Digital Agriculture Research Design Facility

Problem/Issue Statement

The state of Kansas is uniquely positioned to become the global hub for the development and deployment of digital agriculture and advanced analytic (DAAA) systems focused on enhancing food and agricultural innovations that result in transformed, sustainable and adaptable food and agriculture systems, create jobs in Kansas, and solicit direct capital investment into the state. Kansas State University's (K-State) world-class expertise in global food systems combined with Kansas' unique geographic position means that nowhere else in the world is there such a combination of talent and specialized assets. This center will integrate the premier next-generation research at K-State into a development and commercialization hub, allowing industry to leverage existing computing capacity and AI research — including AI-driven data management, AI data analytics, cyber-physical AI and cybersecurity — and incorporating existing expertise in advanced breeding techniques and integrated cropping systems research to better attract opportunities and establish strategies that grow the capabilities and capacity needed to firmly establish K-State as a global leader in DAAA.

Request Description

To fully realize the economic development potential, K-State proposes the development of the Digital Agriculture Research Design Facility, a state-of-the-art flexible facility that creates space suitable for working with large scale agricultural machinery and a test area for evaluating sensors and robotics. This center will integrate the premier next-generation research at K-State into a development and commercialization hub, driving tradeable revenues into the state and increasing attractiveness for anchor programs. The Digital Agriculture Research Design Facility will be a roughly 34,000 square foot structure with space dedicated to machinery bays fitted for tractors, combines, sprayers, and similar equipment with a two-story test area for working with sensors and robotics, including UAS. Estimated cost is $30M.

Request Goals and Expected Outcomes

The Digital Agriculture Research Design Facility will create an entrepreneurial spirit focused on establishing profitable, regenerative, and sustainable food and agriculture systems. K-State will work with industry partners to identify practices and technologies that go beyond sustaining Kansas food and agriculture systems to meet challenges and opportunities of global food security. Targeted strategies will restore and improve natural resources while striving to meet national goals of increasing agriculture productivity by 40% and cutting agriculture's environmental footprint in half by 2050. The resulting practices and technologies will improve plant and animal health through reduction of diseases and pests, food and feed safety and nutrition, soil health, water and air quality, water availability and biodiversity under climate change and other emerging system challenges.

Appropriations Subcommittee

Agriculture, Rural Development, Food and Drug Administration, and Related Agencies
Transportation, and Housing and Urban Development, and Related Agencies

Request Type

Funding Request ☒   Bill Language Request ☐