

Cultivating Our Competitive Edge:

FUNDING TRENDS FOR RESEARCH AND EXTENSION AND THE FUTURE OF U.S. AGRICULTURE

The competitiveness of U.S. agriculture depends on public investments in agricultural research and development (R&D). Over the course of the 20th century, the steady ramping up of R&D spending led to remarkable improvements in U.S. agricultural productivity that enhanced the international competitiveness of the U.S. food and fiber sectors and spurred rapid growth in U.S. farm product exports during the post World War II period. We have begun to see early indications that this era of sustained improvements in U.S. agricultural productivity is over. The rate of U.S. agricultural productivity growth has fallen sharply and across the board relative to the sustained rate of the second half of the 20th century, and this slowdown has contributed to the worsening U.S. agricultural trade balance.

Why has productivity growth slowed down?

Over the past several decades, slowing rates of growth in U.S. public-sector spending on agricultural R&D, combined with a progressive redirection of agricultural research funds away from improving farm productivity to addressing a host of other concerns (such as the environmental, human health and safety, and energy implications of agriculture), have meant a significant reduction in the rate of public investment in agricultural productivity enhancement. The social payoffs from investments in agricultural R&D geared to improving the productivity of the U.S. farm sector have been large. However, the lags from investing in R&D to reaping the returns from these investments are long, typically decades. Consequently it takes time for the effects of past funding decisions to become apparent, but those effects can be expected to last for a long time.



Important shifts in the global structure of R&D spending began taking shape in the latter part of the 20th century. Research funding in many other developed countries has been following patterns like those in the United States, but in some of the larger less-developed countries support for agricultural R&D has been growing and their productivity growth has been dramatic. These shifting global patterns of support for research are likely to have initially subtle but ultimately profound long-term consequences for the global pattern of competitiveness, production, and trade in food and fiber products over the decades to come.

Understanding the scope and nature of the recent productivity slowdown and associated changes in the amounts and orientation of U.S. agricultural R&D spending is a crucial first step in designing policies to revitalize U.S. farm productivity growth and ensure the continuing international competitiveness of U.S. agriculture.

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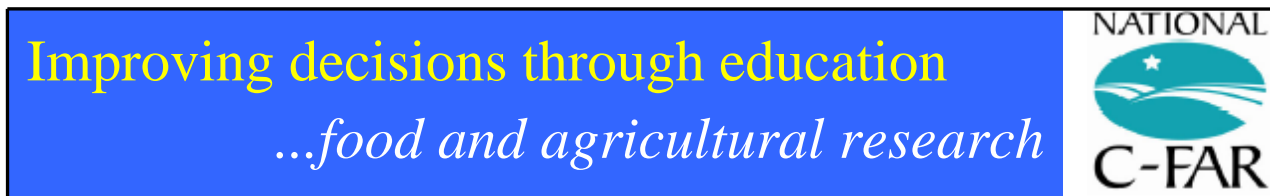
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