



Overview of the 2007 USDA Farm Bill

Proposals for Reforming the Research Title & Other Proposals to Revamp Public Investments in Agricultural Research

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The Administration's proposal to reform the USDA's Research Title is a transformative proposition. In brief, the Administration proposes to "Reorganize and revitalize USDA's research, education, and economics mission and increase investment in high priority areas of research such as specialty crops, bioenergy, and bio-based products" (*USDA 2007 Farm Bill Proposals: Title VII—Research, 2007*).

For several years, federal investments in public agricultural research, including those for the USDA's Agricultural Research Service (ARS), Economics Research Service (ERS), Forest Service (FS) Research and Development, and both formula-funded and competitive grants programs of the Cooperative States Research, Extension and Education Service (CSREES), have been either flat or have actually decreased in real terms. In contrast, during the same period, federal investments for research sponsored by the National Institutes of Health and National Science Foundation have doubled. These two federal agencies focus their investments primarily on human health and fundamental scientific questions.

As a result of the inadequate investment in public agricultural research in our nation, our ability to engage in cutting edge research in ensuring a safe and secure food supply, environmental wellbeing, and economic prosperity has been hampered. The limited funding situation has not only resulted in fewer funds being available for research, but has also resulted in continuing disrepair and decay of infrastructure such as buildings and facilities at land grant colleges and universities, thus exacerbating the situation.

The Administration's response to the declining situation funding for food, agricultural, and natural resource research includes significant increases in funding for research and infrastructure, combined with a drastic reorganization of the agricultural research enterprise by consolidating federal and state efforts to address the nation's agricultural and food needs.

The Administration's Proposal

The Administration's proposal <www.usda.gov/documents/07finalfbp.pdf> calls for significant increases in research investment in several key areas, in addition to streamlining the institutional arrangements for funding allocations.

1. Consolidate USDA's Agricultural Research Service (ARS) and the Cooperative States Research, Education, and Extension Service (CSREES) into a single agency named the "Research, Education, and Extension Service" (REES), which will coordinate both intramural and extramural research, extension, and education programs.
2. Rename the Research, Education, and Economics (REE) mission area the "Office of Science."
3. Establish an annual \$50 million Agricultural Bioenergy and Bio-Based Products Research Initiative to advance fundamental scientific knowledge for the improved production of renewable fuels and bio-based products.
4. Establish an annual \$100 million Specialty Crop Research Initiative to provide science-based tools for the specialty crop industry.

5. Authorize USDA to conduct research and diagnostics for highly infectious foreign animal diseases on mainland locations in the U.S.
6. Invest an additional \$10 million in mandatory funding to be available until expended for organic research. This new funding would focus on conservation and environmental outcomes and new and improved seed varieties especially suited for organic agriculture.

Current Situation

The diminishing federal investment for public agricultural research and infrastructure has been the subject of a number of Congressional hearings, various national forums, and blue ribbon panels of the National Academy of Sciences, all of which have suggested the need for increased funding and coordination between federal and state agencies involved in agricultural research and allocation of funds for agricultural research based on competition rather than historic formula, the latter based on the number of farms and rural population in each state.

There is a perception that the USDA's ARS and ERS, agricultural experiment stations at state land grant universities, and cooperative extension service efforts are not well coordinated. Federal and state agencies have been viewed as competing against rather than complementing each other's missions.

Proponents of allocation of funds based on a competitive process rather than formula basis have suggested that competition brings the best minds in the nation to address national agricultural research needs. In contrast, proponents of allocating funds based on a formula claim that competitively allocated funds will only address what are currently the hottest topics that might affect a small segment of the population rather than topics that address broader communities and also the infrastructural or capacity needs. For example, a recent article by Huffman and Everson (2006) suggests that public agricultural research investments have significant positive impact on agricultural productivity.

Alternative Proposals

To address these issues related to public agricultural research, three proposals have surfaced during the last year: the Farm Bill proposed by the Administration; the proposed National Institute of Food and

Agriculture (NIFA), developed by a USDA panel led by William Danforth, Chancellor Emeritus of Washington University, St. Louis; and, finally, the National Association of State Universities and Land Grant College's (NASULGC) proposal, Creating Research, Extension, and Teaching Excellence for the 21st Century (CREATE-21). All three proposals have significant similarities in the ultimate outcomes, but take different approaches to achieve the same.

The Administration's Farm Bill, as noted above, proposes combining CSREES and ARS into a new Research, Education, and Extension Service. Additionally, the Administration proposes that \$50 million per year be provided for a Bioenergy and Bioproducts Research Initiative, along with \$100 million per year to provide science-based tools for the specialty crop industry and \$10 million per year for organic production research, particularly focused on conservation and positive environmental outcomes.

The Danforth Committee's proposed National Institute of Food and Agriculture (NIFA) <www.ars.usda.gov/SP2UserFiles/Place/00000000/NATIONAL.doc>, in contrast, does not make any recommendations for consolidating existing research capacities at the federal and state levels. It would create NIFA as a separate and new agency within USDA reporting directly to the USDA Secretary. It would comprise three offices: Advanced Science and Application, Scientific Assessment and Liaison, and Scientific Personnel. It proposes a new competitive grants program for fundamental research only, starting at \$245 million per year and growing to \$966 million per year in the fifth year. This new funding would be in addition to existing authorizations for ARS, CSREES, ERS, and the US Forest Service, which will continue to support integrative and applied research programs and invest in capacity.

CREATE-21 <www.create-21.org/>, proposed by NASULGC, combines elements of the Administration's proposal and the Danforth Committee's NIFA proposal. It ensures that adequate funding is available for public agricultural research to be distributed based on competitive and formula approaches, meets fundamental and applied research needs, provides for capacity building and infrastructure, and requires a complete reorganization and consolidation of federal and state agencies undertaking agricultural research.

CREATE-21 includes establishment of a National Institute of Food and Agriculture, similar in structure and organization to the National Institutes for Health. It comprises six institutes: Economic Opportunities in Agriculture and Natural Resources, Nutrition and Health, Rural and Urban Community Development, Natural Resources and Environment, Food Safety and Agricultural Security, and Families, Youth, and Communities. CREATE-21 proposes consolidation of CSREES, ARS, ERS, and Forest Service, and includes funding to be split between competitive grants and capacity programs, and competitive grant funds to support both fundamental and integrative programs. The suggestion in this proposal is that total authorized funding must start at a Fiscal Year 2007 baseline of \$2.68 billion per year and grow to \$5.35 billion per year in the seventh year.

Final Comments

Currently, various Senators and Congressional Representatives have introduced bills in Congress, which are either verbatim proposals noted above or which incorporate elements of the three proposals. For example, House Bill HR 2398 <www.create-21.org/documents/PDF/HR2398.pdf> embodies the original principles of CREATE-21, including the six institutes and funding mechanisms described above, but does not include the proposed consolidation of ARS, ERS, CSREES, and Forest Service Research and Development.

At the end of this Congressional session, one thing is certain: the face of the nation's public agricultural research enterprise and funding for the same will have undergone a breathtaking transformation, which should allow federal and state endeavors to address research questions related to Food Security, Environmental Security, Health Security, Energy Security, and Economic Security for our nation in the 21st Century. It is likely that the proposed reforms will renew the power of U. S. agriculture to be a significant part of the economic engine of our nation and beyond.

References

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