[On company letterhead]

February 20, 2025

[addressee—see <https://www.house.gov/representatives> and <https://www.senate.gov/states/statesmap.htm> for contact information and committees]

Regarding: Public Agricultural Research

The [Name of your organization] would like to take this opportunity to express our deep concern about the recent layoffs and funding cuts/freezes impacting public agricultural scientists and their research efforts. We would like to outline the vast impact of these cuts on farmers, consumers, national security and global competitiveness of U.S. agriculture. *We ask that your office take action to proactively protect and restore agriculture funding, research and regulatory programs critical to the US including, (but not limited to):* [*USDA*](https://www.usda.gov/)*,* [*NSF*](https://www.nsf.gov/)*,*[*EPA*](https://www.epa.gov/home) *and* [*FDA*](https://www.fda.gov/food)*.[[1]](#footnote-1)*

[a few sentences that describe your organization and who you represent including numbers and website] .

[reasons why funding of public breeding programs, agricultural research, national germplasm system, is important for your members].

[your title and signature and date]

**Below is the text that the National Association for Plant Breeding is using in a letter to House and Senate Agriculture Committee members. Feel free to use what is relevant to you and/or your organization.**

**Agriculture is foundational for national security and food security**

In 2023, U.S. agricultural industries contributed $1.537 trillion (5.5%) to GDP[[2]](#footnote-2). Incredibly, that was generated from only 1.89 million farms which feeds 335 million people annually. The U.S. produces a diverse array of plant and animal products providing nutrition for a healthy population. A diverse and balanced human diet in turn reduces illnesses that are costly, not only for medical treatments, but also for workforce performance. *Public institutions with thriving breeding programs are essential in training future employees and the next generation of leaders in the public and private agricultural industry sectors.*

**Public scientific innovation is essential for global competitiveness**

Public research from university and government agencies, such as the USDA, have not only laid the foundation for modern agriculture but continue to develop high-performing products for farmers and consumers. These products include crop varieties to meet ever-changing challenges and market demands in the US and worldwide. The US is the global leader in both production and productivity in crops like corn, wheat, soybean, tomato, alfalfa, almonds, strawberry, lettuce, potato, and cotton. *Plant breeding and agriculture are high-tech industries that employ a workforce in agronomy, genetics, plant pathology, entomology, nutrition, biotechnology, physiology, engineering, data sciences, statistics, and artificial intelligence.*

The U.S. has been a competitive global leader in agricultural innovation, with strong and significant public investment in R&D. However, countries such as China and Brazil are becoming equally competitive, and China has dramatically increased its annual funding in public research over the last decade. By the period 2019-2021, China’s spending on public agricultural R&D was over twice the US investment[[3]](#footnote-3).

**Public and private agricultural industries work in unison**

Public institutions including Land Grant universities, state colleges, and government institutions, including the USDA Agricultural Research Service (ARS) rely on federal funding to develop critical solutions for farmers. USDA National Institute of Food and Agriculture (NIFA) provides leadership and funding for programs that advance agriculture-related sciences. These funds are awarded competitively with rigorous review for scientific merit and stakeholder impact. *Stable physical and organizational infrastructure are critical for long-term success.* This is complemented by funding and collaborations with other organizations, including foundations, state governments, commodity groups, international institutions and industry. *Estimates from over 289 studies on annual return on investment in agricultural research ranges from 60-90%, depending on the specific area of research.*

Public and private sector agricultural scientists collaborate efficiently on research, product development and commercialization to enhance U.S. agricultural productivity. For example, innovations in hybrid breeding first established at Iowa State University and other land grant universities and then efforts by many companies in the private sector have increased the productivity of corn by 7-fold since 1940. Innovations by the University of California-Davis in strawberry also led to a 7-fold increase in production, including year-round production and national availability. Public institutions either directly release crop varieties or license improved plants and innovations to the seed industry. Industry co-develops, improves and/or directly release high-performing crop varieties for farmers and consumers. Breeders in industry get their training at public sector universities. These examples are only from the field of plant breeding, but similar benefits flow from investment in other agricultural sciences. Consequently, one farmer feeds 177 Americans today, compared to 28 Americans in 1950, a 6.3-fold increase in productivity to feed an every growing population.

**Wholesale cuts in agriculture hurt economic development and productivity**

Due the high-tech nature of agriculture, companies invest from 5 to 30% of their annual revenue in research. These companies not only lead in their markets but attract and retain the top employees, who are trained at public institutions where federal funding is critical for their education. The recent wholesale and indiscriminate cuts to federal investments and workforce not only hurt US agriculture, but also jeopardizes our global competitiveness when major global competitors are increasing their investment in agricultural research and technology.

To provide two concrete examples of where these cuts will have immediate impacts. 1. Plant genetic diversity is the foundation of plant breeding and ability to make future improvements to crop varieties. Cuts to the National Plant Germplasm System staff puts the long-term viability of our national germplasm banks at risk, which may make it challenging for plant breeders to respond to emerging diseases and other emerging agricultural threats. 2. Investment in agricultural research at the public level through USDA NIFA funding is critical, especially for crops that do not receive private sector investment in plant breeding. Global challenges such as citrus greening disease require public funding at the federal level to ensure citrus production for future generations.

In summary, *a well-funded public plant breeding and agricultural research and development system is the basis of US food security, farm economic national security, and global competitiveness. Continued federal investment supports domestic capacity and ongoing research that is critical for prosperity of the United States of America.*

Thank you for the opportunity to have input in this important topic.

1. United States Department of Agriculture ([USDA](https://www.usda.gov/)), National Science Foundation ([NSF](https://www.nsf.gov/)), Environmental Protection Agency ([EPA](https://www.epa.gov/home)) and Food and Drug Agency ([FDA](https://www.fda.gov/food)) [↑](#footnote-ref-1)
2. Zahniser, S. and Kassel, K. 2024. What is agriculture's share of the overall U.S. economy? www.ers.usda.gov/data-products/ [↑](#footnote-ref-2)
3. [World Spending on Agricultural Research and Development | Agricultural Policy Review](https://agpolicyreview.card.iastate.edu/winter-2023/world-spending-agricultural-research-and-development) and OECD, 2022 agpolicyreview.card.iastate.edu/winter-2023/world-spending-agricultural-research-and-development [↑](#footnote-ref-3)