

BIOFUEL IMPACTS ON MIDWESTERN AGRICULTURE

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Abstract

Ethanol production from corn doubled from 2001 to 2005 and will likely double again before the end of 2008. Biodiesel production tripled from 2004 to 2005 with continued growth expected in 2007. Biofuels have become the driving force in the U.S. crops sector. But in this race between biofuels, ethanol has emerged as the main biofuel impacting U.S. agriculture today. The growth in the biofuels industry has created a strong demand pull, especially for corn. Over the past 5 months, we have seen corn prices increase dramatically. In mid-September 2006, the December 2007 corn futures contract was priced at \$2.50/bushel. On December 19, 2006, that contract stood at \$3.73/bushel. Prices rose throughout the harvest period despite the third largest corn crop on record coming in 2006. This strength in corn prices has been accompanied by increases in soybean and wheat prices. And this strength is not limited to next year as futures prices and industry forecasts project corn prices above \$3.00/bushel, soybean prices above \$6.00/bushel, and wheat prices above \$4.00/bushel for the next several years.

Thus, the price signals to Midwestern crop producers are strongly indicating a need for more crop acreage in the coming years, especially for corn. Preliminary estimates from the Food and Agricultural Policy Research Institute show U.S. corn acreage increasing to nearly 86 million acres in 2007 with continuing increases beyond that. By 2014, corn acreage is projected to reach 91.5 million acres. Over half of the increase in corn acreage comes from the Corn Belt and Great Lake states. Wheat acreage is projected to rise by 2 million acres in 2007. The increases in corn and wheat acreage are mainly at the expense of soybean acres, as soybean acreage is projected to decline by 4.5 million acres in 2007. Also, over the next 2 years, an additional 5.5 million acres are expected to enter row-crop production.

Ethanol will become the second largest demand for corn, trailing only livestock feeding and overtaking exports in 2007. Corn usage for livestock feeding and exports are projected to decline slightly in 2007, given the higher corn prices. The long-term impacts on the livestock industry depend on several factors, including the relative strength of livestock prices, the ability of U.S. livestock to utilize the co-products from ethanol production, and the ability of U.S. crop producers to match their production growth with the demand growth we are currently seeing.

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