Agriculture and Food Research Initiative (AFRI) Coalition

March 22, 2022

The Honorable Tammy Baldwin, Chair Agriculture Appropriations Subcommittee United States Senate Washington, DC 20510

The Honorable Sanford Bishop, Chair Agriculture Appropriations Subcommittee U.S. House of Representatives Washington, DC 20515 The Honorable John Hoeven, Ranking Member Agriculture Appropriations Subcommittee United States Senate Washington, DC 20510

The Honorable Andy Harris, Acting Ranking Member Agriculture Appropriations Subcommittee U.S. House of Representatives Washington, DC 20515

Dear Chair Baldwin, Ranking Member Hoeven, Chair Bishop, and Acting Ranking Member Harris:

Thank you for your leadership of the House and Senate Agriculture Appropriations Subcommittees in the 117th Congress. The AFRI Coalition, along with the undersigned organizations, look forward to working with all of you in FY 2022 and beyond.

The Agriculture and Food Research Initiative (AFRI) Coalition is comprised of organizations representing research institutions, scientific societies, and other food and agricultural stakeholders. Working together, we advocate for increased investments in AFRI, the U.S. Department of Agriculture's (USDA) flagship competitive grants program for fundamental and applied research, extension, and education in support of our nation's interconnected food and agricultural systems.

We are grateful for the \$445 million provided for AFRI in FY 2022. For FY 2023, we respectfully request an appropriation of \$700 million for AFRI - the full authorization amount. This funding level for the program is needed to invest in crucial areas aimed at addressing our nation's most urgent and pressing food, agriculture, and public health challenges. AFRI-funded research supports COVID-19 recovery, climate change adaptation and mitigation, equity across the food system, food safety and traceability, supply chain resiliency, bioenergy, nutrition and wellness, agricultural technology, rural economic prosperity, and a diverse research workforce.

USDA's National Institute of Food and Agriculture (NIFA) administers AFRI, the USDA's largest competitive extramural research grant program. The program's flexibility has allowed NIFA to quickly respond to unforeseen challenges, such as COVID-19, to support research and education addressing the pandemic. Growing inflation, food insecurity, and supply chain disruptions have all been felt throughout the food and agriculture sector as a result of the ongoing pandemic. However, AFRI is uniquely suited to address many of these challenges through transdisciplinary research, which allows researchers across disciplines to examine issues in a systematic way rather than in silos. For example, Sustainable Agriculture Systems (SAS) AFRI

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program funds projects at the intersection of food production, climate and the environment, and nutrition, with a focus on healthy equity, providing critical support to research that can address these challenges synergistically.¹

AFRI not only helps our farmers and food producers to mitigate the impacts of these challenges, but to also contribute to the solutions. There is no doubt that food and agriculture systems will face future challenges as a result of climate-related events. Increasingly erratic fluctuations in growing seasons and temperature extremes, drought, and flooding impact human and animal health, and the environment in unprecedented and often negative ways. These changes can exacerbate issues associated with water quality, foodborne pathogens, and vector-borne infectious disease. Research is already beginning to show that the nutritional quality of crops has declined with warming temperatures, while productivity has declined by about 21%.²

American farmers and ranchers stand to benefit from research that improves seed adaptability and declining productivity, and helps farmers, especially historically underserved farmers, remain competitive on the global scale. Digital technologies are also changing the landscape of mitigating climate change, improving plant and animal health, and enhancing traceability across the food system. But basic research, development, and scaled implementation of technologies requires investment. Unfortunately, despite incremental increases in AFRI funding, roughly 70 percent of AFRI proposals that are deemed worthy by expert review panels are not funded,³ simply because of insufficient funding.

Food and agriculture is the third largest direct contributor to the U.S. Gross Domestic Product (GDP) after healthcare and housing.⁴ However, this is not reflected in research investments into food and agriculture. Agricultural and food research funding at the USDA has remained fairly flat over the last fifty years.⁵ In contrast, countries such as China and India have steadily increased their funding into agriculture, and since 2010, China's public funding of agricultural research has surpassed all countries.⁶ The stagnation, or rather, decline in U.S. public funding of food and agriculture research risks our competitiveness, long-term cutting edge scientific discovery impacting human and animal health, and the next generation talent pipeline.

The AFRI Coalition remains committed to our longstanding goal of achieving the \$700 million authorized funding level for AFRI, while still investing in other vital research, education, and extension programs across NIFA. The coalition strongly believes the increase in AFRI funding should not come at the expense of other competitive and capacity programs within NIFA. Sustained funding across the food and agricultural research enterprise is needed to ensure our

¹ https://nifa.usda.gov/program/afri-sas

² Ortiz-Bobea, A., Ault, T.R., Carrillo, C.M. *et al.* Anthropogenic climate change has slowed global agricultural productivity growth. *Nat. Clim. Chang.* 11, 306–312 (2021). https://doi.org/10.1038/s41558-021-01000-1

³ https://nifa.usda.gov/afri-annual-review-archives

⁴ https://www.ift.org/-/media/policy-advocacy/files/ift-whitepaper-012720final.pdf

⁵ https://www.nsf.gov/statistics/

⁶ https://www.nsf.gov/statistics/; https://www.ers.usda.gov/amber-waves/2016/november/us-agricultural-r-d-in-an-era-of-falling-public-funding/

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global competitiveness and national security. Robust investment in USDA-supported research is also needed to attract, retain, and develop the next generation of scientists from diverse backgrounds to address increasing pressures on our natural resources and advance innovations benefiting all Americans.

Thank you for your strong support of AFRI and previous efforts to increase AFRI funding. We believe now is the time to invest in our country's future by providing the full authorization amount of \$700 million for AFRI in FY 2023.

Sincerely,

The AFRI Coalition:

Agricultural & Applied Economics Association

American Institute of Biological Sciences

American Society for Horticultural Science

American Society for Microbiology

American Society for Nutrition

American Society of Agronomy

American Society of Animal Science

American Society of Plant Biologists

Aquatic Plant Management Society

Association of American Universities

Association of American Veterinary Medical Colleges

Carbon 180

Crop Science Society of America

Ecological Society of America

Entomological Society of America

Farm Journal Foundation

Institute of Food Technologists

National Association for the Advancement of Animal Science

National Association of Plant Breeders

National Sustainable Agriculture Coalition

North Central Weed Science Society

Northeastern Weed Science Society

Soil Science Society of America

Southern Weed Science Society

Supporters of Agricultural Research (SoAR) Foundation

The Breakthrough Institute

Union of Concerned Scientists

Weed Science Society of America

Western Society of Weed Science