

AGRICULTURAL EXPERIMENT STATIONS

A System to Address Challenges in Food and Agriculture

Our food and agricultural systems face complex challenges as the physical environment and human societies change. Public investment in research and development is key to increasing agricultural productivity, food safety and security, community resilience, environmental stewardship, and economic growth. As part of the Land-grant University system, and with the support of USDA funding, Agricultural Experiment Stations (AES) and agricultural research programs at universities and historically black and tribal colleges are uniquely positioned to improve natural resources, food and agricultural systems.



WHAT MAKES AES UNIQUE?



Institutions in all 50 states and many U.S. territories with research sites representing diverse ecosystems, communities, and food production systems



A family of land-grant universities directs research that reflects a diverse U.S. population and varied needs



Laboratories, greenhouses, computational centers, equipment, and tools focused on improving the food supply and protecting the environment



Skilled scientists, educators, students, and staff working in fundamental and applied research fields



Impartial, verified science, technology, and recommendations

THE POWER OF PARTNERSHIPS



Federal and state funding allows AES to mobilize scientists to respond quickly to local issues



Multistate projects bring together scientists from AES across the country to tackle regional and national issues, creating state synergy, reducing duplication, and leveraging funds, facilities, and other resources



A close relationship with Extension and educators creates a feedback loop from research to application



Strong relationships with government agencies, farm and commodity groups, and the private sector transform innovations into economic development and business opportunities

WHAT DO AES NEED NOW?

With enhanced support, AES and agricultural research programs at universities and historically black and tribal colleges can continue to address challenges in food and agriculture more efficiently than any other system in the world. Filling current gaps and needs will require:



Enhanced funding to support diverse research, enable exploratory and early-career projects, and give AES the flexibility to respond to emerging issues



Resources to improve campus infrastructure and facilities for cutting-edge research



Interdisciplinary, systems-level research



Broader focus on sustainability and wellness



Models and decision-making tools that account for interlinked variables and uncertainty



Harnessing advances in big data, genetics, nanotechnology, and other emerging fields



Strategies for communicating information and sharing technology



Experiment Station Committee on Organization and Policy (ESCOP)

<http://escop.info>