

## AUGUST 17, 2009

## WILL CORN AND SOYBEAN PRODUCTION FORECASTS GET BIGGER?

The USDA's first forecasts of the season show potential for a 2009 U.S. average corn yield of 159.5 bushels and a crop of 12.761 billion bushels. For soybeans, the U.S. average yield forecast came in at 41.7 bushels, resulting in a production forecast of 3.199 billion bushels.

The USDA's corn yield forecast, based on a combination of producer surveys and objective yield data collected in 10 states, is 4.6 bushels above the trend yield for 2009 and only 0.4 bushels below the record yield of 2004. Based on the adage that large crops tend to get larger, there is some expectation that the yield forecast will increase in subsequent *Crop Production* reports. There is, in fact, evidence that large yield forecasts in August tend to be followed by larger forecasts in subsequent reports. The most comprehensive analysis of that pattern is provided by a study by Isengildina, Irwin, and Good published in 2006.

(http://www3.interscience.wiley.com/cgi-bin/fulltext/118558686/PDFSTART)

For the current year, there is mixed evidence of corn yield potential. Some severe hail damage in key lowa growing areas and some very dry weather in other corn growing areas during the first half of August may have reduced yield potential. In addition, the USDA's weekly report of crop conditions in the 18 largest corn growing states have shown some modest deterioration in overall crop condition ratings. The percentage of the crop rated good or excellent peaked at 72 percent for the week ended June 28. For the week ended August 9, 68 percent of the crop was rated in either good or excellent condition, only one percentage point higher than the rating of the 2008 crop a year ago,.

We have estimated a model that explains U.S. average yield based on trend (time), percent of the crop planted after May 20, and percent of the crop rated good or excellent at the end of the season. That model explains 97 percent of the variation in annual yield from 1986 through 2008. Based on August 9 crop condition ratings, that model projects a 2009 U.S. average yield of 158.2 bushels. That projection should be used with caution because crop condition ratings will likely change and because there is some forecast error associated with the model.

We have also developed a crop weather model to explain and forecast state average corn yields in Illinois, Indiana, and Iowa. Average yield forecasts in those three states are used to forecast the U.S. average yield. Based on trend yield, planting progress of the 2009 crop, preliminary weather data through July 2009 and the assumption of average August weather, that process results in a 2009 yield forecast of 165.3 bushels. Again, these results should be used with caution because of unknown weather for the rest of the year and because of the relatively large standard error of the model estimates. For a more complete explanation, see the recent report by Irwin, Good and Tannura. (http://www.farmdoc.uiuc.edu/marketing/mobr/mobr\_09-04/mobr\_09-04.pdf)

At this juncture, slightly higher yield and production forecasts in September and/or October would not be a surprise. Larger crop forecasts would likely keep some pressure on corn prices into the harvest period. In addition, the USDA forecasts of 2009-10 marketing year consumption of U.S. corn appear generous. Beyond harvest, corn prices will be influenced by the revealed rate of consumption and the extent of U.S. and world economic recovery.

For soybeans, the USDA's yield forecast is tied with the 2007 yield as the fourth largest. The forecast is 1.4 bushels below the record yield of 2005 and 0.5 bushels below trend value for 2009. The forecast should not be considered a large forecast. While early August weather has not been perfect, both the crop condition ratings of August 9 and our crop weather model assuming average August weather point to a higher average yield in 2009. Those models point to yield of 44.1 and 43.6 bushels, respectively. Those forecasts should be used with caution for the same reasons as identified for corn. For more details of these forecasts, see the recent report by Irwin, Good and Tannura. (http://www.farmdoc.uiuc.edu/marketing/mobr/mobr\_09-05/mobr\_09-05.pdf) In addition, the late maturing crop may be at more risk to late season weather events.

The USDA reported only 55 percent of the crop setting pods as of August 9. That compares to the previous 5 year average for that date of 72 percent, which includes the relatively small 57 percent of a year ago.

Absent, an early end of the 2009 growing season, larger soybean yield and production forecasts in subsequent reports would not be a surprise. Additional price weakness into harvest would be expected under such a scenario.

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