

R&D in the Department of Agriculture

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HIGHLIGHTS

- National Research Initiative (NRI): The FY 2002 budget proposes \$106 million, the same funding level as in FY 2001 (see Table II-13).
- Initiative for Future Agriculture and Food Systems (IFAFS): The FY 2002 budget proposes \$120 million as mandated in Section 401 of the Agricultural Research, Extension, and Education Reform Act of 1998.

BUDGET OVERVIEW

The U.S. Department of Agriculture (USDA) funds agricultural-related research activities at federal research laboratories, colleges, universities, and private national laboratories. Funding mechanisms include direct funding for federal research laboratories; formula funding for specific programs at the land-grant colleges and universities; funding for research grants awarded through a competitive, peer-reviewed process to federal research laboratories, colleges, universities, and private national laboratories; and special research grants that are initiated both by USDA and Congress. Special grants initiated by Congress are never included in the following year's budget proposal. This lack of inclusion is often highly noticeable in some of the proposed funding totals. Typically, however, Congress restores funding for these earmarked special grants and often proposes others. These special grants are for targeted research that meets individual state agricultural needs.

Funding for R&D activities in USDA seeks to address agricultural issues as they relate to the environment, natural resource management, food safety, competitiveness, and emerging markets, as well as continuation of the basic research needed for a solid understanding of the animal and plant sciences. USDA orchestrates a national network of agricultural research conducted at federal research laboratories (Agricultural Research Service), the 1862 and 1890 land-grant colleges and universities, other colleges and universities, and private national laboratories. USDA is also unique as it partners with the nation's land-grant colleges and state universities to conduct research that impacts agriculture and the environment at both the state and national levels. This partnership has proven highly effective for the 100-plus years it has been in place. For details of R&D in the USDA budget, please see Table II-13.

USDA INITIATIVES

National Research Initiative (NRI): As USDA's primary competitive research grants program, the NRI funds basic and mission-linked research. The President's FY 2002 budget proposes level funding for the NRI at \$106 million. This competitive, peer-reviewed research grants program reached a funding level of \$119 million in FY 2000, the highest level it has ever attained. Congress has rarely responded to previous Administration requests, some of which have reached \$200 million. It is not yet clear how the Bush Administration will view the NRI and if higher requests will be made in the future. Researchers have expressed great interest in the NRI receiving significant increases. However, the NRI has never fully taken hold in the minds of the Administration or the Congress. Funding requests for the six areas of emphasis include: (1) Natural Resources and the Environment, \$17.5 million; (2) Nutrition, Food Safety, and Health, \$17.9 million; (3) Plants, \$34.7 million; (4) Animals, \$24.7 million; (5) Markets, Trade, and Rural Development, \$3.9 million; and (6) Processing for Adding Value or Developing New Products, \$6.9 million.

Initiative for Future Agriculture and Food Systems (IFAFS): IFAFS was mandated in Section 401 of the Agricultural Research, Extension, and Education Reform Act of 1998 and was established as a competitive grants program in the Cooperative State Research,

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Education, and Extension Service (CSREES) for five years with a funding level of \$120 million per year. These funds are mandatory, and do not need to be appropriated each year by Congress, although Congress has the option of blocking the funds through legislation. The President's FY 2002 budget proposal continues this mandate. IFAFS seeks to respond to critical emerging agricultural issues in (1) future food production, (2) environmental quality and natural resource management, and (3) farm income. Priority mission areas are: (1) agricultural genome; (2) food safety, food technology, and human nutrition; (3) new and alternative uses and products of agricultural commodities and products; (4) agricultural biotechnology; (5) natural resource management, including precision agriculture; and (6) farm efficiency and profitability, including the viability and competitiveness of small- and medium-sized dairy, livestock, crop, and other competitive operations. Priority is given to multi-state, multi-institutional, or multi-disciplinary projects, or projects that integrate agricultural research, extension, and education.

USDA AGENCIES

Agricultural Research Service (ARS): With 105 research locations throughout the world, the Agricultural Research Service (ARS) is the principal in-house research agency in USDA in the area of natural and biological sciences. The President's FY 2002 budget proposes a total of \$916 million for the research and information portion of ARS activities, with a total of \$878 million for research. Remaining dollars would be spent for repair and maintenance (\$18 million) and information and library services (\$20 million). The FY 2001 budget for research and information activities in ARS is \$915 million. Included in this amount is \$18 million for repair and maintenance, \$34 million for congressionally earmarked research efforts, and \$18 million for congressionally designated projects in the Agricultural Risk Protection Act (ARPA). The FY 2002 proposal includes funding requests for repair and maintenance at the FY 2001 level but does not include requests for earmarks and the ARPA. Therefore, the budget proposal of \$878 million would represent an actual increase of \$53 million distributed among the programmatic areas of (1) Soil, Water, and Air Sciences (\$90 million, an increase of \$2 million); (2) Plant Science (\$325 million, an increase of \$20 million); (3) Animal Science (\$147 million, an increase of \$11 million); (4) Commodity Conversion and Delivery (\$202 million, an increase of \$19 million); (5) Human Nutrition

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(\$76 million, an increase of \$1 million); and (6) Integration of Agricultural Systems (\$38 million, level funding). Within the FY 2002 proposed level of \$878 million for all research areas, an amount of \$19 million would be used for increased pay costs and a targeted amount of \$34.5 million would provide funding for three priority research areas: (1) \$15 million for New Uses for Agricultural Products; (2) \$12 million for Emerging and Exotic Diseases and Pests, including \$5 million for “mad cow disease”; and (3) \$7.5 million for Biotechnology.

Cooperative State Research, Education, and Extension Service (CSREES): CSREES serves as the base for the federal-state partnership of agricultural research, education, and extension. Partners of CSREES include the State Agricultural Experiment Stations, State Cooperative Extension Systems, land-grant universities, colleges, and other research and education institutions. CSREES also administers the National Research Initiative (NRI). Along with ARS, CSREES activities represent the major research efforts of USDA.

The FY 2002 budget proposes level funding for all formula research funds: (1) Hatch Act (agricultural experiment stations at 1862 land-grant universities), \$180 million; (2) McIntire-Stennis Cooperative Forestry, \$22 million; (3) Evans-Allen Program at 1890 land-grant colleges and universities, \$33 million; and (4) Animal Health and Disease Section 1433, \$5 million. Funding requests for Special Research Grants would total just over \$16 million, which does not include any congressional earmarks that totaled \$83 million in FY 2001. Specific funding requests in this category include \$1.4 million for Global Change, UV-B Monitoring; \$2.7 million for Integrated Pest Management and Biological Control; and \$1.6 million for Pest Management Alternatives. The NRI would receive a total of \$106 million (see details above). Other research requests include \$4 million for aquaculture centers; \$9.2 million for Sustainable Agriculture; and \$1 million for 1994 Research Grants, research funding established at the Tribal colleges. Total funding requests for Integrated Research and Education Activities would be \$42 million and would include, among other funding, \$13 million for water quality, \$15 million for food safety, and \$4.5 million for Pesticide Impact Assessment.

Forest Service (FS): The Forest Service is one of the world’s largest forest research organizations. Its mission is to “develop the knowledge

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and technology needed to enhance the economic and environmental values of all the Nation's Forests and related industries [and] support the specific research needs that arise from... managing the [National Forest System]." The President's FY 2002 budget proposes a funding level of \$235 million, which equals the FY 2001 level plus pay increases.

Economic Research Service (ERS): The Economic Research Service "provides economic analysis on agriculture, food, natural resources, and rural development." The President's FY 2002 budget proposes a \$1 million increase to a level of \$67 million. (More information on ERS can be found in Chapter 22).

