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Budget and Legislative Committee

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For information only

The Budget and Legislative Committee has a full complement of members. In keeping with the rotation among the four geographic regions, Steve Slack agreed to become chair elect. The committee holds regular monthly conference calls on the 4th Tuesday of each month.

The Budget and Advocacy Committee Meeting Feb. 4 in Washington DC: Roger Beachy discussed the NIFA 2011 budget proposal and AFRI programs. The total funding for NIFA was unchanged from FY 2011 but AFRI was increased to \$428,845,000. The additional funds came from Special Grants, Federal Administration projects and several Extension programs. In contrast to the usual practice of eliminating special grants and Federal Administration funds, OMB allowed their capture; there was no new money in the 2011 proposal. NIFA priorities are apparently limited to the major five UDAS goals; however, the role of local needs and priorities is currently unclear.

There was considerable discussion on the Integrated Water Quality Program, Food Safety SARE and regional IMP programs and the need for this work in the states. There has been little congressional support for moving these funds into the competitive pool.

The 2011 RFA, expected March 15, will focus on bioenergy and climate change. Awards will be made for larger projects, funded at higher levels, with more participants. There will be the requirement for integration of these projects with education and outreach efforts.

BAC Discussions: As one of the two standing committees of the Policy Board of Directors, the BAC makes recommendations to the PBD on budget matters. The PBD asserted its prerogative by reducing the total number of recommended lines from 13 to 7 (Click [here](#)). These lines will be specifically targeted for enhancement and advocacy for the 2011 budget. Cornerstone has been recommending for some time the need to simplify the message, but the BAC has been unable to make hard choices. There is also a list of other initiatives supported by the ALPU. The use of themes previously developed is on hold until how NIFA will operate is on hold.

One pagers: The BAC and the EDs reviewed the one page justifications for each of the programs including Hatch, AFRI and McIntire-Stennis and modified as needed. See <http://www.land-grant.org/kb.html>

The B&L committee along with the S&T committee developed a list of priorities for plant and pest biology derived from the 2009, 2010 budget priorities surveys, the 2009 specialty crops survey and the science roadmap surveys. These priorities, detailed on the next page, will be submitted to NIFA on April 13.

Experiment Station Committee on Organization and Policy (ESCOP)
Research Priorities for Plant and Pest Biology
April 13, 2010

ESCOP compiled the following high priority research areas based on several national surveys. Survey results were then analyzed relative the five USDA-NIFA critical issues. Addressing these priorities will enhance knowledge and technology to improve the viability and sustainability of agriculture and food systems; the quality of natural resources and the environment; and service to communities, families, and consumers. Integration with extension will be required to address these research priorities, except where basic research is indicated as the most immediate need.

Global Food Security and Hunger

- Specialty crop systems; genetic manipulation and improvement as well as responses to biotic and abiotic stresses.
- Improve crop productivity with limited inputs of water and nutrients through enhanced efficiencies, plant biology, and innovative management systems.
- Improved methods to protect the environment both on and beyond the farm from any negative impacts of agriculture through optimum use of cropping systems including agroforestry, phytoremediation, and site-specific management.
- More environmentally friendly crop production systems that utilize biologically-intensive Integrated Pest Management strategies for weeds, insects, pathogen and other pests that promote environmental stewardship.
- Integrated systems of plant and animal production, and basic biology of pest management.
- Balanced environmental protection and agriculture economic viability, sustainable BMPs, specialty crops production & harvest systems, agro-ecosystem management, agro-chemicals environmental impact, integrated pest management systems, and biocontrol.
- Develop improved pest, weed, and disease control and management strategies for organic production.
- Identify plant compounds that prevent human diseases (ex. cancer), and develop and encourage methods to enhance or introduce these plants and compounds into the food system.

I. Climate Change

- Explore relationships between global climate change, climate variability, invasive species, native species, and crop responses.
- Develop biotechnologies that enable enhanced production of food, adaption of plant food systems to face global climate change, utilization of integrated pest management, and negotiation of socioeconomic challenges to the food system.
- Research breeding programs, local practices, and pest and disease management systems that help plant agriculturalists adapt to global climate change.

II. Sustainable Energy

- Feedstock development and utilization; basic research on lignin, cellulose & other plant components modification & conversion, enzyme-based processing systems, chemical & thermo conversion technologies, and improved bioenergy & bioconversion biocatalysts.
- Sustainable bioenergy systems, bioprocessing by-products, trees & forest products as feedstocks, biomaterials development & utilization, and alternative feedstock production & processing efficiency & bioconversion.
- Develop appropriate or minimalist approaches to pest control
- Expand biofuel research with respect to non-arable land, algae, pest issues that limit biofuel crop yields, and emissions of alternative fuels.

III. Childhood Obesity

- Development of functional foods and the role of specialty and organic crops in nutrition and well-being.
- Establish plant breeding programs that balance and optimize nutritional value to complement production characteristics.
- Develop food systems and technologies that improve the nutritional values, diversity, and health benefits of food

IV. Food Safety

- Develop methods to prevent, detect, monitor, control, and respond to potential food safety hazards in the production and processing of food crops and livestock grown under all production systems.
- Develop strategies to detect and eliminate food-borne illnesses, bioterrorism agents, invasive species, and pathogens affecting plants, humans, and animals
- Decrease dependence on chemicals with harmful effects to people and the environment by optimizing effective crop, weed, pest, and pathogen management strategies
- Develop and assess the impact of nanotechnology for pathogen and pest identification, detection, and eradication, with the overall goal of improving human health.
- Characterization and prevention of pesticide and pollen drift.

V. Other

- Graduate and Post Doctoral Fellowship Programs

ESS PRIORITIES FOR FY 2012
ESCOP Budget and Legislative Committee
(November 2, 2009)

Are There Other Institutes/Divisions Desired for NIFA?

Current as proposed on the NIFA roll out on Oct 8:

- Food Production and Sustainability
- Youth and Community Development
- Food Safety and Nutrition
- Bioenergy, Climate and Environment
 - While politically attractive at this time the above name is too narrow and fails to address growing concerns about natural resources including forests, land, water and environmental management. In addition, while related to climate change and potentially linked to mitigation, “energy” does not fit well within this general area.

Recommendations

- Suggest removing “Bioenergy” from Bioenergy, Climate and Environment and focus on Natural Resources and Environment
- Create new institute for Bioenergy and Bioproducts
 - Energy is a big issue and will continue to be for the foreseeable future. As such this area is related to climate change and should play a role in mitigating changes. However; we suggest that the formation of a separate institute dealing with bioenergy and bioproducts

Programmatic Integration

The management structure and integration among the institutes are key factors in preventing silos. Will things fall through the cracks between Institutes? How will cross-institute interactions be promoted?

Are There Unidentified Research Priorities or Themes?

Survey Themes Provided:

- Bioenergy, Feedstocks and Conversion should also include logistics, bioproducts
- Biotechnology/nanotechnology (probably technology will be cross-cutting)
- Environmental stewardship, water quantity and quality
- Value added products (food and non-food products)
- Health and Nutrition, Cultural Consumption Practices
- Food and Health
- Climate Change, Mitigation and Adaptation
- Food Safety
- Food Security and World Hunger
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New ideas:

- Farm-scale energy technologies;
- Energy conservation efforts for “Agricultural and Community Systems”;
- Keeping small scale farms economically viable, integrate into “Plant and Animal Production Systems”;
- Food security in the US is a developing problem that few recognize
- Interstate water allocations;

- Making locally-produced food in individual states more profitable and sustainable;
- Sustainability of food, fuel and fiber;
- Need ‘high risk’ research funding targeted to provide opportunity for transformative change.

Comments:

Need human and infrastructural capacity across all themes, support network eroding to address theme capacity across system with budget constraints at all levels.

We should arrange these priorities under the institute themes (\$200M programs) and modifiers added to bullets selected to show alignment

How Should Capacity Programs be Administered in NIFA?

These funds will continue to be distributed by formula into the future. There have been clear messages from OMB and Dr Shah that the Administration understand the importance of these funds and would not see to reduce them.

All comments indicated that participants do not want to see capacity programs diffused across the institutes. This could result in loss of the institutional memory and potentially have programs directed by the institutes rather than by the Experiment Station Directors. Directors must retain the ability to address individual state needs outside of overall national priorities. Directors will need to be aware of potential for the institutes and the POW process to become “directive” of state programs in the future.

NIFA Office for Capacity Programs

To protect capacity programs from either becoming too diffuse throughout NIFA and to protect them from being reduced in importance and forcibly aligned into program areas that fit under the national priorities only and thus ignore state or constituency needs or need for “novel” projects, place the capacity programs in a separate institute or under separate oversight of a highly placed administrator. This administrator would champion the USDA-State-LGU partnership and have the responsibility of keeping capacity programs robust and fully funded.

NIFA has input into capacity funds through approval of the plan of work at our institutions.

A plan of work review is scheduled for 2010; this process will include AES and CES Directors and their staff.

Other comments:

- There was also concern that creating another structure to manage capacity programs might add another bureaucracy with associated costs.
- 1890 programs have capacity programs that are in addition and somewhat different to the 1862 institutions.
- Also suggest that smaller research authorities be rolled into ‘Hatch, McIntyre-Stennis, or Evan-Allen, e.g. ‘animal health’ which would require legislation.

How Should Multicultural Programs be Administered In NIFA?

Programs currently housed under CSREES/SERD must retain integrity and visibility. Included are authorized programs for the 1890s, 1994s, HSIs, Pacific Islanders, Native Alaskans and Territorial colleges

These programs should be place within the Institute for Human and Community Development or in a Multicultural Programs Office within the Director’s Office

However, we are reminded, NIFA is modeling itself after the structure of NIH, which, like NSF has distinct divisions to serve MSIs. For example, NSF programs include multicultural programs in each of the divisions. Thus analogous structures within NSF and NIH might be appropriate NIFA.

What is the Desired Target Increase for Formula Programs in 5 Years?

There is general agreement with annual increases between 5 to 7% but as high as 35%.

Comments:

“Keeping up with Inflation” is not convincing to anyone and we are already “behind” just asking for “inflation”. We need to *double* capacity within the next 5 years but must have compelling arguments. To do so, we must package the request in terms of needs, priorities and outcomes to ensure that the capacity funds are recognized and increased.

- What good things the money is used for, e.g. new infrastructure to address the new priority areas in NIFA Institutes such as:
 - Energy Systems, Food Safety Detection, possibly a Continuing Services Contract for Infrastructure.
- What outcomes will be realized by our publics?
- What good things would “go away” if lost or eroded?

What Are The Next \$200 Million Programs?

Need to increase appropriation under the current authorization; there is a \$400+ million opportunity to increase AFRI appropriation under current authorization

Expand current/historical areas to energy – new area not under current appropriated areas of AFRI. This is new, need new capacity funds to invest in infrastructure to address this area. Any effort into energy production on available lands will impact “food security” in some way.

Bioenergy, Feedstocks Bioproducts, Conversion and Logistics

- Sustainable production/development of feedstocks including forests, animal waste, algal systems, and also municipal solid waste and other waste/nutrient streams
- Engineer plants to produce bioproducts and be productive under water limiting conditions and on marginal lands
- Develop 2nd and 3rd generation biofuels;
- Develop improved bioconversion processes
- Develop regional experimental biorefineries
- Logistics: harvesting, storage, processing, transportation

Health and Nutrition

- Fundamental and applied research that provides solutions to food-related health challenges (obesity, diabetes, heart disease, cancer, etc); Characterize and utilize ethnic foods in biomedical/preventative disease applications;
- Use classical breeding and biotechnology to develop functional foods, with improved nutritional and/or medicinal properties;
- Understand the “culture of consumption” and develop appropriate intervention strategies
- Characterize and utilize ethnic foods in biomedical/preventative disease applications;

Climate Change, Mitigation and Adaptation (Rename: Natural Resources and The Environment)

- Carbon sequestration and life-cycle carbon balance;

- Mitigation and contribution so agriculture to climate change (this is similar to the title, thus the title should be here and rename the theme title as recommended previously)
- Mitigation and contributions of agriculture to climate change) i.e. the development of adaption science
- Competitively fund research and extension projects that focus on:
 - Life cycle analyses including Green Ag Industries
 - Sustainable food, fuel, and fiber systems;
 - Conversion of lands to forests and to other plants species
 - Developing plants adapted to new climate paradigms (economic models, microbial, land use thinking/change), household level inputs global perspective
 - Regionally adapted climate models
 - Water and climate change (affects on water quality, quantity, etc.)
 - Competitively fund research and extension projects that focus on:
 - *Microbial genomic ecology*
 - Sustainable food, fuel, and fiber systems, cross list with Plant and Animal Production;
 - Conversion of lands to forests and to other plants species, cross list with Plant and Animal Production;
 - Developing plants adapted to new climate paradigms, cross list with Plant and Animal Production ;
 - Regionally adapted climate models
 - Water and climate change (affects on water quality, quantity, etc.)

Food Safety

- Characterize and understand the ecology of pathogens from field to fork
- Develop and implement methods to rapidly detect, and prevent (respond to, and recover from) food borne illness, including trace-back and trace-forward labeling to identify contaminate food products;
- Develop pathogen controls based on the multiple hurdle concept, microbial physiology, and modes and mechanisms of action of hurdles;

Food Security and World Hunger

- Develop small scale culturally appropriate production systems; i.e. match production with local consumption;
- Establish collaborative programs between US land-grant institutions and partner institutions in foreign countries;
- Increase in scientific knowledge and training for international graduate students and professionals;
- Use biotechnology to enhance traits and production of local food crops;