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Feed Outlook



Outlook Report



FEED OUTLOOK

United States Department of Agriculture

FDS-0198 Economic Research Service

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HIGHLIGHTS

- o Projected Ending Stocks of Corn Drop; Higher Domestic Use Outweighs Lower Exports
- o Final Crop Production Estimates Show Little Change
- o December 1 Corn Stocks Data Indicate Record Feed and Residual Use
- o Corn Export Forecast Cut 125 Million Bushels

ROBUST DOMESTIC USE AND SLUGGISH EXPORTS SHAPE FEED GRAIN OUTLOOK

Final 1997 feed grain production is estimated at 265.2 million metric tons, while total 1997/98 supply is pegged at 294.9 million tons. Both are virtually unchanged from a month ago. Total feed grain use is projected up nearly 3 million tons to a near-record 269.3 million because of strong gains in feed and residual and in industrial use. This has pushed forecast domestic use up 6 million tons this month. However, forecast exports are down more than 3 million tons, with all of the decline in corn.

Export expectations continue to weaken because of sharp competition from other suppliers and diminishing import prospects in Asia. Presenting a marked contrast is an increase in feed grain disappearance in the United States. Benchmark stocks data indicate a very strong pace for the September-November quarter. Large animal inventories, including many cattle on feed, have been driving feed use. Nevertheless, the impact of lower Asian demand for meat is crimping meat exports and is expected to weaken livestock prices, slowing growth in feed and residual later in the year.

Compared with last year, larger carryin stocks mean that 1997/98 feed grain supply is up 10 million tons despite a small dip in production. Total feed grain use is projected to increase nearly 12 million tons. The increase is all due to gains in domestic use, projected to exceed the 1994/95 record by 10 million tons. Because exports are expected to slip, total feed grain use will likely remain slightly below the 1994/95 record.

CORN PRODUCTION ESTIMATED AT 9.366 MILLION BUSHELS

The 1997 U.S. corn crop is up 7 million bushels from the last forecast to 9,366 million. This is up less than 1 percent from 1996, but ranks as the third highest after 1994 and 1992. Iowa, Illinois, Nebraska, Minnesota, and Indiana were the top 5 producing States, the same as in 1996.

Planted acreage was 80.2 million acres, up 1 percent from 1996. Harvested acres for grain are estimated at 73.7 million, also up about 1 percent, although there was a slight decline from the last forecast. Acreage of soybeans, the major crop competing with corn, was up 10 percent. The combined plantings of corn and soybeans of 151.1 million acres were the highest since 1982, indicative of good market prospects, generally favorable spring weather, the

elimination of most land idling programs, and the increased planting flexibility under the new Farm Act.

The average corn yield was 127 bushels per acre, up slightly from the previous forecast and about equal to the 1996 yield of 127.1 bushels. This was very unusual, given the strong weather-induced variability of the last few years, along with the fact that both years were around trend levels. It has been more common for yields to fall well below or above the long term trend.

DECEMBER CORN STOCKS REVEAL BRISK DOMESTIC USE FOR SEPTEMBER-NOVEMBER

U.S. corn stocks on December 1, 1997, were reported at 7,230 million bushels, up 5 percent from the year before, but well below expectations of most analysts. Of this total, about two-thirds was held on farms. Indicated disappearance for September-November was a record 3.02 billion bushels, surpassing the previous high of 2.87 billion set in September-November 1994/95. While exports were very low at an estimated 385 million bushels, very large feed and residual and industrial use pushed up the total. Release of final November trade data later this month may lead to slight adjustments among the categories of use.

CORN ENDING STOCKS PROJECTED AT 844 MILLION BUSHELS

Projected ending stocks of corn in 1997/98 are reduced 109 million bushels this month to 844 million. This results from an increase of 200 million bushels in feed and residual use and 40 million in food, seed, and industrial (FSI) use, outweighing a decline of 125 million in forecast exports. Total use of corn is projected to match the 1994/95 record of 9.4 billion bushels, with both FSI and feed and residual use setting records at 1,815 million and 5,850 million, respectively.

If the projections are realized, ending stocks would be down modestly from the year before and about equal to 1993/94. At that time, flooding slashed corn supplies sharply but demand was well below the current level, with a stocks-o-use ratio of 11.2 percent. For 1997/98, the ratio of stocks to use is projected at 9 percent, compared with 10 percent in 1996/97 and 5 percent in 1995/96, the year of record high prices.

FEED AND RESIDUAL USE STRENGTHENS

Feed and residual use of the four feed grains plus wheat in 1997/98 is expected to increase 5 percent from the 165 million metric tons used in September 1996-August 1997. Feed and residual use in September-November 1997 was up 9 percent from a year earlier. Corn accounted for 92 percent of feed and residual use in September-November 1997 and is expected to represent 86 percent of feed and residual use in 1997/98.

The index of grain consuming animal units (GCAU's) for 1997/98 is expected to be up 4 percent from 1996/97's 85 million. The grain used per GCAU in 1997/98 would be 1.95 tons, up 1 percent from 1996/97. In the index components in 1997/98, GCAU's for cattle on feed, hogs, broilers and layers are up from the previous year.

Cattle on feed in feedlots with capacity of 1,000 head or more on December 1, 1997, were up 8 percent from a year earlier, but placements were down 6 percent from a year earlier. Thus current feed use by cattle feedlots is stronger than last year.

Pork production in 1998 is expected to increase 8 percent from the 17.3 billion pounds produced in 1997, which was up 1 percent from 1996. Hog farmers responding to the December 1997 survey indicated that they intended to increase the number of sows farrowing in December 1997-May 1998 by 6 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 1997/98.

Boiler and egg production in 1998 are expected to increase from the expected 1997 levels and maintain strong demand for feed grains. Broiler production in 1998 is expected to increase 6 percent from 1997 as producers respond to strong domestic demand. In 1998, turkey producers are expected to maintain production at about equal the 1997 output. Egg producers are expected to produce 6.6 billion dozen eggs in 1998, up 3 percent from 1997. With these increases in production, feed needs by the poultry sector are likely to remain strong.

Dairy cow numbers are expected to continue to trail the previous year, but with increased production per cow, milk production in 1998 is expected to total 157 billion pounds, up from 156.5 billion in 1997. On October 1, 1997, the latest date for which data are available, grain and other concentrates fed to milk cows averaged 18.7 pounds, up .7 pounds from the same date the previous year. Thus with the increased grain fed per cow, feed use by the dairy industry will continue strong.

CORN FOOD, SEED, AND INDUSTRIAL (FSI) USE RISING

Food, seed and industrial (FSI) use of corn in 1997/98 is expected to total 1,815 million bushels, up from 1,692 million in 1996/97. In September-November 1997, FSI use was up 13 percent, from the same period in 1996/97. In 1997/98, FSI use would represent 19 percent of total use, the same as in the previous 2 years. FSI use in September-November 1997 was up for all categories, but corn used for high fructose corn sirup (HFCS), starch, and ethanol were up more than the other uses.

Corn used for HFCS production in September-November 1997 was up 9 percent from the same period in 1996/97. In September, 1997, HFCS exports were strong but dropped to more normal levels in October, the latest data. These exports may have helped boost production, especially early in the quarter. In 1997/98, corn used for HFCS production is expected to increase 7 percent from the 504 million bushels used in 1996/97. Corn used to make glucose and dextrose during September-November 1997 was up 6 percent from a year earlier but may be up only about 2 percent for the year-over-year total. In the first quarter of the 1997/98 corn marketing year, corn used for starch production has been up 8 percent from the same period in 1996/97.

Corn used to make ethanol in September-November 1997 totaled 123 million bushels, up from 96 million in 1996 based on monthly ethanol production reported by the Energy Information Administration in the Department of Energy. This is the largest quarterly use since the 1994/95 record year. It largely reflects higher use of capacity as the industry continues to recover from the 1995/96 cost-price squeeze. Although there has been a modest expansion of capacity in Minnesota in recent months, a few plants that previously closed have not come back into operation. Corn used to make ethanol in 1997/98 is estimated to be up 17 percent from the 429 million bushels used in 1996/97.

LITTLE OR NO CHANGE IN OTHER FEED GRAINS THIS MONTH

There were no changes in production estimates for barley and oats this month, nor any significant changes in supply and use balance sheets. The final production estimate for grain sorghum in 1997 was 653 million bushels, down 6 million from the last forecast, and 150 million below a year earlier. Planted and harvested area were reduced slightly this month while yields were bumped up. Planted acres of 10.1 million were down 23 percent from 1996, when an unusually large amount was planted because of problems with other crops. The average yield, at 69.5 bushels per acre, was up 2 bushels from 1996 and was the third highest ever.

Stocks of sorghum in all positions on December 1, 1997, were 370 million bushels, down 21 percent from the 467 million bushels reported on December 1, 1996. Total disappearance was down 7 percent from the 354 million bushels used in September-November 1996. With smaller supplies in 1997/98, feed use is expected to drop sharply for the year, while exports and industrial use decline only moderately.

HAY STOCKS DECLINE, PRICES STAY FIRM

Stocks of all hay on farms December 1, 1997, were down 2 percent from 1996's 105 million tons. Stock decreases occurred in 26 of the 48 contiguous States, mainly in the upper Midwest, New England States, Mid-Atlantic States and California, Nevada, and Oregon in the West. The largest stock increases occurred in the Mountain States, eastern Corn Belt States, and most of the Southern States.

Roughage consuming animal units in 1997/98 are estimated to be down 3 percent from 1996/97. Thus hay stocks per RCAU are slightly higher at 1.4 tons/RCAU, while in 1996/97, December stocks were 1.38 tons/RCAU.

Hay production in 1997 totaled 152 million tons, up 2 percent from the revised 1996 total. Acreage of all hay was almost the same as last year, down 64,000 acres, but yields were up 2 percent at 2.5 tons per acre. Texas became the number one hay producing State followed by California, South Dakota, Missouri, Kansas, and Nebraska. All States in the West except Nevada, which was unchanged, showed increased production. Texas and Arizona had the largest increases at 38 and 22 percent respectively. The increases were nearly offset by declines in the New England States, Mid Atlantic States, and the South.

Alfalfa and alfalfa mixtures were down 275,000 tons, or less than 1 percent from 1996. All of the decline resulted from a decline in acreage of 2.5 percent. Yields in 1997 were up 2.4 percent, offsetting almost all of the acreage decline. The National Agricultural Statistics Service collected data on the number of acres seeded to alfalfa and alfalfa mixtures during 1997. Wisconsin was the number one State with 650,000 acres seeded, followed by Minnesota with 300,000. (See Table on new seedings of alfalfa and alfalfa mixtures in *Crop Production*, 1997 Summary, page A-88.)

Other hay was up 4 percent from the revised 1996 production of 70 million tons. In 1997, the area harvested of other hay was 37 million acres, up 1.5 percent from 1996. Average yields in 1997 were up 2.6 percent from the 1.91 tons per acre in 1996. Production increases were common across the Nation with the exception of the New England States, the Mid-Atlantic States, and the southern States of Louisiana and Florida.

Corn for silage in 1997 was up 10 percent from the 84 million tons produced in 1996. Acreage was up 6 percent and yields were up 4 percent. Sorghum for silage in 1997 totaled 4 million

tons, down 11 percent from 1996. In 1997, yield was up but acreage was down 16 percent, accounting for all of the drop. Total supplies of harvested roughage (hay stocks on May 1, plus hay and silage production) in 1997/98 are up 2 percent from the 258 million tons available in 1996/97. Supplies of harvested roughage per roughage consuming animal unit in 1997/98 are 3.6 tons, up from 3.4 tons in 1996/97.

Prices remain firm relative to historical levels. Mid-month prices for all hay reported by farmers in December 1997 were \$97.70 per ton, down from \$101 in November, but up from \$90.80 in December 1996. Prices in 1997 had been weakening relative to a year ago, but since July had been running about \$9 stronger than a year ago until December when the spread narrowed again. Prices received for alfalfa hay in December were \$106 per ton, down from \$108 in November but up from \$97 last year. Other hay was selling below last year during July through September but has moved above a year earlier since then. In December the price of other hay was \$76.30 per ton, down from \$77.50 in November, and up from \$73.90 last year. Given current estimates of livestock numbers and hay stocks, prices may stabilize near current levels during the remainder of the hay marketing year.

U.S. 1997/98 CORN EXPORT FORECAST REVISED DOWN 125 MILLION BUSHELS

U.S. corn exports in 1997/98 are forecast at 1.75 billion bushels, down 125 million from a month ago and 2.5 percent from a last year. This mainly reflects higher export prospects for Argentina, along with continued declines in expected imports by Asia. Despite a slow start, shipments in the latter half of 1997/98 are still expected to be more robust than a year ago.

The pace of U.S. corn export sales and shipments so far in 1997/98 has been slower than a year ago. According to *U.S. Export Sales*, as of January 1, 1998, corn shipments lagged by 22 percent, while outstanding sales were down more than 30 percent compared to last year. Stiff competition from China and Eastern Europe has dampened U.S. corn exports early in the season, but it was expected that as the season progressed, U.S. corn exports would face less competition than a year ago. However, this month's increased production prospects in Argentina indicate continued tough competition as Southern Hemisphere production becomes available later in the year.

Argentina's corn production was boosted this month for both 1996/97 and 1997/98. Revised Argentine statistics increased last year's record corn crop by 800,000 tons to 15.5 million. The additional old-crop supplies are available for export before the new-crop harvest in April and May 1998. Moreover, above normal rainfall and mild temperatures provided favorable growing conditions in December and January as Argentina's new-crop corn was tasseling. Fertilizer use is reportedly increasing. Growing conditions this year, so far, are better than for last year's record crop, and a record yield is forecast, raising the 1998 production forecast 2 million tons to 15.0 million. Increased old-crop and new-crop supplies combine to boost Argentina's 1997/98 (October/September) corn export forecast by 2.5 million tons to a record 10.5 million.

While growing conditions in Argentina have boosted expected competition in world corn markets, there has been a small offset in South Africa. Dryness during planting has contributed to lower corn acreage and the production forecast for South Africa was reduced 500,000 tons. However, South Africa's 1997/98 October-September corn exports are forecast only 300,000 tons lower. While El Nino fears persist, recent timely rains have maintained yield prospects.

THE CURRENCY CRISIS IN ASIA IS SOFTENING CORN IMPORT DEMAND

Although soft demand from Southeast Asia is a factor contributing to the 3-million-ton drop in forecast U.S. corn exports, it is not the most significant, as imports by Thailand, Malaysia, the Philippines, and Indonesia combined are down only 0.85 million tons this month. Moreover these four countries' corn imports are down only 0.5 million tons from a year ago, with Thailand still expected to increase corn imports because of a smaller domestic crop.

PRICES FACE VARIETY OF INFLUENCES IN MONTHS AHEAD

USDA made only slight modifications to season average farm price forecasts this month, narrowing the price ranges for corn, sorghum, and barley. The forecast for corn was reduced by 5 cents on both ends to \$2.45-2.75 per bushel. Sorghum is down 10 cents at the high end to \$2.10-2.40 and barley by 5 cents at each end to \$2.35-2.45 per bushel.

For much of the fall, the critical futures market for corn exhibited little firm direction. However, growing fears of the Asian crisis began to pull down prices in December. The price for the March corn contract slipped under \$2.60 per bushel just prior to the January USDA reports, down about 25 cents from early December. The tighter situation indicated since then, however, is expected to provide more price strength.

Markets will remain sensitive to the recent spurt of negative export news, but will also be influenced by robust domestic use and relatively low stocks. Models based on supplies relative to use point to a higher season average farm price than the midpoint of the current forecast, but prices received by farmers for the first 4 months of the marketing year have been fairly low. This will tend to hold down the average, although farmers are reportedly marketing their corn crops slowly again. Stronger marketings over the balance of the year could provide more of an impact on the season average than usual.

Expectations for the 1998 season will also start to influence prices in the next few weeks. The uncertainty surrounding El Nino may or may not be a factor by spring, but acreage prospects should receive the usual strong interest. The *Prospective Plantings* report, based on a survey of farmers' intentions, will be released on March 30.

Pete Riley (202) 694-5308 Information Contacts: 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 April 10, 1998. February and March were discontinued as part of a cutback to 6 issues per year. The annual Feed Situation and Outlook Yearbook will be in April. The summary will be released April 3 and the published full text should be available about 2-3 weeks later.

Check the ERS web site (http://econ.ag.gov) for the full schedule and for other publications relating to feed grains. If you have questions or comments about this change in our schedule, please contact Joy Harwood, Chief, Field Crops Branch (202-694-5310; jharwood@econ.ag.gov) or Fred Surls, Outlook Program Coordinator (202 694-5320; fsurls@econ.aq.qov).

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

Qtr. sto	eg. Produc	ports	5		resid.		disp.		Farm price
CORN			 M			;			
1995/96 Sep-Nov 1,5 Dec-Feb 6,1			8,935 6,111	413 401	1,756 1,348	660 562	2,830 2,311	6,106 3,800	2.80 3.15
Mar-May 3,8		_	3,805	429	1,048	610	2,087	1,718	3.76
Jun-Aug 1,7	'18	3	1,721	370	530	396	1,295	426	4.31
Mkt. yr.1,5	558 7,374	16	8,948	1,612	4,682	2,228	8,522	426	3.24
1996/97 Sep-Nov 4 Dec-Feb 6,9 Mar-May 4,4 Jun-Aug 2,4	94		9,723 6,905 4,498 2,500	387 398 463 444	1,946 1,489 1,108 819	487 525 431 353	2,820 2,411 2,001 1,617	6,903 4,494 2,497 883	2.87 2.66 2.77 2.49
Mkt. yr. 4	26 9,293	13	9,733	1,692	5,362	1,795	8,849	883	2.71
1997/98 Sep-Nov 8	83 9,366	3	10,252	436	2,201	385	3,022	7,230	2.52
Mkt. yr. 8	83 9,366	10	10,259	1,815	5,850	1,750	9,415	844	2.45-2.75
	72 460 01 63 70	0 0 0	532 301 163 70	1 1 5 4	176 71 51 7	54 67 36 41	231 139 92 52	301 163 70 18	2.88 3.25 3.94 3.63
Mkt. yr.	72 460	0	532	11	305	198	514	18	3.19
Mar-May 2	18 803 .67 .74 .19	0 0 0 0	821 467 274 119	11 11 12 7	287 124 82 36	56 59 61 29	354 193 155 72	467 274 119 47	2.44 2.26 2.42 2.27
Mkt. yr.	18 803	0	821	40	529	205	774	47	2.34
1997/98 Sep-Nov	47 653	0	701	9	276	45	330	370	2.23
Mkt. yr.	47 653	0	701	35	425	200	660	41	2.10-2.40

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

Otr.	stocks	tion	ports	Supply	FSI	resid.	Ex- ports	Total disp.	End. stks.	Farm
BARLEY 1995/96				Mil						
Jun-Aug Sep-Nov Dec-Feb Mar-May	113 313 243 178	360 	12 8 8 12	484 321 251 190	44 39 37 52	111 28 17 23	17 11 20 16	172 78 73 91	313 243 178 100	2.53 2.80 3.18 3.29
Mkt. yr	. 113	360	41	513	172	179	62	413	100	2.89
1996/97 Jun-Aug Sep-Nov Dec-Feb Mar-May	100 316 248 173	396 	9 8 8 11	504 324 256 184	44 39 37 53	137 25 40 18	7 12 7 4	188 76 84 75	316 248 173 109	3.11 2.74 2.55 2.33
Mkt. yr	. 100	396	37	532	172	220	31	423	109	2.74
1997/98 Jun-Aug Sep-Nov	109 328	374 	12 6	496 334	44 39	100 5	24 45	168 89	328 245	2.33 2.44
Mkt. yr	. 109	374	35	519	172	160	90	422	97	2.35-2.45
OATS 1995/96 Jun-Aug Sep-Nov Dec-Feb Mar-May	101 180 153 113	162 	28 26 18 9	290 206 171 122	23 22 20 27	86 31 38 28	0.4 0.5 0.3 0.8	110 53 58 56	180 153 113 66	1.48 1.52 1.94 2.21
Mkt. yr	. 101	162	81	343	92	183	2.1	277	66	1.67
1996/97 Jun-Aug Sep-Nov Dec-Feb Mar-May	66 132 126 96	155 	6 39 28 24	228 171 154 120	24 22 20 29	71 22 37 24	1.0 0.8 0.3 0.4	96 45 58 53	132 126 96 67	2.08 1.84 1.79 1.88
Mkt. yr	. 66	155	97	319	95	155	2.5	252	67	1.96
1997/98 Jun-Aug Sep-Nov	67 157	176 	19 35	262 192	24 22	81 25	0.4 0.6	105 48	157 144	1.62 1.52
Mkt. yr	. 67	176	100	343	95	175	2.0	272	71	1.55-1.65

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		Sorg.	Barley	Oats		Wheat	Total grains	Animal Units	
			 - Milli	on metri	.c tons			Mil.	Tons
1995/96									
Sep-Nov			0.6			-2.7			
				0.6		0.4			
Mar-May			0.5			-1.8			
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	85.0	1.65
% Change	-15.2	-23.8	-6.3	-21.7	-15.6	-14.6	-15.6	0.8	-16.3
1996/97									
Sep-Nov	49.4	7.3	0.5	0.4	57.7	-2.1	55.6		
Dec-Feb		3.1			42.4	0.8	43.2		
Mar-May		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	36.0		
Mkt. yr.	136 2	13 4	4 0	2. 7	156 3	8.9	165 2	85.2	1.94
% Change					16.9		17.9		
1997/98									
Sep-Nov	55 9	7 0	0 1	0.5	63 5	-2.9	60 6		
SCP NOV	55.5	7.0	0.1	0.5	33.3	2.7	30.0		
Mkt. yr.	148.6	10.8	3.8	2.9	166.1	6.9	172.9	88.7	1.95
% Change						-22.7		4.0	0.6

Table 3--Grain shipments and rates

	 1995/96	1996/97	199		1997-	
	Mkt. Yr. 	Mkt. Yr.	Sept-Nov	Nov	Sept-Nov	Nov
Barge shipments 1/ (Million ton/mont)		5/ 2.9	NA	NA	1.0	0.9
Barge rate index 2/ (Dec 1990 = 100)	151.8	108.7	136.6	132.4	132.2	119.7
Railcar loadings 3/ (1,000 cars/week)	27.1	23.3	23.5	27.8	23.3	23.8
Rail rate index 2/ (Dec 1984 = 100)	117.3	6/ 119.7	119.7	119.4	7/	7/

^{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. 5/ Jan - Jun average. 6/ Sep - Dec average.

^{7/} Data is discontinued.

Table 4--Cash feed grain prices

	Corn, No. 2, Yel, Ctrl. IL 1/	No. 2, Yel, Gulf	South Panhandle	No. 2, Yel, Gulf	No. 2, feed,	Barley, No. 3 or better, Malting, Minn. 2/	No. 2, Heavy
Mkt. yr.	\$/bu	\$/bu	\$/cwt	\$/cwt	\$/bu	\$/bu	\$/bu
93/94 94/95 95/96 96/97	2.54 2.34 3.91 2.74	2.85 2.78 4.30 3.07	4.95 4.75 7.30 5.02	4.90 4.62 7.19 5.03	2.05 2.02 2.67 2.32	2.48 2.75 3.69 3.18	1.55 1.36 2.28 2.03
Monthly: 1996:							
Aug Sep Oct Nov	4.48 3.39 2.81 2.63	4.73 3.69 3.27 2.97	7.43 6.30 5.08 4.66	6.89 5.89 5.34 4.76	2.60 2.34 2.10 1.90	3.40 3.15 NQ NQ	2.36 2.08 2.06 1.87
1997: Aug Sep Oct Nov	2.60 2.61 2.66 2.70	2.86 2.88 3.05 2.98	4.97 4.81 4.91 4.91	4.71 4.69 5.16 5.09	2.10 2.29 2.05 1.98	2.66 2.74 2.74 NQ	1.80 1.78 1.75 1.65

^{1/} Marketing year beginning September 1.

Table 5--Selected feed and feed by-product prices

	Soybean meal 44% slv. Decatur, IL	Cotton- seed meal, 41% slv. Memphis	Corn gluten feed, IL pts.	Corn gluten meal, IL pts.	Meat & bone meal, Central U.S.	Dists.' dried grains, Lawrence- burg, IN	midlgs,	Alfalfa farm price
	1/	1/	1/	1/	1/	1/	1/	2/ 3/
				\$/ton				
Mkt. yr. 93/94 94/95 95/96 96/97	181.82 151.77 217.27 260.38	168.36 112.64 186.12 191.47	88.62 82.77 116.47 93.05	286.61 221.95 319.35 341.50	206.81 170.51 222.07 272.44	123.79 106.70 151.37 142.87	81.51 65.04 118.08 91.18	89.30 92.10 87.20 97.20
Monthly: 1996:								
Aug Sep Oct Nov	251.10 265.50 238.00 242.70	193.10 193.10 183.25 196.60	111.60 115.75 102.30 97.50	295.00 329.40 344.00 340.00	246.60 279.80 272.10 261.70	NQ 164.00 160.80 145.00	115.80 115.40 103.20 100.70	95.60 95.70 98.20 97.00
1997: Aug Sep Oct Nov	261.60 265.70 216.00 231.60	176.25 192.00 189.10 189.10	75.50 81.10 73.75 73.25	345.60 355.00 343.75 351.25	261.00 272.10 260.40 221.10	NQ 130.00 128.75 133.00	80.30 89.40	106.00 106.00 109.00 108.00

^{1/} Marketing year beginning September 1. NQ = No quote.

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

^{2/} Marketing year beginning May 1.

^{3/} Includes monthly & marketing year revisions from 1994/95.

Table 6--Corn: Food, and industrial uses

		 Glucose and		Alcoh	-	Cereals & other	Total
Year	HFCS	dex.	Starch	Fuel	& Mfg	products	F&I
			Milli	ion bushel	s		
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	1592.2
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	1671.5
1997/98							
Sep-Nov	122.8	63.4	59.6	122.7	33.2	33.9	435.6
Mkt year	540.0	250.0	235.0	500.0	133.0	136.0	1794.0

Table 7--Wholesale corn milling product and by-product prices

	yellow,	Brewers' grits, Chicago	destrose,	tank cars,	Corn starch, fob Midwest 3/
Mkt. yr. 1/	\$/cwt	\$/cwt	cents/lb	cents/lb	\$/cwt
93/94 94/95 95/96 96/97 2/	14.49 13.22 17.79 16.94	10.98 10.67 14.21 12.85	25.44 25.62 25.50 25.50	14.63 12.27 13.01 13.15	12.61 12.43 15.98 13.83
Monthly 1996:					
Sep Oct Nov Dec	20.36 17.19 16.78 16.18	16.26 13.11 12.70 12.08	25.50 25.50 25.50 25.50	13.15 13.15 13.15 13.15	18.50 15.41 13.58 12.95
1997: Sep Oct Nov Dec 2/	16.59 16.73 16.50 16.26	12.49 12.63 12.40 12.16	25.50 25.50 25.50 25.50	NA 8.30 8.30 8.30	13.45 13.70 13.80 14.05

^{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			199 Mkt. yr.		
CORN			-Thousand tor		
Japan	15,303	•	14,821	2,002	2,768
Taiwan	5,938	1,121	5,482	670	924
Former USSR	34	11	131	22	22
South Africa	347	0	81	0	0
Sub-Saharan Africa		145	188	0	23
EU	2,842	652	1,704	53	3
Egypt	2,167	402	2,292	285	411
Canada	808	202	833	160	225
China	2,207	1,700	53	0	0
East Europe	188	0	103	30	0
Algeria S. Korea	522 8,285	55 1 936	869 5,321	118 763	210 439
Mexico	6,453	1,836 817	3,155	763 728	408
Others	11,077	2,235	10,489	1,385	1,145
Others	11,077	2,233	10,409	1,303	1,145
Total	56,494	11,664	45,523	6,216	6,578
SORGHUM					
Mexico	1,759	452	2,111	393	299
Japan	1,617	322	2,102	310	469
Others	1,591	226	948	156	56
Total	4,968	999	5,161	859	824
		 -1995/96	199	96/97	1997/98
		Jun-Oct	Mkt. yr.		
BARLEY					
Saudi Arabia 2/	373	0	88	32	828
Israel	42	42	28	28	0
Jordan	0	0	50	50	0
Japan	522	388	175	93	191
Mexico	190	25	182	114	59
Taiwan	100	33	35	4	60
Other	119	80	220	57	74
Total	1,347	568	779	379	1,212

^{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	199	96/97	1997/98
	Mkt. yr.	Jun-Oct	Mkt. yr.	Jun-Oct	Jun-Oct
OATS			-Thousand tor	ns	
Canada	1,302	711	1,440	576	752
Finland	22	8	99	0	35
Sweden	62	62	140	0	22
Total 1/	1,387	782	1,680	576	809
BARLEY, MALTING					
Canada	740	260	608	194	277
Total 1/	740	260	609	194	277
BARLEY, OTHER 2/					
Canada	141	78	191	68	65
Total 1/	147	83	192	68	65

^{1/} Totals may not add due to rounding.

Source: Bureau of the Census

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