With 2007 corn acreage 2.4 million above intentions reported in March and crop conditions in mid-July near normal, it appears that the 2007 crop will be large enough to meet growing demand at “reasonable” prices for the year ahead. Because demand (primarily from ethanol production) is expected to continue to grow, the market is already thinking about the size of the 2008 crop. With corn consumption likely to grow by a billion bushels in 2008-09 it will be necessary to maintain, or more likely, increase corn acres in 2008. With higher prices of other crops, motivating an increase in corn acreage in 2008 may be more difficult than in 2007. The market recognizes the issue, with December 2008 futures trading about $.50 higher than December 2007 futures. The extent to which South America increases soybean acreage will have a large influence on the competition for land in the US in 2008.

Beyond the acreage question, yield risk will become an issue again as the 2008 growing season begins. Of concern is the impact that a substantial shortfall in yield might have on the availability and price of corn and the policy response to such a scenario. We examined corn production history from 1970 through 2006. For each year, an expected level of corn production was calculated based on planting intentions, the relationship between planted acreage and acreage harvested for grain, and trend yield. That expectation was compared to the final size of the crop as reported by USDA in January after harvest. Actual production was larger than expected production in 22 years and smaller in 15 years. On average, the crop was more than 10 percent larger than expected 1 in 7 years, but more than 10 percent less than expected 1 in 5 years. The crop was more than 20 percent less than expected four times, or an average of about 1 in 9 years. Most of the historical difference between actual and expected production was due to the difference between actual and expected yield.

A 10 percent or smaller shortfall in production would likely be managed by price signals, requiring no policy intervention. Market participants would have to manage higher corn prices. Larger shortfalls in production, however, might be more problematic. Shortfalls exceeding 20 percent of expected production would require significant rationing and very high prices, with potentially very negative implications for some users of corn. An important public policy question is, would the market be allowed to allocate the crop among users or would such a shortfall in corn production induce government intervention? The financial implications of high corn prices for livestock producers might evoke intervention in the allocation of supplies between domestic livestock producers and processors of corn. Pressure for limitations on exports might also emerge.

Discussion of market and policy implications of a shortfall in corn production may appear to be unrealistic, or at least premature. However, market participants and
policy makers should be aware of the consequences of a large shortfall in corn production. Market participants can develop plans to manage a shortfall in production and policy makers can consider appropriate responses to a significant shortfall.