Corn and the Food-versus-Fuel Debate
Frequently Asked Questions

A recent USDA report indicating a smaller year-end corn surplus, combined with rising corn costs, has intensified the food-versus-fuel debate. Critics of biofuels charge that the increase in ethanol production has driven an increase in food costs. 25x’25 offers the following Frequently Asked Questions to provide the information needed to engage in the discussion.

What does the latest USDA grain report actually say?

The February 2011 USDA World Agriculture Supply and Demand Estimate (WASDE) report shows ending stocks for the U.S. corn marketing year at 675 million bushels, down 70 million bushels from the January estimate and the lowest since 1995. The department says the change comes from slight increases in the estimates of corn for ethanol use and of the use of corn in sweeteners and starches. Globally, USDA is estimating a grain supply (wheat, rice, corn, etc.) less than 1 percent smaller than last year’s record amount of more than 2.7 billion metric tons.

Meanwhile, corn prices have risen from $3.50 per bushel in July 2010 to $6.10 in January 2011. While the use of corn for ethanol has increased over the past year and is expected to take 39 percent of this year's field corn crop, USDA says there are number of factors causing the decline in surplus corn stocks, including a drop in the corn harvest from 13.1 billion bushels in 2009 to 12.4 billion bushels last season.

The department also says that corn used for seed and food has risen from 5.9 billion bushels in May 2010 to a projected 6.2 billion bushels this month, with the amount of corn used for feed increasing by 60 million bushels, despite a reduction in U.S. livestock herds. U.S. corn exports have also grown by nearly 434 million bushels as extreme weather events, such as drought in Russia and Ukraine, and flooding in Australia, have converged with times of rising demand in developing countries like India and China.

What do the experts say about the impact of ethanol on food prices?

Recent history has shown biofuel production is not a significant driver of rising food prices. A 2009 Congressional Budget Office report said that ethanol production contributed a minuscule amount to the significant 5.1-percent increase in food prices over the year that ended in April, 2008, noting that higher energy costs, including oil, had at least twice the impact on the cost of food. A World Bank report released in August 2010 concluded energy costs and some commodity market speculation, and not biofuel production, were principle instigators of the spike in food prices in 2008. Furthermore, another study shows the use of agricultural products for energy has no more than a minor impact on retail food prices because less than 5 percent of the cost of corn flakes or corn syrup, for example, stems from the
price of corn. Energy costs associated with packaging, advertising and transportation represent a larger share of costs.

**Does using corn for ethanol take away from the global food supply?**

No. U.S. ethanol production utilizes just 3 percent of the world’s grain supply on a net basis. More importantly, the ethanol industry uses strictly coarse grains, not food grains like rice, wheat and sweet corn. A study by researchers with the Development Prospects Group at the World Bank confirms that on a global scale, biofuels do not represent a large percentage of worldwide grain and oilseed use. While rising food costs have been cited as a factor in the recent political unrest in the Middle East, history has shown that weather shocks, higher energy costs and increasing demand in developing countries have contributed far more to the surge in food prices than biofuel production.

**How does using corn for ethanol affect feed for the livestock industry?**

The production of ethanol yields a by-product called dried distillers grains (DDG) that is a high-protein cattle feed and can replace corn for half of the animal’s diet. (Advancing technology is expected to make distillers grains more useful substitute for pork and poultry.) So, total corn demand for ethanol must be viewed in net terms, as one-third of every bushel of corn used to make ethanol is returned to the feed market as DDG. As a result, of the 39 percent of the 2010/11 marketing year corn crop used for ethanol, 15 percent of that crop is being returned to feed for livestock.

**What are the benefits of using corn-based ethanol?**

Corn-based ethanol is a means of significantly reducing our dependence on foreign oil. Ethanol is blended in 90 percent of America's gasoline supply. The National Corn Growers Association says as much as 15 to 20 billion gallons of ethanol can come from corn without disrupting other markets. Also, corn-based ethanol is developed from a technology that can bridge the nation to newer generations of biofuels that will use non-food and waste material feedstocks. A study by the Department of Energy’s National Oak Ridge Laboratory found that the United States could displace more than one-third of its current oil consumption with biofuels while continuing to meet demands for food, feed, and export. Evidence also suggests that new demand for biofuels can ease world hunger by attracting investment that supports agricultural improvements, which will benefit food production.

**What are the candidates for future biofuel feedstocks?**

The federal government says ongoing and growing research will optimize cellulosic feedstocks and make them primary feedstocks for biofuel production. These include energy crops such as switchgrass, hybrid poplars and other prairie grasses, and residues such as corn stalks, wheat straw, forest trimmings, sawdust, wood chips, yard waste, municipal solid waste and even animal wastes. The United States could produce 40 billion gallons of ethanol a year – equivalent to 20 percent of current gasoline demand – from agricultural residues alone. And crops such as switchgrass can be planted on marginal land, reducing the need to use productive cropland or forests for energy crop production.

**What are the short-term prospects for corn production?**

U.S. farmers have historically responded to market signals and produced more corn when needed, usually on the same amount of acreage, and are expected to do so again this planting and growing season.