NAURFP Executive Committee

September 19th, 2022
Baltimore Convention Center

Douglas L Steele

Vice President, Food, Agriculture and Natural Resources

ASSOCIATION OF PUBLIC & LAND-GRANT UNIVERSITIES

Association of Public and Land-Grant Universities (APLU)

- Founded in 1887, APLU is North America's oldest higher education association with member institutions in all 50 U.S. States, the District of Columbia, four U.S. territories, Canada, and Mexico.
- **1887**—The first annual convention of the Association of American Agricultural Colleges and Experiment Stations is held in Washington, D.C. George W. Atherton, president of Pennsylvania State University, is elected president, and membership is limited to colleges receiving benefits under the 1862 Morrill Act and the 1887 Hatch Act. The association begins work in support of the second Morrill Act.
- APLU is the only presidential higher education association that engages with public research universities' entire senior leadership teams. APLU's councils enable senior public university leaders working in similar positions to come together to address critical issues and expand their knowledge-base within their professional area of expertise.

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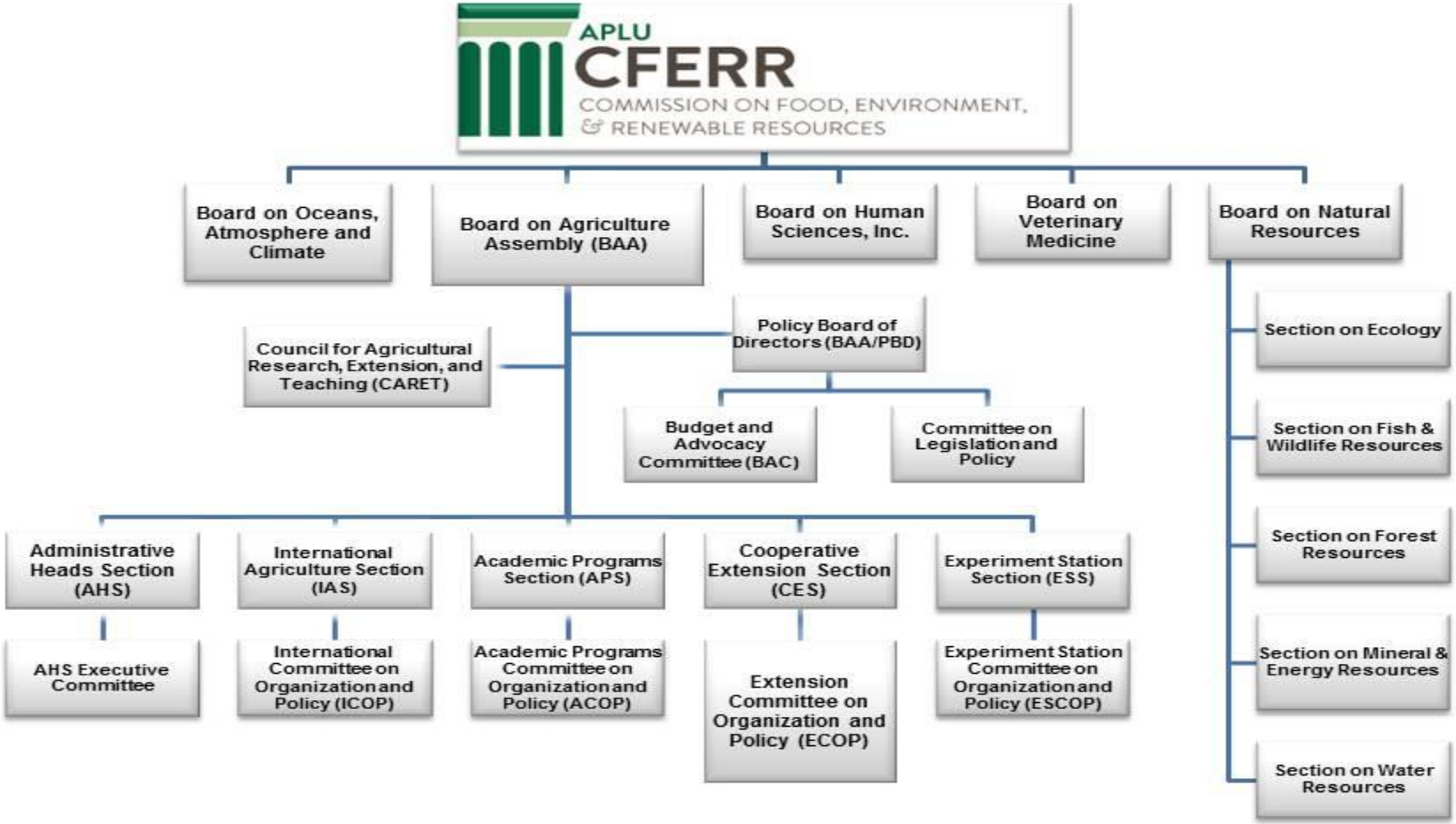
AGRICULTURE
ASSEMBLY

APLU's commission structure enables senior leaders with different responsibilities or roles across universities to come together to address critical issues and expand their knowledge-base in areas of common interest regardless of position

Commission Name	Issues Areas
Commission on Access, Diversity and Excellence (CADE)	• Diversity and social change issues impacting learning, discovery, and engagement.
Commission on Economic & Community Engagement (CECE)	• Economic development • Community engagement
Commission on Food, Environment, and Renewable Resources (CFERR)	• Agriculture • Food and fiber • Human sciences
Commission on Information, Measurement, and Analysis (CIMA)	• Data • Campus planning
Commission on International Initiatives (CII)	• Global learning • Research • Engagement
Coalition of Urban Serving Universities	• Fostering student achievement • Improving the health of a diverse population • 21st Century workforce development • Building smart, resilient cities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CFERR
COMMISSION ON FOOD, ENVIRONMENT, & RENEWABLE RESOURCES
Board on Oceans, Atmosphere and Climate
Board on Agriculture Assembly (BAA)
Board on Human Sciences, Inc.
Board on Veterinary Medicine
Board on Natural Resources
Council for Agricultural Research, Extension, and Teaching (CARET)
Policy Board of Directors (BAA/PBD)
Budget and Advocacy Committee (BAC)
Committee on Legislation and Policy
Administrative Heads Section (AHS)
International Agriculture Section (IAS)
Academic Programs Section (APS)
Cooperative Extension Section (CES)
Experiment Station Section (ESS)
AHS Executive Committee
International Committee on Organization and Policy (ICOP)
Academic Programs Committee on Organization and Policy (ACOP)
Extension Committee on Organization and Policy (ECOP)
Experiment Station Committee on Organization and Policy (ESCOP)
Section on Ecology
Section on Fish & Wildlife Resources
Section on Forest Resources
Section on Mineral & Energy Resources
Section on Water Resources

A Vision for Strategic Federal Investment in Facilities for Advancing Climate Research, Extension, and Innovation in U.S. Agriculture

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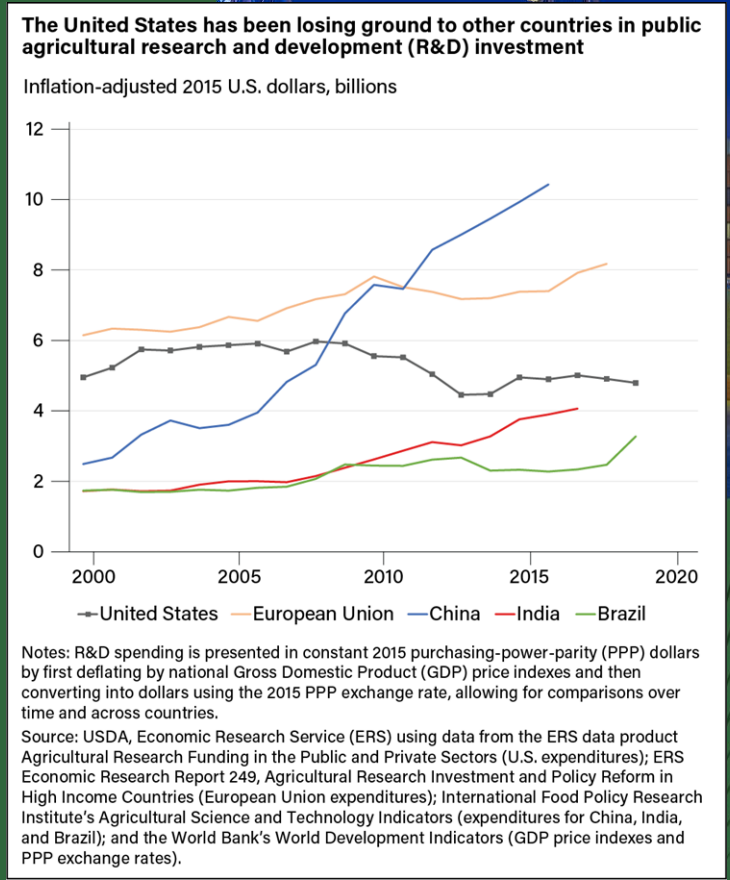
America is Falling Dangerously Behind

Agriculture, food, and related industries contribute $1.1 trillion to our GDP and support 22 million jobs. Behind these numbers are researchers doing cutting-edge work to fuel the next century of American innovation. Despite all this, U.S. public sector funding for agricultural R&D is falling, while China's spending has skyrocketed – handily surpassing the U.S. in 2009.



Competition

To feed its 1.4 billion, China bets big on genome editing of crops

Scientists there are forging ahead with CRISPR, even as regulations remain unclear

29 JUL 2019 · BY JON COHEN

Science

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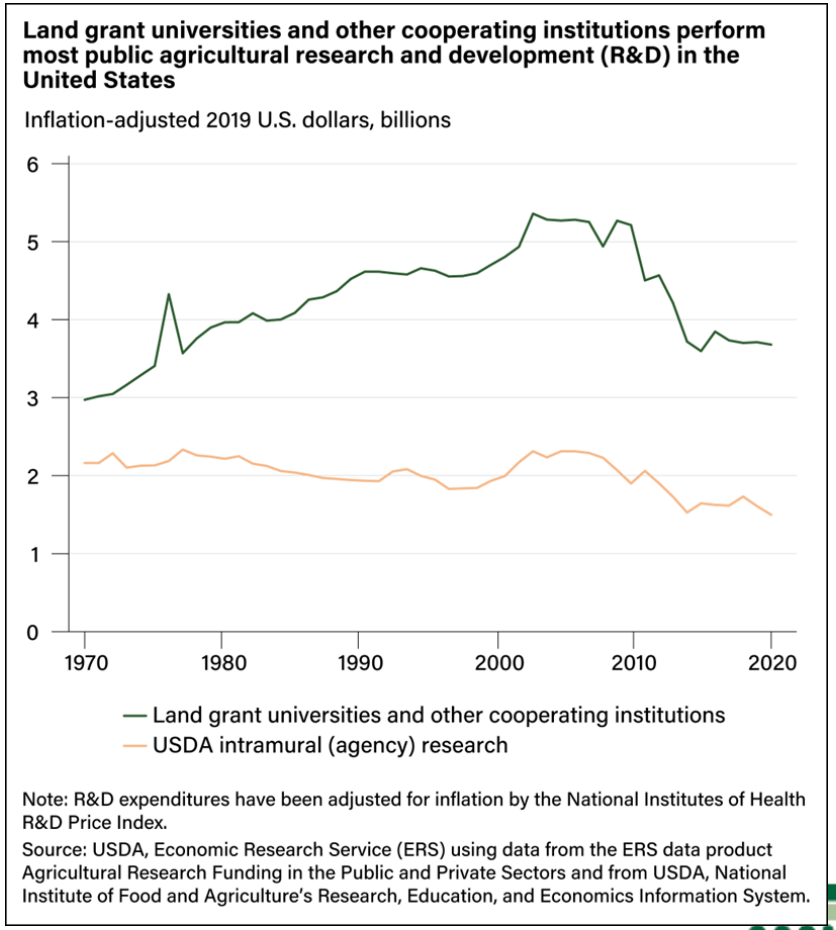
Underinvesting in R&D

- Modern agricultural research and education facilities serve as the backbone of cutting-edge research and applied science solutions that address climate change, agricultural profitability, food safety, zoonotic disease preparedness, personalized nutrition, biosecurity, new biobased packaging and energy innovations, and advanced market analysis.

- Gordian, a firm with 30+ yrs. of experience analyzing cost data and planning services for buildings, evaluated current facilities at U.S. schools of agriculture for research, teaching, and Extension. In 2020, Gordian assessed the state of facilities at the colleges or schools of agriculture, reporting that 69% of the buildings are at the end of their useful life.



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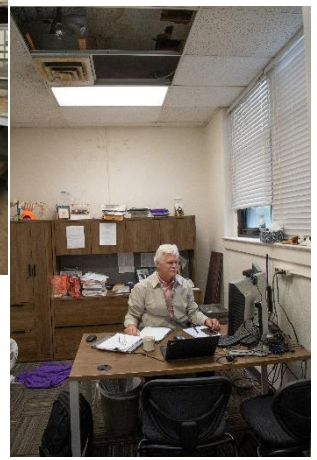
U.S. researchers and educators are being asked to perform 21st Century science in facilities constructed in the 1950s and 1960s.

69%

Of public and land-grant Schools of Agriculture are over 25 years old, meaning they are rapidly approaching the end of their life cycles and require urgent renovations to core building components to stay safe and useful.

Gordian reports that the cost of upgrading deferred maintenance in 2021 is $11.5 billion, with a replacement value of $38.1 billion.

Agricultural Research Facilities Act



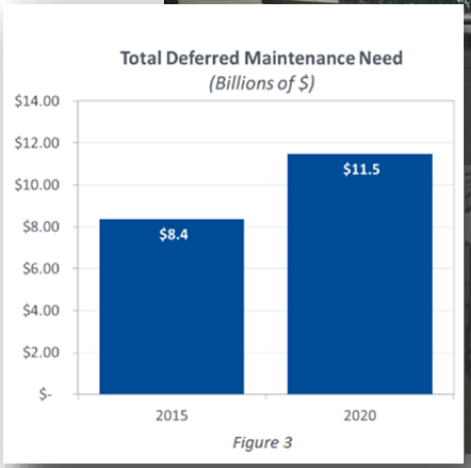


Figure 3

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The Research Facilities Act is:

- For all NIFA capacity eligible institutions
- Competitive
- Has not yet been funded through appropriations in its current form (as a competitive program, as amended in the 2018 Farm Bill)

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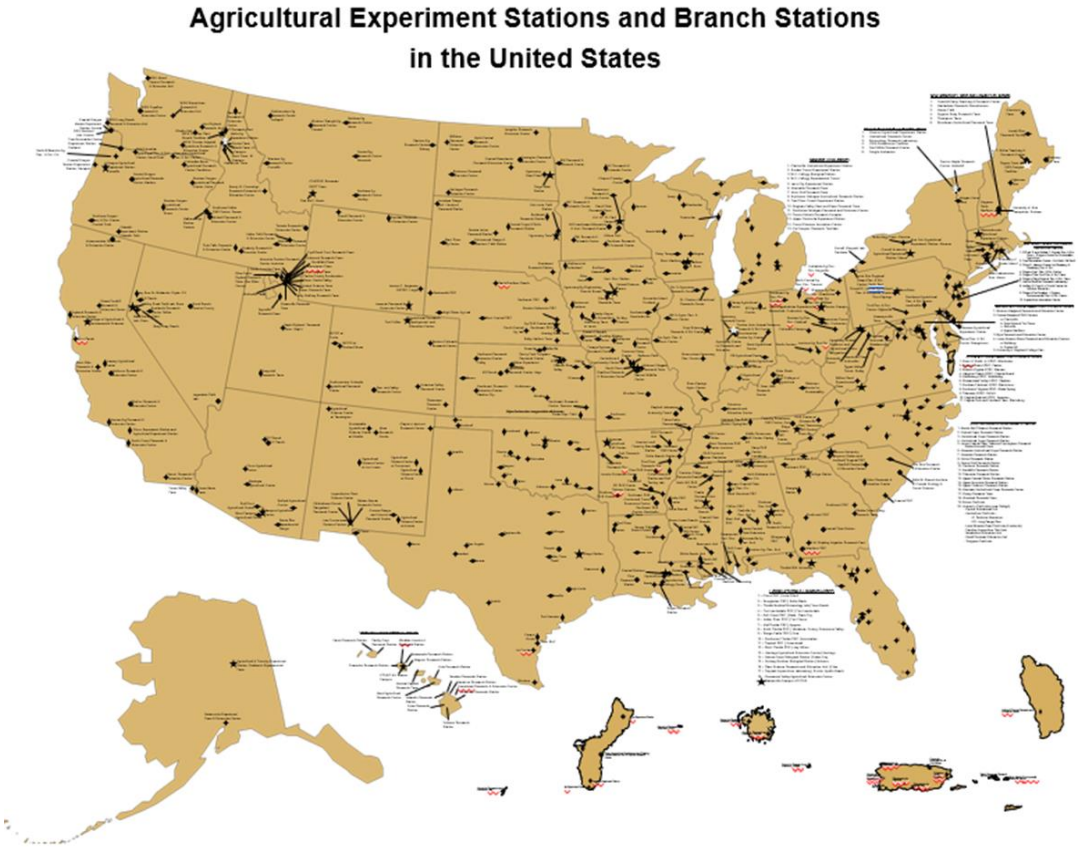
Experiment Station Expertise

- Institutions in all regions indicated having a climate change agenda and portfolio.
- 93% reported having a growing climate research portfolio.
- 64% of the respondents reported medium- to large-scale endeavors.
- 86% of the respondents reported having competitive grant funding that supported climate research. The other top-two funding sources of climate research funding included Hatch/Evans Allen capacity grants and state resources.



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Cooperative Extension System

- The Cooperative Extension System (Extension) has hundreds of unique programs that address aspects of climate education and applied research to support the adaptation, mitigation, and resiliency of U.S. agriculture to climate disruptions.
- Extension professionals help farmers, ranchers, and landowners develop and adopt climate-sensitive practices that improve the profitability and sustainability of plant and animal systems.
- In addition, Extension professionals educate and support water users, managers, and policymakers in making use of new data and models to weigh the costs and benefits of complex water supply decisions, objectively and accurately.

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Request Support for RFA, Experiment Station, Extension

- Support the RFA
- Support the Experiment Stations (Hatch, Evans Allen, 1994 research) under the Climate Hub coordination function
- Support for a Smith Lever 3d program for climate related mitigation, adaptation, and innovation (tech-transfer)

APLU Board on Agriculture Assembly