

Peer Review Plan

Preliminary Title: Using Genetic Resources to Help Agriculture Adapt to Climate Change

Type of Report
(ERR, EIB, EB,
SOR,)

EB

Influential Scientific Information

Agency: Economic Research Service Highly Influential Scientific Assessment
USDA

Agency Contact: Ephraim Leibtag, eleibtag@ers.usda.gov

Subject of Review: Genetic improvement has contributed markedly to sustaining rapid growth in crop yields since the mid-20th Century. However, climate change poses a significant risk to future crop productivity. Crop varieties that are optimal for current growing environments are unlikely to be the best varieties as temperatures rise, rainfall patterns shift, and pest and disease pressures increase in the future. While existing crop varieties can sometimes be used in new locations as conditions change, improved new crop varieties, with attributes such as better tolerance to heat, drought, and pests and diseases, have been proposed as one strategy to help agricultural producers adapt to climate change. This report suggests that greater use of genetic resources in crops may be a relatively high-return, low-cost way of helping farmers adapt to climate change, but technical and institutional constraints may stand in the way of fully exploiting this option.

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 Individual Reviewers

Alternative Process (Briefly Explain):

Timing of Review (Est.): Start: 04/18/14 End: 06/30/14X Completed: 10/14/14

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

Primary Disciplines/Types of Expertise Needed for Review: Economists

Reviewers selected by: Agency Designated Outside Organization

Organization's Name:

Opportunities for Public Comment? Yes No

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

How:

When:

Peer Reviewers Provided with Public Comments? Yes No

Public Nominations Requested for Review Panel? Yes No



