WILLISTON AREA CHAMBER OF COMMERCE
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February 28, 2023

Chairman Sen. Brad Bekkedahl
Senate Appropriations Committee
Testimony in support of House Bill 1020

Chairman Sen. Bekkedahl and members of the Senate Appropriations Committee,

In a report released in December 2022, researchers at North Dakota State University (NDSU) found that agriculture has contributed nearly $31 billion to the state's economy as well as more than 110,000 jobs[1]. That represents more than 28% of the state's gross business volume, nearly 20% of all employment, and more than 24% of gross state product[2]. North Dakota's agriculture industry not only represents a significant amount of the state's economy, but its products also feed its own citizens and those across the nation and around the world.

The state is also inimitably positioned to bring innovation to the global industry with the institution of research centers – extensions of NDSU – across North Dakota. Williams County is in a fortunate and unique position as it houses two research farms within its borders: one west of Williston and one in Nesson Valley. It is at these sites that new crop varieties are created, pathology takes place, and remedies are tested. It is because of these centers that agriculture continues to move forward, to maintain its health, and to ensure its producers can feed the world for years to come.

As with many industries, infrastructure is key. In western North Dakota, that is in the form of the Nesson Valley Facility, a $1.7 million project planned for construction 27 miles from Williston that would support education and expansion efforts related to irrigation, high value crops, food processing, and livestock. On the heels of two straight years of extreme drought conditions that have devastated producers, irrigation is an extremely high priority.

The Williston Area Chamber of Commerce urges a "do pass" recommendation for HB 1020, which includes several SBARE priorities (see attachment), aimed to advance the mission of the NDSU Research Extension Center in Williston and beyond and, in turn, of the agriculture industry as a whole.

Thank you for your consideration of this important issue.

Sincerely,

Anna Nelson
President
Williston Area Chamber of Commerce

1. (North Dakota State University, 2022), https://www.ndsu.edu/agriculture/ag-home/impact-stories/ndsu-study-shows-economic-impact-agriculture-north-dakota
2. (North Dakota State University, 2022), https://www.ndsu.edu/agriculture/sites/default/files/2022-12/Ag%20Summary%2012-6-2022.pdf

Capital Improvement and One-time Requests

North Dakota Agricultural Experiment Station

Final Ranking by SBARE – March 2, 2022

NDSU NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION

Capital Improvement Requests

1. Field Lab Facility

Field agronomic, plant disease and soils research address the pressing questions and important issues needed by state producers. Unfortunately, the current field facilities used by scientists are no longer adequate to address these critical research needs. Waldron Hall, Widakas Laboratory, the Potato Research Laboratory, and the Horticulture laboratory were all built between the 1940s and 1960s prior to the advent of personal computers and other modern equipment commonly used in field research, and at a time when field crop production yields in North Dakota were much lower and consisted largely of small grains. The future of North Dakota's successful agriculture depends on modern field facilities that will allow researchers to address the needs of the industry with improved access to varieties that are adapted to the climate of North Dakota, better fertility recommendations, improved weed control, and improved responses to plant disease challenges.

A modern field laboratory requires space that facilitates collaborations between scientists and their teams, is safe, eliminates contamination from soilborne and insect pests, and provides better processing, cleaning and storing of seed. Additionally, this facility must support research in tuber and root crops, such as potato, and horticulture, including controlled-environment growing rooms that allow precise environments for plant development.

Request: $97,000,000

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2. AES Equipment Storage Sheds

Purchasing and/or leasing expensive field equipment is an investment that the AES needs to protect. Storing expensive research plot equipment such as tractors, planters and combines outdoors reduces the life of the equipment and can compromise the sophisticated electronics typically used on such equipment.

Request: Seven sheds ($475,000 per shed)
Total: $3,325,000

3. Nesson Valley Facility

A facility is needed for office and lab space, a heated shop, and a conference room at the Nesson Valley Irrigation site located 27 miles from Williston. The irrigation research staff currently uses a small office in a building used to store chemicals and other equipment and operating items. This facility would support ongoing educational efforts for growers related to irrigation and high value crops as well as meetings to support expansion of irrigation, food processing and livestock industries in western North Dakota.

Request: $1,700,000

4. Precision Agriculture Facility

A facility that would support precision agriculture activities across the entire North Dakota Agricultural Experiment Station is needed to integrate advanced research in precision and advanced agriculture. A modern facility would provide the workspace scientists need to develop synergistic activities across disciplines that are required to address the complicated challenges facing producers of North Dakota. A new facility would include industrial high bay research space, co-worker space to enhance interdisciplinary research, and other specialty spaces that include a dynometer bay, a fabrication laboratory and a soil laboratory.

Request: $55,000,000

5. Dairy Barn

The last time the 1940s era NDSU dairy barn was updated was in 1978, when cows were producing 11,000 pounds of milk. Today the average dairy cow produces over 23,000 pounds of milk (over 2,600 gallons) in one year. The North Dakota State University dairy herd is recognized consistently by the Holstein association of the United States as one of the top university herds in the country. The current unit needs substantial renovation to the cow barn to modernize it with robotic milking and automatic calf feeding, improve worker safety, and increase animal welfare. This renovation would support the state's dairy industry and help it grow.

Request: $1,700,000

One-time Requests

Deferred Maintenance

Request: $1,440,465

Equipment for an Ag Biotech Innovation Core

Microbiological sciences can best contribute to the future of North Dakota agriculture through the development of microbial inoculants and the microbial valorization of agricultural residues. Broader research interests exist across the NDAES surrounding the microbial transformation of agrifood products and bioproducts. NDAES scientists engaging in this research would benefit from a core facility where they could access specialized equipment and skilled technical support.

Funding would be used to purchase laboratory equipment needed to establish a core biotech facility. Equipment needed includes an array of bioreactors to support high throughput and scale-up experiments and metabolomics equipment including a GC MS/MS mass spectrometer.

Request: $1,000,000