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CAN THE U.S. PLANT MORE CORN, MORE SOYBEANS, AND MORE WHEAT?

U.S. crop producers made dramatic shifts in acreage in 2007. The shifts were motivated by rising corn-based ethanol production and high corn prices, rising wheat prices, and a surplus of soybeans.

The acreage shift was led by a 17 million acre increase in feed grains, including 15.3 million more acres of corn. Winter wheat acreage increased by about 3.1 million and harvested acreage of hay was up by nearly one million acres. These increases were accommodated by an 11.9 million acre decline in soybean plantings, 1.3 million fewer acres of spring wheat, 4.4 million fewer acres of cotton, and about 900,000 fewer acres devoted to other oilseeds; edible beans, peas, and lentils; and sugar beets. In addition to the acreage shifts, total planted acreage (harvested acreage of oats and hay) increased by four million acres. The large increase in total acreage likely includes some pasture acreage converted to row crops and perhaps an increase in re-planted acreage stemming from the spring freeze that damaged the winter wheat crop.

Prices of corn, soybeans, and wheat remain at very high levels. World and U.S. inventories of wheat and soybeans are expected to decline sharply during the current marketing year. Demand for these crops remains very strong and South America made an insufficient soybean acreage response to high prices. While world wheat acreage has (or will) likely increase substantially in 2007 and 2008, the recovery in production is being threatened by weather problems in the U.S., Argentina, India, and Pakistan. Stocks of U.S. corn are expected to increase modestly this year, but stocks in Europe and China are expected to decline sharply. These developments all point to the need for more acreage and production of corn, soybeans, and wheat in the U.S. in 2008.

The USDA projects the consumption of U.S. corn during the current marketing year at 12.69 billion bushels. Use during the 2008-09 marketing year will likely increase if supplies are adequate. Domestic feed use of corn might decline modestly as the production of distillers grains increases. U.S. corn exports are expected to remain strong as Chinese exports continue to decline. Some recovery in world wheat production, however, might result in some softness in demand for U.S. corn. The major uncertainty centers around how rapidly corn based ethanol production will expand next year. Continued high crude oil prices, a recovery in ethanol prices, additional legislative mandates for biofuels, and ongoing construction of new plants suggest a significant increase in corn used for ethanol.

There may be a market for about 13.6 billion bushels of U.S. corn during the 2008-09 marketing year. With stocks at the end of the current year at 1.8 billion bushels, the 2008 crop may have to be near 13.1 billion bushels to meet market requirements. A trend yield of 151 bushels would suggest that harvested acreage needs to be near 86.7 million acres in 2008, 600,000 more than harvested in 2007.

The USDA projects consumption of U.S. soybeans during the current marketing year at 2.988 billion bushels. Year ending stocks are projected at only 185 million bushels, providing no surplus for consumption during the 2008-09 marketing year. With a large soybean crop in South America in 2008 and 2009, exports of U.S. soybeans might decline from the 995 million bushels projected for this year. Even so, consumption of U.S. soybeans in 2008-09 could be near 2.9 billion bushels. With an average yield of 42.5 bushels, harvested acreage in 2008 would need to reach 68.2 million to produce a crop of 2.9 billion bushels. That is 5.4 million acres more than harvested this year.

The USDA projects consumption of U.S. wheat during the current marketing year at 2.333 billion bushels. Year ending stocks are projected at only 280 million bushels, providing little surplus for consumption next year. Use during the 2008 -09 marketing year might decline if world wheat production rebounds and U.S. exports decline from the 1.175 billion bushels projected for this year. Still, a U.S. crop of about 2.2 billion bushels may be needed in 2008. With an average yield of 42 bushels, a crop of that size would require harvested acreage of about 52.4 million, 1.4 million more than harvested this year.

Early projections for 2008 suggest that U.S. harvested acreage of corn, soybeans, and wheat all need to be larger than in 2007, by a total of about 7.4 million acres. With rising prices of other commodities and limited amounts of uncultivated acreage available, it is difficult to see how such an increase can occur. The crop markets have an interesting challenge ahead. With an increase in winter wheat acreage likely already in place, prices of corn and soybeans in particular may have to remain high relative to alternative crops in order to ensure sufficient acreage in 2008. In addition, average yields will have to remain high to generate sufficient production.

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This is the last issue for 2007. The next issue will be on January 7, 2008.