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Grains and Oilseeds Outlook

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GRAINS AND OILSEEDS OUTLOOK FOR 2020¹

Prepared by Members of the
Wheat, Feed Grains, Rice, and Oilseeds Interagency Commodity Estimates Committees
U.S. Department of Agriculture

Planted Acreage Outlook for 2020 (Table 1)

This paper provides USDA’s projections of 2020/21 U.S. supply, demand, and prices for wheat, corn, rice, soybeans, and soybean products. Projections presented in this paper include implications of the January 10 NASS *Winter Wheat and Canola Seedings* report, which estimated that winter wheat area declined 1 percent from 2019 to the 2nd lowest level on record. The projections assume normal weather conditions for spring planting and summer crop development. These forecasts will be updated in the May 12 *World Agricultural Supply and Demand Estimates* (WASDE) report. The May WASDE will incorporate farmers’ 2020 planting intentions as indicated in the March 31 NASS *Prospective Plantings* report and survey-based forecasts for winter wheat production, as well as global, country-by-country supply and demand projections.

Among the 3 major crops, this year’s planted area outlook is for an increase in corn and soybean area following last year’s large prevented plantings. Current new crop soybean futures prices relative to corn, as well as contract bids for fall 2020 delivery, are expected to support an increase in corn acres to 94.0 million, which would be up 1.2 million from planting intentions a year ago. However, the potential for a large increase in corn area is dampened by, among other factors, rotational constraints. Thus, projected soybean acres, at 85.0 million acres, would be up 0.4 million from last year’s planting intentions. Combined corn and soybean acres, at 179.0 million, would be up from 177.4 million intended acres for the two crops in 2019. Offsetting the increase in combined corn and soybean acres is an expected decline in wheat and cotton plantings relative to intended acres a year ago.

Table 1. Wheat, Corn, and Soybean Planted Acreage, 2013-2020

	2013	2014	2015	2016	2017	2018	2019	2020 1/
	- Million Acres -							
Wheat	56.2	56.8	55.0	50.1	46.1	47.8	45.2	45.0
Corn	95.4	90.6	88.0	94.0	90.2	88.9	89.7	94.0
Soybeans	76.8	83.3	82.7	83.5	90.2	89.2	76.1	85.0
Total	228.4	230.7	225.7	227.6	226.4	225.9	211.0	224.0

1/ Projection

Source: National Agricultural Statistics Service data 2013-2019.

Note: Totals may not add due to rounding.

¹This paper incorporates contributions by analysts from the World Agricultural Outlook Board, the Economic Research Service, the FPAC-BC, and the Foreign Agricultural Service.

Wheat Supply, Demand, and Price Outlook for 2020/21 (Table 2)

The 2020/21 outlook for U.S. wheat is for tighter supplies, slightly lower total use, and declining ending stocks. U.S. wheat production is projected down about 4 percent from 2019/20 to 1,836 million bushels on lower projected yield. All wheat planted area is down slightly but harvested area is up on a return to more normal harvested to planted ratio. The NASS *Winter Wheat and Canola Seedings* report indicates winter wheat seeded area down one percent from 2019/20 and the lowest level in more than a century. Low winter wheat plantings are supporting spring wheat prices, but persistent wet soils and unharvested corn in the Northern Plains could prevent or delay some planting. Total wheat area for 2020/21 is projected at 45.0 million acres, down 158,000 acres from the previous year and a record low. The all wheat yield for 2020/21 is projected down nearly 7 percent from last year's near record to 48.2 bushels per acre and is based in a linear trend. Lower beginning stocks and a smaller crop more than offset increased imports to reduce 2020/21 supplies by 6 percent to 2,916 million bushels, a five-year low.

At 2,139 million bushels, projected 2020/21 total use is down slightly from a year earlier but remains above the 5-year average. The year-over-year reduction stems from lower domestic use; exports are flat but still strong at 1.0 billion bushels. Forecast growth in global wheat demand supports the 2020/21 export forecast. Reduced U.S. supplies and relatively stable use lead to substantially lower ending stocks. At 777 million bushels, carryout for the 2020/21 marketing year is more than 17 percent below the previous year and the lowest level since 2014/15. The tighter balance sheet supports a 2020/21 season average farm price of \$4.90 per bushel, up \$0.35 from the previous year.

Corn Supply, Demand, and Price Outlook for 2020/21 (Table 3)

The U.S. corn outlook for 2020/21 is for record production and domestic use, increased exports, and higher ending stocks. The corn crop is projected at 15.5 billion bushels, 13 percent above a year ago with an increase in area from last year's weather-reduced plantings and a return to trend yields. The yield projection of 178.5 bushels per acre is based on a weather-adjusted trend assuming normal planting progress and summer growing season weather. Despite beginning stocks forecast down from a year ago, total corn supplies at 17.4 billion bushels are forecast to be record high.

Total U.S. corn use in 2020/21 is forecast to rise 5 percent from a year ago on record domestic use and a rebound in exports. Food, seed, and industrial (FSI) use is projected up fractionally at 6.8 billion bushels, driven by slightly higher corn used for ethanol. Corn used for ethanol is up less than 1 percent from a year ago, based on expectations of essentially flat motor gasoline consumption and a modest increase in exports. Feed and residual use is up 275 million bushels to 5.8 billion, with a larger crop, continued growth in grain consuming animal units, and lower expected prices. Corn exports are up 375 million bushels to 2.1 billion, reflecting expectations of global trade growth but with continued competition from other exporters such as Argentina, Brazil, and Ukraine. Ending stocks are projected at 2.7 billion bushels, up 745 million from 2019/20, resulting in a 25 cent per bushel decline from a year ago in the season-average farm price to \$3.60 per bushel.

Rice Supply, Demand, and Price Outlook for 2020/21 (Tables 4 & 5)

The 2020/21 outlook for U.S. rice is for a sharp increase in production, increased use, and higher ending stocks. U.S. rice production is projected at 232.5 million cwt, up 26 percent from the previous year. Long-grain accounts for all of the production increase, offsetting the lower combined medium- and

short-grain projected production. Rice planted area for 2020/21 totals 3.07 million acres, up 530,000 acres from the previous year and a four-year-high. Long-grain area is projected to be up 572,000 acres but combined medium- short-grain rice is projected slightly lower. The all rice yield is projected up from the previous year to a near record on a by-class trend analysis. Imports for 2020/21 are projected to total 32.5 million cwt, flat from the previous year's record. These elevated imports continue to reflect strong demand for Asian aromatic varieties for long-grain as well as continued sales of Chinese medium-grain rice into Puerto Rico. Although beginning stocks are down sharply, total 2020/21 supplies are up 33.0 million cwt from the previous year to 295.0 million. If realized, these would be the largest supplies in a decade.

Total 2020/21 use is up 14 million cwt to 246.0 million on higher domestic and residual use as well as higher exports. Long-grain total use is up 13 million cwt to 183.0 million and combined medium- and short-grain total use is up 1.0 million cwt to 63.0 million. Ending stocks for 2020/21 are up 19 million cwt to 49.0 million, which if realized would be a multi-decade high. The all rice season-average farm price is down \$1.00 per cwt to \$12.00.

Soybean Supply, Demand, and Price Outlook for 2019/20 (Tables 6, 7 & 8)

The 2020/21 outlook for U.S. soybeans is for higher supplies, crush, and exports, and lower ending stocks. Soybean supplies are projected at 4.6 billion bushels, up 3 percent from 2019/20 with higher production more than offsetting lower beginning stocks. Soybean production is projected at 4.2 billion bushels, 18 percent above a year earlier with plantings recovering from last year's weather-related decline and a return to trend yields. The yield forecast of 49.8 bushels per acre is based on a weather-adjusted trend assuming normal growing season weather.

Soybean crush is projected at a record 2.1 billion bushels, driven by higher domestic use of soybean meal that more than offsets slightly lower meal exports. Soybean crush margins remain relatively strong with soybean and soybean product prices near 2019/20 levels. Soybean meal prices are forecast at \$310 per short ton. Domestic use of soybean oil is projected up 2 percent for 2019/20 on gains for edible oil and biodiesel consumption. With lower projected soybean oil exports, soybean oil ending stocks for 2020/21 are projected at 1.55 billion pounds, up 2 percent from 2019/20 but still low compared to recent history. Soybean oil prices are forecast at 33.0 cents per pound.

Soybean exports for 2020/21 are projected at 2.05 billion bushels, up 225 million from the 2019/20 forecast. Increasing global import demand, particularly for China, and a recovery in U.S. market share will support higher U.S. soybean exports following a sharp decline over the past two years.

Soybean ending stocks for 2020/21 are projected at 320 million bushels, down 105 million from 2019/20 and the lowest since 2016/17. With a 6 percent increase in total soybean disappearance more than offsetting increased supplies, the ending stocks-to-use ratio is projected at 7.4 percent, down from 10.5 percent in 2019/20. With declining stocks, the soybean season-average farm price is projected at \$8.80 per bushel, up only slightly from 2019/20. However prices will remain pressured by increased South American production and export competition.

Table 2. Wheat Supply, Demand, and Price, 2017/18-2020/21

	2017/18	2018/19	2019/20 1/	2020/21 2/
Area planted (mil. ac.)	46.1	47.8	45.2	45.0
Area harvested	37.6	39.6	37.2	38.1
Yield (bu./ac.)	46.4	47.6	51.7	48.2
Production (mil. bu.)	1,741	1,885	1,920	1,836
Beginning stocks	1,181	1,099	1,080	940
Imports	158	135	105	140
Supply	3,080	3,119	3,105	2,916
Feed & residual	47	90	150	120
Food & seed	1,028	1,013	1,015	1,019
Total domestic use	1,075	1,103	1,165	1,139
Exports	906	936	1,000	1,000
Total use	1,981	2,039	2,165	2,139
Ending stocks	1,099	1,080	940	777
Stocks/use (percent)	55.5	53.0	43.4	36.3
Season-avg. farm price (\$/bu.)	4.72	5.16	4.55	4.90

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates*, February 11, 2020. 2/ Projections based on analysis by USDA's Wheat Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.

Table 3. Corn Supply, Demand, and Price, 2017/18-2020/21

	2017/18	2018/19	2019/20 1/	2020/21 2/
Area planted (mil. ac.)	90.2	88.9	89.7	94.0
Area harvested	82.7	81.3	81.5	86.6
Yield (bu./ac.)	176.6	176.4	168.0	178.5
Production (mil. bu.)	14,609	14,340	13,692	15,460
Beginning stocks	2,293	2,140	2,221	1,892
Imports	36	28	50	25
Supply	16,939	16,509	15,962	17,377
Feed & residual	5,304	5,432	5,525	5,800
Ethanol 3/	5,605	5,376	5,425	5,450
Total food, seed & industrial	7,057	6,791	6,820	6,840
Total domestic use	12,361	12,223	12,345	12,640
Exports	2,438	2,065	1,725	2,100
Total use	14,798	14,288	14,070	14,740
Ending stocks	2,140	2,221	1,892	2,637
Stocks/use (percent)	14.5	15.5	13.4	17.9
Season-avg. farm price (\$/bu.)	3.36	3.61	3.85	3.60

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates*, February 11, 2020. 2/ Projections based on analysis by USDA's Feed Grains Interagency Commodity Estimates Committee. 3/ Corn used to produce ethanol and by-products including, distillers' grains, corn gluten feed, corn gluten meal, and corn oil.

Note: Totals may not add due to rounding.

Table 4. Rice Supply, Demand, and Price, 2017/18-2020/21

All Rice	2017/18	2018/19	2019/20 1/	2020/21 2/
Area planted (mil. ac.)	2.46	2.95	2.54	3.07
Area harvested	2.37	2.91	2.47	3.03
Yield (pounds/ac.)	7,507	7,692	7,471	7,678
Production (mil. cwt)	178.2	223.8	184.7	232.5
Beginning stocks	46.0	29.4	44.9	30.0
Imports	27.5	29.0	32.5	32.5
Supply	251.8	282.2	262.0	295.0
Total domestic & residual use	135.4	143.8	133.0	144.0
Exports	87.1	93.6	99.0	102.0
Total use	222.4	237.3	232.0	246.0
Ending stocks	29.4	44.9	30.0	49.0
Stocks/use (percent)	13.2	18.9	12.9	19.9
Season avg. farm price (\$/cwt.)	12.90	12.60	13.00	12.00

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates*, February 11, 2020. 2/ Projections based on the analysis by USDA's Rice Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.

Table 5. Rice-by Class Supply, Demand, and Price, 2017/18-2020/21

Rice-by-class	2017/18	2018/19	2019/20 1/	2020/21 2/
<u>Long-grain</u>				
Area planted (mil. ac.)	1.81	2.20	1.78	2.35
Area harvested	1.75	2.18	1.73	2.32
Yield (pounds/ac)	7,314	7,517	7,261	7,503
Production (mil. cwt)	127.9	163.6	125.6	174.0
Beginning stocks	31.0	20.3	32.6	14.2
Imports	23.3	23.4	26.0	26.0
Supply	182.2	207.3	184.2	214.2
Total domestic & residual use	98.6	109.0	99.0	110.0
Exports	63.2	65.7	71.0	73.0
Total use	161.9	174.7	170.0	183.0
Ending stocks	20.3	32.6	14.2	31.2
Stocks/use (percent)	12.5	18.7	8.4	17.0
Season avg. farm price (\$/cwt.)	11.50	10.80	12.00	10.80
<u>Medium- and short-grain</u>				
Area planted (mil. ac)	0.65	0.75	0.76	0.72
Area harvested	0.63	0.73	0.74	0.71
Yield (pounds/ac)	8,048	8,209	7,960	8,251
Production (mil. cwt)	50.4	60.3	59.1	58.5
Beginning stocks	11.5	7.6	10.2	13.7
Imports	4.2	5.6	6.5	6.5
Supply	68.2	72.8	75.7	78.7
Total domestic & residual use	36.7	34.8	34.0	34.0
Exports	23.8	27.8	28.0	29.0
Total use	60.6	62.6	62.0	63.0
Ending stocks	7.6	10.2	13.7	15.7
Stocks/use (percent)	12.5	16.3	22.1	24.9
Season avg. farm price (\$/cwt)	17.00	18.50	16.10	15.50
California	20.10	21.10	18.00	17.50
Other States	11.70	12.30	12.10	11.30

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, use, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates*, February 11, 2020. 2/Projections based on analysis by USDA's Rice Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.

Table 6. Soybean Supply, Demand, and Price, 2017/18-2020/21

	2017/18	2018/19	2019/20 /1	2020/21 /2
Area planted (mil. ac.)	90.2	89.2	76.1	85.0
Area harvested	89.5	87.6	75.0	84.2
Yield (bu./ac.)	49.3	50.6	47.4	49.8
Production (mil. bu.)	4,412	4,428	3,558	4,195
Beginning stocks	302	438	909	425
Imports	22	14	15	15
Supply	4,735	4,880	4,482	4,635
Crush	2,055	2,092	2,105	2,130
Seed and Residual	108	132	128	134
Total domestic use	2,163	2,224	2,233	2,264
Exports	2,134	1,748	1,825	2,050
Total use	4,297	3,971	4,058	4,314
Ending stocks	438	909	425	320
Stocks/use (percent)	10.2	22.9	10.5	7.4
Season-avg. farm price (\$/bu.)	9.33	8.48	8.75	8.80

1/ Acreage, yield, production, and beginning stocks are estimates from the National Agricultural Statistics Service. Imports, crush, exports, ending stocks, and season-average farm price are projections from the *World Agricultural Supply and Demand Estimates* report, February 11, 2020.

2/ Projections based on analysis by the USDA's Oilseeds Interagency Commodity Estimates Committee.

Note: Totals may not add due to rounding.

Table 7. Soybean Meal Supply, Demand, and Price, 2017/18-2020/21

	2017/18	2018/19	2019/20 /1	2020/21 /2
Production (thou. short tons)	49,226	48,809	49,473	50,225
Beginning stocks	401	555	402	375
Imports	483	684	500	400
Supply	50,109	50,048	50,375	51,000
Domestic Use	35,537	36,092	36,800	37,500
Exports	14,016	13,554	13,200	13,100
Total use	49,554	49,646	50,000	50,600
Ending stocks	555	402	375	400
Avg. price (\$/short ton) 3/	345.02	308.28	305.00	310.00

1/ Beginning stocks, production, imports, use, ending stocks, and average price are projections from the *World Agricultural Supply and Demand Estimates*, February 11, 2020.

2/ Projections based on analysis by the USDA's Oilseeds Interagency Commodity Estimates Committee.

3/ The average price is for 48-percent protein meal at Decatur, Illinois.

Note: Totals may not add due to rounding.

Table 8. Soybean Oil Supply, Demand, and Price, 2017/18-2020/21

	2017/18	2018/19	2019/20 /1	2020/21 /2
Production (mil. lbs.)	23,772	24,195	24,290	24,685
Beginning stocks	1,711	1,995	1,775	1,515
Imports	335	398	450	450
Supply	25,819	26,589	26,515	26,650
Domestic Use	21,380	22,872	23,100	23,500
Biodiesel 3/	7,134	7,863	8,200	8,500
Food, Feed, Other Industrial	14,247	15,009	14,900	15,000
Exports	2,443	1,941	1,900	1,600
Total use	23,823	24,813	25,000	25,100
Ending stocks	1,995	1,775	1,515	1,550
Avg. price (cents/lb.) 4/	30.0	28.3	33.5	33.0

1/ Beginning stocks, production, imports, use, ending stocks, and average price are projections from the *World Agricultural Supply and Demand Estimates*, February 11, 2020.

2/ Projections based on analysis by the USDA's Oilseeds Interagency Commodity Estimates Committee.

3/ Reflects only biodiesel made from methyl ester as reported by the U.S. Energy Information Administration.

4/ The average price is for crude soybean oil at Decatur, Illinois.

Note: Totals may not add due to rounding.