

May 4, 2009

Addendum to “Review of Methodology for Determining Expected Market Price of Grain Sorghum in the Federal Crop Insurance Program”

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On April 3, 2009, the report “Review of Methodology for Determining Expected Market Price of Grain Sorghum in the Federal Crop Insurance Program” was submitted to the Risk Management Agency (RMA) in response to Section 12009 of the Food, Conservation, and Energy Act of 2008. The law required that the Federal Crop Insurance Corporation “contract individually with 5 expert reviewers...to develop and recommend a methodology for determining an expected market price for sorghum for both the production and revenue-based plans of insurance to more accurately reflect the actual price at harvest.”

The report recommends that RMA consider the following points in establishing its procedures for determining an expected market price for sorghum:

- Production plans of insurance are intended to only cover crop production loss, not price declines. Use of price projections for the coming crop year, based on the market outlook prior to planting, is appropriate for grain sorghum, as it is for other field crops in the insurance program.
- As described by the USDA’s World Agricultural Outlook Board at <http://www.usda.gov/oce/commodity/wasde/prepared.htm>, the World Agricultural Supply and Demand Estimates (WASDE), which include price projections, are prepared by an inter-agency process. Economic Research Service (ERS) contributes season-average price projections. These projections are part of the WASDE discussion and are combined with assessments from other USDA agencies about expected supply and demand conditions for grain sorghum, corn and other crops.
- The models developed and used by ERS are described briefly and referenced in the report submitted to RMA. As noted on page five, the ERS publication “Forecasting Feed Grains in a Changing Environment” explains the methodology and data used to forecast season-average prices and gauge the consistency of supply, demand, and price forecasts. See <http://www.ers.usda.gov/Publications/FDS/Jul04/FDS04F01/>. The sorghum price model is presented on page 12. The data used in the model are publicly available in the ERS Feed Grains Database. See <http://www.ers.usda.gov/Data/Feedgrains/>.

- Revenue insurance plans cover revenue changes over the insurance period. For most field crops revenue changes under insurance contracts are measured from changes in futures contract prices, which are market-based and readily observable by insured producers and insurance providers. Because there are no futures contracts for grain sorghum, corn futures, with an adjustment based on the prices of grain sorghum and corn can be used because the relationship between the prices is typically very strong.
- Although the prices of grain sorghum to relative corn vary from year to year, the average price ratio (grain sorghum divided by corn) over marketing years 1998 - 2007, was 0.956, which, not surprisingly, is close to proportion of feed grain nutrients supplied by grain sorghum relative to corn.
- Prices of grain sorghum and corn, which are determined from supply and demand conditions for each crop, vary within years. Historical relationships between monthly prices received by farmers for grain sorghum and corn could be applied to corn futures prices to derive harvest-time prices for grain sorghum. However, the variability of these monthly price ratios from year to year and across States suggests that they would not provide a consistent and easily understood method of estimating harvest-time prices for grain sorghum.