

June 2021

The Honorable Joseph R. Biden  
President  
The White House  
1600 Pennsylvania Avenue, NW  
Washington, DC 20500

Dear Mr. President:

Thank you for your commitment to our farmers, ranchers, producers, foresters. American agriculture, the lifeblood of Rural America, is facing multiple challenges: climate change, research and development (R&D) competition from China, Brazil, and India, and the COVID-19 pandemic. **We applaud the significant commitment made to revitalize American innovation capacity in the American Jobs Plan and strongly support a robust investment of at least \$40 billion for agricultural research infrastructure, research, and innovation through the American Jobs Plan.**

**Food and agriculture have significant economic impact.** A 2021 study shows that these sectors account for roughly one-fifth of the country's economic activity, directly supporting nearly 20 million jobs. That's more than 13% of U.S. employment. Total jobs indirectly supported by food and agriculture reach almost 41 million jobs. The total output of these sectors is \$7 trillion.<sup>1</sup>

By providing solutions to short- and long-term challenges, research makes our food and agriculture sectors a powerhouse of the U.S. economy. **A recent study found that U.S. public agriculture R&D spending from 1910 to 2007 returned, on average, \$17 in benefits for every \$1 invested.**<sup>2</sup> Increased funding of USDA's research and development (R&D) programs, including intramural and extramural agriculture research and capacity, will invest in our rural communities and give our farmers, ranchers, and foresters the tools needed to improve resiliency and scale climate-smart agriculture. Without significant investments in climate-smart agriculture research and outreach, U.S. farmers and ranchers could face serious production challenges. **A recent study in the journal *Climate* found that average U.S. corn, soybean, and rice yields could fall by up to 23%, 15%, and 4%, respectively, by 2100.**<sup>3</sup>

Modern agricultural research and education facilities serve as the backbone of our nation's cutting-edge agricultural and food research enterprise. **The situation is dire, 69% of the buildings at U.S. colleges and schools of agriculture are at the end of their useful life.**<sup>4</sup> Strategic federal investment in agricultural research infrastructure would create hundreds of thousands of new jobs nationwide.

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<sup>1</sup> <https://feedingtheconomy.com/>

<sup>2</sup> Baldos, Uris Lantz, Frederic G. Viens, Thomas W. Hertel, and Keith O. Fuglie. R&D Spending, Knowledge Capital, and Agricultural Productivity Growth: A Bayesian Approach. *American Journal of Agricultural Economics*. July 2018. 101(1): 291–310; <https://doi.org/10.1093/ajae/aay039>.

<sup>3</sup> Peterson, Lillian K., 2019. "Impact of Climate Change on Twenty-First Century Crop Yields in the U.S." *Climate* 7(3).

<sup>4</sup> <https://www.aplu.org/library/a-national-study-of-capital-infrastructure-at-colleges-and-schools-of-agriculture-an-update/file>

The federal share of overall R&D spending as a percentage of GDP is now at its lowest point since the 1950s, and food and agriculture lags even further behind most other Federal R&D areas. **Agricultural research funding at USDA has remained fairly flat over the last 50 years.**<sup>5</sup> Additionally, as you have repeatedly pointed out, other countries, including China, Brazil, and India, are investing heavily in agricultural R&D, while the U.S. has fallen behind.<sup>6</sup> We need to make these significant investments to win the R&D race and keep our family farms, and all the people they employ in rural America, in business.

This once in a generation opportunity to significantly fund food and agriculture research, innovation, and infrastructure is crucial for the United States to reclaim our global lead in food and agricultural science and rise to meet today's crises and those in the future. We look forward to working with you to make these investments a reality.

Sincerely,

<sup>5</sup> <https://www.nsf.gov/statistics>

<sup>6</sup> Jahn, Molly. New solutions for a changing climate: The policy imperative for public investment in agriculture R&D. August 2020. [https://www.thechicagocouncil.org/sites/default/files/2020-12/report\\_new-solutions-for-changing-climate\\_0.pdf](https://www.thechicagocouncil.org/sites/default/files/2020-12/report_new-solutions-for-changing-climate_0.pdf). Pages 1, 13.