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AGRICULTURE'S DRIVE AND DINE MENU

Agriculture is being asked to contribute to the energy industry in a much larger way in coming years. Agriculture's traditional role as the foundation of the food industry will experience increasing competition for corn use as fuel. One of the largest groups this will impact are the animal industries which are the biggest users. Both crop and animal agriculture will face exciting new challenges to meet the growing demands that are currently being proposed. The next decade will be an exhilarating period for U.S. agriculture as it seeks the balance between food and fuel uses.

As the largest user of corn and soybean meal, animal industries have had the advantage of low costs feed in recent years. As an example, U.S. corn prices received by farmers from the 1998/99 through the 2005/06 marketing years averaged just \$2.05 per bushel and hi-pro soybean meal just \$180 per ton, Decatur Illinois. The rapid growth of the use of corn for ethanol in coming months and years means that the livestock industries have a major new competitor, at least for corn.

Feed is often the largest single cost factor in production of beef, pork, chicken, turkey, lamb, milk, and eggs. Livestock feeding has dominated the total uses of corn for many decades, but that dominance has been reduced over time and stands to become less significant in the future. In the 1960's nearly 80 percent of the total use of corn was for feeding animals. The export boom of the 1970's added dramatic new demands and the average feed use for the decade was 67 percent of total use. Further growth of industrial uses of corn in the 1990s, especially high fructose corn syrup drove the average amount of feeding use downward to 60 percent for the decade. Given the now rapidly growing corn use for ethanol, feed use is expected to drop to about 51 percent for the 2006 crop.

Americans, both consumers (markets) and politicians are signaling they want to use much more corn for fuel. Market prices of ethanol are currently over \$3 per gallon and thus ethanol producers could pay near \$7.00 a bushel for corn and still have positive returns. Futures prices for ethanol today average \$2.58 for the coming 12 month period, high enough to pay an average of about \$6.00 per bushel. Politically there is support to stimulate the corn for fuel sector even more. Senators Lugar and Harkin have recently introduced legislation to move the renewable fuels standard upward to 10 billion gallons by 2010 and 30 billion gallons by 2020. While corn grain ethanol would be the primary source by 2010, the hope is that cellulose based ethanol would be a large contributor by 2020.

The recent era of low priced feed may well be over for the animal industries, especially for corn prices but many uncertainties remain. Corn for fuel can currently bid much more for corn than the animal industries. However, ethanol prices in the future will depend on overall energy prices, on whether federal and some state incentives continue as well as their level, and on the value of ethanol as an oxygenate. The costs of corn for ethanol plants will likely be higher as well.

The greatest fear for the animals sector is that energy prices remain high in coming years, and then a short corn crop occurs in say 2007 or 2008 which results in the need to drastically ration usage. This is a scenario reminiscent of the 1972 to 1975 export boom period when corn prices moved from around \$1 per bushel to closer to \$3.00. Foreign countries could outbid U.S. animal industries for corn and soybean meal, and reductions in the meat, milk, and egg production resulted. During the 1972, 1973, and 1974 period food inflation led the general inflation rate by an average of 3.5 percentage points. Once animal supplies were reduced by the mid 1970's (except for beef), retail food and farm prices rose sufficiently to stimulate rebuilding animal production into the late 1970's.

The corn surplus will be gone with the 2006 crop as expected total corn use may exceed production by about one billion bushels. Thus, the supply crunch year appears to be the 2007/08 marketing year. Of course a weather related small crop this summer could still bring the supply crunch and much higher corn prices yet this summer.

The warning for the animals sector is to remember that when feed prices move to a new higher level, that likely will mean an initial period of losses, and sometimes severe losses, as herds and flocks are reduced. Then after perhaps one to two years (can vary by species), retail prices and farm prices move higher and positive returns can be generated even with the higher feed prices. The strategic message is that managers in the animal industries need to anticipate such a condition in coming years, and more importantly begin planning how to survive the transition years until product prices can eventually cover the higher feed prices.

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