

Peer Review Plan

Preliminary Title: Are Farmers Improving Fertilizer Nutrient-Use Efficiency in Corn, Cotton, Winter Wheat and Soybean Plantings?

Type of Report (ERR, EIB, EB) EIB

Agency: Economic Research Service [X] Influential Scientific Information
USDA [] Highly Influential Scientific Assessment

Agency Contact: Daniel Pick, dpick@ers.usda.gov

Subject of Review: U.S. farmers applied more than 21 million tons of fertilizer nutrients (nitrogen, phosphate, and potash) to their fields in 2010. Excess nutrients (not absorbed by the crop) can be lost to the environment through volatilization into the air, leaching into ground water, emission from soil to air, or runoff into surface water and harm the environment. If applied in amounts that are less than a crop's need, nutrients will be mined from the soil and over time can change the soil's chemical, physical, and biological properties and reduce its productivity. Efficient use of fertilizer nutrients can alleviate both environmental pollution and soil degradation. Using Agricultural Resource Management Survey (ARMS) data collected from 1996-2010, this study examines national trends and geographic diversity in fertilizer nutrient use efficiency, and identifies likely best nutrient practices that improved nitrogen-use efficiency.

Purpose of Review: The purpose of the review is to ensure the high-quality of the economic analysis, transparent explanation of methods, objective interpretation of results, and effective communication to the intended audience.

Type of Review: [] Panel Review [X] Individual Reviewers
[] Alternative Process (Briefly Explain):

Timing of Review (Est.): Start: 08/21/12 End: 06/28/13 Completed: 06/28/13

Number of Reviewers: [] 3 or fewer [X] 4 to 10 [] More than 10

Primary Disciplines/Types of Expertise Needed for Review: Economists

Reviewers selected by: [X] Agency [] Designated Outside Organization
Organization's Name:

Opportunities for Public Comment? [] Yes [X] No

If yes, briefly state how and when these opportunities will be provided:

How:

When:

Peer Reviewers Provided with Public Comments? [] Yes [X] No

Public Nominations Requested for Review Panel? [] Yes [X] No



