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Feed

Situation and Outlook Report

FEED OUTLOOK

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Economic Research Service

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HIGHLIGHTS

- o Feed Grain Supply for 1998/99 Projected to be Highest in 4 Years
- o June 1 Corn Stocks Indicate Slower Than Expected Disappearance in March-May
- o Forecast Corn Use Cut, Ending Stocks Rise in 1997/98 and 1998/99
- o U.S. Corn Export Forecast Up for 1998/99 Despite Stagnant Outlook for World Coarse Grain Trade

LARGER CARRYIN EXPANDS 1998/99 FEED GRAIN SUPPLY

A sharp increase in carryin stocks, stemming from weakening use in 1997/98, has led to a large rise in feed grain supply this month. Beginning stocks were increased 4.5 million metric tons to 41 million because of lower domestic use. Supply is projected at 312.5 million tons, the highest since 1994/95, when there was a record corn crop.

Feed grain production for 1998/99 is projected at 268.7 million tons, down slightly from a month ago, due to small declines in sorghum, corn, and barley. Planted and harvested acreage estimates provided in the June 30 Acreage report showed relatively little change from earlier intentions for corn and sorghum, while barley and oats acres declined. Expected production of barley and oats changed only slightly because higher yields indicated by the first survey-based production forecasts about offset lower acreage. USDA will make its first survey-based forecasts for corn and sorghum in August.

The forecast of total use of feed grains in 1997/98 was trimmed 4.6 million tons this month, reflecting lower than expected disappearance in the March-May quarter and weaker prospects for the remainder of the year. This means that on a year-over-year basis, use will decline. The projection of total use in 1998/99 was also reduced 2.4 million tons from the previous month to 260.5 million due to reduced feed and residual prospects. Forecast exports were raised slightly. Ending stocks for 1998/99 are projected at 52 million tons, up 6 million from last month.

Prices are expected to be fairly weak in 1998/99, given the projected increase in supply and the likelihood of increased stocks. Compared with 1997/98, feed grain supply is projected up 17.5 million tons and ending stocks up 11 million tons. Although domestic use will increase in response to favorable prices, the scope for a strong response in export markets will be constrained by continued sharp competition from other suppliers and economic problems in Asia.

CORN CROP PROJECTED AT 9,625 MILLION BUSHELS

The projection of 1998 corn production was altered only slightly, dropping 15 million bushels from last month because of a small decline in the estimate of harvested acres. Although soybean plantings increased about 700,000 acres from farmers' March intentions, there was an insignificant change in estimated corn plantings which remain at 80.8 million acres.

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Harvested corn acres are forecast at 74.3 million. Both are up 1 percent from 1997, however, and will be the highest since 1985.

With most of the crop in the Corn Belt just starting to enter the critical pollination phase, yield forecasts were left unchanged this month, despite concerns about poorer crop conditions in the last few weeks. At this point, as has been the case in numerous other years, the crop could move either way, depending on conditions in the next month. If current conditions were to prevail for the season, yields would slip below trend. In 1992, however, crop conditions in early July were similar to this year, and then improved, leading to a record crop. Most analysts would now rule out any chance of a huge yield in 1998 with many localized problem areas in the Corn Belt and severe damage to the crop in much of the South, where extreme heat and drought have decimated many fields. However, the southern States account for a relatively small share of the national total.

The rapid end of the El Nino weather event continues to pose uncertainty for crop prospects in the weeks ahead. There are widespread fears about the potential for the severe heat that has beset the South to move into the Midwest as a result. The case of another El Nino year, 1983, when corn yields were devastated by a July-August heatwave, has been cited as an analog year.

SORGHUM AND BARLEY PRODUCTION DOWN, OATS UP

Sorghum production in 1998 is projected at 525 million bushels, down 20 million from a month ago because of lower yields. Sorghum plantings are estimated at 8.9 million acres, down 100,000 from the March intentions. Harvested area is forecast at 8.1 million acres, up 100,000 from last month's projection, which was based on March planting intentions and a 3-year average difference between planted and harvested acres. Rather than trend, this month's projections incorporate the 10-year average yield of 64.7 bushels per acre. As of July 7, crop conditions were fair, with 44 percent of the crop rated good or excellent, compared with 77 percent good or excellent last year. In Texas, the second largest sorghum-growing State, only 18 percent of the crop is rated good or excellent.

The first survey-based forecast of barley production is 376 million bushels, down 4 million from the previous projection and 2 million higher than the 1997 crop. Planted area declined about 400,000 acres from earlier intentions to 6.4 million, the lowest since records were first kept in 1926. Harvested acres are estimated at 6.1 million. Average barley yields are forecast at 61.9 bushels per acre, up from last month's trend-based projection of 59.8 bushels. As of July 7, crop conditions were favorable, with 69 percent of the crop rated good or excellent, compared with 62 percent good or excellent last year.

Oats production is forecast at 183 million bushels in 1998 according to the first survey results, up 3 million from the initial projection. Planted and harvested acres are down 200,000 from reported intentions, but harvested acres would be the same as in 1997. Yields are forecast at 62.4 bushels per acre, up 3 percent from 1997. While 1998 production would be up 4 percent from last year, it would still rank as the fourth lowest crop ever. North Dakota is expecting to increase oats production by 71 percent from 1997, while acreage was up only 20 percent. As of July 7, crop conditions were very favorable, with 75 percent of the crop rated good or excellent, compared with 58 percent good or excellent last year.

HAY HARVESTED ACREAGE DECLINES

The acreage farmers reported they intend to harvest for hay in 1998 was down 996,000 acres
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from the 61 million harvested in 1997. Acreage harvested of alfalfa and alfalfa mixtures will be down 1 percent from 1997, while all other hay is expected to be down 2 percent. The biggest decline in alfalfa hay acreage was in North Dakota, accounting for 250,000 of the 236,000-acre net decline. Nationally, the acreage reported at the end of June declined 80,000 acres from the March intentions report.

Weekly pasture and range conditions for the week ending July 5 were rated as 54 percent good and excellent, down from 63 percent last year. The dry hot weather in the Southeast and Texas has many pastures rated poor or very poor and has likely reduced the hay crop.

ENDING STOCKS OF CORN UP SHARPLY

Because of increased carryin stocks and lower feed use, the projection of 1998/99 corn ending stocks was raised 235 million bushels this month to 1,844 million. Carryin stocks of corn were raised 175 million bushels to 1,434 million because of several changes in 1997/98 forecasts: feed and residual use was reduced 150 million to 5,550 million, and FSI use was decreased 25 million to 1,800 million.

Sorghum ending stocks are projected at 51 million bushels, the same as last month, as lower use offset a decline in expected production. Projected ending stocks of barley increased only marginally to 124 million bushels, as higher reported carryin stocks about offset the prospective decline in production. Oats stocks are projected 4 million lower than a month ago at 85 million, as lower carryin stocks more than offset higher production.

MARCH-MAY 1997/98 CORN DISAPPEARANCE ESTIMATED AT 1.9 BILLION BUSHELS;

Corn stocks on June 1 were reported at 3,039 million bushels, up 22 percent from a year earlier. Off-farm stocks totaled 1,209 million bushels, and those on farms were 1,830 million. This places estimated disappearance for March-May at about 1.9 billion bushels, down 5 percent from the same period a year ago and 13 percent from the record of 1994/95.

Although FSI use was relatively strong, feed and residual use and exports of corn were comparatively weak. The preliminary breakout by category of use can be found in table 1, with some changes possible pending the release of final trade data for May.

Relative to last year, corn supplies in the June-August quarter of 1997/98 will be up 22 percent. Higher wheat production than earlier anticipated and falling wheat prices may lead to some increases in wheat feeding during the summer. However, corn prices have also been falling, and so far this has obscured any strong price advantage for wheat.

FOOD, SEED, AND INDUSTRIAL USE OF CORN IN 1998/99 TO INCREASE

Food, seed, and industrial (FSI) use of corn in 1998/99 is expected to total 1,875 million bushels, unchanged this month, and up 4 percent from 1997/98. In 1997/98, FSI use is expected to be up 6 percent from the 1,692 million bushels used in 1996/97. In 1998/99, FSI use, if realized, would represent 20 percent of total use, the same as in 1997/98, and up from 19 percent in 1996/1997. FSI use in 1997/98 is expected to increase for all the categories, but corn used for high fructose corn syrup (HFCS) and ethanol are up more than the other uses.

The forecast of 1997/98 FSI use was trimmed 25 million bushels this month, with corn for ethanol down 15 million bushels, and HFCS and starch each down 5 million. Corn used for HFCS production in September 1997-May 1998 was up 6 percent from the same period in 1996/97. Since HFCS is used in soft drinks, the June-August quarter is usually the strongest and is expected to boost yearly production nearly 7 percent. In 1998/99, corn used for HFCS production is expected to increase 5 percent from the 540 million bushels used in 1997/98.

Corn used to make glucose and dextrose during September 1997-May 1998 was about the same as a year earlier and may be up about 1 percent for the year-over-year total. In the first 3 quarters of the 1997/98 corn marketing year, corn used for starch production has been up 3 percent from the same period in 1996/97. For all of 1998/99, corn used to make starch is expected to increase 4 percent from 1997/98.

Corn used to make ethanol was decreased 15 million bushels from prior estimates based on the monthly ethanol production reported by the Energy Information Administration in the Department of Energy. Still, corn used to make ethanol in 1997/98 is estimated to be up 13 percent from the 429 million bushels used in 1996/97. In 1998/99, corn used to produce ethanol is expected to increase 6 percent from the anticipated 485 million bushels used in 1997/98.

FEED AND RESIDUAL USE IN 1998/99 TO INCREASE

Feed and residual use of the four feed grains plus wheat in 1998/99 is expected to increase almost 1 percent from the expected 167.7 million metric tons used in September 1997-August 1998. Feed and residual use in 1997/98 is forecast up 2 percent from the year earlier. Corn, which accounted for 82 percent of feed and residual use in 1996/97, is expected to represent 84 percent in 1997/98 and 87 percent in 1998/99.

The index of grain consuming animal units (GCAU's) for 1998/99 is expected to be about the same as 1997/98's 88 million units. The grain used per GCAU in 1998/99 would be 1.93 tons, up 1 percent from 1997/98, and about the same as 1996/97. In the index components, GCAU's for dairy and cattle on feed are down and hogs plus poultry are up.

Cattle on feed in feedlots with capacity of 1,000 head or more on June 1 were up 1 percent from a year earlier. Placements were also well above a year earlier and cattle continue to be placed at heavy weights. Thus, current feed use by cattle feedlots is probably stronger than last year. The January 1 cattle inventory suggests cattle on feed will have to decline at some point because the number of calves under 500 pounds were down 3 percent from last year and the number of beef cows were also down 2 percent. The dry weather in the Southern Plains may be forcing herd replacements into feedyards, but with fewer animals, numbers on feed will eventually decline as will placement weights. As a result, cattle on feed numbers in 1998/99 may be down from 1997/98 and feed use could be weaker.

Pork production in 1999 is expected to increase 4 percent from the 18.7 billion pounds expected in 1998, which is up 9 percent from 1997. Hog farmers responding to the June 1998 survey indicated that they intended to increase the number of sows farrowing in June-November 1998 by 3 percent relative to the prior year. If producers carry through with these reported intentions, feed needs by the pork sector are likely to be stronger in 1998/99.

Broiler and egg production in 1999 are expected to increase from the expected 1998 levels and continue strong demand for feed grains. Broiler production in 1999 is expected to increase 5 percent from 1998. Egg production is expected to increase 3 percent from 1998.

percent from 1998 as producers respond to strong domestic demand as well as abundant feed supplies and lower prices. With low returns and increased supplies of other meats, turkey producers have cut poult placements in 1998. As a result, turkey production in 1998 is expected to total 5.4 billion pounds, down 1 percent from 1997. In 1999, turkey producers are expected cut production by 15 million pounds from the expected 1998 output. Egg producers are expected to produce 6.8 billion dozen eggs in 1999, up 2 percent from the expected 1998 output.

U.S. PRICE EXPECTATIONS WEAKEN FOR 1998/99

The farm price of corn for 1998/99 is forecast at \$1.95-\$2.35 per bushel, down 10 cents at both ends of the range. This compares with the forecast price of \$2.45 for the 1997/98 marketing year that is now winding down. Price prospects for 1998/99 mark a strong contrast to the higher plane of prices that have prevailed in recent years, and the season average will likely be the lowest since \$2.26 per bushel in 1994/95 or \$2.07 in 1992/93.

Because of the great uncertainty about growing conditions, however, the futures market has continued to keep a risk premium on corn. Price movements have been quite erratic for new-crop corn, highly reactive to both weather events and weather forecasts. Since mid-June, the December futures contract settle price has ranged between \$2.68 and \$2.40 per bushel.

Even with declining production prospects, the forecast sorghum price for 1998/99 was dropped 10 cents to \$1.80-2.20 per bushel. This reflects the critical influence of the corn market, which weighs heavily on the other feed grains. The sorghum price relative to corn is expected to be higher, at 93 percent in 1998/99 compared with just under 90 percent in 1997/98.

The season average price of barley is forecast at \$1.85-2.05 per bushel, down 5 cents. Many growers in the Northern Plains fear problems with scab disease (fusarium head blight) will again restrict the amount of barley that maltsters will purchase for malting use. If this is the case, more barley will be sold for feed at lower prices.

U.S. 1998/99 CORN EXPORT FORECAST UP THIS MONTH

Large U.S. corn supplies and lower forecast prices are expected to boost the U.S. share of stagnant world coarse grain trade. Low corn prices are expected to keep corn competitive with other coarse grains or feed wheat. Projected U.S. corn exports are raised 25 million bushels to 1,600 million. This is partly offset by a 5-million-bushel reduction in forecast sorghum exports, as reduced production prospects have limited export prospects. South Korea is expected to import an additional 0.5 million tons of corn in 1998/99 instead of feed wheat. Slightly stronger 1998/99 corn imports by Mexico are expected this month, but that is offset by reduced demand prospects in Taiwan.

Among the competitors, local marketing year changes to forecast corn exports in the Southern Hemisphere involve changes to both 1997/98 and 1998/99 October/September exports. South Africa's corn export forecasts increased this month by 0.5 million tons for both this year and next year as stocks and trade data confirm lower internal consumption and increased exports. In Argentina, the fast pace of sales and shipments of the recently harvested crop has led to an increase of 0.5 million tons in forecast 1997/98 (October/September) corn exports, and a corresponding reduction in 1998/99 export prospects. The increased 1997/98 corn export prospects by Argentina and South Africa, and the larger imports forecast for Brazil,

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Japan, South Korea, and Mexico (more than offsetting reduced prospects for Taiwan and the EU) boosted 1997/98 world corn trade by 1 million tons this month.

World barley trade prospects are lower this month for both 1997/98 and 1998/99. Forecast imports of feed barley by the largest importer, Saudi Arabia, were reduced by 0.5 million tons for both years as abundant forage availabilities resulting from above normal rainfall have reduced the feeding of barley to sheep and camels. Prospective feed barley imports by Japan were reduced 0.2 million tons for both years as well because purchases indicate a shift towards corn. Reduced production prospects are dropping forecast 1998/99 barley exports by Russia and Canada.

WORLD COARSE GRAIN TRADE TO STAGNATE IN 1998/99

Even though prospects for global 1998/99 corn trade increased 0.5 million tons this month, reduced barley trade was offsetting, and forecast coarse grain trade declined slightly to 88 million tons. Although world coarse grain trade is expected to nearly match the previous year, it is down 6 percent from the 10 year average, and 18 percent below the 1980/81 record. World coarse grain trade has not grown even though global consumption is expected to reach a new record in 1998/99 for the third year in a row.

Coarse grain imports to the Middle East in 1998/99 are expected to post a 17 percent year-to-year increase as Saudi Arabia rebounds from low levels, and most of the rest of the region experiences growth. However, prospects are less robust elsewhere. In Latin America, increased production and reduced imports by Mexico more than offset modest growth in the rest of the region. The largest importing region is East and Southeast Asia where imports are expected to decline by over a million tons as macroeconomic problems reduce demand for meat in some countries, and foreign exchange constraints limit feed imports. Excluding China from the region, feed consumption is expected to decline.

China plays a key role in world coarse grain trade, both as an exporter and an importer. China remains the largest importer of malting barley. However, China is expected to be the third largest corn exporter both this year and next. Despite sharply reduced production in 1997, China is boosting internal consumption and exports by dropping stocks in 1997/98. Even though corn consumption in 1998/99 is projected to about match production, China is expected to continue to draw down stocks and export 4 million tons. Changes to grain procurement procedures and financing are expected to reduce government stock holding, especially by the provinces. Low world corn prices forecast for 1998/99 reduce the incentives for China to export, as internal prices are expected to be higher than world prices. However, the high cost of procurement and storage are expected to spur exports.

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

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

1995/96										
Sep-Nov	1,558	7,374	4	8,935	413	1,756	660	2,830	6,106	2.80
Dec-Feb	6,106	---	5	6,111	401	1,348	562	2,311	3,800	3.15
Mar-May	3,800	---	5	3,805	429	1,048	610	2,087	1,718	3.76
Jun-Aug	1,718	---	3	1,721	370	530	396	1,295	426	4.31
Mkt. yr.	1,558	7,374	16	8,948	1,612	4,682	2,228	8,522	426	3.24
1996/97										
Sep-Nov	426	9,293	3	9,723	387	1,946	487	2,820	6,903	2.87
Dec-Feb	6,903	---	2	6,905	398	1,489	525	2,411	4,494	2.66
Mar-May	4,494	---	4	4,498	463	1,108	431	2,001	2,497	2.77
Jun-Aug	2,497	---	4	2,500	444	819	353	1,617	883	2.49
Mkt. yr.	426	9,293	13	9,733	1,692	5,362	1,795	8,849	883	2.71
1997/98										
Sep-Nov	883	9,366	2	10,251	435	2,189	380	3,004	7,247	2.52
Dec-Feb	7,247	---	1	7,248	424	1,504	380	2,308	4,940	2.55
Mar-May	4,940	---	4	4,944	464	1,096	345	1,905	3,039	2.44
Jun-Aug	3,039	---	3	3,042	477	761	370	1,608	1,434	
Mkt. yr.	883	9,366	10	10,259	1,800	5,550	1,475	8,825	1,434	2.45
1998/99										
Mkt. yr.	1,434	9,625	10	11,069	1,875	5,750	1,600	9,225	1,844	1.95-2.35
SORGHUM										
1995/96										
Sep-Nov	72	460	0	532	1	176	54	231	301	2.88
Dec-Feb	301	---	0	301	1	71	67	139	163	3.25
Mar-May	163	---	0	163	5	51	36	92	70	3.94
Jun-Aug	70	---	0	70	4	7	41	52	18	3.63
Mkt. yr.	72	460	0	532	11	305	198	514	18	3.19
1996/97										
Sep-Nov	18	803	0	821	11	287	56	354	467	2.45
Dec-Feb	467	---	0	467	11	124	59	193	274	2.26
Mar-May	274	---	0	274	12	82	61	155	119	2.41
Jun-Aug	119	---	0	119	7	36	29	72	47	2.27
Mkt. yr.	18	803	0	821	40	529	205	774	47	2.34
1997/98										
Sep-Nov	47	653	0	701	9	268	49	327	374	2.23
Dec-Feb	374	---	0	374	9	47	83	139	235	2.24
Mar-May	235	---	0	235	9	75	55	139	96	2.16
Jun-Aug	96	---	0	96	8	30	17	56	41	
Mkt. yr.	47	653	0	701	35	420	205	660	41	2.20
1998/99										
Mkt. yr.	41	525	0	566	35	285	195	515	51	1.80-2.20

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										
1995/96										
Jun-Aug	113	360	12	484	44	111	17	172	313	2.53
Sep-Nov	313	---	8	321	39	28	11	78	243	2.80
Dec-Feb	243	---	8	251	37	17	20	73	178	3.18
Mar-May	178	---	12	190	52	23	16	91	100	3.29
Mkt. yr.	113	360	41	513	172	179	62	413	100	2.89
1996/97										
Jun-Aug	100	396	9	504	44	137	7	188	316	3.11
Sep-Nov	316	---	8	324	39	25	12	76	248	2.74
Dec-Feb	248	---	8	256	37	40	7	84	173	2.55
Mar-May	173	---	11	184	53	18	4	75	109	2.33
Mkt. yr.	100	396	37	532	172	220	31	423	109	2.74
1997/98										
Jun-Aug	109	374	12	496	44	100	24	168	328	2.32
Sep-Nov	328	---	7	335	39	12	39	90	245	2.47
Dec-Feb	245	---	8	253	37	31	6	74	180	2.40
Mar-May	180	---	10	190	53	11	6	70	120	2.24
Mkt. yr.	109	374	38	522	172	155	75	402	120	2.35
1998/99										
Mkt. yr.	120	376	35	531	172	210	25	407	124	1.85-2.25
OATS										
1995/96										
Jun-Aug	101	162	28	290	23	86	0.4	110	180	1.48
Sep-Nov	180	---	26	206	22	31	0.5	53	153	1.52
Dec-Feb	153	---	18	171	20	38	0.3	58	113	1.94
Mar-May	113	---	9	122	27	28	0.8	56	66	2.21
Mkt. yr.	101	162	81	343	92	183	2.1	277	66	1.67
1996/97										
Jun-Aug	66	155	6	228	24	71	1.0	96	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	155	97	319	95	155	2.5	252	67	1.96
1997/98										
Jun-Aug	67	176	19	262	24	81	0.4	105	157	1.65
Sep-Nov	157	---	38	195	22	27	0.7	50	144	1.54
Dec-Feb	144	---	26	170	20	38	0.5	59	111	1.59
Mar-May	111	---	22	133	29	30	0.4	59	74	1.59
Mkt. yr.	67	176	105	348	95	177	2.0	274	74	1.60
1998/99										
Mkt. yr.	74	183	100	357	95	175	2.0	272	85	1.05-1.45

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
1995/96									
Sep-Nov	44.6	4.5	0.6	0.5	50.2	-2.7	47.5		
Dec-Feb	34.3	1.8	0.4	0.6	37.0	0.4	37.4		
Mar-May	26.6	1.3	0.5	0.4	28.8	-1.8	27.0		
Jun-Aug	13.5	0.2	3.0	1.0	17.7	10.5	28.1		
Mkt. yr.	118.9	7.7	4.5	2.6	133.7	6.3	140.1	84.9	1.65
% Change	-15.2	-23.8	-6.3	-21.7	-15.6	-14.6	-15.6	0.7	-16.2
1996/97									
Sep-Nov	49.4	7.3	0.5	0.4	57.7	-2.1	55.6		
Dec-Feb	37.8	3.1	0.9	0.6	42.4	0.8	43.3		
Mar-May	28.1	2.1	0.4	0.4	31.1	-0.7	30.4		
Jun-Aug	20.8	0.9	2.2	1.2	25.1	10.8	35.9		
Mkt. yr.	136.2	13.4	4.0	2.7	156.3	8.9	165.2	85.4	1.93
% Change	14.5	73.5	-10.8	4.0	16.9	39.7	17.9	0.6	17.3
1997/98									
Sep-Nov	55.6	6.8	0.3	0.5	63.2	-3.1	60.1		
Dec-Feb	38.2	1.2	0.7	0.6	40.7	-0.0	40.6		
Mar-May	27.8	1.9	0.2	0.5	30.5	0.3	30.8		
Jun-Aug	19.3	0.8	2.5	1.3	23.9	12.2	36.2		
Mkt. yr.	141.0	10.7	3.7	2.9	158.3	9.4	167.7	87.9	1.91
% Change	3.5	-20.5	-7.4	8.3	1.2	6.0	1.5	3.0	-1.4
1998/99									
Mkt. yr.	146.1	7.2	4.6	2.8	160.7	8.2	168.8	87.7	1.93
% Change	3.6	-32.1	24.0	-3.6	1.5	-13.1	0.7	-0.3	1.0

Table 3--Grain shipments and rates

	1995/96	-----1996/97-----		-----1997/98-----		
	Mkt. Yr.	Mkt. Yr.	Sept-May	May	Sept-May	May
Barge shipments 1/ (Million ton/month)	4/ 3.7	2.8	2.4	3.4	1.4	NA
Barge rate index 2/ (Dec 1990 = 100)	151.8	108.7	114.9	82.5	112.8	NA
Railcar loadings 3/ (1,000 cars/week)	27.1	23.3	23.8	20.1	22.7	20.4
Rail rate index 2/ (Dec 1984 = 100)	5 117.3	119.7	119.7	5/	5/	5/

1/ Illinois & Mississippi rivers. Includes soybeans and all grains.

Source: U.S. Army Corps of Engineers

2/ Source: Bureau of Labor Statistics

3/ Includes soybeans and all grains.

Source: Agricultural Marketing Service, USDA.

4/ 11-months average. NA = Not available.

5/ Discontinued data series and soon to be excluded from this table.

Table 4--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
93/94	2.54	2.85	4.95	4.90	2.05	2.48	1.55
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
Monthly:							
1997:							
Feb	2.71	3.08	4.80	5.03	2.01	2.75	1.94
Mar	2.90	3.25	5.47	5.42	2.22	NQ	1.99
Apr	2.87	3.17	5.21	5.37	2.33	2.73	1.88
May	2.74	3.01	5.04	5.17	2.45	NQ	1.81
1998:							
Feb	2.58	2.88	4.85	5.07	1.56	NQ	1.59
Mar	2.59	2.89	4.85	5.00	1.51	NQ	1.65
Apr	2.41	2.71	4.62	4.69	1.42	NQ	1.54
May	2.37	2.69	4.60	4.58	NQ	NQ	1.58

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

Table 5--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/ 3/
Mkt. yr.	\$/ton							
93/94	181.82	168.36	88.62	286.61	206.81	123.79	81.51	89.30
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	97.20
Monthly:								
1997:								
Feb	253.60	183.75	102.75	335.60	258.80	149.00	96.20	113.00
Mar	270.40	189.10	100.90	340.00	285.00	148.50	97.10	116.00
Apr	277.70	189.10	95.90	342.50	287.70	136.80	86.40	120.00
May	296.00	193.75	83.60	355.75	277.60	128.50	82.90	112.30
1998:								
Feb	182.10	139.10	76.50	295.00	160.40	118.40	82.50	106.00
Mar	165.30	128.70	69.30	270.50	171.10	107.80	81.00	104.00
Apr	152.75	116.25	64.00	238.10	161.60	87.00	59.25	105.00
May	150.30	105.00	64.60	236.25	158.10	85.50	55.50	108.00

1/ Marketing year beginning September 1.
2/ Marketing year beginning May 1.
3/ Includes monthly & marketing year revisions from 1994/95.

Table 6--Corn: Food, and industrial uses

Year	HFCS	Glucose and dex.	Starch	---Alcohol--- Fuel	Bev. & Mfg	Cereals & other products	Total F&I
Million bushels							
1995/96							
Sep-Nov	110.1	60.7	55.8	121.1	32.3	33.2	413.1
Dec-Feb	105.1	52.9	51.5	120.8	37.5	32.8	400.6
Mar-May	130.8	60.7	55.0	91.8	39.6	33.5	411.4
Jun-Aug	136.2	62.8	57.0	61.9	15.6	33.5	367.0
Mkt year	482.2	237.1	219.3	395.7	125.0	133.0	1,592.2
1996/97							
Sep-Nov	113.2	60.0	55.0	96.4	29.0	33.6	387.1
Dec-Feb	110.7	56.3	55.1	109.4	33.0	33.2	397.6
Mar-May	134.8	64.0	59.5	116.6	34.0	33.9	442.8
Jun-Aug	145.1	65.5	59.1	106.3	34.0	33.9	444.0
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	122.7	33.2	34.0	435.7
Dec-Feb	116.8	56.2	56.7	128.3	32.8	33.6	424.4
Mar-May	139.4	60.7	58.3	118.2	33.5	34.4	444.4
Jun-Aug	161.1	69.7	60.4	115.8	33.5	34.4	474.9
Mkt year	540.0	250.0	235.0	485.0	133.0	136.5	1,779.5
1998/99							
Mkt year	570.0	255.0	245.0	515.0	133.0	136.0	1,854.0

Table 7--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/					
93/94	14.49	10.98	25.44	14.63	12.61
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 2/	16.94	12.85	25.50	13.15	13.83
Monthly					
1997:					
Mar	17.02	12.92	25.50	13.15	12.95
Apr	16.94	12.84	25.50	13.15	13.55
May	16.67	12.57	25.50	13.15	13.61
Jun	16.38	12.28	25.50	13.15	13.37
1998:					
Mar	16.09	11.99	30.65	7.75	13.78
Apr	15.74	11.64	30.65	7.25	13.96
May	15.69	11.59	30.65	7.25	13.57
Jun 2/	15.47	11.37	30.65	7.25	13.39

1/ Marketing year beginning September 1.

2/ Preliminary.

3/ Bulk-industrial, unmodified.

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

Country/region	-----1995/96-----		-----1996/97-----		1997/98
	Mkt. yr.	Sep-Apr	Mkt. yr.	Sep-Apr	Sep-Apr
-----Thousand tons-----					
CORN					
Japan	15,303	10,276	14,821	10,267	9,970
Taiwan	5,938	3,917	5,482	3,922	2,835
Former USSR	34	34	131	122	22
South Africa	347	347	81	81	0
Sub-Saharan Africa	321	307	188	155	263
EU	2,842	2,283	1,704	1,180	7
Egypt	2,167	1,489	2,292	1,608	1,166
Canada	808	418	833	672	902
China	2,207	2,207	53	53	53
East Europe	188	164	378	378	19
Algeria	522	375	869	540	605
S. Korea	8,285	6,196	5,321	4,699	1,917
Mexico	6,453	3,849	3,155	2,061	2,600
Others	11,077	9,598	10,214	7,707	4,880
Total	56,494	41,461	45,523	33,445	25,239
SORGHUM					
Mexico	1,759	1,091	2,111	1,643	2,338
Japan	1,617	1,315	2,102	1,648	1,555
Others	1,591	1,325	948	772	420
Total	4,968	3,731	5,161	4,063	4,312
-----1995/96-----					
	Mkt. yr.	Jun-Apr	Mkt. yr.	Jun-Apr	1997/98
-----1996/97-----					
BARLEY					Jun-Apr
Saudi Arabia 2/	373	373	88	88	922
Israel	42	42	28	28	0
Jordan	0	0	50	50	53
Japan	522	481	175	175	290
Mexico	190	142	182	169	120
Taiwan	100	100	35	35	94
Other	119	119	220	97	132
Total	1,347	1,258	779	643	1,611

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

2/ For 1997/98, includes unidentified country, until data is revised.

Table 9--U.S. imports by country of origin

Country/region	-----1995/96-----		-----1996/97-----		1997/98
	Mkt. yr.	Jun-Apr	Mkt. yr.	Jun-Apr	Jun-Apr
-----Thousand tons-----					
OATS					
Canada	1,302	1,252	1,440	1,348	1,251
Finland	22	22	99	76	161
Sweden	62	62	140	140	159
Total 1/	1,387	1,337	1,680	1,565	1,647
BARLEY, MALTING					
Canada	740	637	608	498	655
Total 1/	740	637	609	498	655
BARLEY, OTHER 2/					
Canada	141	122	191	175	101
Total 1/	147	127	192	175	101

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