

STATEMENT OF DR. GALE BUCHANAN

UNDER SECRETARY FOR RESEARCH, EDUCATION & ECONOMICS

UNITED STATES DEPARTMENT OF AGRICULTURE

BEFORE THE

U.S. SENATE AGRICULTURE, NUTRITION AND FORESTRY COMMITTEE

FULL COMMITTEE HEARING

"INVESTING IN OUR NATION'S FUTURE THROUGH AGRICULTURAL
RESEARCH"

328-A RUSSELL SENATE OFFICE BUILDING

WASHINGTON, DC

MARCH 7, 2007

Chairman Harkin, Ranking Member Chambliss and distinguished members of the Committee, it is a great pleasure to be here this morning to discuss the United States Department of Agriculture's (USDA) research, extension and education programs and the Administration's 2007 Farm Bill proposals. I appreciate the committee's interest in these programs that are so critical to our nation's future.

The success of American agriculture is attributable, in large part, to advances in science and technology transfer generated by the USDA's research, extension, and education agencies, in partnership with the nation's Land Grant Universities and other cooperators. Science has served as a vitally important foundation for our nation's agriculture system and its ability to provide this nation and the world with its needs for food, fiber and feed.

While there has been excellent success in the past we must look to not only immediate scientific needs, but build an even stronger foundation to maintain our world leadership in agriculture. This is imperative if this nation's agriculture system is to continue as a world leader and not be severely crippled by the ever increasing disease threats, changing world market competition, and drought and other natural impacts. For example, there is an immediate and long term need for scientific answers on how our agriculture system can play an important role in meeting our nation's need for greater energy independence. The Administration's Title VII 2007 Farm Bill proposals provide organizational changes and specific funding to help meet the immediate and

long term scientific needs of our agriculture system.

As Under Secretary for Research, Education and Economics, I am responsible for four agencies charged with advancing science in agriculture, the Agricultural Research Service (ARS), the Cooperative State Research, Education and Extension Service (CSREES), the Economic Research Service (ERS) and the National Agricultural Statistics Service (NASS).

ARS is USDA's principal in-house research agency with over 2000 scientists at over 100 locations around the nation and in four foreign countries. The mission of ARS is to conduct research to develop and transfer solutions to agricultural problems of high national priority and provide information access and dissemination to: ensure high-quality, safe food, and other agricultural products; assess the nutritional needs of Americans; sustain a competitive agricultural economy; enhance the natural resource base and the environment; and provide economic opportunities for rural citizens, communities, and society as a whole.

CSREES' unique mission is to advance knowledge for agriculture, the environment, human health and well-being, and communities by supporting research, education, and extension programs in the Land-Grant University System and other partner organizations. CSREES doesn't perform actual research, education, and extension functions but rather helps fund it at the state and local level and provides programmatic leadership in these areas.

ERS is a primary source of economic information and research in the U.S. Department of Agriculture. With 450 employees, ERS conducts a research program to inform public and private decision-making on economic and policy issues involving food, farming, natural resources, and rural development.

NASS is the Department's primary statistical agency and provides official USDA crop and livestock production, economic, and environmental data on agriculture and rural America. NASS conducts hundreds of surveys every year and prepares reports covering virtually every aspect of U.S. agriculture including: production and supplies of food and fiber, prices paid and received by farmers, farm labor and wages, farm finances, chemical use, and changes in the demographics of U.S. producers. NASS is also responsible for the Census of Agriculture.

USDA is continually striving to further enhance its science-based programs for the betterment of American agriculture. The Administration's Farm Bill proposals fully recognize this fact and places a high priority on strengthening our system.

We heard from the American public through the Farm Bill Forums led by Secretary Johanns

that research was a major theme in all of the sessions.

From Indiana, we heard during a USDA listening session, "...we get the highest return on investment on those dollars as about any money that's going to be spent in the farm bill. And that allows us to be low-cost producers of a safe and reliable food and fiber source." And, from Delaware we heard, "It's imperative that the next farm bill will provide support for continuing research and education. The future of American agriculture will depend on it. Technological advances in agriculture will help the next generation of American farmers."

Several speakers mentioned that the Department's dual research structure of ARS/Land Grant Universities has strengths and weaknesses. The intellectual and political challenges these institutions face have never been more numerous or challenging. Others stressed the need for more coordination of USDA's overall research funding strategy.

The Administration's farm bill proposals provide an opportunity to address these issues and to improve the efficiency of the research, extension, and education programs in the Department. Specifically, the Administration is recommending the following proposals for the 2007 Farm Bill:

1. Consolidate USDA's Agricultural Research Service (ARS) and the Cooperative State Research, Education, and Extension Service 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 to the Office of Science.
3. Establish a \$50 million annually (\$500 million over 10 years) mandatory funded Agricultural Bio-Energy and Bio-Based Products Research Initiative.
4. Establish a \$100 million annually (\$1 billion over 10 years) mandatory funded 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 United States.
6. Invest an additional \$10 million in mandatory funding for organic research.

I will now provide some additional information on each of these proposals.

REORGANIZATION:

All organizations can be strengthened, and we have a responsibility to strive continuously to improve the efficiency and effectiveness of our programs. In view of these principles, the Administration is recommending the reorganization and revitalization of USDA's research, education, and economics mission area.

The Administration proposes the creation of the Research, Education, and Extension Service (REES) through the merger of USDA's Agricultural Research Service (ARS) and the Cooperative State Research, Education, and Extension Service (CSREES). This new agency would be under the leadership of a Chief Scientist.

All current formula funding authorities as well as authorities for 1890, 1994 and Hispanic Serving Institutions would be retained. This integration of programs will provide better coordination and allow for enhanced efficiency and effectiveness of program implementation and resource allocation. Duplication of efforts between intramural and extramural programs would be minimized, while better identifying and utilizing comparative strengths of USDA's in-house capacity as well as USDA's university partners and other stakeholders.

In addition, the Research, Education, and Economics (REE) mission would be renamed the "USDA Office of Science." Leadership would continue under an Under Secretary and Deputy Under Secretary, who would be responsible for the new REES agency, as well as ERS and NASS. This name change will better reflect the foundation of our programs, which is science. This nomenclature is also consistent with other Departments with major science programs, such as the Department of Energy (DOE).

AGRICULTURAL BIOENERGY AND BIOBASED PRODUCTS RESEARCH INITIATIVE

President Bush has provided strong guidance and leadership in our nation's commitment to achieving greater energy independence. In his State of the Union speech this year, the President announced a bold initiative to reduce gasoline consumption by 20% over the next 10 years and replace it with renewable fuels. The President stated that this could be done by stimulating growth of ethanol and other alternative fuels as well as increasing fuel efficiency.

The Administration's Farm Bill proposal provides \$50 million in annual mandatory spending over a ten year period for the creation of the Agricultural Bio-Energy and Bio-Based Products Research Initiative to enhance the production and conversion of biomass to renewable fuels and bioproducts. These funds will support a USDA bio-energy and bio-based product laboratory network utilizing existing USDA research facilities as well as engaging the nation's land grant

and other universities through a competitive process and connecting them to the laboratory network.

The new initiative will focus research and development efforts on two objectives: 1) improving biomass production and sustainability and 2) improving biomass conversion in biorefineries. Through this initiative we will be better able to take full advantage of USDA's internal and external research programs together with the network of extensive knowledge and capabilities that reside within the Land Grant universities and other research institutions throughout the United States. These activities will be closely coordinated with the Department of Energy (DOE), and its national laboratories and centers of excellence and other components of the Federal government.

American agriculture has been highly successful in capturing the sun's energy and supplying our nation with an abundant food and fiber supply. Through increased research and technology, we can continue this record of success and move our nation toward greater energy independence.

SPECIALTY CROPS

The Administration is also recommending the establishment of a Specialty Crop Research Initiative supported by \$100 million in annual mandatory funding over a ten year period to provide science-based tools for the specialty crop industry.

Fruits, vegetable, horticultural plants, and other specialty crops are essential to healthy diets and the economic viability of American agriculture. However, specialty crop producers face unique challenges including pests and diseases; harvesting and processing issues; domestic cost pressures (including labor issues); and the uncertainty of international markets. Enhanced research, extension, and education programs are needed to help the specialty crop industry address these challenges.

During the Farm Bill listening sessions we repeatedly heard the call for an increased investment in research for specialty crops. For example, Charles from Georgia noted that "federal investment in agricultural research dedicated to the economic vitality and long-term viability of United States specialty crops has been extremely limited." "Federal investments in research for specialty crop production, processing, marketing and consumption which influence public access to these vital commodities must be re-emphasized in the next farm bill."

And Tom, at the California forum, stated: "Specialty crops are vital to the health and well-being of all Americans, and increased consumption of specialty crops will provide tremendous health

and economic benefits to both consumers and growers." "The next Farm Bill must address specialty crop issues much more effectively than in the past Farm Bills." "Policy areas that the next Farm Bill must address, with respect to the unique needs of specialty crop growers, include the following: specialty crop block grants, international trade, nutrition, marketing, invasive pest and disease issues, research, competitive grants, and conservation programs."

In addition to input from commodity and trade groups, the National Agricultural Research, Education, Extension and Economics (NAREEE) Advisory Board has identified specialty crops as a high priority and a unique opportunity to strengthen American agriculture.

Funding recommended in the Administration's proposal will provide for the creation of a Specialty Crops Research Initiative to address critical needs throughout the specialty crops industry in all regions of the U.S. Some of the specific issues to be addressed include: plant breeding, genetics, genomics, food safety and quality, production efficiency, and mechanization.

FOREIGN ANIMAL DISEASE RESEARCH

Research and diagnostics for highly infectious foreign animal disease agents, such as Foot and Mouth Disease (FMD) and Rinderpest viruses, are currently confined to an off shore location, presently the Plum Island Animal Disease Center (PIADC). The Department of Homeland Security (DHS) has initiated a process to move all the functions of PIADC to a new facility to be named the National Bio and Agro Defense Facility (NBAF). In anticipation that this facility will be built on the U.S. mainland, USDA must be authorized to conduct important foreign animal disease research on FMD and other select diseases at the new facility.

Research, diagnostics and training as well as vaccine development and evaluation are critical components to fighting and mitigating the effects of these diseases and securing the U.S. food and agricultural system. Without this research, U.S. farmers and our entire food system would be at greater risk.

The Administration proposes specific authorization for USDA to conduct research and diagnostics for highly infectious disease agents, such as FMD and Rinderpest on the U.S. mainland.

ORGANIC RESEARCH

The Administration's 2007 Farm Bill proposal also includes \$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. This initiative will provide new technologies to help solve some of the unique challenges facing this growing segment of the agriculture industry.

Thank you again for the opportunity to testify before the Committee regarding the Administration's Farm Bill proposals to strengthen the nation's agricultural research, extension and education programs. I look forward to responding to your questions