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 consideration to revitalize American innovation capacity in the American Jobs Plan. We strongly support a robust investment of at least \$40 billion, for agricultural climate research, agricultural innovation, and agricultural research infrastructure in any comprehensive infrastructure package moving forward.

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.¹

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 food and agriculture R&D spending from 1910 to 2007 returned, on average, \$17 in benefits for every \$1 invested.² 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, producers, 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 2100.³

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**

¹ https://feedingtheeconomy.com/

² Baldos, Uris Lantz, Frederi 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.

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

buildings at U.S. colleges and schools of agriculture are at the end of their useful life.⁴ Strategic federal investment in agricultural research infrastructure would create hundreds of thousands of new jobs nationwide.

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. Food and agricultural research funding at USDA has remained fairly flat over the last 50 years. 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. 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,

Academy of Nutrition and Dietetics
Agricultural & Applied Economics Association

Agricultural Retailers Association

American Association of Meat Processors

American Association of Mycobacterial Diseases

American Association of Veterinary Medical Colleges

American Dairy Science Association

American Farm Bureau Federation

American Feed Industry Association

American Institute of Biological Sciences

American Malting Barley Association, Inc.

American Mushroom Institute

American Phytopathological Society

American Pulse Association

American Seed Trade Association

American Society for Horticultural Science

American Society for Microbiology

American Society of Agricultural and Biological Engineers

American Society of Agronomy

American Society of Animal Science

American Society of Plant Biologists

American Vanguard Corporation

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

⁵ https://www.nsf.gov/statistics

⁶ 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. Pages 1, 13.

AmericanHort

Animal Health Institute

ASCC-ACNR (Land Grant Program)

Associated Oregon Hazelnut Industry

Association of 1890 Research Directors (ARD)

Association of Northeast Extension Directors

Association of Public and Land-grant Universities

Biotechnology Innovation Organization

California Polytechnic State University

California State University, Chico

Charles Valentine Riley Memorial Foundation

Clif Bar & Company

CoBank

College of Agricultural, Consumer and Environmental Sciences, University of Illinois Urbana-Champaign

College of Agriculture and Life Sciences, Cornell University

College of Agriculture and Life Sciences, University of Arizona

College of Agriculture and Natural Resources, University of Maryland, College Park

College of Agriculture, Health and Natural Resources, University of Connecticut

Colorado State University

Consumer Federation of America

Corteva Agriscience

Council for Agricultural Science and Technology

Crop Science Society of America

CropLife America

Deans Council Agriculture, Food & Veterinary Medicine (Canada)

Donald Danforth Plant Science Center

Entomological Society of America

Eversole Associates

Extension Committee on Organization and Policy

Farm Journal Foundation

FASS

Florida Nursery, Growers and Landscape Association

FMI - The Food Industry Association

Idaho Nursery & Landscape Association

Illinois Green Industry Association

Indiana Nursery & Landscape Association

Indiana Outdoor Management Association

Indigo Ag

Institute of Food Technologists

International Alliance for Phytobiomes Research

International Wheat Genome Sequencing Consortium

Kansas State University

Maine Landscape & Nursery Association

Michigan Nursery & Landscape Association

Michigan State University, AgBioResearch

Michigan State University, College of Agriculture and Natural Resources

Montana State University

Mycobacterial Diseases of Animals – Multistate Initiative

National Agriculture in the Classroom Organization

National Association for the Advancement of Animal Science

National Association of Federal Veterinarians

National Association of State Departments of Agriculture

National Barley Growers Association

National Barley Improvement Committee

National Bison Association

National Coalition for Food and Agricultural Research

National Farmers Union

National Grange

National Milk Producers Federation

National Pork Producers Council

National Sunflower Association

National Sustainable Agriculture Coalition

National Turkey Federation

NC State University

New Jersey Landscape Contractors Association

Noble Research Institute, LLC

North American Millers' Association

North Carolina Agricultural and Technical State University

North Central Cooperative Extension Association (NCCEA)

North Central Regional Association of Agricultural Experiment Station Directors

Northeastern Regional Association of State Agricultural Experiment Station Directors

Ohio Landscape Association

Oklahoma Farm Bureau

Oklahoma State University

Oregon Association of Nurseries

Oregon Cattlemen's Association

Oregon Dairy Farmers Association

Oregon Farm Bureau Federation

Oregon State University College of Agricultural Sciences

Oregon Women for Agriculture

Oregonians for Food & Shelter

Organic Farming Research Foundation

Penn State University

Pennsylvania Landscape & Nursery Association

Poultry Science Association

Produce Marketing Association

Rochester Institute of Technology

Rutgers, The State University of New Jersey

Society for Range Management

Soil Science Society of America

South Dakota State University

Southern Association of Agricultural Experiment Station Directors

Southern University Agricultural Research and Extension Center

Supporters of Agricultural Research (SoAR) Foundation

Syngenta

Tennessee State University

Texas A&M AgriLife

The BARN & Colorado Ag News Network

The Breakthrough Institute

The Fertilizer Institute

The Ohio State University, College of Food, Agricultural, and Environmental Sciences

The University of Memphis

The University of North Carolina System

The University of Tennessee

U.S. Apple Association

U.S. Canola Association

UC Berkeley

United Fresh Produce Association

University of Arizona Division of Agriculture, Life and Veterinary Sciences, and Cooperative Extension

University of California Agriculture and Natural Resources

University of California System

University of California, Davis

University of Kentucky College of Agriculture, Food and Environment

University of Maryland Eastern Shore

University of Minnesota, College of Food, Agricultural and Natural Resource Sciences

University of Missouri Extension

University of Nebraska-Lincoln

University of New Hampshire

University of Puerto Rico

US Dairy Forage Research Center Stakeholder Committee

USA Dry Pea & Lentil Council

Utah State University

Veterinary Regional Referral Hospital

Virginia Tech

Washington State Nursery & Landscape Association

Washington State University

West Virginia University

Western Association of Agricultural Experiment Station Directors

Western Growers Association

Wisconsin Cranberry Research and Education Foundation

CC Secretary of Agriculture Thomas J. Vilsack