
Approved by the World Agricultural Outlook Board

October 15, 1996

HIGHLIGHTS

- o 1996 Corn Crop Forecast Raised to 9 Billion Bushels
- o Sorghum Production Up 33 Million Bushels
- o 1996/97 Corn Export Prospects Slip
- o 1995/96 Stocks and Disappearance Estimated for Corn and Sorghum

1996/97 FEED GRAIN SUPPLY FORECAST UP 2 PERCENT

Improved prospects for the corn and sorghum crops have bolstered the supply outlook for feed grains. Only minor adjustments were made for barley and oats. Feed grain supplies are forecast at 277 million metric tons, up 6 million from last month, while projected use is up only marginally. A 3-million-ton increase in domestic use is nearly offset by a 2.5-million-ton drop in exports.

The prospective supply increase will permit some rebuilding of stocks, along with a reduction in expected prices. Ending stocks of feed grains for 1996/97 are projected at 27.8 million tons, up 25 percent from a month ago, and nearly double those of 1995/96.

CORN PRODUCTION FORECAST RAISED 208 MILLION BUSHELS

The 1996 corn harvest is forecast at 9,012 million bushels, up 2 percent from September because of improved yield prospects. Compared with 1995, the crop will be 22 percent larger. Based on conditions as of October 1, yields are forecast at 123 bushels per acre, up 2.8 bushels from last month. Expected yields and production were up across most of the Midwest. A record ear count per acre is indicated for the seven States where objective yield surveys are made, surpassing the previous record of 1992.

As of October 6, only 14 percent of the crop had been harvested in the major producing States, compared with the 5-year average of 24 percent. Although crop maturity remains behind normal, crop conditions generally improved in September. As of the beginning of October, most of the Corn Belt remained frost free. Forecast corn production in North Carolina was reduced 8 percent this month, about 7 million bushels, reflecting the impact of Hurricane Fran in early September.

SORGHUM CROP FORECAST UP 4 PERCENT TO 797 MILLION BUSHELS

The U.S. sorghum crop is forecast at 797 million bushels, up 33 million from a month ago, and 73 percent greater than 1995. Like corn, the expected increase also reflects better yields in many States. The U.S. average yield forecast is raised 2.8 bushels to 66.4 bushels per acre.

Kansas accounts for most of this month's production increase, followed by Texas and Nebraska. Sorghum output in Kansas is expected to be record high, and about double last year's crop. Although crop maturity is around normal, only 32 percent of the U.S. crop was harvested as of October 6, compared with an average of 40 percent.

BARLEY AND OATS CROP ESTIMATES SHOW LITTLE CHANGE

Estimates of barley and oats production were released in the September 30 Small Grains 1996 Summary. Barley production is estimated at 397 million

bushels, up 1 percent from the September forecast, because of slightly higher harvested area and yields. The average yield per acre was 58.5 bushels, up 0.2 bushels. Compared to 1995, production is up 10 percent, with North Dakota, the largest producing State, accounting for most of the gain. Idaho surpassed Montana as the second largest producing State in 1996, although output was down in both.

Oats production in 1996 is estimated at 155 million bushels, 2 percent less than the last forecast made in August. While harvested area rose slightly, average yields dropped 1.2 bushels to 57.8 bushels per acre. U.S. production is 4 percent below 1995 and the lowest on record, continuing the long-term declining trend. South Dakota was the largest producing State in 1996, followed by North Dakota, Wisconsin, Minnesota, and Iowa.

DROP IN ALFALFA HAY PRODUCTION OFFSETS INCREASE IN OTHER HAY

Alfalfa hay production in 1996 is currently forecast at 80.7 million tons, down 5 percent from last year. Acres harvested were only down 1 percent, but yields were down 4 percent from 1995's 3.46 tons per acre. Dry conditions late in the season reduced yields from second and third cuttings in most of the northern half of the U.S. In the southern U.S., however, mild temperatures and ample precipitation during August and September led to additional cuttings and helped boost yields. California, which boosted both acreage and yields in 1996, is expected to have its highest yield on record. In Texas, yields of alfalfa and alfalfa mixtures are up 14 percent from last year, offsetting the 6-percent decline in acreage. Kansas yields are up 13 percent from 1995's 3.8 tons per acre, but Oklahoma yields are forecast down 3 percent. Wisconsin, Michigan, Minnesota, South Dakota, and North Dakota, among others, saw yields decline.

All other hay production is forecast at 71.1 million tons, 2 percent above last year. Acres harvested were up 3 percent from last year but yields were down 1 percent from 1995's 1.96 tons per acre. Favorable growing conditions late in the season helped yields, especially in Louisiana and Oklahoma where yields are forecast above last year. Texas will have increased production because additional acreage has offset lower yields.

Roughage consuming animal units (RCAU's) in 1996/97 are expected to be down 2 percent from the 78 million in 1995/96. Hay supplies for 1996/97 at 173 million tons are also down 2 percent from 1995/96. The supply of hay per RCAU is expected to total 2.25 tons, about the same as the 2.24 tons in 1995/96. We do not have survey data on the quality of the hay crop, and those areas that had a wet spring may have lower quality hay than usual if the hay got wet or too mature before cutting.

DOMESTIC CORN USE UP BUT EXPORTS FALL, STOCKS TO GROW

Corn supply in 1996/97 is forecast at 9,448 million bushels, up 225 million from last month, reflecting a larger carryin and the bigger crop. Projected use is down fractionally, as a decline in exports slightly outweighs gains in domestic use. As a result, ending stocks are projected at 903 million bushels, up 235 million from a month ago.

With the larger supply, feed and residual use of corn is forecast up 75 million bushels this month to 4,925 million. (Feed and residual use of sorghum was raised 25 million bushels and barley 10 million, while oats was reduced 10 million.) Food, seed, and industrial use of corn was raised 15 million bushels to 1,670 million.

The projected stocks-to-use ratio in 1996/97 is 10.6 percent, up sharply from last year's very low 5 percent, but still below 11.2 percent in 1993/94. Total use in 1996/97 is expected to rise only modestly compared to the previous year, causing stocks to more than double. Nonetheless, stocks will remain well below 1994/95.

FOOD AND INDUSTRIAL USE OF CORN TO INCREASE IN 1996/97

Food and industrial use of corn in 1995/96 was down 7 percent from 1994/95, because the high corn prices caused ethanol producers to cut back. Fuel ethanol production in 1995/96 is estimated to have used 396 million bushels of corn, down from the record 533 million in 1994/95. Ethanol producers were squeezed when corn prices rose but gasoline prices and competing oxygenates did not rise. Thus, ethanol prices could not rise to offset the increased cost of production, forcing producers to cut output. In areas with ethanol mandates, gasoline suppliers had to scramble this summer to find ethanol for blending. With the new crop harvest, corn prices have slipped from their past highs and ethanol producers are beginning to restart plants and ethanol production has increased. In 1996/97, corn used to produce ethanol may total 450 million bushels, up 14 percent from 1995/96, but still below that used in 1994/95.

High corn prices in 1995/96 also cut corn used for starch production 3 percent from the year earlier. In 1996/97, corn used for starch production will likely rebound as corn prices slip. Production may be up 5 percent from the 219 million bushels used in 1995/96.

In 1995/96, corn used to make corn sweeteners continued to rise even with the high corn prices. High fructose corn sweetener (HFCS) was up 4 percent from the year earlier and glucose and dextrose production was up 3 percent. Additional capacity and strong demand from the soft drink industry have kept corn used in sweetener production increasing. There is no reason to believe demand will slip in 1996/97 and production is expected to increase 5 percent for HFCS and 3 percent for glucose and dextrose.

The latest data available for corn used in beverage production is February, before corn prices peaked. In September 1995-February 1996, corn used in beverage production was up 42 percent from the 49 million bushels used the year before because of strong exports of beverage alcohol. Currently some of our trading partners have begun taking steps to slow beverage alcohol imports and the estimate of corn used for beverages in 1996/97 is expected to decline 9 percent from 1995/96.

FEED DEMAND REMAINS STRONG

Feed and residual use for the four feed grains plus wheat in 1995/96 totaled 141 million metric tons, down 15 percent from 1994/95. In 1996/97, feed and residual use may total 152 million metric tons, up nearly 8 percent from last year. In 1995/96, the number of grain consuming animal units (GCAU's) was slightly higher than 1994/1995. GCAU's in 1996/97 are expected to total 86 million units, up from 85 million a year earlier. The increases are from cattle on feed, hogs, and the poultry sector.

The Hogs and Pigs report released on September 27, 1996 indicated producers intended to have about the same number of sows farrow in September-November 1996 as in the previous year. Producers reported a 7-percent reduction in sows farrowing during June-August period. However, with the number of pigs per litter up 3 percent, the pig crop was only down 5 percent from a year earlier. Farrowing intentions for December 1996-February 1997 are down 1 percent from the year earlier.

Broiler producers continue to expand output. Broiler meat output for 1996 is expected to be up 6 percent from 1995's 25 billion pounds. In 1997, broiler meat production may increase another 5 percent from 1996. Turkey meat production in 1996 is expected to increase 6 percent from the year earlier, but in 1997, output may only rise 1 percent. Egg production is expected to be up 3 percent from 1995, but the average number of hens was up only 1 percent. In 1997, egg production may increase another 3 percent.

Milk production in the 22 monthly reporting States was down 3 percent from a year earlier in June, 2 percent in July, and 1 percent in August. For these 3

months, cow numbers were down a steady 1 percent from the prior year. Grain and other concentrates fed on July 1, 1996 (latest data available) were 18.3 pounds, the same as July 1, 1995.

Cattle on feed on September 1 in the historic 7 monthly States for feedlots with capacity of 1,000 head or more were down 8 percent from the previous year. Placements during August were up 19 percent from last year. With plentiful supplies of sorghum and lower prices for corn, more cattle are likely to be placed on feed.

CORN EXPORT FORECAST FOR 1996/97 REDUCED

The forecast of U.S. corn exports was cut 100 million bushels this month to 1,950 million. This largely reflects an expected reduction in corn imports by South Korea because of higher feed wheat imports. While global wheat production is up sharply this year and export prices are falling, the potential for trade in wheat for feed is mainly linked to crop damage in Canada, where some wheat is expected to be downgraded to feed quality because prolonged wet conditions have delayed the harvest of mature wheat.

U.S. export sales commitments for 1996/97 are relatively strong. The pace of early season shipments, however, has been very slow. Export inspections for the first 6 weeks of the year have been down dramatically from last year's frenetic pace when importers scrambled to procure shrinking corn supplies. This year importers are better covered and global grain supplies are also more abundant.

China's 1996 corn production forecast was boosted 3 million tons to a record 117 million. However, there was no change in China's corn trade projections, which assume small imports and exports of 500,000 tons. Although there is a reported exportable surplus of corn in China's northeastern provinces, there are still no firm indications that larger exports will proceed. China missed an excellent export opportunity this spring when international prices were record high. But even with export prices declining in recent weeks, China's export intentions are likely to remain uncertain over the next several weeks as it completes its harvest.

FEED GRAIN PRICE FORECASTS TRIMMED, BUT STILL RELATIVELY HIGH

Final season average prices for 1995/96 corn and sorghum, weighted by marketings, were record high at \$3.24 and \$3.19, respectively. The season average farm price of corn in 1996/97 is forecast at \$2.80-3.20 per bushel, down 20 cents at each end from last month, while the sorghum price forecast was cut 25 cents to \$2.55-2.95 per bushel. The season average forecast barley price for 1996/97 was reduced 25 cents to \$2.45-2.85 per bushel, and that of oats was cut 20 cents to \$1.65-2.05 per bushel.

Feed grain prices have continued to decline in recent weeks as harvests progress and corn and sorghum crop expectations rise. For the first time in over a year, the nearby futures contract for corn (December) fell under \$3.00 at the end of September. Central Illinois cash prices also slipped to under \$3.00 per bushel by the end of September after averaging \$3.91 for September 1995 to August 1996.

In August, average prices received by farmers for corn declined 13 cents per bushel to \$4.30, the first monthly drop in 21 months. Farm prices continued to drop in September to a preliminary \$3.58, but this was still 89 cents higher than September 1995.

Seasonal price lows typically are made around harvest, but this year's pattern will be difficult to predict. One of the unknowns is the extent of farmer hedging and contracting done at the higher price levels that prevailed during the spring and summer. In 1995/96, the farm price of corn consistently trailed cash prices, reflecting arrangements made before the sharp price runup.

1995/96 CORN STOCKS: 426 MILLION BUSHEL, SORGHUM 18 MILLION

Old-crop corn stored in all positions on September 1, 1996 totaled 426 million bushels, down 73 percent from a year earlier. These were the lowest ending stocks since 400 million bushels in 1976 (when stocks were counted on October 1). Stocks of old-crop sorghum on September 1 were estimated at 18 million bushels, 74 percent lower than the year before, and the lowest ending stocks since 1952/53.

Corn disappearance for the 1995/96 marketing year was 8,522 million bushels, down 9 percent from the 1994/95 record, but the second highest ever. Disappearance for the June-August quarter totaled 1,295 million bushels, down sharply from the previous quarter and the lowest fourth quarter since 1985/86. There were very sharp declines in feed and residual and exports. (The breakout among categories of use is subject to slight changes, pending final trade data for August and some final industrial use estimates.)

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* T.Q. Hutchinson, transportation analyst, retired this month. *
* The next Feed Outlook will be released November 13, 1996. *
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NOTE: THE ANNUAL FEED YEARBOOK IS NOW SCHEDULED FOR MARCH 1997.

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 | | | | | | | | | | |
| 1993/94 | | | | | | | | | | |
| Sep-Nov | 2,113 | 6,336 | 5 | 8,455 | 380 | 1,703 | 435 | 2,518 | 5,937 | 2.34 |
| Dec-Feb | 5,937 | --- | 8 | 5,945 | 376 | 1,243 | 330 | 1,949 | 3,996 | 2.71 |
| Mar-May | 3,996 | --- | 6 | 4,002 | 418 | 955 | 270 | 1,642 | 2,360 | 2.67 |
| Jun-Aug | 2,360 | --- | 1 | 2,361 | 418 | 800 | 293 | 1,511 | 850 | 2.34 |
| Mkt. yr. | 2,113 | 6,336 | 21 | 8,470 | 1,591 | 4,700 | 1,328 | 7,620 | 850 | 2.50 |
| 1994/95 | | | | | | | | | | |
| Sep-Nov | 850 | 10,103 | 2 | 10,955 | 406 | 2,019 | 449 | 2,874 | 8,080 | 2.05 |
| Dec-Feb | 8,080 | --- | 4 | 8,084 | 406 | 1,496 | 590 | 2,493 | 5,592 | 2.18 |
| Mar-May | 5,592 | --- | 3 | 5,595 | 445 | 1,167 | 568 | 2,180 | 3,415 | 2.35 |
| Jun-Aug | 3,415 | --- | 1 | 3,416 | 434 | 854 | 570 | 1,858 | 1,558 | 2.59 |
| Mkt. yr. | 850 | 10,103 | 9.56 | 10,962 | 1,691 | 5,536 | 2,177 | 9,405 | 1,558 | 2.26 |
| 1995/96 | | | | | | | | | | |
| Sep-Nov | 1,558 | 7,374 | 4 | 8,935 | 409 | 1,760 | 660 | 2,830 | 6,106 | 2.80 |
| Dec-Feb | 6,106 | --- | 5 | 6,111 | 387 | 1,362 | 562 | 2,311 | 3,800 | 3.15 |
| Mar-May | 3,800 | --- | 5 | 3,805 | 416 | 1,061 | 610 | 2,087 | 1,718 | 3.76 |
| Jun-Aug | 1,718 | --- | 3 | 1,721 | 370 | 542 | 383 | 1,295 | 426 | 4.31 |
| Mkt. yr. | 1,558 | 7,374 | 17 | 8,949 | 1,583 | 4,725 | 2,215 | 8,522 | 426 | 3.24 |
| 1996/97 | | | | | | | | | | |
| Mkt. yr. | 426 | 9,012 | 10 | 9,448 | 1,670 | 4,925 | 1,950 | 8,545 | 903 | 2.80-3.20 |
| SORGHUM | | | | | | | | | | |
| 1993/94 | | | | | | | | | | |
| Sep-Nov | 175 | 534 | 0 | 709 | 1 | 223 | 39 | 263 | 446 | 2.22 |
| Dec-Feb | 446 | --- | 0 | 446 | 1 | 109 | 60 | 170 | 276 | 2.59 |
| Mar-May | 276 | --- | 0 | 276 | 1 | 83 | 64 | 148 | 128 | 2.39 |
| Jun-Aug | 128 | --- | 0 | 128 | 1 | 41 | 38 | 81 | 48 | 2.10 |
| Mkt. yr. | 175 | 534 | 0 | 709 | 4 | 456 | 202 | 662 | 48 | 2.31 |
| 1994/95 | | | | | | | | | | |
| Sep-Nov | 48 | 649 | 0 | 697 | 0 | 210 | 64 | 274 | 422 | 1.91 |
| Dec-Feb | 422 | --- | 0 | 422 | 1 | 80 | 61 | 142 | 281 | 2.02 |
| Mar-May | 281 | --- | 0 | 281 | 1 | 67 | 54 | 122 | 159 | 2.18 |
| Jun-Aug | 159 | --- | 0 | 159 | 1 | 43 | 43 | 87 | 72 | 2.64 |
| Mkt. yr. | 48 | 649 | 0 | 697 | 3 | 400 | 223 | 625 | 72 | 2.13 |
| 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 | 1 | 55 | 36 | 92 | 70 | 3.94 |
| Jun-Aug | 70 | --- | 0 | 70 | 1 | 8 | 43 | 52 | 18 | 3.63 |
| Mkt. yr. | 72 | 460 | 0 | 532 | 4 | 310 | 200 | 514 | 18 | 3.19 |
| 1996/97 | | | | | | | | | | |
| Mkt. yr. | 18 | 797 | 0 | 815 | 4 | 525 | 225 | 754 | 61 | 2.55-2.95 |

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 | | | | | | | | | | |
| 1993/94 | | | | | | | | | | |
| Jun-Aug | 151 | 398 | 3 | 552 | 43 | 92 | 15 | 150 | 403 | 1.91 |
| Sep-Nov | 403 | --- | 11 | 413 | 37 | 28 | 15 | 80 | 333 | 2.02 |
| Dec-Feb | 333 | --- | 24 | 357 | 34 | 87 | 12 | 133 | 224 | 2.19 |
| Mar-May | 224 | --- | 34 | 258 | 53 | 43 | 24 | 119 | 139 | 2.24 |
| Mkt. yr. | 151 | 398 | 71 | 621 | 166 | 250 | 66 | 482 | 139 | 1.99 |
| 1994/95 | | | | | | | | | | |
| Jun-Aug | 139 | 375 | 24 | 538 | 44 | 122 | 20 | 186 | 352 | 2.00 |
| Sep-Nov | 352 | --- | 14 | 366 | 36 | 32 | 19 | 87 | 279 | 1.98 |
| Dec-Feb | 279 | --- | 14 | 292 | 36 | 53 | 11 | 99 | 193 | 2.05 |
| Mar-May | 193 | --- | 14 | 207 | 51 | 27 | 17 | 95 | 113 | 2.15 |
| Mkt. yr. | 139 | 375 | 66 | 580 | 166 | 235 | 66 | 467 | 113 | 2.03 |
| 1995/96 | | | | | | | | | | |
| Jun-Aug | 113 | 360 | 12 | 484 | 42 | 113 | 17 | 172 | 313 | 2.53 |
| Sep-Nov | 313 | --- | 8 | 321 | 37 | 30 | 11 | 78 | 243 | 2.80 |
| Dec-Feb | 243 | --- | 8 | 251 | 34 | 19 | 20 | 73 | 178 | 3.18 |
| Mar-May | 178 | --- | 12 | 190 | 52 | 23 | 16 | 91 | 100 | 3.29 |
| Mkt. yr. | 113 | 360 | 41 | 513 | 166 | 185 | 62 | 413 | 100 | 2.89 |
| 1996/97 | | | | | | | | | | |
| Mkt. yr. | 100 | 397 | 45 | 541 | 166 | 235 | 35 | 436 | 105 | 2.45-2.85 |
| OATS | | | | | | | | | | |
| 1993/94 | | | | | | | | | | |
| Jun-Aug | 113 | 207 | 17 | 337 | 32 | 84 | 1.5 | 118 | 219 | 1.35 |
| Sep-Nov | 219 | --- | 35 | 254 | 29 | 30 | 0.7 | 60 | 194 | 1.33 |
| Dec-Feb | 194 | --- | 31 | 225 | 27 | 51 | 0.5 | 79 | 147 | 1.42 |
| Mar-May | 147 | --- | 24 | 170 | 37 | 28 | 0.2 | 65 | 106 | 1.39 |
| Mkt. yr. | 113 | 207 | 107 | 427 | 125 | 193 | 3.0 | 321 | 106 | 1.36 |
| 1994/95 | | | | | | | | | | |
| Jun-Aug | 106 | 229 | 20 | 355 | 32 | 103 | 0.2 | 135 | 220 | 1.19 |
| Sep-Nov | 220 | --- | 34 | 254 | 30 | 32 | 0.2 | 62 | 192 | 1.19 |
| Dec-Feb | 192 | --- | 23 | 215 | 28 | 38 | 0.4 | 66 | 149 | 1.21 |
| Mar-May | 149 | --- | 16 | 165 | 35 | 29 | 0.2 | 64 | 101 | 1.36 |
| Mkt. yr. | 106 | 229 | 93 | 428 | 124 | 202 | 1.0 | 327 | 101 | 1.22 |
| 1995/96 | | | | | | | | | | |
| Jun-Aug | 101 | 162 | 28 | 290 | 32 | 78 | 0.4 | 110 | 180 | 1.48 |
| Sep-Nov | 180 | --- | 26 | 206 | 30 | 23 | 0.5 | 53 | 153 | 1.52 |
| Dec-Feb | 153 | --- | 18 | 171 | 27 | 30 | 0.3 | 58 | 113 | 1.94 |
| Mar-May | 113 | --- | 9 | 122 | 34 | 21 | 0.8 | 56 | 66 | 2.21 |
| Mkt. yr. | 101 | 162 | 81 | 343 | 123 | 152 | 2 | 277 | 66 | 1.68 |
| 1996/97 | | | | | | | | | | |
| Mkt. yr. | 66 | 155 | 85 | 307 | 120 | 115 | 3 | 238 | 69 | 1.65-2.05 |

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 |
| 1993/94 | | | | | | | | | |
| Sep-Nov | 43.2 | 5.7 | 0.6 | 0.5 | 50.1 | -1.0 | 49.0 | | |
| Dec-Feb | 31.6 | 2.8 | 1.9 | 0.8 | 37.1 | 1.1 | 38.1 | | |
| Mar-May | 24.2 | 2.1 | 0.9 | 0.5 | 27.8 | -0.7 | 27.1 | | |
| Jun-Aug | 20.3 | 1.0 | 2.7 | 1.5 | 25.6 | 10.2 | 35.8 | | |
| Mkt. yr. | 119.4 | 11.6 | 6.1 | 3.4 | 140.4 | 9.6 | 150.0 | 84.0 | 1.79 |
| % Change | -10.7 | -3.1 | 58.1 | 7.1 | -8.0 | 145.2 | -4.2 | 1.5 | -5.6 |
| 1994/95 | | | | | | | | | |
| Sep-Nov | 51.3 | 5.3 | 0.7 | 0.6 | 57.9 | -0.8 | 57.1 | | |
| Dec-Feb | 38.0 | 2.0 | 1.2 | 0.6 | 41.8 | 0.7 | 42.5 | | |
| Mar-May | 29.6 | 1.7 | 0.6 | 0.5 | 32.4 | -0.8 | 31.6 | | |
| Jun-Aug | 21.7 | 1.1 | 2.5 | 1.2 | 26.4 | 8.3 | 34.7 | | |
| Mkt. yr. | 140.6 | 10.2 | 4.91 | 2.8 | 158.5 | 7.4 | 166.0 | 84.3 | 1.97 |
| % Change | 17.8 | -12.4 | -19.4 | -15.8 | 12.9 | -22.4 | 10.6 | 0.4 | 10.2 |
| 1995/96 | | | | | | | | | |
| Sep-Nov | 44.7 | 4.5 | 0.7 | 0.4 | 50.2 | -2.7 | 47.5 | | |
| Dec-Feb | 34.6 | 1.8 | 0.4 | 0.5 | 37.3 | 0.3 | 37.7 | | |
| Mar-May | 27.0 | 1.4 | 0.5 | 0.3 | 29.2 | -1.8 | 27.3 | | |
| Jun-Aug | 13.8 | 0.2 | 3.1 | 0.9 | 18.0 | 10.9 | 28.9 | | |
| Mkt. yr. | 120.0 | 7.9 | 4.7 | 2.2 | 134.7 | 6.8 | 141.5 | 84.9 | 1.67 |
| % Change | -14.7 | -22.5 | -4.9 | -24.1 | -15.0 | -9.1 | -14.8 | 0.7 | -15.4 |
| 1996/97 | | | | | | | | | |
| Mkt. yr. | 125.1 | 13.3 | 4.1 | 2.1 | 144.6 | 7.5 | 152.1 | 85.9 | 1.77 |
| % Change | 4.2 | 69.5 | -12.2 | -3.2 | 7.4 | 10.3 | 7.5 | 1.1 | 6.3 |

Table 3--Grain shipments and rates

| | 1993/94 Mkt. Yr. | -----1994/95----- Mkt. Yr. Sep-Aug | ----- Aug | -----1995/96----- Sep-Aug | ----- Aug |
|---|---------------------|---------------------------------------|--------------|------------------------------|--------------|
| Barge shipments 1/ (Million ton/month) | 2.8 | 3.1 | 2.9 | 4.2 | NA NA |
| Barge rate index 2/ (Dec 1990 = 100) | 93.6 | 160.8 | 160.8 | 223.8 | 151.5 80.7 |
| Railcar loadings 3/ (1,000 cars/week) | 25.3 | 28.5 | 28.5 | 30.7 | 27.1 20.6 |
| Rail rate index 2/ (Dec 1984 = 100) | 115.2 | 116.6 | 116.6 | 114.9 | 116.7 116.5 |

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: Association of American Railroads.

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 |
| 92/93 | 2.12 | 2.46 | 4.06 | 4.27 | 2.11 | 2.37 | 1.58 |
| 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/ | 3.91 | 4.30 | 7.30 | 7.19 | 2.67 | 3.69 | 2.28 |
| Monthly: | | | | | | | |
| 1995: | | | | | | | |
| May | 2.50 | 2.84 | 4.93 | 4.27 | 2.11 | NQ | 1.76 |
| Jun | 2.65 | 3.04 | 5.26 | 4.97 | 2.22 | 3.15 | 1.73 |
| Jul | 2.79 | 3.23 | 5.61 | 5.41 | 2.25 | 3.69 | 1.92 |
| Aug | 2.68 | 3.21 | 5.53 | 5.38 | 2.09 | 3.22 | 1.96 |
| 1996: | | | | | | | |
| May | 4.86 | 5.17 | 8.88 | 8.46 | 3.20 | 4.11 | 2.68 |
| Jun | 4.74 | 4.99 | 8.57 | 7.95 | 3.22 | 3.28 | 2.11 |
| Jul | 4.70 | 5.07 | 8.35 | 7.38 | 2.79 | 3.74 | 2.48 |
| Aug | 4.48 | 4.73 | 7.43 | 6.89 | 2.60 | 3.40 | 2.36 |

1/ Marketing year beginning September 1.

2/ Marketing year beginning June 1.

3/ Preliminary. NQ = No quote.

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----- | | | | | | | |
| 92/93 | 180.80 | 159.22 | 95.95 | 284.60 | 220.93 | 122.84 | 69.69 | 78.20 |
| 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 | 88.20 |
| Monthly: | | | | | | | | |
| 1995: | | | | | | | | |
| May | 148.10 | 92.75 | 78.50 | 196.50 | 159.60 | 98.00 | 49.70 | 95.30 |
| Jun | 149.10 | 108.75 | 79.90 | 208.10 | 161.60 | 98.90 | 63.61 | 91.60 |
| Jul | 160.10 | 116.90 | 81.90 | 218.75 | 159.80 | 101.00 | 61.80 | 89.60 |
| Aug | 157.50 | 116.50 | 79.40 | 232.00 | 157.40 | NQ | 71.90 | 87.00 |
| 1996: | | | | | | | | |
| May | 232.30 | 191.25 | 138.40 | 343.10 | 220.20 | 186.50 | 114.70 | 102.40 |
| Jun | 227.90 | 192.20 | 122.10 | 315.00 | 231.80 | 190.00 | 127.80 | 96.90 |
| Jul | 242.30 | 201.75 | 109.30 | 308.50 | 239.60 | 175.40 | 112.70 | 92.90 |
| Aug | 251.10 | 193.10 | 111.60 | 295.00 | 246.60 | NQ | 115.80 | 96.00 |

1/ Marketing year beginning September 1.

2/ Marketing year beginning May 1.

3/ Includes monthly & marketing year revisions from 1994/95. NQ = no quotes

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 | | | | | | | |
| 1993/94 | | | | | | | |
| Sep-Nov | 98.5 | 55.8 | 56.4 | 112.2 | 27.7 | 29.4 | 380.1 |
| Dec-Feb | 95.3 | 49.6 | 52.7 | 119.3 | 29.9 | 29.1 | 375.8 |
| Mar-May | 118.0 | 56.7 | 56.3 | 112.4 | 24.9 | 29.7 | 398.2 |
| Jun-Aug | 131.8 | 60.8 | 57.3 | 114.3 | 23.2 | 29.7 | 417.1 |
| Mkt year | 443.6 | 222.9 | 222.7 | 458.3 | 105.8 | 118.0 | 1571.3 |
| 1994/95 | | | | | | | |
| Sep-Nov | 104.6 | 58.8 | 57.3 | 134.4 | 21.2 | 29.4 | 405.8 |
| Dec-Feb | 100.5 | 51.5 | 55.0 | 141.5 | 27.9 | 29.1 | 405.5 |
| Mar-May | 123.8 | 58.4 | 56.2 | 137.7 | 24.2 | 29.7 | 430.1 |
| Jun-Aug | 135.6 | 62.3 | 57.3 | 119.1 | 26.7 | 29.7 | 430.8 |
| Mkt year | 464.6 | 231.1 | 225.7 | 532.8 | 100.0 | 118.0 | 1672.1 |
| 1995/96 | | | | | | | |
| Sep-Nov | 110.1 | 60.7 | 55.8 | 121.1 | 32.3 | 29.4 | 409.4 |
| Dec-Feb | 105.1 | 52.9 | 51.5 | 120.8 | 37.5 | 29.1 | 396.9 |
| Mar-May | 130.8 | 60.7 | 54.9 | 91.8 | 25.0 | 29.7 | 393.1 |
| Jun-Aug | 136.2 | 62.8 | 57.0 | 61.9 | 15.4 | 29.7 | 363.1 |
| Mkt year | 482.2 | 237.0 | 219.3 | 395.7 | 110.3 | 118.0 | 1562.5 |
| 1996/97 | | | | | | | |
| Mkt year | 505.0 | 245.0 | 230.0 | 450.0 | 100.0 | 120.0 | 1650.0 |

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/ |
|------------------|-----------------------------------|-------------------------------|--------------------------------|------------------------------------|-----------------------------------|
| Mkt. yr. 1/ | \$/cwt | \$/cwt | cents/lb | cents/lb | \$/cwt |
| 92/93 | 13.39 | 9.68 | 24.50 | 13.30 | 10.70 |
| 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 2/ | 17.79 | 14.21 | 25.50 | 13.01 | 15.98 |
| Monthly 1995: | | | | | |
| Jun | 13.59 | 11.04 | 25.50 | 11.80 | 13.22 |
| Jul | 13.85 | 11.30 | 25.50 | 11.70 | 13.64 |
| Aug | 13.80 | 11.25 | 25.50 | 11.80 | 13.85 |
| Sep 2/ | 14.34 | 11.80 | 25.50 | 11.80 | 13.67 |
| 1996: | | | | | |
| Jun | 20.18 | 16.08 | 25.50 | 13.15 | 18.65 |
| Jul | 20.45 | 16.35 | 25.50 | 13.15 | 18.65 |
| Aug | 21.72 | 17.62 | 25.50 | 13.15 | 19.19 |
| Sep 2/ | 20.38 | 16.29 | 25.50 | 13.15 | 18.50 |

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 | -----1993/94----- | | -----1994/95----- | | 1995/96 |
|-------------------------|-------------------|-----------------|-------------------|-------------------|-----------|
| | Mkt. yr. | Sep-July | Mkt. yr. | Sep-July | Sep-July |
| -----Thousand tons----- | | | | | |
| CORN | | | | | |
| Japan | 12,322 | 11,362 | 15,849 | 14,649 | 14,178 |
| Taiwan | 5,077 | 4,739 | 6,027 | 5,668 | 5,587 |
| Former USSR | 2,909 | 2,904 | 140 | 140 | 27 |
| South Africa | 12 | 12 | 187 | 161 | 347 |
| Sub-Saharan Africa | 394 | 348 | 449 | 416 | 319 |
| EU | 1,765 | 1,644 | 2,836 | 2,569 | 2,835 |
| Egypt | 1,553 | 1,307 | 2,569 | 2,274 | 2,137 |
| Canada | 603 | 528 | 1,096 | 952 | 711 |
| China | 0 | 0 | 3,240 | 2,698 | 2,207 |
| East Europe | 48 | 48 | 112 | 112 | 188 |
| Algeria | 1,176 | 1,101 | 1,000 | 944 | 522 |
| S. Korea | 508 | 356 | 8,005 | 7,145 | 7,855 |
| Mexico | 1,468 | 1,232 | 2,985 | 2,625 | 6,156 |
| Others | 5,813 | 5,186 | 10,723 | 9,539 | 10,642 |
| Total | 33,649 | 30,768 | 55,218 | 49,891 | 53,709 |
| SORGHUM | | | | | |
| Mexico | 2,972 | 2,607 | 2,557 | 2,262 | 1,578 |
| Japan | 1,640 | 1,454 | 2,050 | 1,964 | 1,478 |
| Others | 432 | 578 | 1,008 | 979 | 1,505 |
| Total | 5,044 | 4,639 | 5,615 | 5,205 | 4,561 |
| | | -----1994/95--- | | -----1995/96----- | 1996/97 |
| | Mkt. yr. | June-July | Mkt. yr. | June-July | June-July |
| BARLEY | | | | | |
| Saudi Arabia | 203 | 0 | 373 | 0 | 0 |
| Israel | 468 | 86 | 42 | 42 | 7 |
| Jordan | 51 | 51 | 0 | 0 | 0 |
| Others | 671 | 107 | 932 | 205 | 91 |
| Total | 1,392 | 243 | 1,347 | 247 | 98 |

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

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

| Country/region | -----1994/95--- | | -----1995/96----- | | 1996/97 |
|-------------------------|-----------------|-----------|-------------------|-----------|-----------|
| | Mkt. yr. | June-July | Mkt. yr. | June-July | June-July |
| -----Thousand tons----- | | | | | |
| OATS | | | | | |
| Canada | 1,161 | 179 | 1,302 | 316 | 70 |
| Finland | 374 | 49 | 22 | 8 | 0 |
| Sweden | 70 | 26 | 62 | 62 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 |
| Total 1/ | 1,605 | 254 | 1,387 | 386 | 70 |
| BARLEY, MALTING | | | | | |
| Canada | 715 | 158 | 740 | 163 | 115 |
| Other | 0 | 0 | 0 | 0 | 0 |
| Total 1/ | 716 | 159 | 740 | 163 | 115 |
| BARLEY, OTHER 2/ | | | | | |
| Canada | 702 | 222 | 141 | 50 | 37 |
| Other | 16 | 10 | 6 | 0 | 0 |
| Total 1/ | 719 | 232 | 147 | 50 | 37 |

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