(8) Conduct research into the basic problems of agriculture in its broadest aspects, including, but not limited to, production, marketing (other than statistical and economic research but including research related to family use of resources), distribution, processing, and utilization of plant and animal commodities; problems of human nutrition; development of markets for agricultural commodities; discovery, introduction, and breeding of new crops, plants, animals, both foreign and native; conservation development; and development of efficient use of farm buildings, homes, and farm machinery except as otherwise delegated in §§ 2.22(a)(1)(ii) and 2.79(a)(2) (7 U.S.C. 427, 1621-1627, 1629, 2201 and 2204).

(9) Conduct research on varietal improvement of wheat and feed grains to enhance their conservation and environmental qualities (7 U.S.C. 428b).

(10) Advance the livestock and agricultural interests of the United States, including the breeding of horses suited to the needs of the United States (7 U.S.C. 437).

(11) Enter into agreements with and receive funds from any State, other political subdivision, organization, or individual for the purpose of conducting cooperative research projects (7 U.S.C. 450a).

(12) Make facilities grants and conduct research under the IR–4 program (7 U.S.C. 450i(d) and (e)).

(13) Conduct research related to soil and water conservation, engineering operations, and methods of cultivation to provide for the control and prevention of soil erosion (7 U.S.C. 1010 and 16 U.S.C. 590a).

(14) Maintain four regional research laboratories and conduct research at such laboratories to develop new scientific, chemical, and technical uses and new and extended markets and outlets for farm commodities and products and the by-products thereof (7 U.S.C. 1292).

(15) Conduct a Special Cotton Research Program designed to reduce the cost of producing upland cotton in the United States (7 U.S.C. 1441 note).

(16) Conduct research to formulate new uses for farm and forest products (7 U.S.C. 1632(b)).

(17) Conduct research to develop and determine methods for the humane slaughter of livestock (7 U.S.C. 1904).

(18) Provide national leadership and support for research programs and other research activities in the food and agricultural sciences to meet major needs and challenges in food and agricultural system productivity; development of new food, fiber, and energy sources; agricultural energy use and production; natural resources; promotion of the health and welfare of people; human nutrition; and international food and agriculture pursuant to the National Agricultural Research, Extension, and Teaching Policy Act of 1977, as amended (7 U.S.C. 3101, *et seq.*).

(19) Conduct a program of grants to States to expand, renovate, or improve schools of veterinary medicine (7 U.S.C. 3151).

(20) Administer the National Agricultural Science Award for research or advanced studies in the food and agricultural sciences (7 U.S.C. 3153).

(21) Conduct program evaluations to improve the administration and effectiveness of agricultural research and education programs (7 U.S.C. 3317).

(22) Enter into contracts, grants, or cooperative agreements to further research programs and library and related information programs supporting research, extension, and teaching programs in the food and agricultural sciences (7 U.S.C. 3318).

(23) Enter into cost-reimbursable agreements relating to agricultural research, teaching and to further library and related information programs supporting research, extension and teaching programs in the food and agricultural sciences (7 U.S.C. 3319a).

(24) Conduct research for the development of supplemental and alternative crops (7 U.S.C. 3319d).

(25) Conduct research on potential uses for compost from agricultural wastes, including evaluating the application of compost on soil, plants, and crops (7 U.S.C. 3130).

26) Reserved.

(27) Cooperate and work with national and international institutions, Departments and Ministries of Agriculture in other nations, land-grant colleges and universities, and other persons throughout the world in the performance of agricultural research activities (7 U.S.C. 3291).

(28) Perform research and development at aquacultural research and development centers (7 U.S.C. 3322).

(29) Conduct a program of basic research on cancer in animals and birds (7 U.S.C. 3902).

(30) Conduct and coordinate Departmental research programs on water quality and nutrient management (7 U.S.C. 5504).

(31) Conduct research to optimize crop and livestock production potential, integrated resource management, and integrated crop management (7 U.S.C. 5821).

(32) Administer a national research program on genetic resources to provide

for the collection, preservation, and dissemination of genetic material important to American food and agriculture production (7 U.S.C. 5841).

(33) Conduct remote-sensing and other weather-related research (7 U.S.C. 5852).

(34) Administer grants and conduct research programs to measure microbiological and chemical agents associated with the production, preparation, processing, handling, and storage of agricultural products (7 U.S.C. 5871–5874).

(35) Conduct research on integrated pest management, including research to benefit floriculture (7 U.S.C. 5881).

(36) Conduct research in the control and eradication of exotic pests (7 U.S.C. 5883).

(37) Conduct research to study the biology and behavior of chinch bugs (7 U.S.C. 5884).

(38) Administer a grant program for risk assessment research to address concerns about the environmental effects of biotechnology (7 U.S.C. 5921).

(39) Establish and coordinate USDA programs and conduct basic and applied research and technology development in the areas of plant genome structure and function (7 U.S.C. 5924).

(40) Conduct research for the development of technology to determine animal lean content (7 U.S.C. 5925).

(41) Conduct research to determine the presence of aflatoxin in the food and feed chains (7 U.S.C. 5925).

(42) Conduct research to develop production methods and commercial uses of mesquite (7 U.S.C. 5925).

(43) Conduct research to investigate enhanced genetic selection and processing techniques of prickly pears (7 U.S.C. 5925).

(44) Conduct a research program and administer grants and contracts for research on the disease of scrapie in sheep and goats (7 U.S.C. 5925).

(45) Conduct basic and applied research in the development of new commercial products from natural plant materials (7 U.S.C. 5925).

(46) Conduct research on diseases affecting honeybees (7 U.S.C. 5934).

(47) Coordinate USDA policy and programs relating to global climate change (7 U.S.C. 6701–6703).

(48) Coordinate Departmental policies under the Toxic Substances Control Act (15 U.S.C. 2601–2629).

(49) With respect to facilities and activities under his or her authority, to exercise the authority of the Secretary of Agriculture pursuant to section 1–102 related to compliance with applicable pollution control standards and section 1–601 of Executive Order 12088, 3 CFR, 1978 Comp., p. 243, to enter into an