



August 19, 2015

Policy and Oversight Division
Office of Grants and Financial Management
National Institute of Food and Agriculture
U.S. Department of Agriculture, STOP 2299
1400 Independence Avenue, SW
Washington, DC 20250–2220

Re: Comments on FY 2015 AFRI Foundational RFA

Submitted via email to: Policy@nifa.usda.gov

The National Sustainable Agriculture Coalition (NSAC) appreciates the opportunity to submit comments on the Agriculture and Food Research Initiative (AFRI) Foundational Program Request for Applications (RFA) issued for Fiscal Year 2015.

NSAC is a national alliance of over 40 family farm, food, rural, and conservation organizations¹ that together take common positions on federal agriculture and food policies to advance sustainable agriculture. Research, extension, and education remain key issues for our coalition. NSAC's research policy work focuses on the development, funding, and implementation of USDA and other federal research, education, extension, and integrated programs that examine sustainable food and agricultural systems, including the AFRI program and several other NIFA competitive grant programs such as the Sustainable Agriculture Research and Education (SARE) program, the Organic Agriculture Research and Extension Initiative (OREI) and the Beginning Farmer and Rancher Development Program (BFRDP).

¹ Agriculture and Land-Based Training Association - Salinas, CA; Alternative Energy Resources Organization - Helena, MT; California Certified Organic Farmers - Santa Cruz, CA; California FarmLink - Santa Cruz, CA; C.A.S.A. del Llano (Communities Assuring a Sustainable Agriculture) - Hereford, TX; Catholic Rural Life – St Paul, MN; Center for Rural Affairs - Lyons, NE; Clagett Farm/Chesapeake Bay Foundation - Upper Marlboro, MD; Community Alliance with Family Farmers - Davis, CA; Dakota Rural Action - Brookings, SD; Delta Land and Community, Inc. - Almyra, AR; Ecological Farming Association - Soquel, CA; Farmer-Veteran Coalition - Davis, CA; Fay-Penn Economic Development Council - Lemont Furnace, PA; Flats Mentor Farm - Lancaster, MA; Florida Organic Growers - Gainesville, FL; GrassWorks - New Holstein, WI; Hmong National Development, Inc. - St. Paul, MN and Washington, DC; Illinois Stewardship Alliance - Springfield, IL; Institute for Agriculture and Trade Policy - Minneapolis, MN; Interfaith Sustainable Food Collaborative - Sebastopol, CA; Iowa Natural Heritage Foundation - Des Moines, IA; Izaak Walton League of America - St. Paul, MN/Gaithersburg, MD; Kansas Rural Center - Topeka, KS; The Kerr Center for Sustainable Agriculture - Poteau, OK; Land Stewardship Project - Minneapolis, MN; MAFO – Sartell, MN; Michael Fields Agricultural Institute - East Troy, WI; Michigan Food & Farming Systems (MIFFS) - East Lansing, MI; Michigan Organic Food and Farm Alliance - Lansing, MI; Midwest Organic and Sustainable Education Service - Spring Valley, WI; The National Center for Appropriate Technology - Butte, MT; National Hmong American Farmers - Fresno, CA; Nebraska Sustainable Agriculture Society - Ceresco, NE; Northeast Organic Dairy Producers Alliance -Deerfield, MA; Northern Plains Sustainable Agriculture Society - LaMoure, ND; Northwest Center for Alternatives to Pesticides - Eugene, OR; Ohio Ecological Food & Farm Association - Columbus, OH; Oregon Tilth - Corvallis, OR; Organic Farming Research Foundation - Santa Cruz, CA; Rural Advancement Foundation International – USA - Pittsboro, NC; Union of Concerned Scientists Food and Environment Program - Cambridge, MA; Virginia Association for Biological Farming - Lexington, VA; Wild Farm Alliance - Watsonville, CA.

Additionally, NSAC co-founded the AFRI Coalition in 2009, which now represents over 40 professional scientific societies and agricultural stakeholders that continue to advocate for increased support for AFRI and agricultural research writ large.

In our view, AFRI must offer enhanced support to the development of sustainable food and agricultural systems in order to meet its broad goals set forth with its establishment in the 2008 Farm Bill. In this light, NSAC makes the following recommendations on the AFRI Foundational RFA for FY 2015, as the agency moves ahead with developing next year's RFA. Our recommendations aim to further the goals of sustainability and the resiliency of our food and farm systems through AFRI-supported research, with a specific focus on increasing resources for public cultivar and breed development and strengthening our country's genetic resources.

NSAC and our member groups across the country believe that there is much promise for research focused on sustainable agricultural systems through the AFRI program. We thank you for serious consideration of our recommendations, and would welcome requests for any additional feedback we can provide.

Sincerely,



Juli Obudzinski, Senior Policy Specialist
National Sustainable Agriculture Coalition

RECOMMENDATIONS

1. Develop a separate RFA to solicit proposals on Public Cultivar and Breed Development

NSAC has worked for many years to increase support for classical plant and animal breeding in order to meet the urgent needs for improved varieties and breeds for farmers of all kinds, including sustainable, organic, diversified farmers and those growing for local and regional food systems. We have pressed both Congress and USDA over the years to invest more resources and dedicated funding for public cultivar development in order to reverse the dangerous trend of dwindling support for plant breeding programs across the country. We acknowledge the efforts that USDA has undertaken in recent years to call more attention to the vulnerable state of our country's public plant and animal breeding infrastructure, and appreciate the improvements made to recent Requests for Applications under the AFRI program, as well as several listening sessions and the recent USDA Roadmap that was released on this topic.

However, we continue to urge the Administration to scale up its efforts. Enhanced funding and programming will be necessary in order to actually have a measurable impact in reversing the trend of declining research and support for public plant and animal breeding programs across our country.

We urge immediate action in this regard with substantial changes for the FY 2016 AFRI foundational program.

Concern for public plant breeding resources has been raised by Congress in recent years, and was heightened in the Senate's proposed agriculture appropriations bill for Fiscal Year 2016, which reiterates the importance of conventional (classical) plant and animal breeding within AFRI as authorized in Section 7406 of the Food, Conservation, and Energy Act of 2008. Specifically, the Senate Appropriations Committee states that it:

“strongly concurs with the intent of this section [of the 2008 Farm Bill], and notes the importance of having publicly available cultivars and breeds that are specifically bred to be adapted to the soils, climates, and farming systems of farmers of all regions,”

and specifically directs NIFA to:

“make public cultivar and breed development an increased priority for funding within the AFRI program by creating a **separate Request for Applications in this area** (*emphasis added*). The Committee further requests a report from the agency as to its plans for implementing this important requirement.”

We urge the Administration to incorporate these changes, as directed by Congress, into the FY 2016 AFRI Foundational Program by releasing a separate RFA on Public Cultivar and Breed Development. The current structure of managing a program that solicits applications on both conventional breeding research as well as genomics, pre-breeding, and more basic research has not to date addressed the fundamental issue and statutory priority on conventional breeding research and public cultivar development.

Therefore, as directed by Congress, a stand-alone program should be developed in FY 2016 that is focused solely on public cultivar and breed development, and those research proposals should be solicited and reviewed separately from more basic genomics research that does not directly result in improved public cultivars.

The new AFRI RFA for FY 2016 should solicit applications from plant breeders seeking to improve genetic resources and cultivars for the benefit of U.S. producers, seed companies, processors and consumers. This research should focus on breeding improved germplasm and varieties with higher yields, improved disease and pest resistance, resilience to weather extremes, and that are adapted to local and regional growing climates. We were pleased to see “cultivar development” and “participatory breeding” listed under the *Plant Breeding* priority in the 2015 RFA. Another NIFA competitive grants program (OREI) has funded several highly cost-effective farmer-participatory breeding networks that have released multiple new public cultivars, and much more of this activity is warranted to meet farmers' needs. Thus, we urge NIFA to emphasize *farmer* participatory breeding and *public* cultivar development in the new AFRI RFA on Public Cultivar and Breed Development.

In addition to the distinct AFRI RFA on Public Cultivar and Breed Development, sufficient resources should be provided for this priority area in order to fund a greater percentage of submitted applications than recent funding cycles, which have yielded lower success rates than many other AFRI or NIFA programs.

For example, over 90 proposals were submitted for consideration under the FY 2014 AFRI Foundational RFA's *Plant Breeding* program, and yet, there was only sufficient funding available to fund six projects. While we were very pleased to see that a majority of these projects included some level of cultivar development in the proposed research, the inability of the program to meet the high demand for research in this area and the dire need for additional resources to support our nation's plant breeding programs and infrastructure, is an issue that needs to be addressed with an increase in dedicated funding to support public cultivar development within AFRI.

We appreciate the Administration's increased funding request for AFRI's FY 2016 budget, and encourage future budget requests to continue to build on previous requests. For the Fiscal Year 2016 Foundational AFRI program, at least \$10 million should be invested in the new Public Cultivar and Breed Development RFA.

Recommendation: Develop a separate AFRI RFA for FY 2016 on Public Cultivar and Breed Development and allocate at least \$10 million for new plant breeding research projects. The RFA should solicit applications on applied classical plant breeding research, including farmer-participatory breeding; and exclude more basic, genomic and pre-breeding research that is currently included in the AFRI *Plant Breeding* program area.

2. Ensure adequate plant breeding expertise on peer review panels

Upon creation of a distinct RFA dedicated to Public Cultivar and Breed Development in FY 2016, as directed by Congress, it is of the utmost importance to ensure that the peer review panel and panel manager chosen to evaluate submitted proposals have the demonstrated expertise in plant breeding and cultivar development to accurately assess the scientific merit and relevance of each proposed project.

Previous review panels assembled for AFRI's *Plant Breeding* program have not included sufficient plant breeders with the expertise and track record in cultivar development needed to thoroughly review and debate the merit and relevance of plant breeding proposals.

We therefore urge NIFA to re-establish a truly "peer" review panel for the FY 2016 AFRI RFA on Public Cultivar and Breed Development that includes actual plant breeder peers as reviewers who have demonstrated expertise and a track record in public cultivar development to evaluate proposed research on plant breeding. We also strongly encourage NIFA to continue trends from recent years to include non-scientists (including farmers and NGOs with expertise and insight on plant breeding needs for a variety of agricultural production systems, including organics) in the peer review panel as well.

Recommendation: For the new FY 2016 RFA on Public Cultivar and Breed Development, NIFA should assemble a peer review panel, including the panel manager, which includes a majority of actual plant breeders who have demonstrated expertise and track record in public cultivar development. Additionally, other stakeholders within the NGO and farm sector who have expertise and connections to the farming community should also be included in the peer review panel in order to help evaluate the relevance of plant breeding research,

3. Strengthen emphasis on sustainable farming systems, including soil health, water quality and agricultural diversification

We urge NIFA to continue to evaluate and include an emphasis throughout all AFRI programs on research, education, and extension that supports sustainable farming systems. Specifically, NIFA should increase the focus on and funding available for research related to soil health, water quality, and agricultural diversification within the AFRI Foundational RFA's program priority on Bioenergy, Natural Resources, and Environment (BNRE).

Given the recent national focus on the importance of soil health in protecting the future of our country's natural resources and agricultural economy, a specific call for research proposals that seeks to advance our understanding of the role that soil quality plays in agricultural production and agroecosystem management should be included in the FY 2016 Foundational AFRI RFA. In addition to the program areas on *Nitrogen and Phosphorus Cycling* and *Agroecosystem Management*, a separate *Soil Health* program area should be established that explicitly solicits research proposals that develop innovative production methods and holistic management structures that seek to improve soil health and the overall sustainability and resilience of our farming systems. This program area should include a specific focus on cover cropping and resource-conserving crop rotations and should address the enormous role that soil health can play in improving water, air, and wildlife resources; reducing costly and sometimes harmful inputs; and mitigating climate change while also helping farmers and ranchers adapt to and become more resilient to climate change. The importance of soil health as the basis for all agricultural production and its central importance to long-term sustainable production should be emphasized throughout the AFRI Foundational RFA.

Additionally, the *Nitrogen and Phosphorus*, and *Agroecosystem Management* program areas should include a specific call for research projects that seek to improve water quality as it relates to nutrient use and specific practices associated with actively managed agroecosystems. In addition to the Foundational program, all NIFA programs with a focus on water and agriculture should solicit research projects that seek to not only increase water-use efficiency and delivery, but equally importantly, research that ultimately improves water quality using an agroecological and systems approach. Agricultural runoff directly impacts water quality, carrying potential pollutants into streams, lakes, ground water supplies, and estuaries. The RFA should highlight the importance of research that addresses agricultural nonpoint source pollution, as well as erosion mitigation to improve water quality.

Recommendation: The FY 2016 AFRI Foundational RFA should make available \$20 million to fund research, education and extension projects within the Bioenergy, Natural Resources, and Environment program priority, of which \$7 million should be allocated for a new *Soil Health* program area. Other program areas within the BNRE program priority should emphasize systems research on agricultural diversification and impacts of production methods on soil health, biodiversity and water quality.

4. Strengthen emphasis on research that is relevant to organic production systems

We are pleased to see organic agriculture specifically referenced in last year's Foundational RFA in the Plant Health, Production and Protection; and Animal Health, Production, and Protection program areas. Given the continued growth of the organic sector in recent years, we urge NIFA to expand other program areas to specifically solicit research on a variety of production systems, including organic cropping and livestock methods and innovations.

For example, the Agriculture Economics and Rural Communities program area should solicit proposals that analyze the scale differentials of organic production systems, specifically how production techniques, technologies, transition methodologies and marketing strategies differ according to the scale of operation and how they may impact overall farm profitability and economic viability.

Additional research areas could examine how to improve and meet market demand for organic agriculture products nationally and internationally, the specific plant and animal breeding needs for organic production to enhance nutritionally dense products and stress reliance, and whole systems approaches utilizing organic methods for weed, insect, and disease management with a specific focus on integrated crop and livestock systems.

Recommendation: Include specific reference to potential research topics relevant to organic production systems within the Agriculture Economics and Rural Communities program area, in addition to other relevant AFRI Foundational programs.

5. Maintain current priorities on small and medium-sized farms, beginning farmers, and local food systems

We are pleased to see the continuation of a host of recently added priorities in this year's RFA that focus on research on local and regional food systems, immigration policies, farm labor, and programs that assist beginning, small and medium-sized farms. We are also pleased to see that farm entry, transition, and economic viability remain subtopics within the *Small and Medium-Sized Farms* subprogram.

We would urge NIFA to continue to include the research focus on effective strategies and tools to assist small and medium-sized farmers in making decisions about participating in livestock or crop production contracts, as that issue continues to be extremely relevant especially for producers within the livestock sector.

We are pleased to see a focus on the "resilience" of agricultural and rural communities within the *Innovation for Rural Entrepreneurs and Communities* program area, and would encourage NIFA to strengthen this research topic by explicitly including this focus in the list of bulleted emphasis areas outlined in the RFA.

Finally, we would urge NIFA to strengthen the emphasis on research related to the retention rate of existing farmers and the success rates of new farmers, specifically seeking analysis that seeks to better understand how the scale, land access and tenure, farm profitability, and marketing access ultimately impact the success and long-term career of farmers across a variety of sectors and regions.

Recommendation: Provide increased funding for the AERC program area of at least \$20 million, with a significant portion of this increase directed to the Small and Mid-sized Farms program. This will allow NIFA to not only maintain current priorities within the AERC program area, but also expand proposed research topic areas to include resiliency of agricultural systems and specific research on the retention and success rates of existing and new farmers.