



IMPACT, JOBS AND CONSUMERS

ECONOMIC IMPACT OF AGRICULTURE AND RELATED INDUSTRIES

	CONGRESSIONAL DISTRICTS				STATE TOTAL
	1	2	3	4	
Population (2019)	773,171	781,907	849,252	750,740	3,155,070
Total Employment (2019)	518,680	501,584	581,860	490,163	2,092,287
Jobs Linked to Ag-Related Industries	97,828	69,059	59,605	140,234	389,553
Percentage of Ag-Related Total Employment	18.9%	13.8%	10.2%	28.6%	28.6%
Total GDP in \$ Billions (2019)	\$47.0	\$43.1	\$62.8	\$42.2	\$195.1
GDP Linked to Ag-Related Industries in \$ Billions	\$9.7	\$6.8	\$6.1	\$14.6	\$40.0
Production (<i>crops, livestock, forestry, fishing, etc.</i>)	\$1.9	\$1.7	\$1.1	\$6.3	\$11.1
Processing (<i>food & kindred, ethanol</i>)	\$5.7	\$4.0	\$4.3	\$7.4	\$23.9
Other Ag-Related Manufacturing (<i>chemicals, machinery, etc.</i>)	\$2.1	\$1.1	\$0.8	\$0.9	\$4.9
Ag-Related Percentage of total GDP	20.7%	15.7%	9.7%	34.7%	20.5%

LINKS TO IOWA STATE UNIVERSITY

	1	2	3	4	STATE TOTAL
Education Most undergraduate students enrolled at Iowa State come from Iowa. Total enrollment was 31,825 (26,846 undergraduate students) in fall 2020.	3,438	2,785	6,686	5,002	17,911
4-H/Youth Total direct contacts for Extension and Outreach was 370,496 for FY20; however, all data sets are not available by county.	22,119	14,676	8,637	23,827	69,259
Alumni Iowa State has more than 273,045 alumni worldwide, and more than 26,000 College of Agriculture and Life Sciences alumni living in Iowa (49,192 worldwide).	18,730	15,640	42,852	39,296	117,452

*Reflects 2019 data. **The sum of economic impact values for the four congressional districts does not equal the state total.** The state and district values are obtained from a unique input-output model built specifically for that region. The figures include the direct employment and value added produced within these industries, plus the related spinoff activity that they stimulate in the remainder of Iowa's economy, from crop farming; cattle ranching and farming; dairy cattle and milk production; poultry and egg production; hog and other animal production; forest nurseries, forest products and timber tracts; logging; fishing; hunting and trapping; support activities for agriculture and forestry; food and beverage manufacturing; ethanol and other basic organic chemical manufacturing; fertilizer manufacturing; pesticide and other agricultural chemical manufacturing; and farm machinery and equipment manufacturing.

IOWA CARET REPRESENTATIVES

Donald Latham
Alexander, Iowa
(641) 692-3546
Email: donel@frontiernet.net

Katie Stutsman
West Des Moines, Iowa
(319) 325-4686
Email: katie.stutsman@corteva.com

Robert Petrzelka
Mt. Pleasant, Iowa
(319) 254-2232
Email: bpivol1@gmail.com

Kevin Ross
Minden, Iowa
(712) 566-3518
Email: krossfarms@yahoo.com

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Inquiries regarding non-discrimination policies may be directed to Office of Equal Opportunity, 3410 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. 515-294-7612, Hotline 515-294-1222, email eooffice@iastate.edu

C-CHANGE CREATES NEW VALUE CHAINS TO FUEL FARMS

Iowa State scientists with the Consortium for Cultivating Human and Naturally reGenerative Enterprise (C-CHANGE) are working to create new value chains on U.S. farms by developing innovative ways for farmers to turn biomass and manure into renewable energy. The project centers on anaerobic digestion, or the process by which microorganisms break down biomass and produce biogas, which is mostly methane (the main component of natural gas). This has shown promise of profitability for farmers and rural communities, especially in the Midwest.

GENOME TO PHENOME RESEARCH AMPS UP EFFICIENCY, RESILIENCE OF AG

Researchers working from “genomics to phenomics” are exploring how genomes (organisms’ complete set of DNA) influence the expression of observable, phenotypic traits. Better understanding of these relationships helps predict phenotypic traits. Scientists at Iowa State University are collaborating with researchers from across the country to lay the groundwork for a larger federal Agricultural Genome to Phenome Initiative (AG2PI) sponsored by the U.S. Department of Agriculture’s National Institute for Food and Agriculture. The tools and datasets they develop for the analysis of phenotypes can be used across multiple livestock and crop species to improve the output and efficiency of agriculture.



HELPING LIVESTOCK PRODUCERS ADAPT TO COVID SLOWDOWNS

To help Iowa’s pig farmers slow hog growth during the packing industry slowdown caused by COVID-19, ISU Extension and Outreach, Iowa Pork Industry Center, Iowa Department of Agriculture and Land Stewardship and Iowa Pork Producers Association formed an emergency Resource Coordination Center. The center’s collaborative efforts helped over 100 producer systems make plans to manage the slowdown. Also, in partnership with the Iowa Department of Agriculture and Land Stewardship and commodity organizations, the Iowa State University Meats Lab provided essential processing options for beef and pork producers via the Pass the Pork and Beef Up Iowa food insecurity programs and supplied over 175,000 pounds of processed meat to Iowa food banks.



BIOCHAR MITIGATES MANURE-RELATED ODORS, EMISSIONS

Researchers at Iowa State have found carbon-rich biochar can be used to mitigate many odors and volatile organic compounds emitted from swine manure. The results of this study and related research shows the potential to use biochar treatments to improve air quality inside barns, thus improving worker and animal safety, especially during manure agitation. Biochar is a material obtained from a high-temperature process called pyrolysis of certain types of biomass and biowaste.

NEW POULTRY FARM LAUNCHES ISU INTO NEW ERA OF RESEARCH, EDUCATION

Iowa State University dedicated the new Robert T. Hamilton Poultry Teaching and Research Farm south of Ames in March 2020. The nearly \$7 million facility was made possible solely through private funding. The facility will accommodate education and research on poultry housing systems, nutrition, food safety and microbiology, flock behavior, genetics, health and welfare, and environmental issues, including waste management.



AG RESEARCH ADVANCES IOWA

The Iowa Agriculture and Home Economics Experiment Station is the research division of the College of Agriculture and Life Sciences that helps Iowa remain a world leader in food production and address societal issues linked to agriculture: economic development, life sciences, the environment, public policy, families and communities.

- #1 – The College of Agriculture and Life Sciences leads the nation in faculty with federal grants and is also #1 in faculty who have received awards and honors.
- #2 – Faculty in agriculture and life sciences at Iowa State rank second nationally for research findings published in scientific journals.

99-COUNTY CAMPUS

With a presence in each of Iowa’s 99 counties, **Iowa State University Extension and Outreach** connects Iowans to researchers at Iowa State and throughout the land-grant university system. The Agriculture and Natural Resources Extension network of campus-based state specialists and field specialists include: agricultural engineering, commercial horticulture, farm management, field agronomists, beef specialists, swine specialists and dairy specialists.

- 98,200 contacts were made at 1,836 meetings, workshops and field days in 2020.
- 959 virtual presentations and online courses in agriculture and natural resources reached 55,790 live participants in 2020 and another 70,581 via virtual archives.
- 3,943 individual and face-to-face contacts were made by agriculture and natural resources experts communicating with constituents 33,777 times on the phone and through email throughout 2020.

THE CALS ADVANTAGE

The **College of Agriculture and Life Sciences (CALS)** offers more than 24 undergraduate majors and 35 graduate programs in addition to hands-on opportunities for students to hone skills in leadership, communications and cultural competency, within and across disciplines.

- #3 largest undergraduate student body among agricultural colleges in the nation.
- 98% placement of graduates into careers within six months of graduation.
- \$4 million in scholarships provided annually.