



Inadequate Funding Limits Food and Agricultural Research Breakthroughs

Scientists at agricultural colleges and universities across the country are tackling issues critical to the well-being of all Americans: Food Safety and Security. Health and Nutrition. The Environment. In these areas and others, researchers, educators, and extension staff at state universities, land-grant institutions, and in other colleges of agriculture in all 50 states and the territories are making discoveries every day that:

- protect our homeland,
- change the way we live, and
- improve the quality of life for people around the world.

University Research Increases Food Safety and Security

Security threats facing America require new and expanded agricultural research to protect our nation's forests, water supplies, food processing and distribution network, and rural communities.

- Experts in applied research at 30 land-grant universities are working with the Department of Homeland Security to develop national disaster response plans.
- An enzyme from corn has been developed that inactivates chemical warfare nerve agents.

We are doing a lot... but more must be done.



Government-Funded Research Education, and Extension Improve Health and Nutrition

Discoveries by agricultural researchers have reduced health care costs.

- To help combat obesity in America, university researchers found a way to reduce up to fifty percent of the fat in baked goods.
- Scientists developed a coating for eggs that can reduce the over 40,000 reported cases of salmonellosis.
- Agricultural researchers successfully cloned a miniature pig, a scientific achievement that one day may help thousands of Americans waiting for organ transplants.

We are doing a lot... but more must be done.

Agricultural Science Protects the Global Environment

Scientists are discovering new ways to increase food and fiber production without damaging the environment.

- An ozone treatment system discovered at a state university removes contaminants from industrial wastewater.
- Scientists developed new pasture management and irrigation practices that reduce nutrient leaching and soil erosion in watersheds.
- University research produced best management practices drastically reducing livestock and other waste products.

We are doing a lot... but more must be done.

"Terrorists could have a number of biological weapons, and the public health infrastructure is vitally important to defend the safety of our citizens, livestock and food supply."

--- Sen. Chuck Grassley

"The possibility that the next attack is going to be against our food supply is sad reality, but it is a reality, and we have to focus on it."

--- Sen. Dick Durbin

Science will "help us defeat the efforts of terrorists to attack our homeland and disrupt our way of life."

--- The National Strategy for Homeland Security

"USDA's extension program supports Web sites that help parents and teachers talk about terrorism with kids."

--- An Extension Agent in Connecticut



Increased Funding Needed for Agriculture Research, Education, and Extension

USDA has a unique system for supporting agricultural research. By tying university-based research to education and extension programs, the department is able to discover and bring the research directly where it's needed in real time. Farmers, nutritionists, public health officials, educators and students have access to scientific breakthroughs as they happen.

Formula Funds are the Foundation

This system relies on a program of formula funds for which federal support is declining in real terms (figure 1). These funds support an infrastructure that includes a network of extension offices in every corner of the nation, cooperative forestry programs, and support for predominantly Black and Native American colleges. Unfortunately, many of these programs are struggling. At the same time they have been hit by the fiscal crisis in the states, they are seeing their federal support weakening as well. This world class system combining basic research with education and extension programs is at serious risk.

Formula funds for USDA's Cooperative State Research, Education, and Extension Service (CSREES) should be *increased by five percent* over last year's levels. Such a modest increase is necessary just to absorb increased costs, such as lab security; sustain the existing infrastructure; and maintain a constant level of effort in this very critical area.

Competitive Grants Drive Breakthroughs

Competitive research is the other broad area that needs increased support in the CSREES budget.

As a nation, our commitment to basic research is clear. The National Science Foundation and the National Institutes of Health have seen major increases in funding in the last ten years.

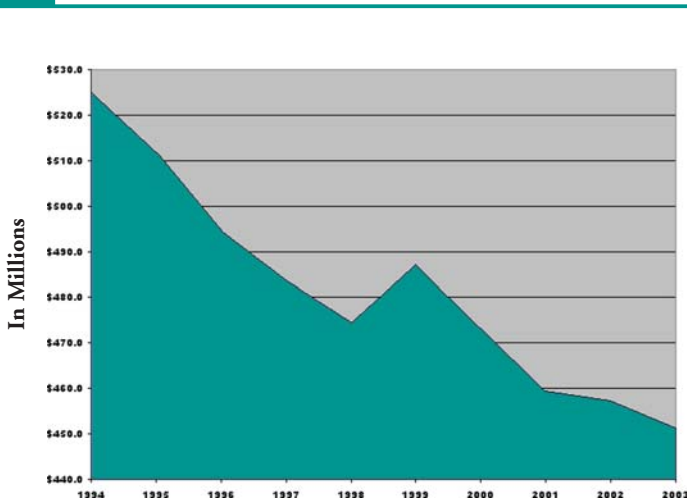
Unfortunately, CSREES has not enjoyed the same level of support.

For example, the nation's flagship agricultural research program – the National

Research Initiative -- funds only 15 percent of eligible research (figure 2). This is research that has been examined by experts and deemed of high quality by peer review panels. The research described on the front of this paper represents only the tip of the iceberg. Vast amounts of important research that could help protect the homeland, improve health, and protect the environment, goes unfunded. Our system of research, extension and education is a proven program of scientific discovery combined with immediate application where it is most needed. It deserves robust support by the federal government.

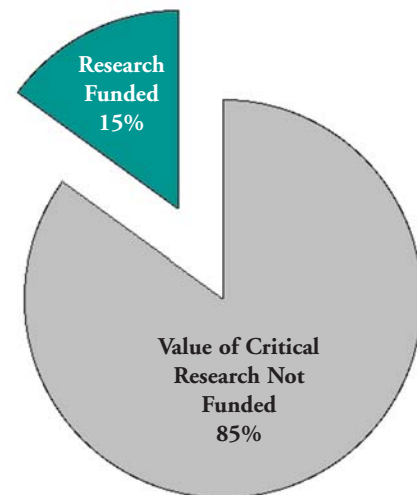
Congress should appropriate sufficient funds to fully support at least 30 percent of the competitive grant proposals submitted to CSREES. Such an increase will help solve the urgent problems that confront us: Food Safety and Security. Health and Nutrition. The Environment.

1 CSREES Formula Funds (In constant 1996 dollars)



Formula funds provide the foundation for a strong program of agricultural research, education and extension. The decline in federal support in real terms is eroding our ability to maintain the important work done in colleges and universities throughout the country and the territories.

2 Only 15% of High Quality Research is Funded



In terms of total dollar amount of proposals submitted, only 15 percent of qualified, peer reviewed research gets funded by CSREES. Other science agencies, such as NIH and NSF, typically fund more than 30 percent of eligible research.