

Commodity Spotlight



U.S. Corn Prices To Remain Weak Despite Record Domestic Use

U.S. farm prices for corn are expected to remain weak in 1999/2000. While this year's crop is smaller, supplies are essentially unchanged because of larger carryin stocks. Exports are projected to decline, but with domestic use setting another record, gains in 1999/2000 ending stocks should be limited.

Faced with low prices, U.S. corn producers trimmed plantings by 2 percent in 1999. Besides low prices, the decline in corn acreage is attributable to lower prospective government payments for corn relative to soybeans under the marketing assistance loan program. Lower plantings combined with yield-reducing dry weather in the eastern Corn Belt is cutting U.S. corn output to 9.4 billion bushels, down 4 percent from 1998.

Over the last 10 years, planted acreage of corn, the primary feed grain in the U.S., has consistently comprised 23 to 24 percent of acreage of major field crops. Sorghum acreage has accounted for 3 to 4 percent, oats 1 to 3 percent, and barley 2 to 3 percent. Like corn, planted acreages of sorghum, oats, and barley declined in 1999.

Average corn yield is forecast at 132.2 bushels per acre, down from 134.4 bushels in 1998. The eastern Corn Belt crop was planted earlier than in recent years, setting up early-season expectations of higher yields, but dry weather in many

areas of the eastern Corn Belt has cut yield potential. In the western Corn Belt, wetter conditions throughout the growing season have helped yield potential.

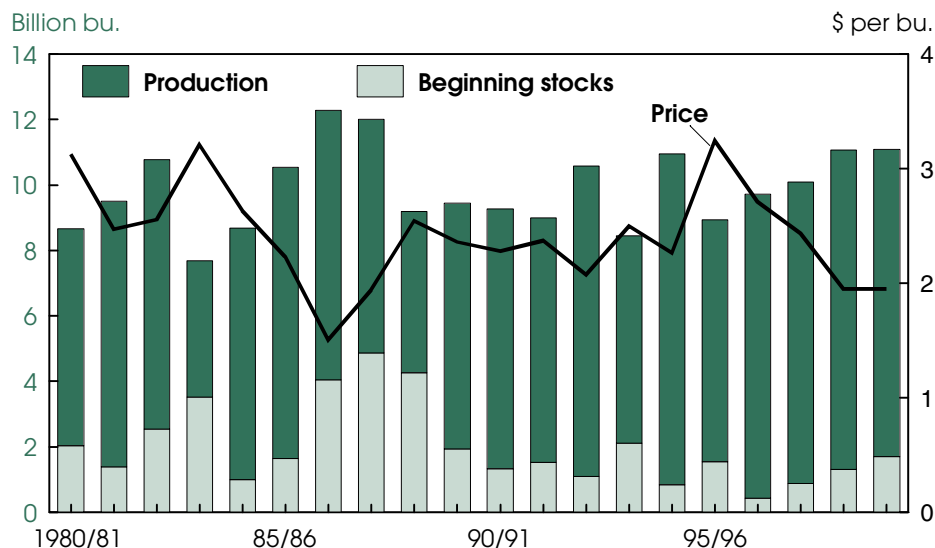
Domestic Use Forecast Record High

Domestic use in 1999/2000 is expected to total a record 7.5 billion bushels, up 1 percent from 1998/99, bolstered by gains in food/seed/industrial use.

Food, seed, and industrial uses are forecast to remain strong, up 3 percent from 1998/99 to 1.9 million bushels. Use at this level would represent 17 percent of total corn supply, up from 16.5 percent in 1998/99 but below the 17.6 percent of supply used in 1997/98.

Total sweetener use of corn has not been as strong as earlier anticipated in 1998/99. Corn used in high fructose corn syrup (HFCS)—principally in soft drinks—is forecast up 3 percent in 1998/99 from 532 million bushels in 1997/98. The hot summer months stimulated domestic sales, but exports of HFCS in September 1998-June 1999 were down 6 percent from the previous year. Higher tariffs limited export gains to Mexico to 1 percent. In

U.S. Corn Prices to Hold Steady in 1999/2000



U.S. season-average farm price. Season beginning September 1. 1998/99 and 1999/2000 forecast.

Economic Research Service, USDA

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1999/2000, use is expected to increase another 3 percent.

Glucose and dextrose use in 1998/99 is expected to be down 4 percent from 1997/98. Some “nonfat” products that used sweeteners (including those derived from corn) to replace fats have not sold well and have been reformulated, weakening the market for glucose and dextrose. In 1999/2000, corn used to produce glucose and dextrose is expected to level off or rise slightly, continuing a long-term trend similar to the rate of population growth.

In 1999/2000, *beverage alcohol and manufacturing use* of corn is expected to be up 2 percent from the forecast 127 million bushels in 1998/99. The strong economy is expected to keep sales of beverages strong, and low corn prices should help keep manufacturing alcohol (used for rubbing alcohol and after-shave, for example) competitive with alternatives.

Industrial uses of corn are expected to continue growing in 1999/2000, but not at the strong pace of 1998/99. Corn used to make *ethanol* in 1998/99 is forecast at 530 million bushels, up 10 percent from 1997/98. Low corn prices have encouraged ethanol producers to keep output high. Ethanol stocks have become large, preventing a runup in ethanol prices that would normally accompany recent gains in gasoline prices.

Corn used to make *starch* in 1998/99 (for products such as paper and wall board) is forecast to decline 1 percent from 1997/98 to 230 million bushels, possibly due to increased competition from wheat starch. The strong U.S. economy would be expected to keep paper use (and thus starch demand) at a high level. Builders are reportedly having problems finding wall board. This news normally stimulates wall board production and boosts starch use. In 1999/2000, starch use of corn is expected to rise 2 percent from 1998/99 as the strong economy stimulates starch use.

Feed demand from the poultry and dairy sectors continues strong as production expands, responding to strong domestic demand for meat and an expected increase in meat exports. But feed demand from the beef and pork sectors is expected to

Gasoline Additives: MTBE v. Ethanol

Methyl tertiary butyl ether (MTBE) and ethanol are oxygenates—oxygen-rich compounds which are added to motor vehicle fuels to make them burn more cleanly. MTBE is often produced from methanol (derived primarily from natural gas). Ethanol is derived primarily from corn and other agricultural products. Under the Clean Air Act Amendments of 1990, Federal law requires a 2-percent minimum level of oxygenates in reformulated gasoline sold in “nonattainment” areas (generally metropolitan areas where ozone levels exceed federal standards).

MTBE is highly water soluble and spreads easily in water if underground gasoline tanks leak or if it is spilled. Earlier this year, news reports of its discovery in well water in California prompted calls for its elimination as a gasoline additive. California’s governor has issued an executive order to ban use of MTBE by the end of 2002. If ethanol were to completely replace MTBE in California and elsewhere, much more ethanol would need to be produced.

Also boosting prospects for ethanol use is a change in Environmental Protection Agency (EPA) regulations to require gasoline with lower sulfur content beginning in 2004. Most processing technology to reduce sulfur content also lowers gasoline’s octane rating. Ethanol is a prime additive because it boosts gasoline’s octane rating and has low sulfur content. But ethanol has a relatively high Reid Vapor Pressure (rvp)—a measure of propensity to evaporate—and must be combined with a higher-cost low rvp gasoline blend stock to meet requirements for reformulated gasoline.

Earlier this year, the EPA established a blue ribbon panel (including representatives from government, industry, and environmental groups) to study the use of oxygenates. In July 1999, the panel recommended reducing the use of MTBE. The panel also recommended Congressional removal of the 2-percent oxygenate requirement, a move favored by oil companies since it would give refiners greater flexibility in finding a substitute for MTBE.

slip, leaving total feed use (including residual) unchanged at 5.6 billion bushels in 1999/2000.

Broiler producers have continued to expand production despite disease problems in their hatchery supply flocks. Low grain prices and relatively strong broiler product prices have encouraged producers to continue expansion. Turkey and egg production are both expected to increase from 1999 levels. Likewise, higher milk production will boost feed demand by the dairy industry.

Beef production is forecast to decline 6 percent in 2000. Cattle herds have been declining for 2 years, and the number of calves available for feeding has been declining. The USDA *Cattle on Feed* report released in August indicated fewer feedlot placements than a year earlier and confirmed that beef supplies will decline. With fewer cattle in feedlots in the months ahead, feed needs will weaken in the beef sector.

Pork production is projected to increase 1 percent in 1999 but decline 3 percent in 2000. While very low hog prices caused many small producers to abandon the industry in fourth-quarter 1998 and first-quarter 1999, large operations have cut back very little, and production continues to increase in 1999, sustaining strong demand for grain. However, feed demand may weaken in 2000.

Competition Holds Down U.S. Exports

U.S. corn *exports* are likely to decline in 1999/2000 because of increased competition from China, continued large exports by Argentina, and declining world trade. Behind the increased competition and flat demand is large world corn production, forecast at 592 million tons, down 2 percent mostly because of below-trend yields in China. Significant increases are expected in Argentina, Brazil, Mexico, South Africa, and the European Union (EU). Production gains in Latin America

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will lower imports in that region. World corn area continues to expand, with foreign area increases more than offsetting the U.S. decline.

Throughout much of 1998/99, U.S. and world corn prices were low enough to discourage the government of China from exporting aggressively (i.e., with subsidies since internal prices are above world prices), and China's corn exports dropped to less than half the previous year despite the record large crop. However, with burdensome stocks and a new crop about to be harvested, China sold over 2 million tons abroad when U.S. corn prices increased in late July and early August. Most of those exports are expected to be shipped in 1999/2000.

While world corn output is forecast down slightly in 1999/2000, production is fore-

cast down for all other coarse grains, particularly barley. Global barley production is expected to fall dramatically, with world production down over 9 million tons or 7 percent. The EU, the world's largest barley producer and exporter, increased the grain area set-aside for 1999 from 5 percent to 10 percent, and producers reduced barley plantings because wheat was generally more profitable. In the Middle East and parts of North Africa, drought reduced both area and yields of barley. In total, world coarse grain production is forecast at 863 million tons in 1999/2000, down 3 percent from a year ago.

For the last 3 years, global coarse grain production exceeded consumption. In 1999/2000, world coarse grain consumption is forecast larger than production, and a 6-percent decline in ending stocks is expected. Nevertheless, supplies remain

large, limiting U.S. price increases for corn and other feed grains.

The weighted-average price of corn received by U.S. farmers is forecast at \$1.75-\$2.15 per bushel in 1999/2000, compared with a forecast \$1.95 in 1998/99. In January-May 1999, the monthly farm price of corn averaged about \$2.05 per bushel but declined to a low of \$1.74 per bushel in July when the prospective crop suggested large supplies. Although prices strengthened when the impact of the drought in the eastern Corn Belt became clear, abundant supplies in other major U.S. growing regions are expected to dampen any additional gains in 1999/2000. **AO**

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The ag sector: yearend wrap-up

...in an upcoming issue of *Agricultural Outlook*