

## Stakeholder Feedback for FY2015 Food Security RFA

### AFRI Stakeholder Input

The programs described herein were developed within the context of the authorized purposes of USDA research, extension, and education projects and activities. In addition, AFRI obtains input from Congress, the NAREEEAB, as well as many university, scientific, and agricultural committees and organizations. NIFA developed a stakeholder's Web page ([www.nifa.usda.gov/business/reporting/stakeholder.html](http://www.nifa.usda.gov/business/reporting/stakeholder.html)) to document stakeholder input that is considered when developing and updating Program Area Descriptions and Priorities each year.

The AFRI program was significantly restructured and refocused in FY 2010 to more effectively address societal challenges while continuing to support foundational agricultural science. A public meeting was held on June 2, 2010, to seek stakeholder comment on the FY 2010 AFRI RFAs prior to revising them for FY 2011. NIFA again solicited stakeholder input via a public meeting and 12 program-specific webinars. The public meeting was held on February 22, 2012, and the webinars were held during the months of March and April, 2012. NIFA received more than 145 comments from stakeholders, including a wide range of scientific societies, producer associations, universities and other research organizations, policy and advocacy groups, non-profit organizations, and leading scientists in the field of agriculture and food sciences. Collectively, the non-governmental organizations represented over 300,000 stakeholders of interest. A comprehensive analysis was conducted of the written and oral stakeholder input comments received. Categorically, these comments can be clustered into the following: Production Agriculture; Food Safety; Energy, Environment, Natural Resources, and Rural Communities; Bioengineering, Biochemistry, and Plant Health; Health and Obesity; Grant-making; and Animal Agriculture and Aquaculture.

In general, the broad range of AFRI stakeholders provided overwhelming support for NIFA and the AFRI program. During the in-person stakeholder listening session, 100 percent of the speakers expressed their appreciation for the event and the opportunity to participate. It should be noted that hundreds of e-mails were received from stakeholders indicating their regrets of not being able to attend due to other commitments, the short notification, and lack of financial resources. Overall, stakeholders applauded NIFA for expending the time, effort, and resources to facilitate sessions designed to obtain their feedback, comments, and being responsive to stakeholder input. In addition, almost ten percent of the stakeholders specifically expressed their gratitude for the Administration, USDA, and NIFA's request for an increase in funding for the AFRI program in the FY 2013 budget. Moreover, many supported full funding of the AFRI program to the level authorized in the 2008 Farm Bill. Stakeholders with current and past AFRI projects expressed their appreciation of the goals and mission of the AFRI program. The stakeholders applauded NIFA for its leadership in taking on the diverse, global agricultural and food science issues. In addition, a significant proportion of the stakeholders, 40 percent, expressed in great detail the level of their gratitude for AFRI as a funding source, the competitive grants process, efforts to ensure that AFRI Challenge Area RFAs include basic research and relevant scientific disciplines. Lastly, stakeholders articulated their support for NIFA's partnership initiatives including inter-agency and public-private efforts.

Stakeholder concern exists regarding NIFA's compliance with AFRI authorizing language, the scientifically confining aspects of the RFAs, the funding amount and allocations between the foundational and challenge areas, the benefit and efficacy of Coordinated Agricultural Project (CAP) grants, and the overall AFRI program/project types that are under/not funded.

Stakeholders expressed trepidation regarding the eligibility criteria for integrated projects that exclude entities beyond colleges and universities as primary recipients. Also, stakeholders felt that the funding level of the Foundational Program was inadequate and indicated support of an allocation level of up to 50 percent of the AFRI appropriation for that part of the program. Other stakeholders provided input regarding specific AFRI set-aside amounts for program/projects, e.g., organic, classical breeding, water, and biotechnology. Overall, 30 percent of stakeholders expressed concern that CAP grants are too large. While many of the stakeholders expressed an understanding of the concept and benefit of CAP grants to long-term, interdisciplinary, scientific research, stakeholders encouraged NIFA to reconsider and balance the portfolio and funds attributed to these types of projects. Additionally, stakeholders expressed concerns regarding the overall AFRI program, as it pertains to decisions that eliminate and/or reduce single-investigator, hypothesis-driven scientific discovery, junior faculty award success rates, qualified and diverse panel reviewers, and a disconnect between industry and higher education scientific research.

Stakeholders provided an abundance of recommendations that are proactive and designed to have immediate, beneficial outcomes. The recommendations included the need for NIFA to define its agricultural identity among the federal agencies, improvements to the AFRI Program, current and future investments, and the development of RFAs. Some stakeholders indicated that NIFA was duplicative and/or indistinguishable in its research efforts associated with other federal agencies. However, they were supportive of the need and benefit of leveraging limited resources through inter-agency partnerships. Stakeholders expressed the need for more, smaller innovative awards in the amount of \$1 million dollars and restricting the size of CAP awards to \$10 to \$20 million. Lastly, the recommendations regarding RFAs included expanding and/or clarifying the restrictive language, allowing adequate time to prepare a responsive, comprehensive proposal, systematic and consistent publishing, and associating the request for information to match the size of the award.

In response to the comments received, NIFA took several actions. The AFRI program is undergoing a rigorous external evaluation to examine a number of issues around NIFA's administration of the program and to assess the quality of the work being supported. Based on the recommendations of the evaluation, as well as comments from stakeholders, NIFA will make changes to program offerings, make adjustments to award sizes, and reconsider the distribution of funds between Challenge Areas and the Foundational Program. The rate at which these changes will occur will depend, in part, on available funding.

NIFA understands that some stakeholders are concerned about priority limitations identified in the AFRI RFAs. NIFA has focused on making critical but essential decisions regarding the scientific reach and impact for each RFA that is published. These decisions included the identification of five Challenge Areas in FY 2010 that are relevant and consistent with the priority areas identified in the AFRI legislation. After careful consideration, the AFRI program introduced the Water and Agriculture Challenge Area in FY 2014. Moreover, these decisions are guided by 2008 Farm Bill, National Agricultural Research, Extension, Education, and

Economics Advisory Board, USDA Strategic Plan, Research, Education, and Economics Action Plan, NIFA Strategic Plan, pertinent industry-related scientific reports, and stakeholder input. In the end, the RFAs reflect a comprehensive, consultative document to address the collective needs of specific scientific issues that notably impact America's agricultural and food system.

Within the stakeholder community, there is a fair amount of concern regarding NIFA's agricultural identity among the federal agencies, specifically as it applies to addressing childhood obesity prevention. NIFA emphasizes the role of foods and whole diets in the prevention of chronic degenerative diseases, while the National Institutes of Health, addresses therapeutic aspects. Successful applications to AFRI must align with USDA and NIFA mission, strategic plans, and goals. Moreover, the existing REE Action Plan encourages the formal and informal collaboration with other USDA and Federal agencies, as well as public and private partners. The focus of these partnerships is on a national and international level to ensure our research, education, and extension activities are representative of current priorities and take advantage of existing knowledge.

NIFA acknowledges the level of concern that exists within a portion of the stakeholder community regarding entities eligible to submit applications for integrated projects. Eligibility for all NIFA programs is established in authorizing legislation. Eligibility to apply to the AFRI program was established in the 2008 Farm Bill and updated in Section 7406 of the Agricultural Act of 2014 amends section 2(b) of the Competitive, Special, and Facilities Research Grant Act (7 U.S.C. 450i(b)) and NIFA has adhered to that requirement. Applicants not eligible to directly apply are encouraged to partner with eligible institutions. In addition, NIFA remains committed to engaging small, mid-sized, and minority-serving institutions and new investigators in all of its programs. To ensure their participation in AFRI, NIFA offers Food and Agriculture Science Enhancement (FASE) grants within most of the program areas. FASE gives special funding consideration to applications from qualifying schools for even the largest grants, and NIFA sets aside 10 percent of AFRI funding for this purpose. FASE-eligible schools are those with enrollments of fewer than 17,500 students, minority-serving institutions, and those in EPSCoR states (see Part II, D, 3, c, 2). In addition, AFRI gives special consideration to new faculty with fewer than five years of experience, and offers pre- and post-doctoral fellowships to encourage young scientists to engage in agricultural science.

### **Stakeholder Input on Food Security**

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In FY 2012, NIFA received approximately 70 stakeholder comments that were relevant to the Food Security Challenge Area. Most of those who commented on the focus of the AFRI program were supportive of the shift to focused challenge areas, but also felt that the research priority areas need to be broadened. Several stakeholders urged continued support for the challenge

areas, but also advocated for increasing funding for the Foundational Program in which basic research grants can be awarded. Specific recommendations made by stakeholders included:

1. Increase support for animal and livestock research. According to the Food and Agriculture Organization of the United Nations (FAO), animals and livestock contribute 40 percent of the global value of the agricultural output and support the livelihoods and food security of almost a billion people worldwide.
2. Improve animal feed efficiency. Increasing production and consumption of meat and other animal products raise important questions for food security. Animal production diverts grain from human consumption, uses lots of land, and produces carbon dioxide (CO<sub>2</sub>). Improved animal feed efficiency would mitigate these detrimental effects.
3. Increase support for aquaculture research. Current USDA investments in aquaculture are not proportional to growing consumer demand and opportunities for developing the U.S. aquaculture industry. Despite the obvious importance of aquaculture for the future economic and food security of the United States, research investments by USDA are highly skewed toward terrestrial agriculture.
4. Increase support for classical breeding of plants and animals and track the results. AFRI should fund classical breeding projects whose overall objective is the release of farmer-ready public livestock breeds and crop varieties with a priority placed on regional adaptation, breeding for organic and/or sustainable farming systems, pest and disease resistance, and resilience to climate change. Investments in classically bred plants and animals should be tracked separately from genomics or molecular genetics. In this way, the funding and trends in public breeding capacity will be more easily monitored and analyzed.
5. Increase support for integrated pest management (IPM). IPM programs effectively manage pests and also respond rapidly to crises. NIFA's IPM portfolio has been cut disproportionately relative to the rest of the NIFA portfolio. Strong federal investments in IPM research and education increases food security by reducing agricultural losses caused by pests and disease.
6. Support genome sequencing of agriculturally important insects and specific plant and animal varieties and species. Increased knowledge in this area can reduce losses from pest insects and increase production.

In addition, there were many comments about providing career opportunities for young scientists, ensuring that there is a pipeline of researchers with the skills to address the challenges facing agriculture and ensuring continuity in food and agricultural science disciplines. The food industry wants students with advanced degrees. Universities expressed concern that they would not be able to train these students without adequate research funding. The AFRI Fellowships program now supports both predoctoral students and postdoctoral students. The program focuses on developing technical and functional competence for predoctoral students as well as the research independence and teaching credentials of postdoctoral scientists. Research competence in the agriculture, forestry, and food sciences within NIFA's challenge areas is achieved through well-developed and highly interactive mentoring and training activities.

Additional stakeholder comments encouraged NIFA to increase the involvement of Extension in projects, improve collaboration and coordination with other federal agencies to leverage resources and avoid duplication of effort, and identify and develop new agricultural technologies.

On August 15, 2013, the REE mission area of the U.S. Department of Agriculture (USDA) sponsored a plant breeding stakeholders listening session to begin gathering input on the current status of plant breeding research, drawing 80 attendees and an additional 38 sets of submitted written comments. Comments and suggestions relevant to AFRI food security received from stakeholders during the listening session and comment period included: (i) training the next generation of plant breeders; (ii) developing tools and resources to enable discovery and advanced breeding of underserved commodities; and (iii) promoting technology transfer of genomics research to field outcomes. In response to those comments, this RFA includes a priority on “Genetics, Genomics, Phenomics, and Breeding.”