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Baseline Update for U.S. Agricultural Markets

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FAPRI-MU and AMAP are both affiliated with the MU Division of Applied Social Sciences.

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Summary

The outbreak of COVID-19, as well as U.S. government response to the outbreak, continues to impact agricultural markets, disrupting supply chains, shifting consumer demand and expanding government outlays. Beyond the near term opening of the economy, the macroeconomic contraction is likely to have longer lasting effects. In addition to those impacts, farmer intentions for acreage in 2020 have been published, prospects for achieving the Phase 1 trade agreement with China have narrowed and crop size in South America has become better known. These impacts are significant and motivated an update to the 2020 Agricultural Market Outlook, which was produced under the prevailing conditions in early February of this year.

This update was prepared the first week of June 2020. Macroeconomic assumptions are based on May forecasts by IHS Markit, which include a sharp economic contraction in 2020 and a recovery that keeps U.S. GDP below previous estimates for several years. We allow for some market changes which facilitate trade consistent with Phase 1 implementation but reflect current conditions in which targets remain unmet for both 2020 and 2021. The *Prospective Plantings* report from USDA showed a strong rebound in intended area after last year's weather-related planted area contraction, and our update relies on the figures in that report with only minor adjustments to reflect developments after farmers were surveyed in March.

This update incorporates only government payment programs that were announced before June 1, 2020. Thus, it includes $16 billion in Coronavirus Food Assistance Program (CFAP) payments in 2020, but does not assume any additional programs that might be created.

Given important assumptions, key outcomes of the analysis are as follows:

- Total federal spending on various farm support and conservation programs in the current fiscal year reaches a record $50 billion.
- Net farm income in 2020 declines by about $3 billion in spite of record government payments of $33 billion. Another farm income measure—net cash income—declines by $18 billion in 2020, with much of the difference in the two measures explained by changes in inventory values.
- Given projected market developments and the assumption of no new government payment programs, both net farm income and net cash income decline again in 2021, with net farm income falling below $80 billion.
- Corn-planted area in 2020 is projected to be 96.0 million acres, second only to 2012 in the modern era but 1 million acres below the March intentions report. Record production of 15.5 billion bushels for the 2020/21 marketing year causes carryout stocks to build and corn prices received by farmers to fall to $3.06 per bushel. While acreage moderates in subsequent years, prices rise only modestly.
- Widespread shelter-at-home orders as a result of COVID-19 sharply reduced motor gasoline demand. Within a year, biofuel policy allows ethanol mandates to fall with unanticipated demand declines, cutting domestic biofuel use. Falling oil prices also provide headwinds to ethanol exports. As a result, corn used for ethanol production for 2019/20 is the lowest since the drought year of 2012/13, when corn supplies were the limiting factor. Corn used for ethanol largely rebounds in 2020/21 as fuel demand returns and mandates are reset for calendar year 2021.
- Projected soybean-planted area rebounds to 84.5 million acres in 2020/21, up 8 million acres from 2019 and 1 million acres from the planting intentions report. Soybean stocks decline in 2020/21 but remain above 500 million bushels; prices fall to $8.21 per bushel. A rebalancing of corn and soybean area results in a further increase in soybean production in 2021 and soybean prices bottom out at $8.00 per bushel.
- Wheat prices average about $4.60 per bushel over the next five years given large global supplies and demand-side competition with corn. Lower global textile demand has contributed to lower cotton prices in the 2019/20 marketing year, and projected production exceeds use again in 2020/21, resulting in an even lower price.

- As a result of supply chain disruptions, margins between live animal prices and wholesale meat prices have widened. Those supply chain impacts are assumed to be largely overcome in the months ahead. Projected levels of 2020 meat production are below previous estimates, but exceed those in USDA's May World Agricultural Supply and Demand Estimates.
- Steer prices decline by more than $3 per hundredweight in 2020 and hog prices fall by nearly $5 per hundredweight, largely because of COVID-19-related foodservice slowdowns and packing plant closures.
- U.S. pork export growth in 2020 offers price support, with much of the growth in exports headed to China.
- Broiler prices are expected to fall 15% in 2020 in response to larger supplies and demand weakness.
- After several years of strong growth, total per-capita consumption of beef, pork and poultry consumption is projected to decline in 2020 as the COVID-19 crisis pushes up retail prices and reduces consumer disposable income.
- Milk prices are off sharply in 2020, as restaurant and school closures and supply chain disruptions push down milk and dairy product demand. Projected milk prices fall to $16.34 per hundredweight from the prior year's $18.63 per hundredweight. Price recovery occurs over the next several years, but milk prices remain below 2019 levels.

Markets will continue to evolve under the threat of a re-emergence of COVID-19, as supply chain disruptions are resolved, the status of the Phase 1 trade agreement with China is clarified and the economy begins to reopen.

Macroeconomic assumptions*

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
Real GDP growth				(Percent)				
United States	2.9	2.3	-7.3	5.1	4.6	3.9	3.3	2.8
China	6.7	6.1	0.5	7.8	5.6	5.4	5.2	5.1
European Union (exc. UK)	2.1	1.5	-8.2	3.5	2.5	1.7	1.5	1.5
World	3.2	2.6	-5.5	4.5	3.9	3.5	3.3	3.2
U.S. CPI inflation	2.4	1.8	1.0	1.7	1.7	0.8	1.3	2.0
U.S. interest rates								
Federal funds rate	1.8	2.2	0.4	0.1	0.1	0.1	0.1	0.1
Prime rate	4.9	5.3	3.5	3.3	3.3	3.3	3.3	3.3
Petroleum price				(Dollars per barrel)				
West Texas Intermediate	64.89	56.98	30.97	44.24	54.74	51.21	54.55	59.92
Exchange rates				(Currency per dollar)				
Chinese yuan	6.62	6.91	7.04	7.07	7.07	6.98	6.87	6.78
Euro	0.85	0.89	0.92	0.93	0.92	0.91	0.90	0.89

*Source: IHS Markit forecast, May 2020

Policy assumptions

Year	2018	2019	2020	2021	2022	2023	2024	2025
Special program availability								
Market Facilitation Program	Yes	Yes	No	No	No	No	No	No
Coronavirus Food Assistance	n.a.	n.a.	Yes	No	No	No	No	No
Reference prices				(Dollars per bushel)				
Corn	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Soybeans	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Wheat	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
PLC participation				(Percent of base acreage)				
Corn	7.4	75.5	75.5	80.5	80.5	80.5	80.6	80.5
Soybeans	3.8	14.1	14.1	28.0	28.4	29.3	29.3	29.2
Wheat	44.2	93.0	93.0	90.0	90.0	90.1	90.2	90.2
				(Million acres)				
Conservation reserve area	22.6	22.3	22.0	22.5	23.0	23.5	23.5	23.5
Renewable fuel standard				(Billion gallons, ethanol equivalent)				
Overall, as applied	19.0	18.9	18.8	19.8	20.4	20.4	20.5	20.5
Advanced biofuels	4.4	4.7	4.8	5.2	5.7	5.8	5.8	5.9
Biomass-based diesel	3.3	3.3	3.4	3.7	3.8	3.9	3.9	4.0
Conventional biofuel "gap"	14.6	14.2	14.1	14.6	14.6	14.6	14.6	14.7

U.S. corn supply and use

September-August year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area				(Million acres)				
Planted area	88.9	89.7	96.0	91.7	92.7	92.9	93.1	93.1
Harvested area	81.3	81.4	87.9	84.0	84.9	85.1	85.2	85.2
				(Bushels per harvested acre)				
Yield	176.4	167.8	175.9	177.6	179.1	180.9	182.8	184.8
				(Million bushels)				
Supply	16,509	15,928	17,591	17,844	18,063	18,210	18,369	18,530
Beginning stocks	2,140	2,221	2,096	2,900	2,822	2,789	2,758	2,745
Production	14,340	13,663	15,459	14,907	15,204	15,384	15,574	15,749
Imports	28	45	36	36	36	36	36	36
Domestic use	12,223	12,068	12,518	12,639	12,763	12,827	12,880	12,933
Feed and residual	5,430	5,692	5,999	5,845	5,851	5,861	5,880	5,902
Ethanol and coproducts	5,378	4,989	5,114	5,376	5,477	5,512	5,532	5,548
HFCS	441	414	408	411	417	423	425	429
Seed	29	31	30	31	31	32	32	32
Food and other	944	941	966	976	987	999	1,010	1,022
Exports	2,065	1,764	2,173	2,383	2,510	2,625	2,744	2,857
Total use	14,288	13,833	14,691	15,021	15,274	15,452	15,624	15,791
Ending stocks	2,221	2,096	2,900	2,822	2,789	2,758	2,745	2,740
Under loan	156	171	252	228	226	225	225	223
Other stocks	2,065	1,925	2,648	2,594	2,563	2,533	2,520	2,516
Prices, program provisions				(Dollars per bushel)				
Farm price	3.61	3.61	3.06	3.19	3.25	3.28	3.31	3.35
Loan rate	1.95	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Reference price	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Market returns				(Dollars)				
Gross market revenue/a.	636.95	606.36	537.36	565.64	582.02	593.82	605.53	619.09
Variable expenses/a.	335.12	339.52	333.86	330.40	338.74	343.84	348.70	357.83
Market net return/a.	301.83	266.84	203.49	235.25	243.28	249.98	256.83	261.26

U.S. soybean supply and use

September-August year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area				(Million acres)				
Planted area	89.2	76.1	84.5	86.0	85.5	85.7	86.0	86.2
Harvested area	87.6	75.0	83.4	84.9	84.4	84.6	84.9	85.1
				(Bushels per harvested acre)				
Yield	50.6	47.4	49.5	50.0	50.4	50.9	51.4	52.0
				(Million bushels)				
Supply	4,880	4,481	4,719	4,799	4,807	4,828	4,861	4,904
Beginning stocks	438	909	576	538	536	503	479	468
Production	4,428	3,557	4,129	4,246	4,256	4,310	4,367	4,421
Imports	14	15	15	15	15	15	15	15
Domestic use	2,224	2,228	2,279	2,331	2,332	2,340	2,356	2,374
Crush	2,092	2,127	2,143	2,192	2,193	2,200	2,214	2,231
Seed and residual	132	101	137	139	139	140	141	143
Exports	1,748	1,677	1,902	1,932	1,972	2,009	2,037	2,063
Total use	3,971	3,905	4,181	4,263	4,305	4,349	4,393	4,437
Ending stocks	909	576	538	536	503	479	468	467
Under loan	44	46	61	67	64	61	60	61
Other stocks	865	529	478	469	438	417	407	406
Prices, program provisions				(Dollars per bushel)				
Farm price	8.48	8.54	8.21	8.00	8.16	8.34	8.47	8.53
Illinois processor price	8.53	8.84	8.45	8.24	8.39	8.57	8.69	8.76
Loan rate	5.00	6.20	6.20	6.20	6.20	6.20	6.20	6.20
Reference price	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Market returns				(Dollars)				
Gross market revenue/a.	428.69	405.14	406.58	400.21	411.47	424.78	435.36	443.25
Variable expenses/a.	161.96	162.78	158.94	158.70	160.62	162.26	165.20	169.12
Market net return/a.	266.73	242.36	247.64	241.51	250.86	262.52	270.16	274.13
Other indicators								
Soybean/corn price ratio	2.35	2.36	2.69	2.51	2.51	2.54	2.56	2.55
48% soymeal price, $/ton	308.28	303.32	295.68	296.00	305.06	309.29	311.33	313.85
Soybean oil price, cents/lb.	28.26	29.01	26.31	26.29	24.59	25.26	25.92	25.90
Crushing margin, $/bu.	1.93	1.63	1.58	1.79	1.66	1.66	1.66	1.65

U.S. wheat supply and use

June-May year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area				(Million acres)				
Planted area	47.8	45.2	44.7	46.9	46.0	45.1	44.6	44.3
Harvested area	39.6	37.2	37.5	39.4	38.6	37.9	37.5	37.3
				(Bushels per harvested acre)				
Yield	47.6	51.7	48.1	47.7	48.0	48.2	48.5	48.8
				(Million bushels)				
Supply	3,119	3,108	2,923	2,905	2,878	2,849	2,838	2,834
Beginning stocks	1,099	1,080	980	890	889	888	884	874
Production	1,885	1,920	1,808	1,880	1,854	1,826	1,817	1,822
Imports	135	108	136	135	135	135	136	137
Domestic use	1,103	1,156	1,127	1,131	1,138	1,142	1,139	1,139
Feed and residual	90	136	97	95	102	106	103	100
Seed	59	59	62	60	59	58	58	58
Food and other	955	961	968	975	977	977	978	981
Exports	936	973	906	886	852	823	824	826
Total use	2,039	2,129	2,033	2,017	1,990	1,964	1,964	1,964
Ending stocks	1,080	980	890	889	888	884	874	869
Under loan	36	33	30	31	32	32	31	30
Other stocks	1,043	947	860	857	856	852	843	839
Prices, program provisions				(Dollars per bushel)				
Farm price	5.16	4.60	4.67	4.65	4.59	4.54	4.61	4.67
Loan rate	2.94	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Reference price	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Market returns				(Dollars)				
Gross market revenue/a.	245.57	237.60	224.74	221.97	220.24	218.87	223.39	227.89
Variable expenses/a.	129.53	132.31	129.96	130.17	133.36	135.72	137.86	141.14
Market net return/a.	116.04	105.29	94.78	91.79	86.89	83.15	85.54	86.75

U.S. upland cotton supply and use

August-July year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area				(Million acres)				
Planted area	13.85	13.51	13.28	12.40	12.62	12.91	13.00	13.02
Harvested area	9.74	11.39	11.01	10.27	10.47	10.71	10.79	10.81
				(Pounds per harvested acre)				
Yield	865	810	873	879	890	901	911	921
				(Million bales)				
Supply	21.66	23.86	26.81	26.94	26.95	27.09	27.25	27.41
Beginning stocks	4.10	4.64	6.79	8.12	7.54	6.98	6.77	6.68
Production	17.57	19.23	20.02	18.81	19.41	20.11	20.47	20.74
Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic use								
Mill use	2.95	2.73	2.79	2.81	2.82	2.84	2.86	2.87
Exports	14.09	14.34	15.90	16.59	17.15	17.48	17.71	17.92
Total use	17.05	17.07	18.69	19.40	19.97	20.32	20.57	20.78
Unaccounted	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending stocks	4.64	6.79	8.12	7.54	6.98	6.77	6.68	6.63
Prices, program provisions				(Cents per pound)				
Farm price	70.3	59.0	52.2	57.2	60.8	62.4	63.7	64.4
Loan rate	52.0	52.0	52.0	52.0	51.9	52.0	52.0	52.0
Seed cotton reference	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
Seed cotton farm price	34.5	30.4	26.3	28.7	30.2	30.8	31.3	31.7
Market returns				(Dollars)				
Gross market revenue/a.	698.04	562.87	540.80	590.12	629.26	651.22	669.69	683.78
Variable expenses/a.	415.07	443.03	425.12	431.84	444.51	449.79	460.09	472.42
Market net return/a.	282.97	119.84	115.68	158.28	184.75	201.43	209.60	211.37

U.S. rice supply and use

August-July year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area				(Million acres)				
Planted area	2.95	2.54	2.85	2.84	2.78	2.78	2.76	2.75
Harvested area	2.91	2.47	2.78	2.77	2.72	2.71	2.69	2.68
				(Pounds per harvested acre)				
Yield	7,692	7,471	7,675	7,752	7,823	7,892	7,961	8,037
				(Million hundredweight)				
Supply	282.2	261.0	275.3	283.6	287.4	291.0	293.8	297.0
Beginning stocks	29.4	44.9	29.8	35.2	39.4	40.1	40.8	41.3
Production	223.8	184.7	213.3	214.5	212.5	213.9	214.5	215.5
Imports	29.0	31.5	32.3	33.9	35.5	37.0	38.6	40.2
Domestic use	143.8	133.3	135.6	137.9	139.0	140.0	141.3	142.3
Exports	93.6	98.0	104.5	106.2	108.2	110.2	111.2	112.9
Total use	237.3	231.3	240.1	244.2	247.3	250.2	252.5	255.2
Ending stocks	44.9	29.8	35.2	39.4	40.1	40.8	41.3	41.8
Prices, program provisions				(Dollars per hundredweight)				
Farm price	12.60	13.06	12.62	11.99	12.12	12.17	12.12	12.27
Long grain	10.80	12.03	11.61	11.02	11.15	11.21	11.14	11.30
Japonica	21.10	18.09	17.76	17.00	17.06	17.10	17.06	17.19
Other medium, short grain	12.30	11.99	11.93	11.13	11.34	11.35	11.31	11.45
Loan rate	6.50	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Reference price								
Long grain	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Japonica	16.10	17.30	17.30	17.30	17.30	17.30	17.30	17.30
Other medium, short grain	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Market returns				(Dollars)				
Gross market revenue/a.	969.17	975.82	968.58	929.36	948.34	960.77	964.84	986.42
Variable expenses/a.	551.39	553.28	538.72	540.74	554.18	562.06	571.96	585.78
Market net return/a.	417.78	422.54	429.86	388.61	394.16	398.70	392.88	400.64

Other U.S. feed grains supply and use

Marketing year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Sorghum				(Million acres)				
Planted area	5.69	5.27	5.92	5.94	5.92	5.88	5.86	5.84
Harvested area	5.06	4.68	5.32	5.33	5.32	5.29	5.27	5.25
				(Bushels per harvested acre)				
Yield	72.12	73.04	69.69	69.80	70.00	70.29	70.61	70.89
				(Million bushels)				
Production	365	341	371	372	373	372	372	372
Imports	0	0	0	0	0	0	0	0
Domestic use	244	176	162	166	166	165	165	165
Exports	93	190	205	206	207	207	207	207
Ending stocks	64	39	43	42	42	42	43	43
				(Dollars per bushel)				
Farm price	3.26	3.24	2.95	3.02	3.05	3.07	3.08	3.09
Reference price	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Barley				(Million acres)				
Planted area	2.55	2.72	2.92	2.77	2.73	2.70	2.67	2.64
Harvested area	1.98	2.18	2.36	2.24	2.20	2.18	2.16	2.13
				(Bushels per harvested acre)				
Yield	77.5	77.7	74.5	75.9	76.6	77.1	77.6	78.4
				(Million bushels)				
Production	154	170	176	170	169	168	167	167
Imports	6	8	12	9	8	8	7	7
Domestic use	162	169	180	176	174	172	170	169
Exports	5	5	4	5	5	5	6	6
Ending stocks	87	90	94	91	89	88	86	85
				(Dollars per bushel)				
Farm price	4.62	4.69	4.46	4.43	4.42	4.40	4.41	4.45
Reference price	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95
Oats				(Million acres)				
Planted area	2.75	2.81	3.01	2.99	2.92	2.86	2.83	2.82
Harvested area	0.87	0.83	1.04	1.03	1.01	0.99	0.97	0.97
				(Bushels per harvested acre)				
Yield	64.9	64.3	66.1	66.6	66.9	67.2	67.5	67.8
				(Million bushels)				
Production	56	53	69	69	67	66	66	66
Imports	87	93	91	89	88	88	88	88
Domestic use	144	151	151	153	153	152	152	152
Exports	2	2	2	2	2	2	2	2
Ending stocks	38	31	38	41	42	42	42	42
				(Dollars per bushel)				
Farm price	2.66	2.91	2.59	2.46	2.39	2.37	2.38	2.40
Reference price	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40

Other U.S. oilseeds supply and use

Marketing year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Peanuts				(Million acres)				
Planted area	1.43	1.43	1.53	1.52	1.50	1.52	1.54	1.54
Harvested area	1.37	1.39	1.44	1.47	1.45	1.47	1.48	1.48
				(Pounds per harvested acre)				
Yield	4,001	3,949	4,139	4,202	4,257	4,310	4,367	4,427
				(Million pounds)				
Production	5,496	5,496	5,970	6,167	6,164	6,322	6,474	6,566
Imports	117	115	115	115	115	115	115	115
Domestic use	4,711	4,758	4,789	4,820	4,924	5,047	5,147	5,221
Exports	1,198	1,379	1,353	1,386	1,384	1,397	1,416	1,433
Ending stocks	2,421	1,895	1,839	1,915	1,885	1,878	1,904	1,931
				(Cents per pound)				
Farm price	21.50	20.53	20.55	19.99	20.45	21.01	21.30	21.44
Reference price	26.75	26.75	26.75	26.75	26.75	26.75	26.75	26.75
Sunflowerseed				(Million acres)				
Planted area	1.30	1.35	1.56	1.51	1.49	1.47	1.47	1.46
Harvested area	1.22	1.24	1.46	1.42	1.40	1.38	1.38	1.37
				(Pounds per harvested acre)				
Yield	1,731	1,562	1,620	1,628	1,635	1,645	1,658	1,670
				(Million pounds)				
Production	2,107	1,943	2,366	2,307	2,284	2,271	2,287	2,289
Imports	254	346	214	191	172	157	139	125
Domestic use	2,319	2,220	2,374	2,331	2,277	2,246	2,234	2,215
Exports	141	101	158	168	176	183	190	196
Ending stocks	287	254	302	301	303	302	305	306
				(Cents per pound)				
Farm price	17.40	18.98	16.88	16.86	16.44	16.68	16.89	16.90
Reference price	20.15	20.15	20.15	20.15	20.15	20.15	20.15	20.15
Canola				(Million acres)				
Planted area	1.99	2.04	1.99	2.01	2.01	2.02	2.02	2.02
Harvested area	1.94	1.91	1.92	1.94	1.94	1.94	1.94	1.94
				(Pounds per harvested acre)				
Yield	1,861	1,781	1,850	1,858	1,870	1,885	1,899	1,916
				(Million pounds)				
Production	3,615	3,402	3,547	3,599	3,625	3,658	3,691	3,719
Imports	1,228	1,350	1,157	1,160	1,172	1,179	1,189	1,199
Domestic use	4,332	4,324	4,290	4,340	4,379	4,417	4,456	4,492
Exports	399	430	412	416	415	420	423	425
Ending stocks	307	304	305	308	310	310	311	312
				(Cents per pound)				
Farm price	15.80	14.97	14.59	14.60	14.49	14.66	14.80	14.85
Reference price	20.15	20.15	20.15	20.15	20.15	20.15	20.15	20.15

U.S. hay supply and use

May-April year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
				(Million acres)				
Area harvested	52.8	52.4	53.3	53.2	52.9	52.6	52.5	52.4
				(Tons per acre)				
Yield	2.34	2.46	2.42	2.43	2.43	2.44	2.44	2.45
				(Million tons)				
Production	123.6	128.9	129.0	129.2	128.7	128.3	128.2	128.3
Disappearance	124.0	123.3	126.9	128.5	128.7	128.5	128.3	128.2
Ending stocks	14.9	20.4	22.5	23.2	23.2	23.0	22.9	22.9
				(Dollars per ton)				
All hay price	166.00	163.00	151.64	147.31	146.83	147.32	147.84	148.19

U.S. planted and idled area

Marketing year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Planted area				(Million acres)				
Corn	88.87	89.70	95.99	91.73	92.73	92.94	93.10	93.11
Soybeans	89.17	76.10	84.51	85.99	85.49	85.75	86.03	86.19
Wheat	47.82	45.16	44.66	46.87	45.97	45.05	44.56	44.34
Upland cotton	13.85	13.51	13.28	12.40	12.62	12.91	13.00	13.02
Sorghum	5.69	5.27	5.92	5.94	5.92	5.88	5.86	5.84
Barley	2.55	2.72	2.92	2.77	2.73	2.70	2.67	2.64
Oats	2.75	2.81	3.01	2.99	2.92	2.86	2.83	2.82
Rice	2.95	2.54	2.85	2.84	2.78	2.78	2.76	2.75
Sunflower seed	1.30	1.35	1.56	1.51	1.49	1.47	1.47	1.46
Peanuts	1.43	1.43	1.53	1.52	1.50	1.52	1.54	1.54
Canola	1.99	2.04	1.99	2.01	2.01	2.02	2.02	2.02
Sugar beets	1.11	1.13	1.14	1.17	1.18	1.20	1.19	1.17
Sugarcane harvested	0.91	0.92	0.93	0.95	0.97	0.97	0.97	0.95
13-crop planted	260.37	244.67	260.27	258.69	258.32	258.05	257.99	257.83
Hay area harvested	52.84	52.43	53.28	53.21	52.87	52.59	52.47	52.38
13 crops + hay	313.21	297.10	313.55	311.90	311.19	310.65	310.46	310.21
Conservation reserve (CRP)	22.63	22.33	21.96	22.50	23.00	23.50	23.50	23.50
13 crops + hay + CRP	335.84	319.42	335.52	334.40	334.19	334.15	333.96	333.71
Double crop area	3.56	3.04	3.31	3.29	3.24	3.22	3.23	3.24
Total minus double crop	332.28	316.39	332.21	331.10	330.95	330.92	330.73	330.47

U.S. soybean product supply and use

October-September year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Soybean meal				(Thousand tons)				
Production	48,814	50,018	50,585	51,744	51,779	51,936	52,277	52,671
Imports	684	550	516	516	516	516	516	516
Domestic use	36,097	37,158	36,867	36,992	36,913	37,111	37,395	37,713
Exports	13,554	13,435	14,237	15,262	15,382	15,341	15,395	15,472
Ending stocks	402	378	376	383	383	383	386	388
Soybean oil				(Million pounds)				
Production	24,197	24,502	24,824	25,392	25,410	25,487	25,654	25,847
Imports	398	375	400	400	400	400	400	400
Domestic use	22,874	22,418	23,201	24,173	22,729	23,089	23,445	23,477
Biodiesel	7,863	7,727	8,501	9,390	7,766	8,014	8,303	8,267
Food and other	15,011	14,691	14,700	14,783	14,963	15,075	15,142	15,210
Exports	1,941	2,355	1,916	1,554	2,933	2,795	2,600	2,739
Ending stocks	1,775	1,879	1,986	2,052	2,201	2,203	2,212	2,242
Decatur prices				(Dollars per ton)				
Soybean meal 48% protein	308.28	303.32	295.68	296.00	305.06	309.29	311.33	313.85
				(Cents per pound)				
Soybean oil	28.26	29.01	26.31	26.29	24.59	25.26	25.92	25.90

U.S. biomass-based diesel supply and use

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
Supply and use				(Million gallons)				
Production	2,300	2,378	2,607	2,965	3,263	2,988	3,199	3,268
Biodiesel	1,857	1,725	1,812	2,036	2,233	1,867	2,059	2,078
From soybean oil	979	950	1,021	1,132	1,249	929	1,078	1,078
From corn oil	271	229	212	231	256	270	283	291
From other fats and oils	607	546	579	674	729	668	698	708
Cellulosic diesel	0	0	0	0	0	0	0	0
Renewable diesel	442	653	795	928	1,030	1,121	1,139	1,190
Net exports	-63	-54	-103	-82	-93	-34	-97	-105
Domestic disappearance	2,346	2,463	2,724	3,051	3,356	3,024	3,296	3,373
Ending stocks	196	165	151	146	146	144	144	145
Prices and RIN values				(Dollars per gallon)				
Biodiesel rack, Des Moines	3.05	2.81	2.94	2.90	2.94	2.64	2.83	2.87
#2 diesel, refiner sales	2.13	1.96	1.22	1.41	1.73	1.79	1.89	2.02
Biodiesel RIN (per RIN gal.)	0.53	0.47	0.43	0.36	0.28	0.64	0.79	0.75

U.S. ethanol supply and use

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
Petroleum fuel prices				(Dollars per barrel)				
Petroleum, W. Texas interm.	64.89	56.98	30.97	44.24	54.74	51.21	54.55	59.92
Petroleum, refiners acquisition	64.46	59.33	28.06	37.11	49.73	51.76	55.48	60.67
				(Dollars per gallon)				
Unl. gasoline, FOB Omaha	2.11	1.94	1.21	1.39	1.71	1.77	1.87	2.00
Unleaded gasoline, retail	2.74	2.64	1.91	2.10	2.42	2.49	2.59	2.72
				(Million gallons)				
Motor gasoline supplied	143,013	142,171	127,996	138,544	141,352	141,244	140,769	140,022
Ethanol supply and use								
Production	16,082	15,776	14,310	15,580	16,089	16,300	16,379	16,465
From corn	15,978	15,613	14,215	15,470	15,965	16,178	16,256	16,341
From other feedstocks	96	154	80	94	106	103	102	102
Cellulosic	8	10	15	16	18	19	21	22
Imports	54	224	150	111	68	76	80	80
Domestic disappearance	14,411	14,568	12,893	14,034	14,397	14,541	14,585	14,616
In low-level blends	13,998	13,859	12,438	13,320	13,629	13,431	13,261	13,026
In mid-level blends	182	274	278	541	587	932	1,135	1,382
In flex fuel vehicles	231	219	177	173	181	179	189	208
Exports	1,710	1,477	1,564	1,646	1,747	1,822	1,861	1,916
Ending stocks	984	939	941	952	966	979	993	1,005
Ethanol prices				(Dollars per gallon)				
Conventional rack, Omaha	1.23	1.26	1.13	1.27	1.30	1.28	1.30	1.32
Other advanced rack	1.43	1.55	1.29	1.33	1.30	1.60	1.78	1.79
Effective retail	1.56	1.78	1.58	1.68	1.73	1.68	1.71	1.76
Ethanol/gasoline retail ratio	57%	68%	82%	80%	71%	68%	66%	65%
RIN values				(Dollars per gallon)				
Conventional ethanol	0.31	0.17	0.26	0.30	0.28	0.32	0.30	0.27
Other advanced ethanol	0.51	0.46	0.43	0.36	0.28	0.64	0.79	0.75

U.S. beef sector

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
				(Million head)				
Beef cows (Jan. 1)	31.5	31.7	31.3	30.8	30.4	30.2	30.1	30.0
Dairy cows (Jan. 1)	9.4	9.4	9.3	9.3	9.3	9.3	9.3	9.4
Cattle and calves (Jan. 1)	94.3	94.8	94.4	94.3	93.3	92.3	91.4	90.7
Beef supply and use				(Million pounds)				
Production	26,938	27,221	27,261	27,759	27,746	27,677	27,573	27,490
Imports	2,998	3,057	2,909	2,984	3,047	3,072	3,116	3,155
Domestic use	26,762	27,276	27,237	27,574	27,491	27,340	27,201	27,178
Exports	3,161	3,022	2,947	3,134	3,295	3,407	3,485	3,463
Ending stocks	662	642	628	663	670	672	675	680
Prices				(Dollars per hundredweight)				
Total all grades, 5-area direct steers	117.12	116.78	113.52	111.06	116.71	121.31	123.31	125.26
600 - 650 lb. Oklahoma City feeder steers	159.20	153.65	147.45	146.90	159.23	166.06	169.00	171.52
Boxed beef cutout	214.06	222.86	237.48	219.38	224.29	230.94	236.29	239.68
				(Dollars per pound)				
Beef retail	5.92	6.04	6.28	6.19	6.24	6.41	6.58	6.71

U.S. pork sector

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
				(Million head)				
Breeding herd (Dec. 1*)	6.18	6.33	6.47	6.37	6.18	6.04	5.95	5.88
Market hogs (Dec. 1*)	67.0	68.7	72.2	72.2	72.0	71.1	70.6	70.5
Pork supply and use				(Million pounds)				
Production	26,330	27,652	28,448	28,676	28,638	28,522	28,593	28,803
Imports	1,042	945	824	858	908	952	974	983
Domestic use	21,491	22,188	21,910	21,897	22,021	22,100	22,182	22,330
Exports	5,876	6,321	7,339	7,623	7,524	7,377	7,382	7,448
Ending stocks	559	646	670	684	685	681	685	693
Prices								
Barrows & gilts, national base 51-52%				(Dollars per hundredweight)				
lean equivalent	45.93	47.95	42.99	43.48	46.81	48.34	49.39	50.20
Pork cutout value	76.09	77.14	76.45	75.28	78.07	80.18	81.97	83.13
				(Dollars per pound)				
Pork retail	3.74	3.84	3.88	3.90	3.91	3.95	4.03	4.09

* Preceding year

U.S. poultry supply and use

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
Broiler				(Million pounds)				
Production	42,145	43,435	44,168	44,268	44,620	45,258	45,934	46,571
Imports	139	131	138	133	133	133	133	133
Domestic use	35,227	36,365	36,955	36,940	37,077	37,468	37,898	38,301
Exports	7,069	7,109	7,334	7,471	7,684	7,921	8,162	8,396
Ending stocks	845	937	954	944	935	937	943	950
Turkey								
Production	5,878	5,818	5,824	5,899	6,007	6,086	6,150	6,190
Imports	19	12	13	12	13	13	14	14
Domestic use	5,293	5,261	5,257	5,312	5,389	5,457	5,515	5,549
Exports	611	639	584	595	624	637	645	653
Ending stocks	303	233	229	233	240	245	248	250
Prices				(Cents per pound)				
National composite wholesale broiler	97.80	88.58	75.26	80.39	86.61	89.06	90.80	91.34
Broiler retail	187.29	187.65	190.21	192.61	198.28	201.98	204.86	207.24
8-16 lb. national turkey hens	80.18	89.21	97.75	99.86	102.14	102.46	102.98	103.15
Turkey retail	150.08	152.00	161.52	167.39	171.25	171.64	172.55	174.55

U.S. per-capita meat consumption

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
				(Pounds)				
Beef	57.3	58.1	57.6	57.9	57.4	56.7	56.0	55.6
Pork	51.0	52.4	51.4	51.0	50.9	50.8	50.6	50.6
Broiler	92.6	95.1	95.9	95.2	94.9	95.3	95.7	96.1
Turkey	16.2	16.0	15.9	15.9	16.1	16.2	16.2	16.2
Sum	217.0	221.6	220.8	220.1	219.3	218.9	218.6	218.5

U.S. dairy sector

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
Milk supply								
Dairy cows (thou. head)	9,398	9,336	9,347	9,298	9,299	9,321	9,354	9,373
Milk yield (lbs. per cow)	23,152	23,391	23,677	23,939	24,296	24,626	24,969	25,185
Milk production (bil. lbs.)	217.6	218.4	221.3	222.6	225.9	229.5	233.6	236.1
				(Dollars per hundredweight)				
All milk price	16.28	18.63	16.34	16.27	17.31	17.98	18.01	18.19
Wholesale prices				(Dollars per pound)				
Butter, CME	2.25	2.23	1.53	1.48	1.56	1.70	1.76	1.79
Cheese, Am., 40#, CME	1.55	1.78	1.57	1.51	1.60	1.64	1.63	1.64
Nonfat dry milk, AA	0.81	1.06	1.04	1.13	1.22	1.23	1.22	1.23
Dairy product production				(Million pounds)				
American cheese	5,254	5,232	5,301	5,323	5,392	5,475	5,573	5,636
Other cheese	7,784	7,905	8,037	8,108	8,249	8,408	8,576	8,695
Butter	1,968	1,994	2,042	2,045	2,098	2,156	2,212	2,248
Nonfat dry milk	2,352	2,440	2,540	2,485	2,575	2,686	2,788	2,868

U.S. government outlays

Fiscal year	2018	2019	2020	2021	2022	2023	2024	2025
				(Million dollars)				
Commodity Credit Corp.								
Farm bill commodity programs	7,709	3,437	3,566	6,501	10,854	9,316	8,366	7,729
Corn	3,024	595	310	904	5,359	4,368	3,816	3,500
Wheat	1,957	1,049	456	1,689	1,562	1,569	1,678	1,763
Soybeans	225	270	160	811	683	626	403	158
Upland cotton	290	-77	781	1,343	1,598	1,209	995	903
Rice	828	495	589	350	424	506	481	471
Other major crops & dairy	1,383	1,105	1,270	1,404	1,228	1,038	992	935
Other CCC-funded programs	3,175	17,952	20,676	3,385	3,396	3,444	3,480	3,411
Market facilitation program	38	13,678	9,320	0	0	0	0	0
CFAP (CCC portion)*	0	0	6,500	0	0	0	0	0
Conservation (CCC portion)	1,955	1,904	1,891	1,961	2,097	2,134	2,157	2,088
Disaster and all other	1,182	2,370	2,965	1,424	1,298	1,309	1,323	1,324
Total CCC programs	10,884	21,389	24,242	9,886	14,249	12,759	11,847	11,140
Non-CCC programs								
Crop insurance	6,525	10,286	8,546	7,945	7,493	7,683	7,889	8,055
CFAP (non-CCC portion)*	0	0	9,500	0	0	0	0	0
NRCS conservation	3,082	3,085	3,573	3,705	3,745	3,833	3,679	3,798
Non-CCC disaster and all other	0	0	4,619	0	0	0	0	0
Total non-CCC programs	9,607	13,371	26,238	11,650	11,238	11,516	11,568	11,853
Total, CCC & non-CCC	20,491	34,760	50,479	21,536	25,488	24,276	23,415	22,992

Note: Fiscal years begin on Oct. 1 (FY 2020: Oct. 1, 2019 to Sep. 30, 2020)

* Part of the cost of the Coronavirus Food Assistance Program (CFAP) is included in CCC accounts, the remainder appears under non-CCC programs.

U.S. government payments (farm income accounts)

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
				(Million dollars)				
Price loss coverage	2,065	1,921	4,399	9,255	8,415	7,685	7,282	6,814
Agriculture risk coverage	1,109	690	1,052	1,361	902	695	468	393
Market facilitation program	5,127	14,313	3,558	0	0	0	0	0
Coronavirus food assistance	0	0	16,000	0	0	0	0	0
Conservation programs	3,987	4,019	4,215	4,424	4,534	4,639	4,518	4,556
Emergency and disaster	916	2,201	2,598	786	786	786	786	786
All other	466	510	983	797	237	31	21	11
Total direct payments	13,669	23,654	32,805	16,623	14,874	13,836	13,075	12,559

U.S. farm income

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
				(Billion dollars)				
Farm receipts	401.9	408.6	383.9	390.4	409.4	422.7	432.0	440.2
Crops	196.2	196.7	186.5	189.3	195.9	200.9	205.4	209.4
Livestock	176.5	177.6	164.8	169.0	181.0	188.5	192.4	195.7
Farm-related	29.1	34.3	32.5	32.1	32.5	33.3	34.1	35.1
Direct government payments	13.7	23.7	32.8	16.6	14.9	13.8	13.1	12.6
Gross cash income	415.5	432.2	416.7	407.0	424.2	436.5	445.1	452.8
Nonmoney income	19.1	20.1	20.7	20.8	20.7	20.7	20.7	20.8
Value of inventory change	-7.1	-14.5	1.7	-1.3	-0.2	-0.1	0.2	0.3
Gross farm income	427.6	437.8	439.1	426.5	444.7	457.1	465.9	473.9
Cash expenses	311.3	311.8	314.5	311.9	319.2	324.1	328.9	335.0
Total expenses	343.8	344.3	348.5	347.0	354.7	359.6	364.4	370.7
Net cash income	104.2	120.4	102.2	95.1	105.0	112.5	116.2	117.8
Net farm income	83.8	93.6	90.6	79.4	90.0	97.5	101.6	103.2
Deflated (2020 $)	87.3	95.2	90.6	78.6	88.5	95.5	98.8	99.4

U.S. farm balance sheet

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
Farm assets				(Billion dollars)				
Real estate	2,510	2,555	2,584	2,631	2,526	2,466	2,443	2,437
All other	517	534	551	524	516	509	514	519
Total assets	3,027	3,089	3,136	3,155	3,042	2,975	2,957	2,955
Farm debt								
Real estate	246	257	265	270	273	271	268	266
All other	156	159	159	156	158	160	162	166
Total debt	402	416	424	426	431	431	430	432
Debt/asset ratio	13.3%	13.5%	13.5%	13.5%	14.2%	14.5%	14.6%	14.6%