

November 16, 2023

The Honorable GT Thompson  
Chairman  
House Committee on Agriculture  
400 Cannon House Office Building  
Washington, DC 20515

The Honorable Debbie Stabenow  
Chairwoman  
Senate Committee on Agriculture  
731 Hart Senate Office Building  
Washington, DC 20510

The Honorable David Scott  
Ranking Member  
House Committee on Agriculture  
468 Cannon House Office Building  
Washington, DC 20515

The Honorable John Boozman  
Ranking Member  
Senate Committee on Agriculture  
555 Dirksen Senate Office Building  
Washington, DC 20510

Dear Chairman Thompson, Chairwoman Stabenow, Ranking Member Scott, and Ranking Member Boozman:

As you work together to develop the next Farm Bill, we urge you to support transformative research at USDA by including the bipartisan, bicameral *Advancing Cutting Edge (ACE) Agriculture Act* (S.834, H.R.2385) in the next Farm Bill. The *ACE Ag Act* would reauthorize the Agriculture Advanced Research and Development Authority (AgARDA) at USDA, add an additional focus on resilience and mitigation research, and grow its authorization level to more adequately reflect the mission of advanced research programs.

AgARDA was established in the 2018 Farm Bill to support high-risk, high-reward research at USDA to address the most far-reaching challenges facing the food and agriculture system. Modeled after successful advanced research agencies like the Department of Defense's Defense Advanced Research Projects Agency (DARPA) and the Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E), AgARDA was created to bring this proven model of transformative research to the USDA to maintain U.S. advantages and leadership in agriculture innovation. AgARDA was designed to help de-risk innovative technologies by funding research with significant potential benefits, but which may be too early-stage or technically challenging for private-sector investment.

Because of investments in agricultural research, the U.S. has seen unparalleled growth in agricultural production over the last 70 years and has led the world in agricultural innovation. Farmers and consumers in the U.S. and around the world benefit from increased productivity, increased efficiency, and lower rates of food insecurity. However, public funding for these innovations has fallen by one-third over the last two decades. This decline comes at the same time when global competitors like China, Brazil, and India are making significant investments in public agricultural research and development (R&D). As of 2016, China's investments in agriculture R&D were nearly double that of the U.S.<sup>1</sup>

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<https://www.ers.usda.gov/amber-waves/2022/june/investment-in-u-s-public-agricultural-research-and-development-has-fallen-by-a-third-over-past-two-decades-lags-major-trade-competitors/>

Novel and innovative research holds the keys to unlocking new tools and ensuring a resilient food and agricultural system. Adding an emphasis on resilience and mitigation research at AgARDA will help producers meet the challenges of a changing agricultural landscape, increase production to meet the needs of a growing global population, and help U.S. agricultural products compete in shifting global markets.

A hallmark of ARPA agencies is the focus on transformative, transdisciplinary research questions that require pivotal investments in breakthrough technologies. DARPA has successfully addressed national challenges for the past 50 years by building diverse collaborations across academia, industry, and government partners to cultivate an environment that strives for transformational change. The overall budgets of DARPA, ARPA-E, and the newly created ARPA-H, which range from \$450 million to \$3.8 billion, are reflective of the resources needed to support the advanced research mission. ARPA research projects' budgets are large, but also laser-focused on ambitious and highly specific challenges. While AgARDA is a pilot program in its current form, the *ACE Ag Act* envisions a program similar to the other ARPAs and shows support for this concept by increasing the authorization to \$100 million. This will provide the program the greatest opportunity and flexibility to support the kind of research that can have truly transformational results.

The successes of other federal high-risk, high-reward research programs have made significant contributions to the U.S. economy, such as the Internet and Global Positioning Services, and have protected and enhanced vital components of our nation's defense and energy sectors. AgARDA is an opportunity to bring this legacy of transformative innovation to USDA to secure America's food supply and give our farmers and ranchers the tools they need to meet the challenges of the 21st century. We, the undersigned organizations, companies, and institutions, ask you to support advanced and innovative research at USDA by reauthorizing AgARDA through the *ACE Ag Act* in the next Farm Bill.

Sincerely,

Agricultural & Applied Economics Association  
American Association of Mycobacterial Diseases  
American Association of Veterinary Medical Colleges  
American Conservation Coalition Action  
American Dairy Science Association  
American Feed Industry Association  
American Institute of Biological Sciences  
American Malting Barley Association  
American Phytopathological Society  
American Seed Trade Association  
American Society for Microbiology  
American Society of Agronomy  
American Society of Animal Science  
American Society of Plant Biologists  
American Soybean Association  
American Veterinary Medical Association  
Animal Health Institute

Aquatic Plant Management Society  
Biotechnology Innovation Organization  
Bipartisan Policy Center Action  
C3 Action  
Cereals & Grains Association  
Citizens for Responsible Energy Solutions (CRES)  
ClearPath Action  
Colorado Farm Bureau  
Colorado State University  
Cornell College of Agriculture and Life Sciences  
Council for Agricultural Science and Technology (CAST)  
Crop Science Society of America  
E2  
Earthjustice  
Ecological Society of America  
Edge Dairy Farmer Cooperative  
Entomological Society of America  
Environmental Defense Fund  
Environmental Policy Innovation Center  
Evangelical Environmental Network  
Eversole Associates  
FASS  
Food and Agriculture Climate Alliance  
International Alliance for Phytobiomes Research  
International Wheat Genome Sequencing Consortium  
Iowa State University  
Kansas State University  
Meat Institute  
Mycobacterial Diseases of Animals – Multistate Initiative  
National Barley Improvement Committee  
National Coalition for Food and Agricultural Research  
National Turfgrass Federation  
National Wheat Improvement Committee  
North American Millers' Association  
North Central Weed Science Society  
Northeastern Weed Science Society  
Pet Food Institute  
Soil Science Society of America  
Southern Weed Science Society  
Spark Climate Solutions  
Supporters of Agricultural Research (SoAR) Foundation  
The Breakthrough Institute  
The Good Food Institute  
University of Florida

US Dairy Forage Research Center Stakeholder Committee  
Washington State University  
Weed Science Society of America  
Western Society of Weed Science