



June 4, 2021

The Honorable David Scott
Chairman
House Committee on Agriculture
Washington, DC 20515

The Honorable Glenn Thompson
Ranking Member
House Committee on Agriculture
Washington, DC 20515

The Honorable Debbie Stabenow
Chairwoman
Senate Committee on Agriculture
Washington, DC 20510

The Honorable John Boozman
Ranking Member
Senate Committee on Agriculture
Washington, DC 20510

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

Federal agricultural research and development is one of the surest ways to enable farmers to produce more food on less land and with fewer inputs and greenhouse gas emissions. Unfortunately, total public spending on agricultural research and development has fallen by nearly 30 percent since its peak in 2002. Achieving President Biden’s climate goals will require a renewed and sustained federal commitment to agricultural research, and we urge Congress to seize the unique opportunity presented by the infrastructure package by **(1) investing at least \$40 billion to support agricultural research, address deferred maintenance, and expand research capacity and (2) directing USDA to develop a research infrastructure revitalization plan that gives preference to facilities conducting high priority research.**

The link between agricultural research and environmental benefits is well established, and a recent analysis provides insights into the magnitude of the climate benefits a \$40 billion investment could yield. According to the analysis, increasing US agricultural research spending by nearly \$40 billion over a decade **could prevent nearly 58 million acres of cropland conversion and around 154 million tons carbon dioxide-equivalent of emissions per year globally by 2050.**¹ That’s equivalent to nearly 25 percent of annual greenhouse gas emissions from the US agricultural sector.²

Conducting cutting-edge research that yields these environmental benefits will require modern facilities with climate-controlled environments, state-of-the-art equipment, and sensor technologies. Currently, however, facilities are burdened with limited space, equipment

¹ Baldos, Uris and Blaustein-Reijto, Dan. 2020. “Investing in Public R&D for a Competitive and Sustainable US Agriculture.” https://s3.us-east-2.amazonaws.com/uploads.thebreakthrough.org/Uris-Memo_Fine.pdf

² The United States Environmental Protection Agency. 2021. “Inventory of Greenhouse Gas Emissions and Sinks.” <https://www.epa.gov/sites/production/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf>



shortages, and deferred maintenance — \$1 billion at ARS facilities and \$11.5 billion at NIFA agricultural research facilities at colleges and universities. These infrastructure challenges can cause delays, jeopardize research quality, and prevent labs from accommodating additional scientists, so **maximizing the effectiveness of research spending will require a significant investment in research infrastructure.**

USDA should help guide infrastructure investments by developing a revitalization plan that prioritizes facilities conducting the most critical research. In 2012 the USDA ARS Capital Investment Strategy report used a data- and criteria-based process to identify 21 facilities for recapitalization over the following decade.³ Now, nearly a decade later, the time is right to develop a new ten-year plan that reflects the urgency of the climate crisis. Ideally, the authors would think strategically about **where high priority research is being conducted or could be conducted in the future and whether the public agricultural research system would benefit from being restructured to reduce redundancies and facilitate collaboration.**

Agricultural research and development generates environmental benefits in the US and abroad — increased spending would cut direct agricultural emissions, boost exports of environmentally efficient agricultural goods, and facilitate the spread of climate-friendly innovations. Federal investment will be crucial for realizing these advantages since environmentally and socially beneficial research, which is often non-competitive or has a long payback period, less frequently attracts private investment. For example, the private sector conducts little agricultural research associated with natural resources, the environment, economics, or policy because such research rarely results in commercializable products.⁴

As you continue to negotiate the infrastructure package, we hope you will invest in climate solutions and the farm sector’s future by prioritizing agricultural research and research infrastructure.

Sincerely,

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³ USDA. 2012. “The USDA Agricultural Research Service Capital Investment Strategy.” https://www.aplu.org/members/commissions/food-environment-and-renewable-resources/board-on-agriculture-assembly/policy-board-of-directors/baapbd-minutes/ars_capital_investment_strategy.pdf

⁴ Clancy, Matthew, et al. 2016. “U.S. Agricultural R&D in an Era of Falling Public Funding.” USDA ERS, <https://www.ers.usda.gov/amber-waves/2016/november/us-agricultural-r-d-in-an-era-of-falling-public-funding/>