

Baseline Update for U.S. Agricultural Markets

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Summary

The war in Ukraine and weather-reduced crop supplies have contributed to higher prices for many agricultural commodities, while higher prices for fertilizer, fuel and other inputs have increased farm production expenses. Projected prices for a range of farm commodities and farm inputs are expected to decline in the years ahead but nominal prices remain high by historical standards.

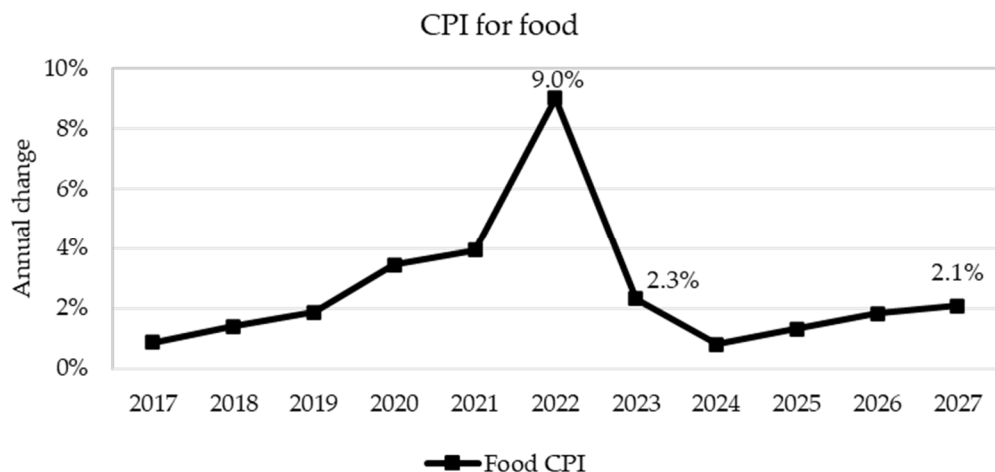
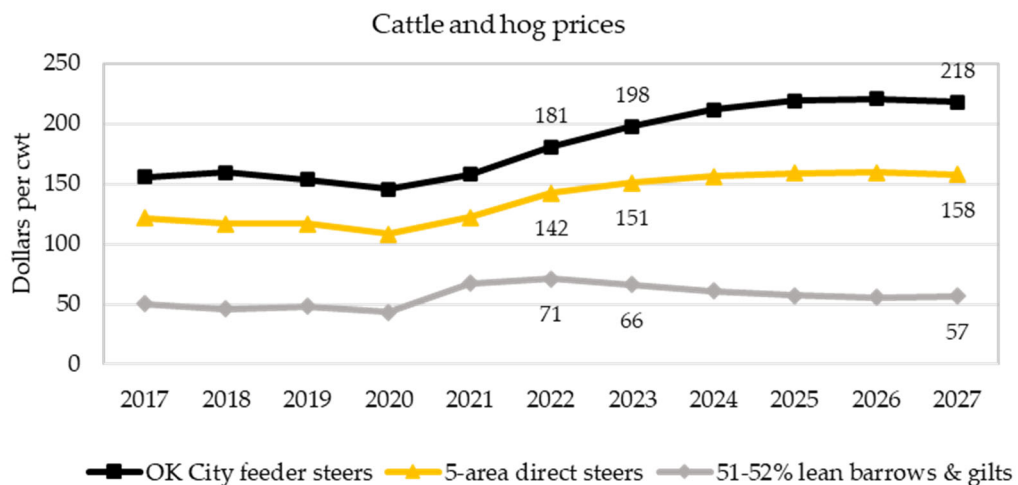
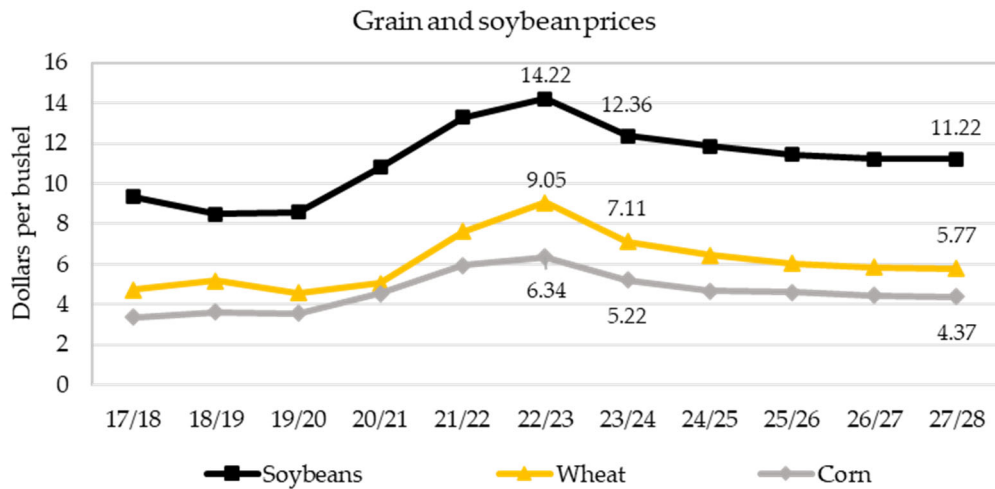
This report, based on information available in mid-August 2022, updates the 2022 FAPRI baseline outlook prepared earlier this year. Crop production in 2022 is assumed to equal the values reported by USDA in its August *Crop Production* report and macroeconomic assumptions are based on July 2022 forecasts by S&P Global. Current government policies are assumed to continue, and selected provisions of the recently approved Inflation Reduction Act (IRA) are incorporated along with the 2020-2022 RFS requirements that were finalized in June 2022. The COVID-19 pandemic is assumed to continue waning and related supply chain disruptions are anticipated to be resolved in the future.

Key results include:

- The war in Ukraine has reduced exports by a major grain and oilseed trading country, contributing to higher prices. The baseline assumes the conflict continues to limit Ukraine’s production and trade in the year ahead, before an eventual return to normalcy.
- Weather is another factor pushing up crop prices. Unfavorable weather reduced the South American soybean crop earlier this year and has reduced crop production in the United States and Europe this summer.
- Tight global supplies result in record prices for wheat and cotton and near-record prices for corn and soybeans. For the 2022/23 marketing year, wheat prices are projected to exceed \$9 per bushel, corn tops \$6 per bushel, soybean prices are more than \$14 per bushel and cotton prices average 96 cents per pound.
- Prices for fertilizer, fuel and many other farm inputs are also up very sharply in 2022. For example, variable corn production expenses increase by an estimated \$164 per acre in 2022. Projected input costs moderate in the years ahead, but remain well above the 2021 level.
- If better growing conditions result in trendline crop yields in 2023 and later years, crop prices could also decline from current levels. In 2023/24, projected average corn prices drop to \$5.22 per bushel, wheat falls to \$7.11 per bushel and soybean prices decline to \$12.36 per bushel.
- Sharply higher feed and other input costs help keep projected total U.S. meat production nearly flat in 2022 and 2023. The last time meat production failed to grow in consecutive years was 2003 and 2004. Strong U.S. consumer demand for meat offsets a decline in exports.
- Drought conditions in important cow-calf areas are causing producers to send animals to slaughter early, lifting beef production in the short term but leading to fewer cows and higher prices in the years to come.
- The all-milk price is on pace to reach a new annual record high in 2022 as milk production fails to increase for the first time since 2009. Milk production growth resumes in 2023, but solid international demand for U.S. dairy products should moderate price declines.
- Supply of liquid motor fuels, including biofuels, recovers from pandemic lows. Renewable diesel production is projected to overtake methyl-ester biodiesel as soon as 2023, and tax credit provisions in the IRA lead to a modest expansion of sustainable aviation fuel production.
- However, the long-run trend is for lower U.S. motor fuel use, so ethanol and biomass-based diesel domestic use softens after the near-term recovery. Foreign income growth and policies, as well as rising petroleum prices, lead to strong U.S. ethanol exports.
- The CPI for food is projected to increase 9.0% in 2022. Food-at-home prices increase 10.6%, well above the increase in prices of food away-from-home for the first time since 2011.
- The increase in the food CPI moderates to 2.3% in 2023, as commodity prices and food marketing costs decline. This still outpaces the 1.7% average annual increase from 2010-2019.

These projections are a snapshot based on information available in August 2022. New information about the size of the 2022 crop, the war in Ukraine and other factors will alter the outlook, perhaps in important ways. This baseline update does not explore or quantify the uncertainty around these projections. Please refer to our stochastic baseline projections released earlier this year for information of this type.

A subsequent report will examine the farm income implications of these commodity market projections.



Macroeconomic assumptions*

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
Real GDP growth								
				(Percent)				
United States	-3.4	5.7	1.4	1.3	1.9	2.3	2.1	1.9
China	2.2	8.1	4.0	5.2	5.1	5.0	4.9	4.8
European Union (exc. UK)	-5.9	5.3	2.6	1.3	2.2	1.7	1.6	1.5
World	-3.3	5.8	2.7	2.6	3.0	3.0	2.9	2.9
U.S. CPI inflation	1.2	4.7	7.8	3.3	1.9	1.9	2.2	2.2
U.S. interest rates								
Federal funds rate	0.4	0.1	1.5	3.3	3.1	2.6	2.6	2.6
Prime rate	3.5	3.3	4.7	6.5	6.2	5.7	5.7	5.7
Petroleum price				(Dollars per barrel)				
West Texas Intermediate	39.25	67.99	101.25	96.15	86.37	81.96	84.37	86.78
Exchange rates				(Currency per dollar)				
Chinese yuan	6.90	6.45	6.61	6.64	6.34	6.24	6.21	6.22
Euro	0.88	0.85	0.94	0.96	0.94	0.92	0.90	0.88

*Source: S&P Global forecast, July 2022

Policy assumptions

Year	2020	2021	2022	2023	2024	2025	2026	2027
Special program availability								
Coronavirus Food Assistance	Yes	No	No	No	No	No	No	No
Pandemic Assistance for Producers	No	Yes	No	No	No	No	No	No
Inflation Reduction Act additional conservation budget authority	No	No	No	Yes	Yes	Yes	Yes	No
Effective reference prices				(Dollars per bushel)				
Corn	3.70	3.70	3.70	3.70	3.99	4.26	4.26	4.26
Soybeans	8.40	8.40	8.40	8.40	9.26	9.66	9.66	9.66
Wheat	5.50	5.50	5.50	5.50	5.50	5.61	6.00	6.00
PLC participation				(Percent of base acreage)				
Corn	75.0	50.8	38.9	7.6	9.6	19.0	19.0	20.9
Soybeans	14.0	12.6	14.4	1.9	5.4	6.8	6.7	7.1
Wheat	92.8	82.7	52.2	81.6	67.4	56.7	72.9	73.5
Conservation reserve area				(Million acres)				
	21.9	20.5	22.1	23.7	24.7	25.6	26.0	26.4
Renewable fuel standard				(Billion gallons, ethanol equivalent)				
Overall, as applied	18.0	19.5	20.9	21.0	21.0	21.0	20.9	20.8
Advanced biofuels	4.9	5.5	5.9	6.0	6.0	6.0	5.9	5.8
Biomass-based diesel	4.0	4.0	4.4	4.4	4.4	4.4	4.3	4.2
Conventional biofuel "gap"	13.2	14.0	15.0	15.0	15.0	15.0	15.0	15.0

U.S. corn supply and use

September-August year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Area	(Million acres)							
Planted area	90.7	93.4	89.8	91.1	92.6	91.1	91.4	90.7
Harvested area	82.3	85.4	81.8	83.3	84.7	83.3	83.6	82.9
Yield	(Bushels per harvested acre)							
	171.4	177.0	175.4	182.1	184.3	186.6	188.8	191.0
Supply	(Million bushels)							
Beginning stocks	1,919	1,235	1,530	1,400	1,822	2,202	2,280	2,412
Production	14,111	15,115	14,359	15,165	15,602	15,545	15,778	15,834
Imports	24	25	25	25	25	25	25	25
Domestic use	12,074	12,395	12,130	12,442	12,694	12,720	12,805	12,842
Feed and residual	5,603	5,600	5,297	5,477	5,648	5,663	5,739	5,783
Ethanol and coproducts	5,033	5,350	5,387	5,491	5,546	5,546	5,539	5,519
HFCS	421	415	413	407	409	405	404	403
Seed	31	31	31	32	32	32	32	32
Food and other	987	999	1,001	1,036	1,060	1,074	1,090	1,105
Exports	2,747	2,450	2,383	2,326	2,553	2,772	2,865	2,946
Total use	14,821	14,845	14,513	14,769	15,247	15,492	15,670	15,788
Ending stocks	1,235	1,530	1,400	1,822	2,202	2,280	2,412	2,484
Under loan	60	50	39	71	96	98	108	111
Other stocks	1,175	1,480	1,361	1,751	2,106	2,181	2,305	2,372
Prices, program provisions	(Dollars per bushel)							
Farm price	4.53	5.95	6.34	5.22	4.65	4.59	4.43	4.37
Loan rate	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Effective reference price	3.70	3.70	3.70	3.70	3.99	4.26	4.26	4.26
Market returns	(Dollars)							
Gross market revenue/a.	776.61	1053.25	1112.66	950.68	857.86	856.03	836.65	834.14
Variable expenses/a.	333.39	333.90	497.75	460.07	420.58	402.61	392.93	396.26
Market net return/a.	443.22	719.35	614.91	490.61	437.28	453.42	443.72	437.89

U.S. soybean supply and use

September-August year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Area	(Million acres)							
Planted area	83.4	87.2	88.0	87.9	85.5	85.7	85.2	85.6
Harvested area	82.6	86.3	87.2	87.1	84.7	84.8	84.4	84.7
	(Bushels per harvested acre)							
Yield	51.0	51.4	51.9	51.7	52.2	52.8	53.4	53.9
	(Million bushels)							
Supply	4,761	4,707	4,770	4,765	4,739	4,799	4,851	4,928
Beginning stocks	525	257	225	247	302	303	329	341
Production	4,216	4,435	4,531	4,503	4,422	4,482	4,507	4,572
Imports	20	15	15	15	15	15	15	15
Domestic use	2,238	2,322	2,370	2,410	2,427	2,450	2,471	2,498
Crush	2,141	2,205	2,249	2,284	2,300	2,320	2,339	2,364
Seed and residual	97	117	121	125	127	130	132	134
Exports	2,266	2,160	2,154	2,053	2,010	2,021	2,039	2,076
Total use	4,504	4,482	4,524	4,463	4,436	4,471	4,510	4,574
Ending stocks	257	225	247	302	303	329	341	354
Under loan	10	6	5	9	11	13	14	15
Other stocks	247	219	242	293	292	316	327	339
Prices, program provisions	(Dollars per bushel)							
Farm price	10.80	13.30	14.22	12.36	11.85	11.44	11.23	11.22
Illinois processor price	13.41	15.05	14.32	12.62	12.12	11.72	11.51	11.51
Loan rate	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20
Effective reference price	8.40	8.40	8.40	8.40	9.26	9.66	9.66	9.66
Market returns	(Dollars)							
Gross market revenue/a.	551.26	683.28	738.69	639.37	619.04	604.35	599.55	605.33
Variable expenses/a.	187.56	188.77	240.37	239.51	232.02	227.62	228.47	231.57
Market net return/a.	363.70	494.51	498.33	399.85	387.02	376.73	371.07	373.76
Other indicators								
Soybean/corn price ratio	2.38	2.24	2.24	2.37	2.55	2.49	2.53	2.57
48% soymeal price, \$/ton	392.31	435.00	390.15	329.18	306.73	300.89	297.01	298.55
Soybean oil price, cents/lb.	56.87	72.00	66.93	63.43	63.00	60.90	59.96	59.96
Crushing margin, \$/bu.	2.51	3.67	2.73	2.59	2.50	2.52	2.53	2.57

U.S. wheat supply and use

June-May year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Area	(Million acres)							
Planted area	44.5	46.7	47.0	47.8	48.8	50.0	49.6	49.6
Harvested area	36.8	37.2	37.5	39.5	40.4	41.4	41.0	41.0
	(Bushels per harvested acre)							
Yield	49.7	44.3	47.5	51.0	51.4	51.9	52.4	52.9
	(Million bushels)							
Supply	2,956	2,586	2,551	2,737	2,907	3,046	3,108	3,153
Beginning stocks	1,028	845	660	618	729	799	861	890
Production	1,828	1,646	1,783	2,013	2,077	2,149	2,150	2,166
Imports	100	95	109	105	101	98	97	97
Domestic use	1,117	1,126	1,119	1,154	1,148	1,160	1,165	1,165
Feed and residual	93	94	84	111	98	105	104	102
Seed	64	60	63	64	66	65	65	65
Food and other	961	972	972	978	984	990	995	998
Exports	994	800	814	854	959	1,025	1,053	1,079
Total use	2,111	1,926	1,933	2,008	2,107	2,185	2,217	2,244
Ending stocks	845	660	618	729	799	861	890	909
Under loan	15	2	2	6	8	11	11	12
Other stocks	831	658	616	723	791	850	879	897
Prices, program provisions	(Dollars per bushel)							
Farm price	5.05	7.63	9.05	7.11	6.44	6.02	5.84	5.77
Loan rate	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Effective reference price	5.50	5.50	5.50	5.50	5.50	5.61	6.00	6.00
Market returns	(Dollars)							
Gross market revenue/a.	250.93	337.89	430.15	362.37	330.69	312.91	305.99	305.14
Variable expenses/a.	129.63	130.94	190.33	173.31	162.18	152.93	149.73	150.48
Market net return/a.	121.30	206.95	239.82	189.05	168.52	159.98	156.26	154.67

U.S. upland cotton supply and use

August-July year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Area	(Million acres)							
Planted area	11.89	11.09	12.32	11.81	11.65	11.70	11.81	11.82
Harvested area	8.02	10.15	6.98	9.52	9.39	9.44	9.54	9.55
	(Pounds per harvested acre)							
Yield	841	813	837	899	908	920	932	941
	(Million bales)							
Supply	20.93	20.21	15.64	19.74	21.52	22.49	23.12	23.48
Beginning stocks	6.87	3.02	3.48	1.91	3.74	4.39	4.59	4.75
Production	14.06	17.19	12.16	17.83	17.78	18.10	18.52	18.73
Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic use								
Mill use	2.39	2.54	2.30	2.33	2.37	2.37	2.35	2.34
Exports	15.59	14.19	11.42	13.67	14.75	15.53	16.01	16.28
Total use	17.97	16.73	13.73	16.00	17.12	17.90	18.36	18.62
Unaccounted	-0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Ending stocks	3.02	3.48	1.91	3.74	4.39	4.59	4.75	4.87
Prices, program provisions	(Cents per pound)							
Farm price	66.3	92.0	95.7	79.2	74.9	75.9	75.9	75.4
Loan rate	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
Seed cotton effective refer, price	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
Seed cotton farm price	34.1	47.0	49.2	40.3	38.2	38.4	38.3	38.0
Market returns	(Dollars)							
Gross market revenue/a.	665.82	874.98	950.35	839.69	804.08	819.50	825.49	828.28
Variable expenses/a.	422.65	451.76	586.59	562.57	533.81	523.61	525.61	532.02
Market net return/a.	243.17	423.22	363.77	277.12	270.27	295.89	299.88	296.25

U.S. rice supply and use

August-July year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Area	(Million acres)							
Planted area	3.04	2.53	2.34	2.47	2.48	2.56	2.55	2.56
Harvested area	2.99	2.49	2.31	2.43	2.44	2.52	2.51	2.52
	(Pounds per harvested acre)							
Yield	7,619	7,709	7,627	7,729	7,800	7,884	7,939	8,002
	(Million hundredweight)							
Supply	290.2	273.5	260.7	265.1	269.7	278.8	282.2	286.1
Beginning stocks	28.7	43.7	41.5	36.7	39.0	40.5	42.8	43.8
Production	227.5	191.8	176.0	187.6	190.6	198.3	199.2	201.8
Imports	34.1	38.0	43.2	40.8	40.0	40.0	40.2	40.5
Domestic use	153.1	148.5	145.3	148.9	150.3	152.0	152.6	154.1
Exports	93.5	83.5	78.7	77.2	78.8	84.0	85.8	87.6
Total use	246.6	232.0	224.0	226.1	229.1	236.0	238.4	241.7
Ending stocks	43.7	41.5	36.7	39.0	40.5	42.8	43.8	44.5
Prices, program provisions	(Dollars per hundredweight)							
Farm price	14.40	15.80	18.00	16.04	15.74	15.51	15.44	15.53
Long grain	12.60	13.70	15.78	13.98	13.58	13.32	13.29	13.37
Japonica	22.60	26.00	32.09	27.94	26.52	25.24	25.31	25.52
Other medium, short grain	13.00	14.10	16.66	14.62	14.14	13.76	13.74	13.84
Loan rate	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Effective reference price								
Long grain	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Japonica	17.30	17.30	17.79	18.50	19.89	19.90	19.90	19.90
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.	1,097.19	1,218.00	1,372.52	1,239.78	1,227.85	1,223.05	1,226.00	1,243.10
Variable expenses/a.	526.51	529.31	689.14	647.16	623.52	609.19	610.66	619.71
Market net return/a.	570.68	688.69	683.38	592.62	604.32	613.87	615.34	623.39

Other U.S. feed grains supply and use

Marketing year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Sorghum								
	(Million acres)							
Planted area	5.88	7.31	6.31	5.80	6.00	5.98	6.03	6.06
Harvested area	5.10	6.49	5.38	5.15	5.32	5.30	5.35	5.37
	(Bushels per harvested acre)							
Yield	73.20	69.00	53.23	75.57	75.78	76.07	76.43	76.79
	(Million bushels)							
Production	373	448	286	389	403	403	409	412
Imports	0	0	0	0	0	0	0	0
Domestic use	104	125	91	119	111	100	98	99
Exports	279	290	224	263	288	303	309	312
Ending stocks	20	53	24	32	36	36	38	39
	(Dollars per bushel)							
Farm price	5.04	5.95	6.40	5.28	4.80	4.81	4.70	4.66
Effective reference price	3.95	3.95	3.95	3.95	4.06	4.54	4.54	4.54
Barley								
	(Million acres)							
Planted area	2.73	2.66	3.03	2.86	2.77	2.54	2.51	2.48
Harvested area	2.21	1.95	2.38	2.31	2.23	2.04	2.01	1.99
	(Bushels per harvested acre)							
Yield	77.2	60.4	66.3	78.4	79.1	80.6	81.5	82.7
	(Million bushels)							
Production	171	118	158	181	177	164	164	164
Imports	7	15	9	14	12	12	13	14
Domestic use	172	154	152	167	169	167	168	168
Exports	14	7	8	7	8	7	7	7
Ending stocks	71	42	49	69	81	83	86	88
	(Dollars per bushel)							
Farm price	4.75	5.31	6.85	5.87	5.18	5.00	4.90	4.84
Effective reference price	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95
Oats								
	(Million acres)							
Planted area	3.01	2.55	2.39	2.71	2.61	2.66	2.73	2.78
Harvested area	1.01	0.65	0.80	0.85	0.81	0.83	0.86	0.87
	(Bushels per harvested acre)							
Yield	65.1	61.3	66.1	67.1	67.7	68.1	68.8	69.4
	(Million bushels)							
Production	66	40	53	57	55	57	59	61
Imports	85	81	95	90	86	85	84	83
Domestic use	147	124	144	140	138	139	139	140
Exports	3	3	3	3	3	3	3	3
Ending stocks	38	33	34	38	38	39	40	41
	(Dollars per bushel)							
Farm price	2.77	4.55	5.59	4.28	4.01	4.03	4.02	4.02
Effective reference price	2.40	2.40	2.40	2.40	2.76	2.76	2.76	2.76

Other U.S. oilseeds supply and use

Marketing year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Peanuts								
	(Million acres)							
Planted area	1.66	1.59	1.54	1.54	1.58	1.58	1.56	1.56
Harvested area	1.62	1.55	1.50	1.49	1.54	1.53	1.51	1.51
	(Pounds per harvested acre)							
Yield	3,813	4,135	4,129	4,258	4,307	4,361	4,417	4,474
	(Million pounds)							
Production	6,158	6,389	6,202	6,363	6,612	6,668	6,680	6,768
Imports	121	112	110	110	110	110	110	110
Domestic use	5,013	4,875	4,997	5,094	5,172	5,203	5,235	5,286
Exports	1,429	1,200	1,321	1,357	1,427	1,479	1,522	1,564
Ending stocks	1,968	2,394	2,388	2,411	2,533	2,629	2,662	2,690
	(Cents per pound)							
Farm price	21.00	24.30	23.92	23.76	23.05	22.34	22.15	22.20
Effective reference price	26.75	26.75	26.75	26.75	26.75	26.75	26.75	26.75
Sunflowerseed								
	(Million acres)							
Planted area	1.72	1.29	1.67	1.59	1.58	1.60	1.58	1.58
Harvested area	1.67	1.24	1.60	1.52	1.51	1.53	1.51	1.51
	(Pounds per harvested acre)							
Yield	1,790	1,530	1,726	1,687	1,700	1,713	1,726	1,737
	(Million pounds)							
Production	2,983	1,903	2,765	2,569	2,571	2,619	2,605	2,630
Imports	375	395	313	436	501	536	548	549
Domestic use	3,027	2,346	2,784	2,900	3,000	3,076	3,090	3,113
Exports	130	110	137	97	75	63	59	59
Ending stocks	395	236	392	400	398	414	418	425
	(Cents per pound)							
Farm price	21.30	32.90	27.71	24.55	24.31	23.03	22.59	22.56
Effective reference price	20.15	20.15	20.15	20.15	20.15	20.84	21.69	21.69
Canola								
	(Million acres)							
Planted area	1.82	2.15	1.96	1.83	1.87	1.92	1.95	1.98
Harvested area	1.79	2.09	1.91	1.78	1.82	1.87	1.90	1.93
	(Pounds per harvested acre)							
Yield	1,931	1,302	1,870	1,846	1,861	1,878	1,894	1,909
	(Million pounds)							
Production	3,453	2,721	3,578	3,293	3,384	3,507	3,598	3,680
Imports	970	1,085	1,064	1,203	1,196	1,183	1,184	1,189
Domestic use	4,092	3,750	4,150	4,177	4,260	4,354	4,444	4,528
Exports	344	282	358	312	317	322	325	331
Ending stocks	470	243	378	385	389	403	416	425
	(Cents per pound)							
Farm price	18.40	32.90	24.30	21.94	21.61	21.05	20.61	20.59
Effective 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	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
				(Million acres)				
Area harvested	52.2	50.7	51.5	52.1	51.9	51.6	51.5	51.6
				(Tons per acre)				
Yield	2.43	2.37	2.27	2.40	2.41	2.42	2.43	2.44
				(Million tons)				
Production	126.8	120.2	116.8	125.0	125.2	124.9	125.2	126.0
Disappearance	129.2	121.4	120.7	121.6	122.2	123.1	124.1	125.3
Ending stocks	18.0	16.8	12.8	16.3	19.3	21.1	22.1	22.8
				(Dollars per ton)				
All hay price	156.00	186.00	217.18	192.16	173.04	166.58	165.36	166.35

U.S. planted and idled area

Marketing year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
				(Million acres)				
Planted area								
Corn	90.65	93.36	89.82	91.14	92.59	91.11	91.39	90.65
Soybeans	83.35	87.20	88.03	87.93	85.50	85.66	85.22	85.57
Wheat	44.45	46.70	46.99	47.82	48.83	50.01	49.63	49.63
Upland cotton	11.89	11.09	12.32	11.81	11.65	11.70	11.81	11.82
Sorghum	5.88	7.31	6.31	5.80	6.00	5.98	6.03	6.06
Barley	2.73	2.66	3.03	2.86	2.77	2.54	2.51	2.48
Oats	3.01	2.55	2.39	2.71	2.61	2.66	2.73	2.78
Rice	3.04	2.53	2.34	2.47	2.48	2.56	2.55	2.56
Sunflower seed	1.72	1.29	1.67	1.59	1.58	1.60	1.58	1.58
Peanuts	1.66	1.59	1.54	1.54	1.58	1.58	1.56	1.56
Canola	1.82	2.15	1.96	1.83	1.87	1.92	1.95	1.98
Sugar beets	1.16	1.16	1.18	1.16	1.17	1.19	1.18	1.17
Sugarcane harvested	0.96	0.94	0.93	0.91	0.91	0.91	0.91	0.92
13-crop planted	252.32	260.52	258.50	259.56	259.54	259.41	259.05	258.75
Hay area harvested	52.24	50.74	51.51	52.08	51.90	51.56	51.48	51.65
13 crops + hay	304.56	311.25	310.01	311.64	311.44	310.97	310.53	310.39
Conservation reserve (CRP)	21.92	20.51	22.07	23.70	24.69	25.60	26.00	26.35
13 crops + hay + CRP	326.49	331.77	332.08	335.35	336.13	336.57	336.52	336.75
Double crop area	3.84	3.99	3.56	4.14	3.96	4.00	3.94	3.92
Total minus double crop	322.65	327.78	328.52	331.21	332.17	332.57	332.58	332.83

U.S. soybean product supply and use

October-September year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Soybean meal	(Thousand tons)							
Production	50,565	51,659	52,901	53,739	54,105	54,577	55,023	55,610
Imports	784	600	450	450	450	450	450	450
Domestic use	37,674	38,500	39,315	39,672	39,928	40,460	40,743	41,039
Exports	13,675	13,700	13,996	14,498	14,621	14,565	14,727	15,020
Ending stocks	341	400	440	459	464	468	470	472
Soybean oil	(Million pounds)							
Production	25,023	26,105	26,455	26,874	27,056	27,293	27,516	27,809
Imports	302	325	560	587	330	310	300	300
Domestic use	23,314	24,685	25,892	26,067	25,964	26,025	26,115	26,033
Biofuel	8,850	10,500	12,064	12,347	12,290	12,286	12,254	12,062
Food and other	14,465	14,185	13,828	13,720	13,674	13,739	13,860	13,971
Exports	1,731	1,775	1,389	1,377	1,487	1,496	1,647	2,046
Ending stocks	2,131	2,101	1,835	1,851	1,787	1,869	1,924	1,954
Decatur prices	(Dollars per ton)							
Soybean meal 48% protein	392.31	435.00	390.15	329.18	306.73	300.89	297.01	298.55
	(Cents per pound)							
Soybean oil	56.87	72.00	66.93	63.43	63.00	60.90	59.96	59.96

U.S. biomass-based diesel supply and use

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
Supply and use	(Million gallons)							
Production	2,518	2,459	3,206	3,458	3,492	3,475	3,481	3,455
From soybean oil	1,089	1,179	1,459	1,603	1,604	1,593	1,596	1,590
From corn oil	197	342	470	525	522	532	547	588
From other fats and oils	1,232	938	1,277	1,331	1,366	1,350	1,338	1,277
Net imports	331	413	511	444	398	360	319	277
Domestic disappearance	2,850	2,859	3,706	3,895	3,886	3,834	3,799	3,731
Ending stocks	163	176	187	195	199	201	202	202
Prices and RIN values	(Dollars per gallon)							
Biodiesel rack, Des Moines	2.98	5.13	5.93	5.44	5.19	5.13	5.00	4.94
#2 diesel, refiner sales	1.29	2.11	3.37	2.90	2.46	2.16	2.26	2.35
Biodiesel RIN (per RIN gal.)	0.66	1.55	1.58	0.96	0.84	0.77	0.66	0.54

U.S. ethanol supply and use

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
Petroleum fuel prices								
				(Dollars per barrel)				
Petroleum, W. Texas interm.	39.25	67.99	101.25	96.15	86.37	81.96	84.37	86.78
Petroleum, refiners acquisition	39.16	67.51	93.23	88.25	80.32	78.01	81.44	84.58
				(Dollars per gallon)				
Unl. gasoline, FOB Omaha	1.32	2.23	3.23	2.65	2.47	2.42	2.52	2.60
Unleaded gasoline, retail	2.17	3.05	4.07	3.42	3.21	3.17	3.27	3.36
				(Million gallons)				
Motor gasoline supplied	123,733	134,829	136,105	137,087	136,740	136,076	134,328	131,669
Ethanol supply and use								
Production	13,941	15,015	15,604	15,744	16,153	16,240	16,250	16,267
From corn	13,851	14,964	15,549	15,701	16,094	16,156	16,146	16,142
From other feedstocks	88	50	54	42	59	82	102	123
Cellulosic	2	1	1	1	1	1	1	2
Imports	154	61	76	76	75	75	72	68
Domestic disappearance	12,680	13,937	14,000	14,124	14,328	14,439	14,335	14,170
In low-level blends	12,415	13,615	13,274	13,324	13,012	12,591	12,321	11,922
In mid-level blends	68	105	445	509	885	1,402	1,546	1,745
In flex fuel vehicles	197	216	281	291	432	446	469	502
Exports	1,317	1,252	1,682	1,697	1,899	1,874	1,985	2,163
Ending stocks	1,037	924	922	920	921	923	925	927
Ethanol prices								
				(Dollars per gallon)				
Conventional rack, Omaha	0.86	2.40	2.20	2.06	1.87	1.79	1.74	1.72
Other advanced rack	1.05	2.59	2.45	2.48	2.40	2.28	2.14	2.00
Effective retail	1.28	1.92	1.71	2.28	2.30	2.25	2.23	2.21
Ethanol/gasoline retail ratio	59%	63%	42%	67%	72%	71%	68%	66%
RIN values								
				(Dollars per gallon)				
Conventional ethanol	0.43	1.31	1.33	0.54	0.31	0.28	0.26	0.26
Other advanced ethanol	0.63	1.50	1.58	0.96	0.84	0.77	0.66	0.54

U.S. beef sector

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
				(Million head)				
Beef cows (Jan. 1)	31.3	30.8	30.1	29.3	28.7	28.5	28.5	28.7
Dairy cows (Jan. 1)	9.3	9.4	9.4	9.4	9.5	9.5	9.5	9.6
Cattle and calves (Jan. 1)	93.8	93.8	91.9	89.5	88.1	87.7	87.6	87.7
				(Million pounds)				
Beef supply and use								
Production	27,244	28,016	28,040	26,962	26,299	26,126	26,222	26,465
Imports	3,339	3,346	3,470	3,356	3,409	3,448	3,449	3,442
Domestic use	27,559	27,962	27,918	27,140	26,566	26,384	26,441	26,602
Exports	2,951	3,441	3,549	3,224	3,179	3,202	3,225	3,293
Ending stocks	716	676	718	672	634	622	627	639
				(Dollars per hundredweight)				
Prices								
Total all grades, 5-area direct steers	108.51	122.40	142.35	150.98	156.53	158.87	159.39	157.81
600 - 650 lb. Oklahoma City feeder steers	145.82	157.65	180.54	197.54	211.62	219.03	220.45	218.22
Boxed beef cutout	236.36	280.21	263.79	268.86	275.85	284.12	287.87	286.51
				(Dollars per pound)				
Beef retail	6.54	7.25	7.65	7.67	7.79	7.95	8.04	8.03

U.S. pork sector

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
				(Million head)				
Breeding herd (Dec. 1*)	6.55	6.18	6.13	6.09	6.05	6.07	6.06	5.98
Market hogs (Dec. 1*)	70.3	71.1	68.3	68.4	69.0	69.8	70.5	70.9
				(Million pounds)				
Pork supply and use								
Production	28,318	27,690	27,270	27,519	28,016	28,545	28,964	29,139
Imports	904	1,180	1,439	1,388	1,302	1,208	1,130	1,100
Domestic use	22,122	21,865	22,121	22,209	22,411	22,616	22,741	22,754
Exports	7,279	7,026	6,476	6,660	6,882	7,118	7,338	7,480
Ending stocks	467	446	558	595	621	640	655	660
				(Dollars per hundredweight)				
Prices								
Barrows & gilts, national base 51-52% lean equivalent	43.18	67.29	71.22	66.49	60.81	57.39	55.84	56.91
Pork cutout value	77.31	104.10	104.09	97.68	94.40	89.70	86.93	89.13
				(Dollars per pound)				
Pork retail	4.03	4.50	4.94	4.84	4.76	4.67	4.63	4.66

* Preceding year

U.S. poultry supply and use

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
Broiler								
	(Million pounds)							
Production	44,106	44,419	44,860	45,394	46,058	46,755	47,355	47,918
Imports	145	155	180	152	152	152	152	152
Domestic use	36,989	37,343	37,615	38,071	38,553	39,061	39,475	39,862
Exports	7,368	7,355	7,386	7,461	7,647	7,836	8,027	8,204
Ending stocks	830	705	745	759	768	777	782	787
Turkey								
Production	5,743	5,558	5,369	5,593	5,691	5,762	5,795	5,816
Imports	21	22	55	34	34	34	34	34
Domestic use	5,203	5,090	5,018	5,150	5,234	5,287	5,311	5,326
Exports	571	548	406	443	477	499	513	521
Ending stocks	223	166	166	200	215	225	230	233
Prices								
	(Cents per pound)							
National composite wholesale broiler	73.21	101.18	134.75	115.64	109.22	107.32	107.42	107.81
Broiler retail	199.18	209.44	238.52	233.09	228.51	226.75	227.58	228.96
8-16 lb. national turkey hens	106.52	122.75	144.47	122.44	116.34	114.89	115.12	115.76

U.S. per-capita meat consumption

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
	(Pounds)							
Beef	58.1	58.9	58.6	56.7	55.3	54.6	54.4	54.4
Pork	51.7	51.1	51.5	51.5	51.7	51.9	51.9	51.6
Broiler	95.8	96.6	96.9	97.7	98.4	99.2	99.7	100.1
Turkey	15.7	15.3	15.1	15.4	15.6	15.6	15.6	15.6
Sum	221.3	221.9	222.1	221.2	220.9	221.2	221.6	221.8

U.S. dairy sector

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
Milk supply								
Dairy cows (thou. head)	9,392	9,448	9,409	9,443	9,478	9,521	9,557	9,589
Milk yield (lbs. per cow)	23,777	23,948	24,038	24,281	24,639	24,838	25,093	25,349
Milk production (billion lbs.)	223.3	226.3	226.2	229.3	233.5	236.5	239.8	243.1
(Dollars per hundredweight)								
All milk price	18.16	18.54	25.09	22.32	20.41	19.84	19.66	19.66
Wholesale prices								
(Dollars per pound)								
Butter, CME	1.58	1.74	2.76	2.42	2.15	2.03	1.96	1.91
Cheese, Am., 40#, CME	2.00	1.71	2.11	1.93	1.87	1.85	1.85	1.86
Nonfat dry milk, AA	1.06	1.31	1.74	1.56	1.39	1.36	1.36	1.37
Dairy product production								
(Million pounds)								
American cheese	5,338	5,568	5,606	5,660	5,781	5,875	5,972	6,067
Other cheese	7,901	8,139	8,520	8,673	8,889	9,048	9,205	9,360
Butter	2,146	2,072	2,047	2,140	2,207	2,248	2,302	2,349
Nonfat dry milk	2,665	2,730	2,681	2,748	2,835	2,923	3,009	3,079

U.S. consumer food price inflation

Calendar year	2020	2021	2022	2023	2024	2025	2026	2027
(Change from the previous year)								
Food	3.4%	3.9%	9.0%	2.3%	0.8%	1.3%	1.8%	2.1%
Food at home	3.5%	3.5%	10.6%	2.0%	0.1%	1.0%	1.5%	1.7%
Cereal and bakery	2.2%	2.3%	11.9%	3.5%	-0.5%	0.5%	1.5%	1.8%
Meat	6.2%	6.6%	9.9%	0.3%	0.4%	1.5%	1.7%	1.9%
Dairy	4.4%	1.4%	11.2%	2.9%	-0.4%	0.7%	1.4%	1.9%
Fruits and vegetables	1.4%	3.2%	7.8%	1.6%	0.5%	0.9%	1.3%	1.5%
Other food at home	3.0%	2.6%	11.8%	2.8%	0.1%	0.8%	1.3%	1.5%
Food away from home	3.4%	4.5%	7.1%	2.6%	1.5%	1.7%	2.1%	2.4%