RFA RENEWABLE FUELS ASSOCIATION

December 18, 2009

Nick Pallotta
Agricultural Statistician; LRP Committee Member
USDA National Agriculture Statistics Service
Census and Survey Division
1400 Independence Ave. SW
Washington, D.C. 20250
Submitted electronically

Mr. Pallotta,

Thank you for the invitation to provide input into the National Agricultural Statistics Service's (NASS) Long Range Planning initiative. As a major user of grain and producer of animal feed, the U.S. ethanol industry has a strong interest in timely and accurate information regarding agricultural markets.

In general, our staff and member companies have found NASS information and data products to be of high quality, wide breadth and great utility. NASS reports focused on crop production, crop progress/condition, agricultural prices, grain stocks, and other aspects of the grain markets help our members make more informed business decisions every day. Further, NASS information enhances our staff's understanding of agricultural market conditions, assists us in providing thoughtful analysis to industry stakeholders, and supports our efforts to plan for the future.

However, as federal and state biofuels regulations become more data-driven and data-reliant in nature, we see several existing data and information gaps and a number of emerging needs that would be well-suited to NASS' capabilities and mission. In the context of biofuel regulations, NASS reports and raw data are now taking on unprecedented importance. As a result of new regulations, the biofuels industry is actually being regulated based on its environmental performance, which is estimated in part using agricultural data from NASS.

Specifically, new federal regulations require that biofuels reduce greenhouse gas (GHG) emissions relative to petroleum. Also, emerging state regulations—such as California's Low Carbon Fuels Standard—favor fuels that have the greatest ability to reduce GHGs relative to gasoline and diesel fuel. The only way to gauge the extent to which biofuels reduce GHGs is to examine the emissions associated with each stage of the fuel's production. Total emissions from the biofuel's "lifecycle" can then be compared to "lifecycle" gasoline or diesel fuel emissions. For grain-based ethanol, analyses of lifecycle emissions typically include the GHGs associated with the energy used for the agricultural activities shown in Table 1.

TABLE 1. Agriculture-Related Energy Use Included in Most Lifecycle GHG Analysis of Grain Ethanol
1. Fuel use for farm machinery (tillage, planting, fertilization and harvest)
2. Energy use for fertilizer production
3. Fertilizer application
4. Chemical (pesticide and herbicide) usage
5. Energy use for irrigation
6. Energy use for on-farm grain drying
7. Fuel use for grain transportation to processor/elevator

When summed, the emissions from these agricultural activities generally constitute 50-60% of the total lifecycle GHG emissions associated with the production and use of grain ethanol (the other 40-50% of emissions come from conversion of the grain to ethanol, drying of co-products, and transportation of ethanol and co-products to end users). Thus, the "agricultural phase" of grain ethanol production is a major contributor to the fuel's overall carbon footprint.

While NASS has intermittently collected data on the various crop production stages listed in Table 1 above, the regulatory implications of this information are such that new data are needed *each year* to accurately reflect current practices (and to demonstrate increasing efficiencies). Lifecycle analysis tools, such as the Department of Energy's GREET model and Texas A&M's FASOM model, are being used by regulatory agencies to compute total biofuels lifecycle energy use and emissions. Unfortunately, these models are populated with outdated assumptions regarding the energy used in grain production. This is due, in part, to the fact that more current NASS data is not available. As an example, the most recent NASS data available on fertilizer use, chemical use, seeding rates, and many other important corn production factors is from 2005.

As lifecycle energy and GHG estimates serve as the basis of regulations that have real implications for our industry, data that has significant bearing on lifecycle analysis results should be collected annually. Corn was included annually in the NASS-administered Agricultural Resource Management Survey (ARMS) from 1996 to 2001, but has only been included once (2005) in subsequent years. The ARMS incorporates information that is critically important to conducting lifecycle energy and GHG analysis for grain-based ethanol, including data related to irrigation technology and water use, nutrient use and management, crop residue management, pest management, pesticide use, seed use, tillage systems, and manure management. All of these factors are important in analyzing the energy use and related GHG emissions associated with crop production.

When this data is collected only once every five years, its usefulness and reliability as an accurate reflection of current practices is diminished. For instance, if the data is collected in a year in which crop production conditions deviated significantly from recent trends, a skewed and misrepresentative view of the industry's efficiency may result. Unfortunately, that view will persist for the next five years until the industry is surveyed again.

Further, significant lag time exists between collection and reporting of some data, which effectively renders the data obsolete by the time of publication. One example of this is the "Characteristics and Production Costs of U.S. Corn Farms, 2001" report, which was released in February 2006—five years after the data was collected. While we understand data collection and analysis takes time and some amount of lag time is unavoidable, there is an urgent need for data that is more timely and regular.

We also encourage NASS to increase its focus on providing regular data on the production and use of ethanol feed co-products. Production of feed co-products, such as distillers dried grains with solubles (DDGS), has grown from less than 5 million metric tons in 1999/2000 to more than 30 million metric tons in 2009/2010. Unfortunately, there is virtually no USDA data available on the production, use, and market dynamics of these co-products. In particular, data is needed on real world use (inclusion rates, type and amount of feed displaced, etc.) of ethanol feed co-products in the livestock and poultry industries. Using outside funding (from the Federal, State Marketing Improvement Program and the Nebraska Corn Development, Utilization & Marketing Board), NASS produced a report in 2007 based on a survey conducted in 2006. The report was useful, but offered only a "snapshot in time" regarding co-product use. We encourage NASS to consider the initiation of a regularly scheduled survey of livestock and poultry producers to collect information on their use of ethanol feed co-products. Further, a regular survey of ethanol producers to determine the types and quantities of feed co-products would be very beneficial to the livestock and ethanol industries.

Again, thank you for the opportunity to provide comment on NASS data and our industry's future informational needs. Owing to the central role of lifecycle analysis in new and emerging biofuels regulations, the future viability and livelihood of individual ethanol producers may very well depend on the quality and currency of available agricultural data. In that regard, we believe NASS has an important role to play in ensuring pertinent data affecting the grain ethanol lifecycle is collected and reported annually.

We would welcome the opportunity to meet with appropriate NASS staff to discuss the contents of this letter in more detail, including our view of specific data and information gaps important to our industry. Please contact at us at your convenience if you see value in such a meeting.

Sincerely,

Geoff Cooper
Vice President, Research & Analysis
Renewable Fuels Association