



## 2007 Farm Bill Policy Recommendation

### Improve Research and Extension

#### Recommendation

Implement a new model of agricultural research that strengthens accountability, focuses on solving problems, engages the best scientists wherever they work and involves stakeholders in identifying and prioritizing research. Restore the National Research Initiative (NRI) to a \$500 million competitive grants program that delivers large, long-term grants on high-priority fundamental and mission-oriented research. Also, increase the federal investment in agricultural research by at least 10 percent.

#### Rationale

The federal agricultural research and extension network includes USDA's Agricultural Research Service (an in-house science agency); research branch of the Forest Service; Economic Research Service; National Agricultural Statistic Service (analyzes agricultural data); and Extension Service (Cooperative State Research, Education and Extension System (CSREES)), which channels USDA funds to state partners under a variety of programs.

State partners include state agricultural experiment stations (affiliated with land grant universities); cooperative extension services in 50 states and eight U.S. territories; 18 historically black land-grant colleges of agriculture (the 1890 institutions); and 31 Native American colleges that gained land-grant status in 1994 (the tribal colleges).

Funding for agricultural research has not increased significantly since the 1970s. USDA currently spends \$2.4 billion per year, or about 3.1 percent of the total annual USDA budget, and about two percent of all federal research and development funding. USDA sends \$921 million directly to its in-house research agencies and distributes the rest through the CSREES as *block grants* ("formula funds" divided among states based on their rural population and number of farms), *competitive grants* (the National Research Initiative (NRI)), *special grants* (earmarks) and *contracts, grants and cooperative agreements*.

Studies consistently find high rates of return (40 to 60 percent) for the public investment. However, due to controversies over how we fund research, whether we are doing the right research and whether that research is having the desired effects, there is significant pressure to drastically reduce formula funds in favor of competitive funds. We recommend a retooling of the USDA-university partnership to increase stakeholder involvement and strengthen accountability. By changing the system, we can ask the public to reinvest in a new system that fosters collaboration and integration and is oriented toward identifying and tackling large challenges.

## **Mechanics**

Invest in a new model of agricultural research that strengthens accountability, focuses on solving problems and makes better use of stakeholders:

Two proposals have emerged in the last two years that provide better models for agricultural research. We prefer the proposal unveiled in 2005, which establishes a National Institute for Food, Agriculture and Natural Resources (NIFANR) and totally revamps the USDA-university partnership, making it more competitive and accountable. The second option, the National Institute of Food and Agriculture (NIFA), was proposed by a task force led by Dr. Bill Danforth in 2004. NIFA is modeled after the National Institutes of Health. It would improve the quality of agricultural research but was not designed to address the issues of inefficiency and accountability faced by the USDA-university partnership as a whole. The two ideas are compatible, emphasizing problem solving, and represent a step in the right direction.

The task force behind NIFANR (CREATE-21) is currently conferring with Dr. Danforth about folding NIFA into their model. The NIFANR model is evolving rapidly, and the task force recently expanded to include the 1890 and 1994 institutions and several key stakeholder groups. Significantly, both the National Association of State Universities and Land-Grant Colleges (NASULG) and USDA leadership support the concept and have agreed to their guiding principles.

The NIFANR model has set four goals: enhance the USDA-land-grant partnership's relevancy, adequacy, responsiveness, accountability and sustainability; increase integration of the partnership's programmatic activities; improve the partnership's ability to attract appropriate resources to meet the goals expressed by Congress and addressed by USDA; and create a more efficient vehicle that is capable of rapidly applying new funds to emerging issues and maximizes the service provided to stakeholders and policymakers.

They also hope to lower the transaction costs of research: the insatiable demand for committee meetings and reports. The model integrates all internal and external research, extension, and education efforts within USDA into NIFANR using the *2005 Science Roadmap for Agriculture* as a starting point (which identifies broad problem and solution areas). They plan to have a more fully developed model in late June with open discussions in July. Simultaneously, they are briefing Congressional staffers and key stakeholders; developing legislative language that can be introduced as a stand-alone bill or as a title to the next farm bill; and preparing to guide the proposal through the legislative process. Although the NIFANR model focuses on strengthening the USDA-land grant partnership, competitive funds will be open to all universities and nonprofits.

Restore the National Research Initiative (NRI) Competitive Grants Program to its original intent:

The NRI was originally conceived as a \$500 million per year program delivering large, long-term grants on high-priority fundamental and mission-oriented research. Since then, it has evolved into a small-grants program providing short-term funding. We would make the NRI the premier large basic research grants program within NIFANR or NIFA by increasing its funding and broadening its peer review panels to involve stakeholders.



## American Farmland Trust

Revive the Initiative for Future Agriculture and Food Systems (IFAFS) competitive grants program to provide stakeholder-driven grants to address applied research needs within NIFANR:

IFAFS was legislated by Congress, and authorized by the secretary of agriculture, to establish a research, extension and education competitive grants program in 2001 and 2002 to address a number of critical emerging agricultural issues. These issues related to future food production, environmental quality, natural resource management, and farm income.

Priority IFAFS program areas included:

- 1) Agricultural genome
- 2) Food safety, food technology, and human nutrition
- 3) New and alternative uses and production of agricultural commodities and products
- 4) Agricultural biotechnology
- 5) Natural resource management, including precision agriculture
- 6) Farm efficiency and profitability, including the viability and competitiveness of small- and medium-sized dairy, livestock, crop and other commodity operations

Priority for IFAFS funding was for those proposals that were multi-state, multi-institutional or multi-disciplinary, or that integrated agricultural research, extension, and/or education. Stakeholder involvement was considered critical. We would make IFAFS the premier applied-research grants program within NIFANR.

Increase the federal investment in agricultural research by at least 10 percent (\$230 million):

Right now, 30 percent of our expenditures are allocated to maintenance research (“running in place”). We recommend a 10 percent increase in funds (\$230 million), but only if we succeed in redesigning the current system to increase the involvement of stakeholders, strengthen accountability, improve the exchange of research data and eliminate redundancy in the current system.