

FEED OUTLOOK

United States Department of Agriculture



FDS-0299
Economic Research Service

Approved by the World Agricultural Outlook Board

February 12, 1999

HIGHLIGHTS

- U.S. Corn Export Forecast Increased 25 Million Bushels; World Trade Up
- Corn Ending Stocks Projected at 1,786 Million Bushels
- USDA Livestock Revisions Change Index of Roughage Consuming Animal Units

OUTLOOK FOR FEED GRAINS SHOWS LITTLE CHANGE

There were few changes in 1998/99 U.S. supply and use forecasts this month. The most important of these was a 25-million bushel increase in corn exports discussed below. The U.S. corn import forecast was also raised 2 million bushels to 12 million, reflecting larger shipments from Canada. Changes for the other feed grains were small this month. Forecast U.S. sorghum exports were reduced 10 million bushels to 185 million, largely because of expectations of weaker sales to Japan. This is down from 212 million bushels in 1997/98, and the lowest since 1985/86. In addition, the forecast of U.S. oats imports was increased 5 million bushels because of prospects for larger imports from Scandinavia.

U.S. feed grain supplies in 1998/99 are up nearly 8 percent from the year before to 312 million metric tons due to larger carryin stocks and higher production. Total use is forecast to rise 4 percent to 261 million tons as domestic use charges to a record for the second straight year and exports increase modestly from the depressed level of 1997/98. With the increase in supply outstripping gains in use, stocks will build again, and ending stocks are projected at 51 million tons, the highest since 1992/93. Feed grain prices remain weak and are not expected to strengthen significantly in the next few months.

PROJECTION OF CORN ENDING STOCKS REDUCED

Ending stocks of corn in 1998/99 are projected at 1,786 million bushels, down 23 million from last month. This reflects the 25 million bushel increase in exports and 2-million-bushel rise in imports. However, compared with the year before, stocks are expected to be 37 percent higher. The ratio of stocks to use is projected at 19.2 percent, up from 14.9 in 1997/98.

Incorporation of final November trade data into the corn balance sheet led to virtually no change in quarterly disappearance estimates for September-November. Feed and residual use of corn was 2,129 million bushels, up 5 percent from the same period the year before, and record high for any quarter. Food, seed, and industrial (FSI) use, estimated at 444 million bushels, was record high for the September-November quarter.

HISTORICAL LIVESTOCK REVISIONS CHANGE RCAU'S

With the release of the 1997 Census of Agriculture, the National Agricultural Statistics Service has revised its livestock and poultry numbers. There are still some reports to be released but those released last month have changed the indexes for grain consuming animal units (GCAU's) and roughage consuming animal units (RCAU's). For instance, the roughage

consuming animal units for 1996/97 increased 370,000 units (less than 1 percent), 1997/98 increased 410,000 units (rounding up to 1 percent), and 1998/99 increased 700,000 units (almost a 1-percent increase from last month).

In January, hay stocks for December 1, 1998, were reported at 112 million tons, up from 103 million the year before. Using the revised RCAU's, hay stocks per RCAU in 1998/99 are 1.5 tons, up from 1.4 tons in 1997/98. The 1998/99 December 1 hay stocks per RCAU are approaching the record high of 1.6 tons in 1987/88, and are the third highest on record.

Plentiful stocks per RCAU help explain the weakness in hay prices relative to last year. In January 1999, prices received by farmers for all hay were \$78.80 per ton, down from \$94.70 in January 1998. Given current estimates of livestock numbers and hay stocks, hay prices will likely remain weak during the remainder of the marketing year.

FEED AND RESIDUAL USE REMAINS STRONG

Feed and residual use of the four feed grains plus wheat in 1998/99 is expected to increase 1 percent from the 164 million metric tons used in September 1997-August 1998. Feed and residual use in September-November 1998 was up 4 percent from a year earlier. Corn accounted for 94 percent of feed and residual use in September-November 1998 and is expected to represent 87 percent of feed and residual use for all of 1998/99.

The index of grain consuming animal units (GCAU's) for 1998/99 is expected to be nearly the same as 1997/98's 88 million. The grain used per GCAU in 1998/99 would be 1.90 tons, up 2 percent from 1997/98. In the index components in 1998/99, GCAU's for hogs, broilers and layers are up from the previous year.

The total number of cattle on feed on January 1, 1999, was 13.2 million head, down from 13.6 million the previous year. In the first half of 1998, the calf crop was down 1 percent from the same period a year earlier but in the second half, the calf crop was down 2 percent. Feeder cattle supplies outside feedlots were down less than 1 percent on January 1. Thus, placements of cattle on feed are likely to be down slightly in 1999 compared with 1998 and feed needs would be slightly less.

Pork production in 1999 is expected to decline less than 1 percent from the 19 billion pounds produced in 1998, which was up 10 percent from 1997. Hog farmers responding to the December 1997 survey indicated that they intended to decrease the number of sows farrowing in December 1998-May 1999 by 4 percent relative to the prior year. If these intentions are realized, feed needs could be reduced in the fall of 1999, after the end of the 1998/99 feeding year.

Broiler and egg production in 1999 are expected to increase from the expected 1998 levels and maintain strong demand for feed grains. Broiler production is expected to increase 6 percent from 1998 as producers respond to strong domestic demand. In 1999, turkey production may decline 1 percent from the 5.2 billion pounds produced in 1998. Egg producers are expected to produce 6.8 billion dozen eggs in 1999, up 2 percent from 1998. With these increases in production, feed needs by the poultry sector are likely to remain strong.

The total number of dairy cows on January 1, 1999, was 9.1 million head, down 1 percent from 1998. Dairy cow numbers are expected to continue to trail the previous year during 1999. But with increased production per cow, milk production in 1999 is expected to total 159.9 billion pounds, up from 156.9 billion in 1998. Thus, with the increased milk production per cow, feed use by the dairy industry will continue strong.

U.S. CORN EXPORT PACE STRONG, 1998/99 FORECAST INCREASED THIS MONTH

U.S. 1998/99 corn exports are forecast to reach 1,725 million bushels, up 25 million bushels this month. For September through the end of January, according to U.S. Export Sales, exports shipments were almost 20 percent ahead of last year, while outstanding sales were up almost 30 percent. Shipments to South Korea more than doubled. U.S. corn exports are forecast up 15 percent from last year, when the U.S. share of world trade dropped because of increased competition from Argentina, China, and Eastern Europe. This year, the U.S. share of global corn trade is expected to increase as these key competitors reduce exports.

WORLD CORN TRADE UP 1.3 MILLION TONS THIS MONTH

The United States is not the only corn exporter with a strong pace of corn export shipments during the first months of 1998/99. Hungary has shipped corn, especially to European destinations, at a strong pace, boosting the export forecast 400,000 tons to 1.2 million. In neighboring Romania, the production estimate was increased, and the early season exports supported this month's doubling of the corn export forecast to 400,000 tons. However, these export forecasts remain below a year ago.

Record corn production in Canada, concentrated in Ontario, is leading to increased shipments to grain-deficit areas in the United States. This month, Canada's corn exports and U.S. corn imports are forecast up 200,000 tons. However, Canada is still expected to be a net importer of corn from the United States.

Import forecasts were increased this month for several countries that have been purchasing corn at a faster pace than expected. South Korea's imports are up 500,000 tons this month to 7 million tons. Although domestic demand for meat has declined because of South Korea's macroeconomic problems, increased pork exports to Japan and credits to purchase corn from China and the United States have slowed the decline in corn imports. Japan's corn import forecast was also raised 500,000 tons this month because of faster than expected purchases, partly because of a switching from sorghum to corn. (The 1998/99 U.S. sorghum export forecast dropped 200,000 tons this month). Import forecasts for Malaysia and China also increased this month because of the pace of purchases, but prospects for Brazilian corn imports were reduced by devaluation and macroeconomic problems.

World corn trade at 63 million tons in 1998/99 is now expected to be about the same as a year earlier, but remains 7 percent less than the 1994/95-96/97 average, and about 25 percent less than the 1980/81 record.

Information Contacts: Pete Riley (202) 694-5308
Allen Baker (202) 694-5290
International: Edward Allen (202) 694-5288
Data Coordinator: Jenny Gonzales (202) 694-5296

The next Feed Outlook will be released March 15, 1999.

Note: The table that contained transportation data, (Table 3-Grain shipments and rates) has been eliminated because the data series has been discontinued. For available transportation data, refer to Table 37 in the *Agricultural Outlook* magazine, published 10 times a year by ERS and available on the ERS website at www.econ.ag.gov. For more transportation data and information, see the *Grain Transportation Report*, published weekly by USDA, AMS, available on the Internet at www.ams.usda.gov/tmd/grain.htm

Table 1--Feed Grains: Marketing year supply and disappearance 1/

Year/ Qtr.	Beg. stocks	Production	Imports	Supply	FSI	Feed & resid.	Exports	Total disp.	End. stks.	Farm price
-----Million bushels-----										
CORN										
1996/97										
Sep-Nov	426	9,233	3	9,662	383	1,890	487	2,759	6,903	2.87
Dec-Feb	6,903	---	2	6,905	394	1,492	525	2,411	4,494	2.66
Mar-May	4,494	---	4	4,498	465	1,105	431	2,001	2,497	2.77
Jun-Aug	2,497	---	4	2,500	450	814	353	1,617	883	2.49
Mkt. yr.	426	9,233	13	9,672	1,692	5,302	1,795	8,789	883	2.71
1997/98										
Sep-Nov	883	9,207	2	10,092	429	2,036	380	2,845	7,247	2.53
Dec-Feb	7,247	---	1	7,248	418	1,510	380	2,308	4,940	2.55
Mar-May	4,940	---	4	4,944	464	1,089	350	1,904	3,040	2.45
Jun-Aug	3,040	---	2	3,042	470	870	394	1,734	1,308	2.12
Mkt. yr.	883	9,207	9	10,099	1,782	5,505	1,504	8,791	1,308	2.43
1998/99										
Sep-Nov	1,308	9,761	4	11,073	444	2,129	450	3,023	8,050	1.91
Mkt. yr.	1,308	9,761	12	11,081	1,870	5,700	1,725	9,295	1,786	1.80-2.10
SORGHUM										
1996/97										
Sep-Nov	18	795	0	814	15	276	56	346	467	2.45
Dec-Feb	467	---	0	467	15	119	59	193	274	2.26
Mar-May	274	---	0	274	10	85	61	155	119	2.41
Jun-Aug	119	---	0	119	6	37	29	72	47	2.27
Mkt. yr.	18	795	0	814	45	516	205	766	47	2.34
1997/98										
Sep-Nov	47	634	0	681	18	239	49	307	374	2.26
Dec-Feb	374	---	0	374	18	38	83	139	235	2.24
Mar-May	235	---	0	235	12	71	55	139	96	2.16
Jun-Aug	96	---	0	96	6	17	24	47	49	2.08
Mkt. yr.	47	634	0	681	55	365	212	632	49	2.21
1998/99										
Sep-Nov	49	520	0	569	15	180	41	235	334	1.68
Mkt. yr.	49	520	0	569	45	275	185	505	64	1.55-1.85

Table 1--Feed Grains: Marketing year supply and disappearance, (cont.) 1/

Year/ Qtr.	Beg. stocks	Produc- tion	Im- ports	Supply	FSI	Feed & resid.	Ex- ports	Total disp.	End. stks.	Farm price
-----Million bushels-----										
BARLEY										

1996/97										
Jun-Aug	100	392	9	501	44	136	7	187	314	3.11
Sep-Nov	314	---	8	322	39	25	12	76	246	2.74
Dec-Feb	246	---	8	254	37	38	7	82	173	2.55
Mar-May	173	---	11	184	53	18	4	75	109	2.33
Mkt. yr.	100	392	37	529	172	217	31	419	109	2.74
1997/98										
Jun-Aug	109	360	12	482	44	87	24	155	327	2.31
Sep-Nov	327	---	7	334	39	12	39	90	244	2.45
Dec-Feb	244	---	8	252	37	29	6	72	180	2.42
Mar-May	180	---	13	193	53	16	5	74	119	2.26
Mkt. yr.	109	360	40	510	172	144	74	390	119	2.38
1998/99										
Jun-Aug	119	352	7	479	44	101	8	153	326	2.02
Sep-Nov	326	---	7	333	39	24	8	71	262	1.97
Mkt. yr.	119	352	30	502	172	185	30	387	115	1.90-2.00
OATS										
1996/97										
Jun-Aug	66	153	6	226	24	69	1.0	94	132	2.08
Sep-Nov	132	---	39	171	22	22	0.8	45	126	1.84
Dec-Feb	126	---	28	154	20	37	0.3	58	96	1.79
Mar-May	96	---	24	120	29	24	0.4	53	67	1.88
Mkt. yr.	66	153	97	317	95	153	2.5	250	67	1.96
1997/98										
Jun-Aug	67	167	19	253	24	74	0.4	98	155	1.62
Sep-Nov	155	---	38	193	22	26	0.7	49	144	1.54
Dec-Feb	144	---	26	170	20	38	0.5	59	111	1.59
Mar-May	111	---	15	127	29	23	0.5	53	74	1.60
Mkt. yr.	67	167	98	332	95	161	2.1	258	74	1.60
1998/99										
Jun-Aug	74	167	28	269	24	83	0.5	107	162	1.15
Sep-Nov	162	---	36	198	22	32	0.4	54	143	1.08
Mkt. yr.	74	167	105	346	95	165	2.0	262	84	1.10-1.20

Totals may not add due to rounding.

1/ Corn and sorghum are on a September 1 to August 31 marketing year.

Barley and oats are on a June 1 to May 31 marketing year.

Table 2--Feed and residual use of wheat and coarse grains

Year Beginning September 1	Corn	Sorg.	Barley	Oats	Feed Grains	Wheat	Total grains	Animal Units	Feed/ animal unit
	----- Million metric tons -----							Mil.	Tons
1996/97									
Sep-Nov	48.0	7.0	0.5	0.4	56.0	-2.1	53.9		
Dec-Feb	37.9	3.0	0.8	0.6	42.4	0.8	43.2		
Mar-May	28.1	2.1	0.4	0.4	31.0	-0.7	30.4		
Jun-Aug	20.7	0.9	1.9	1.1	24.6	9.6	34.2		
Mkt. yr.	134.7	13.1	3.6	2.6	154.0	7.7	161.7	85.3	1.89
% Change	12.6	74.8	-17.9	1.0	14.9	24.8	15.3	0.4	14.9
1997/98									
Sep-Nov	51.7	6.1	0.3	0.5	58.5	-3.1	55.5		
Dec-Feb	38.3	1.0	0.6	0.6	40.6	-0.0	40.5		
Mar-May	27.7	1.8	0.3	0.4	30.2	0.3	30.5		
Jun-Aug	22.1	0.4	2.2	1.3	26.0	11.6	37.6		
Mkt. yr.	139.8	9.3	3.4	2.8	155.3	8.8	164.1	87.8	1.87
% Change	3.8	-29.2	-5.4	6.6	0.8	14.1	1.5	2.8	-1.3
1998/99									
Sep-Nov	54.1	4.6	0.5	0.6	59.7	-2.0	57.7		
Mkt. yr.	144.8	7.0	4.6	2.7	159.0	7.5	166.5	87.7	1.90
% Change	3.5	-24.7	32.0	-1.3	2.4	-14.9	1.5	-0.0	1.5

Table 3--Cash feed grain prices

	Corn, No. 2, Yel, Ctrl. IL 1/	Corn, No. 2, Yel, Gulf ports 1/	Sorghum, No. 2, Yel Texas South Panhandle 1/	Sorghum, No. 2, Yel, Gulf ports 1/	Barley, No. 2, feed, Duluth 2/	Barley, No. 3 or better, Malting, Minn. 2/	Oats, No. 2, Heavy white, Minn. 2/
Mkt. yr.	\$/bu	\$/bu	\$/cwt	\$/cwt	\$/bu	\$/bu	\$/bu
94/95	2.34	2.78	4.75	4.62	2.02	2.75	1.36
95/96	3.91	4.30	7.30	7.19	2.67	3.69	2.28
96/97	2.74	3.07	5.02	5.03	2.32	3.18	2.03
97/98	2.45	2.78	4.72	4.76	1.90	2.50	1.70
Monthly: 1997:							
Sep	2.61	2.88	4.81	4.69	2.29	2.74	1.78
Oct	2.66	3.05	4.91	5.16	2.05	2.74	1.75
Nov	2.70	2.98	4.91	5.09	1.98	NQ	1.65
Dec	2.60	2.89	4.82	5.02	1.66	NQ	1.71
1998:							
Sep	1.78	2.18	3.83	3.84	NQ	NQ	1.30
Oct	1.94	2.43	4.01	4.00	NQ	NQ	1.29
Nov	2.09	2.47	4.14	4.15	NQ	NQ	1.32
Dec	2.08	2.42	3.94	4.12	NQ	NQ	1.31

1/ Marketing year beginning September 1.

2/ Marketing year beginning June 1. NQ = No quote.

Table 4--Selected feed and feed by-product prices

	Soybean meal 44% slv. Decatur, IL 1/	Cotton- seed meal, 41% slv. Memphis 1/	Corn gluten feed, IL pts. 1/	Corn gluten meal, IL pts. 1/	Meat & bone meal, Central U.S. 1/	Dists.' dried grains, Lawrence- burg, IN 1/	Wheat midlgs, Kansas City 1/	Alfalfa farm price 2/
-----\$/ton-----								
Mkt. yr.								
94/95	151.77	112.64	82.77	221.95	170.51	106.70	65.04	92.10
95/96	217.27	186.12	116.47	319.35	222.07	151.37	118.08	87.20
96/97	260.37	191.47	93.05	341.50	272.44	142.87	91.18	101.80
97/98	186.55	150.40	69.65	290.45	192.56	109.76	76.30	107.00
Monthly:								
1997:								
Sep	265.70	192.00	81.10	355.00	272.10	130.00	80.30	106.00
Oct	216.00	189.10	73.75	343.75	260.40	128.75	89.40	106.00
Nov	231.60	189.10	73.25	351.25	221.10	133.00	101.50	107.00
Dec	214.90	190.50	78.20	350.50	226.60	125.80	91.70	102.00
1998:								
Sep	126.90	115.60	51.50	210.00	133.40	NQ	43.90	89.10
Oct	129.40	106.50	56.90	227.50	141.30	75.00	49.00	88.10
Nov	139.30	107.90	66.10	313.10	154.00	74.00	60.00	85.00
Dec	139.60	119.75	74.40	291.00	151.20	78.00	68.10	81.40
1/ Marketing year beginning September 1.					NQ = No quote.			
2/ Marketing year beginning May 1.								

Table 5--Corn: Food, and industrial uses

Year	HFCS	Glucose and dex.	Starch	---Alcohol--- Fuel	Bev. & Mfg	Cereals & other products	Total F&I
-----Million bushels-----							
1996/97							
Sep-Nov	113.2	60.0	55.0	91.9	29.0	33.6	382.6
Dec-Feb	110.7	56.3	55.1	106.2	33.0	33.2	394.4
Mar-May	134.8	64.0	59.5	119.2	34.0	33.9	445.4
Jun-Aug	145.1	65.5	59.1	111.4	34.0	33.9	449.0
Mkt year	503.8	245.8	228.6	428.7	130.0	134.6	1,671.5
1997/98							
Sep-Nov	122.8	63.4	59.6	116.1	33.2	34.0	429.1
Dec-Feb	116.8	56.2	56.7	122.2	32.8	33.6	418.3
Mar-May	139.4	60.7	58.3	118.3	33.5	34.4	444.5
Jun-Aug	153.4	64.7	58.9	124.6	33.5	34.4	469.4
Mkt year	532.3	244.9	233.5	481.1	133.0	136.5	1,761.2
1998/99							
Sep-Nov	127.6	60.5	57.8	132.4	30.6	34.8	443.7
Mkt year	560.0	240.0	235.0	550.0	125.0	139.7	1,849.7

Table 6--Wholesale corn milling product and by-product prices

	Corn meal, yellow, New York	Brewers' grits, Chicago	Sugar, destrose, Midwest	HFCS, 42% tank cars, Midwest	Corn starch, fob Midwest 3/
	\$/cwt	\$/cwt	cents/lb	cents/lb	\$/cwt
Mkt. yr. 1/					
94/95	13.22	10.67	25.62	12.27	12.43
95/96	17.79	14.21	25.50	13.01	15.98
96/97	16.94	12.85	25.50	13.15	13.83
97/98 2/	15.94	11.85	28.08	7.77	13.55
Monthly 1997:					
Oct	16.73	12.63	25.50	8.30	13.70
Nov	16.50	12.40	25.50	8.30	13.80
Dec	16.26	12.16	25.50	8.30	14.05
Jan	16.02	11.92	25.50	8.50	13.63
1998:					
Oct	14.89	10.99	30.65	7.40	11.71
Nov	15.07	10.97	30.65	7.65	11.32
Dec	14.91	10.81	30.65	7.83	11.32
Jan 2/	15.10	11.00	30.65	7.95	11.17

1/ Marketing year beginning September 1.

2/ Preliminary.

3/ Bulk-industrial, unmodified.

Table 7--U.S. imports by country of origin

Country/region	-----1996/97----		-----1997/98-----		1998/99
	Mkt. yr.	Jun-Nov	Mkt. yr.	Jun-Nov	Jun-Nov
OATS	-----Thousand tons-----				
Canada	1,440	779	1,282	910	770
Finland	99	0	161	51	111
Sweden	140	0	176	22	212
Total 1/	1,680	779	1,696	983	1,094
BARLEY, MALTING					
Canada	608	294	733	362	247
Total 1/	609	294	733	362	247
BARLEY, OTHER 2/					
Canada	191	81	112	68	66
Total 1/	192	81	143	68	66

1/ Totals may not add due to rounding.

2/ Mainly consists of barley for feeding, and also includes seed barley.

Source: Bureau of the Census

Table 8--U.S. feed grain exports by selected destinations 1/

Country/region	-----1996/97---		-----1997/98-----		1998/99
	Mkt. yr.	Sep-Nov	Mkt. yr.	Sep-Nov	Sep-Nov
CORN					
Japan	14,821	3,412	14,497	3,913	3,339
Taiwan	5,482	1,215	3,758	1,151	1,118
Former USSR	184	59	23	22	0
South Africa	81	0	0	0	0
Sub-Saharan Africa	272	41	336	32	68
EU	1,704	145	135	3	129
Egypt	2,292	640	1,808	572	693
Canada	833	285	1,423	385	251
China	53	53	212	0	154
East Europe	385	312	19	19	0
Algeria	869	265	861	263	231
S. Korea	5,369	1,968	3,484	602	1,172
Mexico	3,155	1,064	4,116	647	1,281
Others	10,081	2,886	7,444	2,017	2,977
Total	45,581	12,344	38,117	9,628	11,412
SORGHUM					
Mexico	2,111	578	3,222	473	573
Japan	2,102	569	1,650	700	380
Others	948	270	463	73	35
Total	5,161	1,417	5,334	1,246	988
BARLEY					
		-----1996/97---		-----1997/98-----	1998/99
	Mkt. yr.	Jun-Nov	Mkt. yr.	Jun-Nov	Jun-Nov
Saudi Arabia	88	32	922	908	0
Israel	28	28	0	0	0
Jordan	50	50	53	53	0
Japan	175	93	290	211	237
Mexico	182	129	124	68	50
Taiwan	35	35	94	60	0
Other	220	61	135	76	64
Total	779	428	1,617	1376	351

1/ Totals may not add due to rounding. Source: Bureau of the Census