.24	56.82	56.08	53.95	54.15	53.98	54.31	54.56
Upland cotton	10.21	10.85	8.75	9.09	9.47	9.27	9.26	9.27
Sorghum	8.08	7.14	8.74	8.33	7.95	7.91	7.85	7.81
Barley	3.53	2.98	3.41	3.58	3.44	3.44	3.39	3.38
Oats	2.98	2.72	3.06	2.95	2.95	2.89	2.84	2.83
Rice	2.49	2.94	2.77	2.91	2.89	2.88	2.88	2.90
Sunflower seed	1.58	1.56	1.68	1.80	1.77	1.74	1.72	1.72
Peanuts	1.07	1.35	1.60	1.45	1.38	1.37	1.40	1.42
Canola	1.35	1.71	1.57	1.68	1.65	1.63	1.63	1.64
Sugar beets	1.20	1.16	1.16	1.23	1.25	1.26	1.26	1.26
Sugarcane harvested	0.91	0.87	0.90	0.89	0.87	0.85	0.84	0.83
13-crop planted	261.82	264.41	262.96	260.68	260.40	261.02	261.35	261.61
Hay area harvested	57.90	57.09	56.54	56.92	57.18	57.47	57.69	57.85
13 crops + hay	319.72	321.50	319.50	317.60	317.58	318.49	319.04	319.45
Conservation reserve (CRP)	26.84	25.45	24.24	24.00	23.00	23.00	23.00	23.00
13 crops + hay + CRP	346.56	346.95	343.74	341.60	340.58	341.49	342.04	342.45
Double crop area	6.81	5.61	4.95	4.85	5.01	5.08	5.11	5.14
Total minus double crop	339.75	341.34	338.79	336.75	335.57	336.42	336.93	337.31

U.S. crop farm prices

Marketing year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Corn (\$/bu.)	4.46	3.70	3.68	3.71	3.96	4.09	4.14	4.13
Soybeans (\$/bu.)	13.00	10.05	9.12	9.15	9.98	10.31	10.42	10.50
Wheat (\$/bu.)	6.87	5.99	5.10	5.05	5.24	5.55	5.72	5.76
Durum	7.46	8.81	6.31	6.01	6.23	6.61	6.82	6.87
Other spring	6.73	5.75	5.38	5.35	5.55	5.87	6.05	6.09
Winter	6.89	5.92	4.94	4.91	5.09	5.39	5.56	5.59
Upland cotton (cents/lb.)	77.90	60.50	65.07	63.78	63.10	65.84	67.07	67.22
Sorghum (\$/bu.)	4.28	4.00	3.90	3.73	3.90	4.02	4.04	4.04
Rice (\$/cwt)	16.30	13.30	13.78	13.84	13.71	14.06	14.26	14.32
Long grain	15.40	11.90	11.95	12.45	12.33	12.79	13.08	13.16
Medium/short (exc. Japonica)	15.70	14.60	14.81	14.95	14.86	14.81	14.92	15.03
Japonica	20.70	20.50	21.01	19.44	19.31	19.25	19.40	19.54
Barley (\$/bu.)	6.06	5.30	4.58	4.40	4.62	4.75	4.83	4.83
Oats (\$/bu.)	3.75	3.21	2.35	2.66	2.72	2.77	2.80	2.80
Peanuts (cents/lb.)	24.90	22.00	20.02	19.61	21.27	22.36	23.13	22.95
Sunflower seed (\$/cwt)	21.40	22.25	19.10	19.02	21.27	20.18	20.60	20.79
Canola (\$/cwt)	20.60	17.00	16.68	16.54	17.05	17.52	18.06	18.26
Flaxseed (\$/bu.)	13.80	11.80	9.86	10.11	10.64	10.91	11.01	11.07
Lentils (\$/cwt)	19.80	24.40	19.03	19.03	19.95	20.45	20.64	20.74
Safflower (\$/cwt)	27.90	25.00	23.44	23.44	24.47	25.03	25.24	25.36
Mustard seed (\$/cwt)	37.20	35.00	32.81	32.79	34.01	34.79	35.12	35.27
Dry peas (\$/cwt)	14.60	12.00	10.82	10.79	11.29	11.71	11.91	11.98
Rapeseed (\$/cwt)	25.10	23.70	19.40	19.37	20.76	21.31	21.49	21.68
Large chickpeas (\$/cwt)	31.20	28.80	24.93	24.86	26.07	27.03	27.48	27.64
Small chickpeas (\$/cwt)	22.90	20.70	18.00	17.95	18.85	19.57	19.91	20.03
Crambe (\$/cwt)	35.10	28.40	26.31	26.25	27.45	28.41	28.86	29.02
Sesame seed (\$/cwt)	44.00	46.00	37.79	37.71	39.46	40.81	41.43	41.66

U.S. soybean product supply and use

October-September year	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Soybean meal								
(Thousand tons)								
Production	40,685	44,200	44,425	44,415	44,419	44,425	44,721	44,958
Imports	383	350	325	325	325	325	325	325
Domestic use	29,547	31,850	32,911	33,803	33,888	34,108	34,320	34,640
Exports	11,546	12,650	11,839	10,937	10,862	10,641	10,724	10,640
Ending stocks	250	300	300	300	294	295	297	300
Soybean oil								
(Million pounds)								
Production	20,130	21,055	21,642	21,637	21,639	21,642	21,786	21,902
Imports	165	250	200	200	200	200	200	200
Domestic use	18,958	19,000	19,464	19,684	20,004	20,000	19,964	19,900
Biodiesel	5,010	5,000	5,131	5,102	5,362	5,272	5,123	4,972
Food and other	13,948	14,000	14,333	14,581	14,642	14,728	14,840	14,928
Exports	1,877	1,950	2,086	2,207	1,886	1,820	1,997	2,225
Ending stocks	1,165	1,520	1,813	1,760	1,709	1,731	1,757	1,733
Decatur prices								
(Dollars per ton)								
Soybean meal 48% protein	489.94	370.00	326.73	330.67	352.09	360.38	365.85	364.19
(Cents per pound)								
Soybean oil	38.23	32.00	30.47	29.25	31.78	32.47	32.86	33.87

U.S. biomass-based diesel supply and use

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
Supply and use								
(Million gallons)								
Production	1,776	1,606	1,732	1,760	1,818	1,881	1,891	1,915
Biodiesel	1,359	1,240	1,376	1,404	1,450	1,497	1,490	1,496
From soybean oil	715	624	658	669	660	708	677	662
From corn oil	138	126	247	257	306	299	324	349
From other fats and oils	506	490	471	478	484	489	489	486
Cellulosic diesel	0	0	0	1	2	4	6	8
Renewable diesel	417	366	356	355	366	380	395	410
Net exports	-146	-130	-76	-69	-48	9	31	55
Domestic disappearance	1,820	1,768	1,738	1,844	1,873	1,875	1,862	1,861
Ending stocks	160	127	197	182	175	171	170	169
Prices and RIN values								
(Dollars per gallon)								
Biodiesel rack, Des Moines	4.63	3.47	2.96	3.04	3.11	3.17	3.22	3.27
#2 diesel, refiner sales	3.03	2.82	1.73	1.87	2.03	2.31	2.54	2.46
Biodiesel RIN (per RIN gal.)	0.73	0.56	0.84	0.88	0.82	0.72	0.64	0.74

U.S. ethanol supply and use

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
Petroleum fuel prices								
Petroleum, W. Texas interm.	97.96	92.97	54.62	57.92	66.17	78.03	87.39	84.04
Petroleum, refiners acquisition	100.47	92.23	52.17	58.35	66.08	77.31	86.31	82.26
(Dollars per barrel)								
Unl. gasoline, FOB Omaha	2.90	2.66	1.79	1.81	1.98	2.26	2.48	2.40
Unleaded gasoline, retail	3.53	3.37	2.46	2.45	2.59	2.87	3.11	3.06
(Dollars per gallon)								
Motor gasoline supplied	135,563	136,782	140,189	140,512	141,648	141,674	140,733	139,921
Ethanol supply and use								
Production	13,526	14,334	14,496	14,473	14,479	14,708	14,805	14,822
From corn	13,235	14,243	14,422	14,398	14,396	14,613	14,702	14,712
From other feedstocks	292	90	71	66	65	63	61	58
Cellulosic	0	1	3	9	19	31	42	52
Imports	377	60	62	63	67	64	61	58
Domestic disappearance	13,449	13,449	13,825	13,942	13,936	14,087	14,145	14,170
In low-level blends	13,277	13,272	13,645	13,758	13,752	13,895	13,948	13,966
In flex fuel vehicles	172	176	180	184	184	192	198	203
Exports	619	847	725	588	603	677	713	704
Ending stocks	690	787	795	802	808	815	822	829
Ethanol prices								
(Dollars per gallon)								
Conventional rack, Omaha	2.47	2.34	1.85	1.83	1.84	1.91	1.94	1.96
Other advanced rack	2.57	2.40	2.16	2.25	2.52	2.44	2.35	2.22
Effective retail	2.49	2.56	1.99	2.02	2.31	2.34	2.34	2.13
Ethanol/gasoline retail ratio	0.71	0.76	0.81	0.82	0.89	0.81	0.75	0.70
RIN values								
(Dollars per gallon)								
Conventional ethanol	0.60	0.49	0.53	0.46	0.14	0.19	0.22	0.48
Other advanced ethanol	0.71	0.54	0.84	0.88	0.82	0.72	0.64	0.74

U.S. beef sector

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
(Million head)								
Beef cows (Jan. 1)	29.6	29.1	29.7	30.7	31.4	31.6	31.7	31.5
Dairy cows (Jan. 1)	9.2	9.2	9.3	9.3	9.3	9.3	9.2	9.2
Cattle and calves (Jan. 1)	90.1	88.5	89.8	93.1	95.9	97.4	97.6	97.0
(Million pounds)								
Beef supply and use								
Production	25,790	24,320	23,848	24,662	25,909	26,904	27,612	28,007
Imports	2,250	2,947	3,527	3,140	2,869	2,674	2,647	2,654
Domestic use	25,475	24,686	25,054	25,338	26,115	26,736	27,255	27,547
Exports	2,589	2,573	2,360	2,444	2,621	2,811	2,979	3,101
Ending stocks	584	591	553	573	615	646	670	683
Prices								
(Dollars per hundredweight)								
Total all grades, 5-area direct steers	125.89	154.56	156.89	149.10	136.60	129.80	124.77	122.12
600 - 650 lb. Oklahoma City feeder steers	158.84	225.07	242.01	224.95	198.26	181.60	168.93	162.75
Boxed beef cutout	195.64	239.21	243.75	233.63	218.42	210.95	205.76	203.20
(Dollars per pound)								
Beef retail	5.29	5.97	6.33	6.21	6.05	5.98	5.97	5.96

U.S. pork sector

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
(Million head)								
Breeding herd (Dec. 1*)	5.82	5.76	5.94	6.02	5.94	5.83	5.70	5.59
Market hogs (Dec. 1*)	60.4	59.0	61.8	63.4	65.0	64.8	64.4	63.7
(Million pounds)								
Pork supply and use								
Production	23,204	22,861	24,460	24,948	25,416	25,442	25,381	25,341
Imports	880	1,008	1,117	1,063	1,016	1,003	999	1,007
Domestic use	19,099	19,070	20,576	20,882	21,104	20,954	20,708	20,545
Exports	4,992	4,857	4,924	5,112	5,315	5,498	5,684	5,811
Ending stocks	618	560	637	655	668	661	648	639
Prices								
(Dollars per hundredweight)								
Barrows & gilts, national base 51-52% lean equivalent	64.05	76.03	51.08	48.07	47.56	50.12	53.10	55.18
Pork cutout value	91.69	110.10	80.06	76.99	75.23	77.94	81.65	84.09
(Dollars per pound)								
Pork retail	3.64	4.02	3.78	3.65	3.63	3.73	3.88	3.97

* Preceding year

U.S. poultry supply and use

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
Broiler								
Production	37,425	38,137	39,971	41,417	42,120	42,373	42,569	42,951
Imports	122	117	120	116	118	120	122	124
Domestic use	30,184	30,942	33,207	34,390	34,887	34,926	34,891	35,030
Exports	7,345	7,301	6,837	7,102	7,341	7,578	7,814	8,053
Ending stocks	669	680	727	768	779	768	754	746
Turkey								
Production	5,729	5,756	5,662	5,972	6,281	6,401	6,442	6,489
Imports	22	29	35	28	29	29	30	30
Domestic use	5,051	5,023	5,117	5,252	5,494	5,604	5,636	5,668
Exports	759	805	562	722	784	813	831	847
Ending stocks	237	193	211	238	269	283	287	290
Prices								
National composite				(Cents per pound)				
wholesale broiler	99.70	104.88	96.17	90.74	90.24	93.13	96.38	98.22
Broiler retail	196.47	196.27	195.81	194.15	193.42	200.79	208.84	213.54
8-16 lb. national turkey hens	99.75	107.59	112.76	106.79	97.88	96.07	97.40	98.42
Turkey retail	165.90	160.13	156.78	155.86	152.20	151.27	154.77	157.38

U.S. per-capita meat consumption

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
(Pounds)								
Beef	56.3	54.2	54.6	54.8	56.0	56.9	57.5	57.7
Pork	46.8	46.4	49.7	50.0	50.2	49.4	48.4	47.7
Broiler	81.9	83.4	88.8	91.2	91.8	91.1	90.3	90.0
Turkey	16.0	15.8	15.9	16.2	16.8	17.0	17.0	17.0
Sum	201.1	199.8	209.0	212.2	214.7	214.4	213.2	212.3

U.S. dairy sector

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
Milk supply								
Dairy cows (thou. head)	9,224	9,257	9,314	9,322	9,300	9,261	9,235	9,224
Milk yield (lbs. per cow)	21,816	22,258	22,419	22,854	23,165	23,474	23,769	24,062
Milk production (bil. lbs.)	201.2	206.0	208.8	213.0	215.4	217.4	219.5	221.9
(Dollars per hundredweight)								
All milk price	20.11	24.07	16.96	16.70	17.63	18.32	18.76	19.00
Wholesale prices								
Butter, CME	1.56	2.16	1.77	1.68	1.69	1.72	1.72	1.72
Cheese, Am., 40#, CME	1.76	2.11	1.62	1.56	1.62	1.69	1.73	1.75
Nonfat dry milk, AA	1.72	1.74	0.92	1.06	1.22	1.29	1.34	1.37
Evaporated	2.12	2.24	1.81	1.79	1.84	1.88	1.91	1.93
Dairy product production								
(Million pounds)								
American cheese	4,420	4,534	4,621	4,693	4,705	4,714	4,735	4,766
Other cheese	6,682	6,916	7,015	7,157	7,247	7,342	7,459	7,590
Butter	1,863	1,856	1,812	1,869	1,918	1,956	1,985	2,013
Nonfat dry milk	1,999	2,214	2,257	2,344	2,373	2,428	2,484	2,541

U.S. consumer food price inflation

Calendar year	2013	2014	2015	2016	2017	2018	2019	2020
(Change from the previous year)								
Food	1.4%	2.4%	1.9%	1.3%	1.7%	2.2%	2.3%	2.0%
Food at home								
Cereal and bakery	0.9%	2.4%	1.3%	0.5%	1.2%	1.9%	2.2%	1.9%
Meat	1.0%	0.2%	1.1%	1.1%	1.4%	1.9%	2.0%	1.6%
Dairy	2.1%	7.2%	3.4%	-1.7%	-1.5%	0.9%	1.7%	1.7%
Fruits and vegetables	0.1%	3.6%	-1.0%	-0.2%	2.3%	2.7%	2.5%	2.0%
Other food at home	2.5%	1.5%	-0.7%	2.1%	3.1%	2.6%	2.6%	2.3%
Food away from home	0.0%	0.7%	1.8%	1.5%	1.9%	1.8%	1.9%	1.6%
	2.1%	2.4%	2.5%	2.4%	2.3%	2.5%	2.4%	2.1%