

# 2025-2035 agInnovation Roadmap



## A Critical Crossroads for the Nation:

The United States faces an urgent crisis that threatens its agricultural leadership, food security, and economic stability. Increased productivity through innovation has long driven U.S. agriculture's success, but declining public investment now jeopardizes this progress. Nobel and World Food Prize laureates warn that without substantial, strategic investment in agricultural science, the world risks a catastrophic “mismatch of global food supply and demand by mid-century.”<sup>1</sup> Immediate action is essential to maintain U.S. competitiveness, preserve environmental resources, and ensure a safe, abundant, and affordable food supply for everyone.

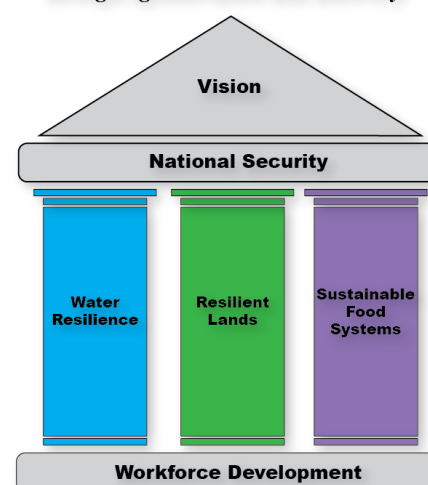
Public investment in agricultural research has plummeted by a third since peaking in 2002, reverting to 1970s levels by 2019. Meanwhile, competitors like China have surged ahead, surpassing U.S. funding of agricultural research and development. Despite delivering \$20 in economic benefits for every \$1 invested, federal funding has steadily declined, eroding the nation's ability to compete and innovate.<sup>2</sup> The stakes are too high to ignore. Global competition, geopolitical instability, pandemics, and extreme weather events are placing unprecedented strain on the nation's food systems, public health, and economy. The U.S. must act now to reinvest in food and agricultural innovation, ensuring a resilient and secure future for all.

## An Outcomes-Driven Roadmap for the Nation:

To respond to the critical challenges our nation and agricultural sectors face, Land-grant University leaders developed a 10-year platform with clear goals and ambitious science outcomes aimed at addressing land resilience, water security, and sustainable food systems. This roadmap includes:

- Bold stakeholder-informed goals that enhance national security through strategic research and Extension.
- Innovative strategies to equip the next generation of agricultural professionals with the skills needed to address future challenges.
- Plans to foster strategic public and private partnerships to drive the adoption of innovative solutions.
- Innovative funding strategies and plans to ensure accountability and maximize impact.

*“A world where people and the planet thrive through agInnovation and discovery”*



## The Role of Land-Grant Universities (LGUs):

LGUs are uniquely equipped to tackle today's challenges through their integrated mission of research, education, and Extension. Their work has both national and global impact, driving collaboration, scientific exchange, and resource sharing to address pressing agricultural issues. Agricultural Experiment Stations and Cooperative Extension Service provide critical leadership in developing stakeholder-driven, science-based solutions that enhance agricultural productivity, sustainability, public health, water resources, and environmental protection—while training future generations of agricultural leaders. Notably, LGUs and other non-federal institutions conduct approximately 70% of publicly funded agricultural research and development, highlighting their essential role in driving innovation.

## A National Imperative: Public Investments in Agricultural Research, Extension, and Education:

Addressing the critical societal challenges facing the U.S. and the world demands a bold and immediate increase in federal investment in Land-grant University agricultural research, Extension, and education. Without significant funding over the next decade, the nation's ability to secure water resources, advance agricultural sustainability, and safeguard public health and the environment will be at serious risk. To build a resilient and sustainable future, it is crucial to prioritize and expand public support across a diverse range of grant programs. While USDA capacity and competitive grant programs—including research infrastructure—should be the primary focus, aligned funding opportunities across other federal agencies must also be leveraged to achieve the roadmap goals.

<sup>1</sup>Hunger's Tipping Point: An Urgent Call to Transform Food and Nutrition Security. [https://www.worldfoodprize.org/en/laureates/laureate\\_letter/](https://www.worldfoodprize.org/en/laureates/laureate_letter/). World Food Prize Foundation.

<sup>2</sup>Investment in U.S. Public Agricultural Research and Development has Fallen by a Third Over Past Two Decades, Lags Major Trade Competitors. <https://www.ers.usda.gov/amber-waves/2022/june/investment-in-u-s-public-agricultural-research-and-development-has-fallen-by-a-third-over-past-two-decades-lags-major-trade-competitors>. USDA Economic Research Service.