

R&D in the U.S. Department of Agriculture

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HIGHLIGHTS

- Food and Agriculture Defense Initiative – \$58 million.
- Avian Influenza Research – \$5.4 million.
- National Research Initiative – \$257 million.
- US-India Agricultural Knowledge Initiative – \$1 million.
- Reduction of Hatch Formula Funds and Redirection to Competitive Multi-State Grants.

OVERVIEW

The U.S. Department of Agriculture (USDA) serves as the principal government agency for agricultural research and development. For FY 2008 USDA continues to design its budget request around a framework of six strategic goals previously established, namely to: (1) enhance international competitiveness of American agriculture; (2) enhance the competitiveness and sustainability of rural and farm economies; (3) support increased economic opportunities and improved quality of life in rural America; (4) enhance protection and safety of the nation's agriculture and food supply; (5) improve the nation's nutrition and health; and (6) protect and enhance the nation's natural resource base and environment. The majority of the department's research activities occur in the Agricultural Research Service (ARS) and the Cooperative State Research, Education, and Extension Service (CSREES). ARS serves as the department's in-house research agency; CSREES partners with the nation's land-grant colleges and universities through formula and grant funding. These agencies seek to advance the department's strategic goals

through their various research activities in priority areas such as food safety, biosecurity, invasive species, and emerging diseases in crops and livestock.

The Administration requests \$89 billion in funding for all activities in USDA for FY 2008. To provide a context for the size of research and development activities within the department, 75 percent of that \$89 billion would be for mandatory programs that include nutrition assistance programs, farm commodity programs, export promotion programs, and conservation programs. Within the remaining 25 percent, funding would be used to support all other programs, including research. Research activities would receive slightly over \$2 billion in funding. Of that amount, ARS would receive over \$1 billion in funding and the research funding available to the land-grant institutions would be in the neighborhood of \$600 million and includes both competitive and formula funding. (See Table II-13 for details of R&D in the USDA budget.)

INITIATIVES

Food and Agriculture Defense Initiative. Research and other activities in the department seek to guarantee the safety of the nation's commercial agricultural products. The Administration requests a total of \$341 million for this Initiative (R&D and non-R&D programs). In the area of research, \$58 million would be used to strengthen research in areas such as improving vaccines and identifying genes affecting disease resistance, automated diagnostic methods to rapid detection and identification of pathogens and chemical contaminants, rapid response systems to bioterror agents, and conducting genomic analyses of priority pathogens of livestock and wildlife species to advance vaccine discovery.

Avian Influenza. Research and other activities in the department seek to stop, slow, or control the spread of avian influenza in the United States. Present in the United States since the early 1900s, low pathogenic avian influenza is not uncommon but poses no significant threat to humans. However, highly pathogenic avian influenza poses a significant threat to human health and well-being because it is easily transmitted between birds and humans. The Administration proposes \$82 million in funding in various areas to respond to this threat. Of the total amount, \$5.4 million would go to ARS to continue its research that also includes the development of a vaccine. The rest of the funding would go towards

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funding surveillance and diagnostics and emergency preparedness efforts.

National Research Initiative (NRI). The principal competitive grants program of USDA, the National Research Initiative funds peer-reviewed research. In FY 2008, the Administration proposes \$257 million for the NRI—an increase of \$66 million. However, \$42 million of this increase is not new dollars but merely brings the integrated projects on water quality, food safety, organic transition, and pest management under the umbrella funding for research. Therefore, the Administration actually is requesting only an increase of \$26 million in new dollars. The Administration also has included in its request for the NRI \$19 million for the department's bioenergy and biobased-fuels research initiative.

US-India Agricultural Knowledge Initiative. The Administration proposes providing \$1 million of the International Science and Education grants program to strengthen agricultural ties between the United States and India. Activities would include facilitating technology transfer, trade and investment, as well as enhancing partnerships in agricultural research, education, and extension.

USDA AGENCIES

Agricultural Research Service (ARS). ARS is the in-house research arm of USDA and, along with CSREES, serves as a major producer of the nation's agricultural research. ARS has over 100 research labs throughout the United States and the world. The FY 2008 budget proposal for ARS in the areas of research and information is \$107 million less than recently enacted final 2007 appropriation. While funding would remain at a level of over \$1 billion, what is missing in the Administration's proposal is \$141 million in earmarked projects funded by the Congress in FY 2006; Congress decided on a moratorium on earmarks in final 2007 appropriations. The Administration proposes to increase research funding in product quality/value added (up \$14 million), livestock production (up \$5 million), crop production (up \$17 million), food safety (up \$6 million), crop protection (up \$16 million), human nutrition (up \$8 million), and environmental stewardship (up \$5 million). It will be interesting to see if Congress will hold good to its promise to reduce congressional earmarks in 2008 appropriations as part of an effort to be more fiscally responsible. The decision will affect significantly the level at which the above areas are funded.

Cooperative State, Research, Education, and Extension Service (CSREES). Partnering with the nation's land-grant universities, USDA funds research that is conducted at both the basic and applied levels. The FY 2008 budget proposal continues a direction introduced in last year's budget: formula funds for the Hatch Act that funds the nation's agricultural experiment stations would be further decreased to grow the new competitive multi-state/multi-institutional grant program. The Administration proposes a decrease in funding of \$158 million from an unexpectedly high final 2007 funding level of \$323 million to a new level in FY 2008 of \$165 million, 60 percent of which would be used for multi-state/multi-institutional projects. This represents a significant increase for the multi-state/multi-institutional projects as only 25 percent of Hatch funding is due to be directed to these projects in FY 2007. Needless to say, with a decreased level of funding and the requirement to redirect the funding they would receive, agricultural experiment stations at the nation's land-grant colleges and universities are greatly concerned because redirection of these Hatch funds seriously impact ongoing research projects and infrastructure, including salaries for scientists. Agricultural experiment station directors will face a significant challenge as they respond to this particular change in funding. The Administration asserts, however, that this new approach will continue to sustain the matching requirement and the use of federal funds to leverage non-federal resources. In addition to the change in Hatch funding, the McIntire-Stennis Cooperative Forestry formula funding also would be modified by creating a multi-state research program supported by about 62 percent of the total funding and all multi-state funds would be distributed through competitively-awarded grants in 2008.

Overall funding in CSREES for research remains relatively stable if one does not account for the congressional earmarks that the Administration never includes in its proposal. In FY 2006, Congress appropriated \$157 million in earmarked projects before the 2007 moratorium. Although the 2007 budget may be the beginning of a trend of congressional restraint when earmarking funding, it will be of great interest to see how the current Congress actually handles the issue of earmarking. It should be noted that the current Congress has not said that it will cease earmarking funds. Rather, Members of Congress talk about a more transparent process that will require the requesting Member to provide a written statement detailing the purpose of the earmark to the committee with appropriate jurisdiction. House Appropriations Committee Chairman

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David Obey (D-WI) has written an open letter to his congressional colleagues detailing the process. In his letter, Chairman Obey also states his intent to reduce congressional earmarks by 50 percent relative to the amount funded in FY 2006.

Economic Research Service (ERS). ERS provides economic, social science information, and analysis on agriculture, food, the environment, and rural development. The Administration proposes funding ERS at a level of \$83 million for FY 2008. This is an increase of \$8 million over both the FY 2006 and FY 2007 estimates. A \$5 million increase would be used to strengthen the current market analysis and outlook program that “will ensure the continuity and quality of current market analysis and enhance coverage of increasingly complex global markets for an expanding array of agricultural products.” Another \$1 million increase would be used in the area of bioenergy research and modeling to enhance ERS’ “research and modeling capacity to better understand the economics of bioenergy production, the demand for by-products, and the likely future adjustments in the crop and livestock sectors.”

National Agricultural Statistics Services (NASS). NASS provides unbiased data to agricultural markets, rural communities, and researchers. The FY 2008 budget requests \$168 million, an increase of \$28 million over the current estimate for FY 2007. Of this increase, \$25 million would be used to support the 2007 Census of Agriculture. Activities center on data collection and processing. (For more on NASS, see Chapter 20.)

Forest Service (FS). The Forest Service (FS) is the world’s largest forest research organization. The Administration’s FY 2008 request contains \$263 million for Forest and Rangeland Research, which represents a decrease of \$17 million from the current estimate of \$280 million in FY 2007 and \$15 million less than the \$278 million funded in FY 2006. The reduction in funding represents decreased activity in lower priority projects. (Total Forest Service R&D in Table II-13 also includes some R&D funding in other FS accounts.)