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Moribund Funding in Agricultural Research

The double-digit increases in federal funding for basic research at the National Science Foundation (NSF) and the National Institutes of Health (NIH) for fiscal year 2001 are a welcome development (1), but does recognition of basic research as the engine that drives technology and economic growth not apply to agriculture?

The standard competitive grants program for basic research at the U.S. Department of Agriculture (USDA) began as the National Research Initiative 10 years ago after National Research Council (NRC) reports decried the lack of support for competitive research in the agricultural sciences. The program has outgrown its initiative status, yet it has been stalled for 9 years at a funding level that can only be described as moribund. Whereas support for competitive basic research programs at NSF and NIH combined have grown in constant dollars by 60% since 1992 (2), funding for the USDA's competitive grants program has decreased 14% in constant dollars since its 1992 appropriation of \$100 million.

A report from the NRC noted the high quality of National Research Initiative research, its crucial contributions to agricultural productivity and environmental quality, and the more than three dozen studies that have placed the economic rate of return on public investment in food and fiber research at 35 to 60% per year (3). This is a phenomenal rate of return. New markets, new products, and environmental protection require new ideas, new approaches, and levels of research funding commensurate with the importance that society places on a safe, productive, and environmentally benign food and fiber production system.

In 30 years--the approximate time it takes basic research in the public sector to reach marketplace maturity--the world population will have increased by about 3 billion. Will we have funded the basic research necessary to feed and clothe them?

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References and Notes

1. See, for example, D. Malakoff, *Science* **291**, 33 (2001).
2. American Association for the Advancement of Science, Historical data on federal R&D, FY 1976-2001. Available at <http://www.aaas.org/spp/dspp/rd/hist01c.pdf>.

3. National Research Council, *National Research Initiative: A Vital Competitive Grants Program in Food, Fiber, and Natural-Resources Research* (National Academy Press, Washington, DC, 2000).

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Volume 291, Number 5511, Issue of 16 Mar 2001, pp. 2089-2090.

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