

Institute of Agriculture and Natural Resources — AT WORK FOR NEBRASKA

Fifteen to one. Conservatively.

That's the return Nebraskans receive on the tax dollars they invest in the Institute of Agriculture and Natural Resources (IANR) at the University of Nebraska–Lincoln, according to an independent “At Work for Nebraska” study* conducted for the Institute by Battelle, a national, nonprofit research and development organization specializing in global science and technology.

Said the report, “... it is evident that IANR’s research, teaching, and extension activities are having powerful impacts on Nebraska’s economic growth and on economic and social sustainability in the State of Nebraska. In FY 2005, IANR received an annual appropriation of \$71.6 million from the State of Nebraska. ... the estimated annual impacts of IANR programs far exceed \$750 million in direct economic output and savings benefits for Nebraska, a leverage ratio conservatively estimated to be greater than ten to one. This number does not include the impact of IANR’s direct and indirect expenditures (salaries, benefits, capital improvements, etc.) ... which represents an additional leverage ratio of approximately five to one. **Taken together, the impact of IANR’s programs and expenditures represents a leverage of state funding that exceeds fifteen to one.**”

IANR sought an independent review of its programming as part of its strategic planning process. Battelle examined current programming of the Institute, the effects of that programming on Nebraska, and directions for Nebraska’s future.

Noting Nebraska is a powerhouse agricultural state where one in three jobs – both urban and rural – depends on agriculture, the “At Work” report said, “In the 21st century, challenges such as globalization, competitive market

pressures, technological advances, and the preeminent importance of innovation and talent are restructuring the economy. Against such a backdrop of rapid and dramatic change, can a system such as agricultural research and extension, established in the late 1800s, be relevant? The surprising answer – that agricultural research and extension institutions may well be **more** necessary and relevant than ever before – is a testimony to the foresight of those who ensured the creation of IANR ...”

The report noted, “... expanding the agricultural sector could benefit every county in the state. Agriculture and associated processing industries are highly diffused across every Nebraska county; therefore, the more direct and indirect effects of expansion in the sector are felt much more widely than with more narrow, geographically focused sectors.”

It also spoke of ways IANR’s Food Processing Center works to advance

Nebraska’s value-added manufacturing, and offers technical assistance in product development, laboratory testing, market, business, entrepreneurial, and economic analysis assistance, and pilot plant assistance.

“Through its array of activities, the Food Processing Center is transferring value-added scientific knowledge to Nebraska agbioscience companies, helping them to maintain a comparative advantage over their ever-increasing global competition,” the report said.

The “At Work” study pointed to agbiosciences as a growth area for Nebraska: “Nebraska’s agbioscience sector is a vibrant, robust, and extremely important component of the state’s economy,” Battelle said. “IANR is also focused on cutting-edge research within new growth opportunity areas to help increase Nebraska’s economic diversity and wealth. The ability of IANR to transfer its scientific, tech-



nical, and research capabilities to the state's agbioscience industrial base has significant impact on the health and vibrancy of the economy."

And, "IANR scientists and researchers are currently pushing Nebraska forward in the biorenewables arena – whereby agricultural crops form the basis of new industries and new forms of bio-based economic development. Biorenewable resources represent a new pathway to realizing economic development and higher-value products from plant and animal biomass ..."

The report cited the importance of education and citizens with well-developed skills in advancing a bright future for Nebraska:

"... as knowledge, intellectual capacity, and technology become the foremost drivers of modern economies, IANR's teaching activities within the College of Agricultural Sciences and Natural Resources (CASNR) likely will continue to grow in their importance to Nebraska's economic progress," Battelle said. "Strengthening the lives and communities of Nebraska through research, teaching and extension activities is key to the long-term competitive sustainability of Nebraska's high standard of living."

Historically, over 70 percent of CASNR graduates take their first position out of college in Nebraska, a real brain gain for the state. And, throughout Nebraska, IANR's extension division delivers education people can put to immediate use in their lives.

Here are additional findings of the "At Work for Nebraska" study:

- ▶ "... while it is highly likely that IANR's programmatic activities and research endeavors would generate considerably more than a 1 percent gain in agricultural output in the state on an annual basis, a conservative 1 percent estimate serves as a baseline for considering the significant effects of agricultural productivity on the Nebraska economy. ... A direct 1 percent increase in agricultural production in the Nebraska

economy would equate to **\$117.3 million annually. Total (direct and indirect) economic output would increase by \$215.1 million annually. ... 1,544 jobs would be created in the state annually.**"

- ▶ "In a state that depends on its environment, not only for quality of life but also as the underpinning of its agriculture-based economy, the work of IANR in environmental sustainability and preservation is of critical importance. IANR is highly active in this area, with initiatives focused on such issues as water availability and quality, agricultural waste management, and fertilizer and pesticide reduction opportunities."
- ▶ "IANR has a substantial track record in contributing to Nebraska's overall quality of life and positively influencing the state's economy."
- ▶ "IANR is an innovation engine for the state ... a pragmatic disseminator of the latest in research and technologies to enhance productivity and expand the economic base of Nebraska. ... has a track record in applying technology and enhancing productivity ... is focused on education, seeking to significantly enhance human capital ... provides a statewide network ..."
- ▶ "IANR is flexible ... in tackling complex problems in scientific, economic and social areas. ... works to enhance and sustain the environment and quality of place in Nebraska ... emphasizes youth development and leadership..."
- ▶ "The advanced research, educational offerings, and programmatic activities of IANR empower people and communities to solve problems, stimulate economic development, and improve lives."
- ▶ "Much of what is required for 21st century success (innovation, technology transfer, human capital enhancement, productivity improvement, networking, and quality of environment and place) is directly addressed through the mission and operations of IANR."

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