

the demand for corn for these plants will be the equivalent of 81 percent of Indiana's 2006 corn production. Even if only a fraction of these plants are built, this new usage for corn will dramatically alter Indiana's agriculture (see **Figure 1**).

Biodiesel produced from soybean oil is not developing as quickly as ethanol. The largest facility will be a new soybean crushing facility being built at Claypool in Kosciusko County by Louis Dreyfus, Inc. That plant will process 50 million bushels of soybeans per year, equivalent to 17 percent of Indiana's 2006 soybean production.

Why has interest in biofuels approached "gold rush" status in the last year? With crude oil prices above \$50 a barrel, biofuels, and ethanol in particular, have become extremely profitable. As recently as 2004, crude oil was well below \$40 a barrel, a point where biofuels are not profitable. In 2006, with crude oil in the \$60 to \$70 a barrel range, the outlook for the ethanol market is rosy. However, profitability in the ethanol market is vulnerable to the price of crude oil.

Farm Income and Farmland Values

How will the development of ethanol and biodiesel plants in Indiana affect farm incomes and farmland values? The answer for farm incomes depends on the enterprise, with grain operations benefiting from the biofuels boom and livestock operations who must buy grain to feed their animals struggling. To highlight this point, between October

12, 2006 (when World Agricultural Supply and Demand Estimates were released), and November 3, 2006, the December 2006 corn futures price had increased about 67 cents from \$2.77 to \$3.44 because U.S. corn production was revised downward. This large increase in the price of corn will

translate into an additional \$112 per acre of income for the projected 2006 state average corn yield of 167 bushels per acre. However, Dr. Chris Hurt estimates that the typical Indiana hog

operation will not be profitable if the price of corn (the primary cost for hog operations) is above \$3.50. For Indiana hog producers, this 67 cent increase in the price of corn means that the profitability in their operations is quickly disappearing.

Farmland value depends on many factors, including long-term interest rates, government price support payments, real estate taxes, and most importantly, on the returns to crop production. Looking to 2007, the biofuels boom can be expected to increase the value of farmland with its large impact on the returns to crop production. Given the current price levels for corn and soybeans, prices are well above the level where government price support payments would be triggered, reducing the influence of government programs. Long-term interest rates can be expected to increase, which would put downward pressure on land prices, but this increase is happening slowly. Overall, the biofuels boom will increase the value of Indiana farmland for 2007 and beyond. ■

For more information about Indiana farmland values, see the Purdue Land Value Survey at: www.agecon.purdue.edu/extension/pubs/paer/2006/august/paer0806.pdf

More information about the Indiana agricultural outlook can be found at: www.agecon.purdue.edu/extension/pubs/paer/2006/october/paer1006.pdf

Indiana

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With the end of 2006 in sight, the year is shaping up to be one of even tamer growth than we predicted a year ago. As shown in **Figure 1**, Indiana's total nonfarm payroll employment in 2006 has continued its relatively steady climb that began in July 2003. As of September 2006, nonfarm payrolls accounted for 2,980,200 Indiana jobs. This level is barely 1 percent below the state's all-time employment peak reached in May 2000, and it's almost 100,000 jobs higher than the post-recession low of three years ago.

Employment

Employment growth began the year at a fairly slow pace of about 20,000 new jobs annually compared to a year earlier. Then the pace picked up to a year-over-year rate of about 25,000 to 30,000 new jobs during the summer, but it slowed substantially in September. This continues a trend of decelerating job growth over the past two years, but at least we're still adding jobs in most months.

Indiana's modest job growth has been shared across most industries. The sectors with the largest contributions to new jobs over the past twelve months have been education and health services (averaging 6,742 new jobs year-over-year); leisure and hospitality (4,718 jobs); trade, transportation, and utilities (3,742 jobs); professional and business services (3,017 jobs); and construction (2,917 jobs).

The traditional bastion of the Hoosier economy, manufacturing, averaged an annual growth rate of only 383 jobs over the past twelve months, and overall factory employment has not budged much for the past two years. Even with this slow growth, however, Indiana is