UNIVERSITY OF ILLINOIS EXTENSION

WEEKLY OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

AUGUST 7, 2000

HOW MUCH CORN CAN WE CONSUME?

It is generally expected that the 2000 U.S. corn crop will be near record or record large. Private estimates tend to be in the 10.2 to 10.3 billion bushel range. The USDA will release the first objective production estimate on August 11. While the crop is not yet in the bin, market attention is beginning to shift to the question of the size of the market for U.S. corn during the 2000-01 marketing year. The early interest in demand is stimulated by crop problems in China and speculation about expansion of U.S. hog production.

U.S. corn is consumed in three primary categories – food, seed, and industrial (FSI); feed and residual; and export. Food use includes high fructose corn syrup (HFCS); glucose and dextrose; starch; cereal and other dry milled products; and beverage alcohol. Industrial use is primarily for fuel alcohol. Total FSI use of corn has increased steadily over the past 25 years. The only year-over-year decline in use during that period was 1995-96 when corn supplies were limited and prices were very high. The two growth markets have been HFCS and fuel alcohol (ethanol). Use of corn for HFCS has grown from 45 million bushels in 1975-76 to 545 million projected for the current year. Use of corn for ethanol has grown from 10 million bushels in 1979-80 to a projection of 565 million bushels for the current year. These two products account for about 58 percent of all food and industrial use.

For the year ahead, there is general agreement that use of corn for ethanol will expand due to higher petroleum prices. Last month, the USDA projected a 15 million bushel increase. The market for HFCS is more difficult to assess, partly because of the trade dispute with Mexico. The World Trade Organization has ruled against anti-dumping duties imposed by Mexico. The USDA has projected a 10 million bushel increase in corn used for HFCS during the year ahead. That is a slower rate of increase than experienced recently. The market may be a little larger than projected. With trend increases in the other category of use, the USDA has projected total FSI use at 1.96 billion bushels. Some have suggested that the market could be as large as 2 billion bushels if current low prices are maintained.

Domestic feed and residual use of corn consumes the largest share of the U.S. crop. Use in that category has expanded over time, growing from 4 to 4.5 billion bushels annually in the early 1980s to the 5.2 to 5.5 billion bushel level in the late 1990's. Use for the current year is projected at a record 5.625 billion bushel. The USDA has projected a modest increase of 25 million bushels for the 2000-01 marketing year. With the continuation of low corn prices (in absolute terms and in relation to soybean meal prices), expansion in broiler production, and

hints that the hog industry is in the early stages of a modest expansion, feed and residual use might exceed the early projection. The rate at which cattle feed lot inventories decline will be an important factor in determining feed demand for corn. Generally profitable livestock prices will likely encourage heavier slaughter weights of both cattle and hogs. Optimistically, feed and residual use of corn could approach 5.8 billion bushels during the year ahead.

Unlike domestic use of corn, which has generally trended higher, annual exports of U.S. corn are highly variable. In the last 10 years, shipments have been as low as 1.328 billion bushels (1993-94) and as high as 2.367 billion bushels (1989-90). Shipments exceeded 2.2 billion bushels in 1995-96, but reached only 1.5 billion in 1997-98. U.S. corn exports are influenced by the rate of world economic growth and the demand for livestock products, the size of the feed grain crops in importing and other exporting countries, exchange rates, trade policy, and a number of other factors. Shipments during the 1999-00 marketing year, which ends on August 31, are expected to total only 1.875 billion bushels, about 100 million less than shipped last year. Part of the decline is associated with the large 1999 Chinese corn crop and a sizeable increase (170 percent) in Chinese exports during the current year. Those exports are projected at 354 million bushels. World corn consumption is expected to increase during the year ahead and consumption in the major importing countries is expected to hold steady. Unfavorable weather has reduced the likely size of the Chinese corn crop and the likely level of Chinese exports. The USDA has projected a 118 million bushel reduction in Chinese exports and a 175 million bushel increase in U.S. exports during the 2000-01 marketing year. The swing could be larger, depending on the actual size of the Chinese crop and the actual size of old crop stocks in China. A rebound in U.S. exports to the 2.2 billion bushel level is possible.

A market for 10 billion bushels of U.S. corn is possible for the year ahead. However, use at that level will require that prices remain at low levels. Year ending stocks would obviously continue to grow if the crop is larger than 10 billion bushels. The most important implication of record consumption would be to minimize the level of stocks so that prices would eventually respond to a shortfall in production.

Issued by Darrel Good
Extension Economist
University of Illinois

U of I Extension Newsletter Service
University of Illinois
at Urbana Champaign
1917 South Wright Street
Champaign IL 61820