Rationing The 2008 U.S. Corn Crop



Extension Economist University of Illinois

he USDA's World Agricultural Outlook Board lowered its expectation of the size of the 2008 U.S. corn crop from 12.125 billion bushels in May to 11.735 billion in June. Extensive flooding in parts of the midwest suggest that production potential may be declining even further.

Consumption of U.S. corn during the 2008-09 marketing year will likely have to be less than the record 12.96 billion bushels projected for the current marketing year. Historically, much of the reduced consumption in years of tight supplies and high prices came in the domestic feed and residual category. The most recent examples include 1980, 1983, 1988, 1993, 1995, 2002, and 2006. In those seven years, feed and residual use declined by an average of about 11 percent from use during the previous marketing year. The range was from 5 percent (2002-03) to 18 percent (1988-89).

U.S. corn exports also declined in the 1993-94 marketing year (20 percent) and in the 2002-03 marketing year (17 percent). Both of those years were characterized by extremely large coarse grain crops in the rest of the world. Production outside of the U.S. in 1993-94 was record large, exceeding the previous record of 1990-91 by 2.5 percent. Foreign production in 2002-03 was only fractionally smaller than the large crop of the previous year and only 1.9 percent smaller than the previous record of 1996-97. Only in 1995-96 did domestic use of corn for food and industrial purposes decline from the level of the previous year. The cut totaled 87 million bushels, or 5.1 percent, of the previous year's use.

The current World Agricultural Outlook Board projections for consumption of U.S. corn during the 2008-09 marketing year are consistent with historical patterns. Feed and residual use is projected to decline by 16.3 percent. Exports are expected to decline by 21.2 percent, reflecting the forecast of a record large coarse grain crop outside of the U.S. as well as a record large world wheat crop. Domestic consumption of corn for ethanol is expected to increase by one billion bushels (33 percent) while use of corn for all other food and industrial uses is expected to equal that of the current marketing year.

While feed and residual use of sorghum is expected to increase, the total consumption of sorghum, barley, oats, and wheat is expected to decline by about 3.4 percent. The cut in domestic feed and residual use of corn will be accomplished in a number of ways.

The USDA expects the number of grain consuming animal units to decline by 1.1 million, or about 1.2 percent. Domestic feeding of soybean meal is expected to increase by nearly one percent and we project that domestic feeding of distillers grains could increase by about 32 percent. Adding the projections for the various categories suggests that total feed and residual use of grain and protein will decline by 8.5 percent and that use per animal unit will decline by nearly 8 percent. Estimated consumption per animal during the current year, however, is very high and may reflect an overestimate of the size of the 2007 U.S. corn crop. Still, consumption per animal unit during the 2008-09 marketing year is expected to be near the lowest level of the past 10 years. Some of the reduction may be offset by increased feeding of hay and forage made available by the CRP initiative described two weeks ago.

Corn prices have moved sharply higher as production expectations have been scaled back. It is still not clear how much rationing will be required during the 2008-09 marketing year. The USDA will release its annual Acreage report on June 30 which may provide some insight into potential crop size. However, some acreage had not yet been planted or replanted at the time of data collection. The report, then, will still reflect a fair amount of planting intentions. Harvested acreage for grain may also be difficult to anticipate with the recent widespread flooding. The USDA's quarterly Hogs and Pigs report will be released on June 27 and may give some hint of how livestock producers are responding to higher feed prices. Responses, however, may not completely reflect the recent surge in feed prices.

A fair amount of crop loss and demand rationing are already priced into the corn market with December 2008 futures approaching \$8. The worst of the crop stress may have passed and more favorable growing conditions are forecast. Corn prices may now moderate somewhat, at least until more is known about crop size.