USDA Corn and Soybean Acreage Estimates and Yield Forecasts: Dispelling Myths and Misunderstandings

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The U.S. is the world’s largest producer and exporter of corn and soybeans. As a result, the size of the crops in the U.S. has a substantial impact on the price of corn and soybeans. During the planting and growing season, market participants form expectations about the potential size of these crops from a variety of private and public sources of information. The National Agricultural Statistics Service (NASS) of the U.S. Department of Agriculture (USDA) is the primary provider of public information relative to potential crop size. These reports are among the biggest market movers year-in and year-out.

NASS has provided detailed descriptions of their crop estimating and forecasting procedures. Still, market participants continue to demonstrate a lack of understanding of NASS methodology for making acreage, yield, and production forecasts and/or a lack of trust in the objectives of the forecasts. Some market participants are not fully aware of the sampling methodology employed in gathering acreage and yield data. Specifically, there does not appear to be widespread understanding that a combination of producer surveys and field observations are used to gather data for making planted acreage estimates and yield forecasts. In addition, the estimation process based on this data is often not clearly understood.

Beyond misunderstanding, some market participants continue to express the belief that the USDA has a hidden agenda associated with producing the estimates and forecasts. This “agenda” centers on price manipulation for a variety of purposes, including such things as managing farm program costs and influencing food prices.

Lack of understanding of NASS methodology and/or the belief in a hidden agenda can prevent market participants from correctly interpreting and utilizing the acreage and yield forecasts. The purpose of the brief summarized here is to provide a condensed version of extensive NASS descriptions of acreage estimation and yield forecasting procedures for corn and soybeans. We have attempted to capture the essence of NASS methodology without all of the underlying details. We believe users can more fully benefit from these estimates and forecasts by understanding the strengths and limitations of the methodology. Our focus is on acreage and yield because these estimates and forecasts are widely followed and highly anticipated by market participants and can have substantial influence on the price of corn and soybeans. Specifically we describe the methodology for the estimate of planting intentions.
released in early spring, the estimate of actual plantings and planting intentions in June, the forecasts of yield released each month from August through November, and the estimate of actual yield released in January following harvest.

The full Marketing and Outlook Brief is available at:

http://farmdoc.illinois.edu/marketing/mobr/mobr_11-02/mobr_11-02.html