



# EXTENSION AGRICULTURE & AGRIBUSINESS IN MICHIGAN

## \$104.7 billion

annual impact of food and agriculture on Michigan's economy

## 300 commodities

Michigan ranks second in the nation in crop diversity due to its unique climate, topography and impact of the Great Lakes

### REACHING PEOPLE WHERE THEY ARE

Michigan is agriculturally diverse both in what we produce and who produces it. Through our efforts to reach farmers at every level and size of production wherever they may be, MSU Extension has gone beyond traditional methods of working with farmers. We understand that some farmers may not be able to meet in person either due to distance or timing of an educational offering, so we have incorporated a vast array of online learning and digital informational opportunities to meet people where they are and when they have the time to consume information integral to their success.

## 2,691



pig farms will be better prepared for business continuity in the case of a foreign animal disease

### KEY PROGRAMMING IMPACTS

Michigan State University (MSU) Extension educators work with farms of all sizes to positively impact individual farming operations. When individual operations do well, their success helps to fuel state and local economies.

**Dairy Employee Trainings.** MSU Extension focuses on areas that influence workforce development opportunities and decisions regarding labor issues in the dairy industry. Bilingual training in English and Spanish assists farms with employees who speak English as a second language. Farmers depend on this service to train their employees on milking, cow and newborn calf care, sick cows, low stress animal handling and cow nutrition, affecting more than 22,000 dairy cows per year. These topics are part of a core training for new dairy farm employees, yet still applicable to seasoned staff. MSU Extension will continue to bring education and resources to dairy farms to support the care of animals, improve sustainability of the industry and develop the dairy workforce. Dairy employees, managers and owners value these trainings.



## 96%

of dairy farm employees reported increased skills due to a training session

**Foreign Animal Disease (FAD).** Through dedicated preparedness planning, MSU Extension engages with farmers to best prepare them for protecting their herds from FADs. Teaching the signs and symptoms of prevalent FADs to farmers and partners involved in pork production was the focus of the MSU Extension swine team. Two online modules were created that focused on identifying the signs and symptoms of prevalent FADs. Additionally, a poster was developed in English and Spanish highlighting the signs and symptoms of African swine fever for butchers and processors, including what would be seen during postmortem inspection.

**Financial Analysis & Tax Management.** MSU Extension works to improve farm personnel well-being and income, expand agriculture-related businesses and increase employment opportunities, leading to agriculture being one of the strongest industries in Michigan. Supporting agriculture and helping to improve financial stability and competitiveness has a significant economic impact on Michigan and local communities. The MSU Extension farm business management team created a wealth of fact sheets and decision tools that aid farmers in better understanding government program options, custom work rates and land rent trends as well as assessing farm plans against industry benchmarks for improved decision-making.

## \$1.57 million

in tax saving benefits to participating farms

[canr.msu.edu/agriculture](http://canr.msu.edu/agriculture)

MICHIGAN STATE UNIVERSITY

Extension



**Michigan's Blueberry Industry** is reliant on MSU Extension for timely research and outreach programming to sustain the viability, employment and profitability of their farms. The blueberry industry established a checkoff program to address top concerns of Michigan blueberry growers. This partnership funded competitive grant dollars to maintain and expand MSU Extension programming and applied research to address grower-established priorities. In recent surveys, growers identified insect pests to be a top concern. The MSU Extension fruit team developed educational materials and conducted outreach programming that has refined blueberry growers' integrated pest management programs, as well as helped reduce the number of applications of pesticides against spotted wing Drosophila, blueberry stem gall wasp and fruit rots.

**\$132 million**

annual economic contribution by Michigan blueberry industry

**Gardening Successfully.** MSU Extension educates Michigan residents about gardening practices that diversify landscapes, reduce chemical inputs and enhance edible food production. To ensure resources are provided equitably in Michigan, educators use a variety of methods. MSU Extension extends the capacity of educating Michigan communities about sustainable gardening through recruiting and training volunteers to serve on a diagnostic responder team or as an Extension Master Gardener. These volunteers are pivotal in reaching a much broader audience. Extension Master Gardeners are equipped through advanced training to help disseminate research-based gardening education to residents. Whether serving as a diagnostic responder or sharing Smart Gardening advice at a public event, the team of nearly 2,000 volunteers multiply the efforts of every team member.



**\$3,067,030**

contributed economic value of services by Extension Master Gardeners

**99,712**

views of nutrient-based articles



**Nutrient Management.** The Michigan Manure Hauler Certification Program helps prevent manure application problems and reduce insurance premiums through improved nutrient management plan implementation and responsible manure application. The Fertilizer Cost Comparison Decision tool has versions available for forage, field crop, fruit and vegetable growers. MSU Extension held training workshops and wrote numerous articles on maximizing nutrient needs while minimizing costs.

**Irrigation Efficiency.** Irrigation plays an important role in Michigan agriculture. High-value crops are nearly 100% produced under irrigation and require an irrigation system upon contract. MSU Extension uses a variety of methods such as in-person and recorded presentations, articles, websites, field demonstrations and conferences to educate irrigators and policymakers. Educators also provide awareness and education on large-volume water use registration and reporting in irrigation-related education meetings.

**2,283**

participants in irrigation-related programming



**Ornamental Horticulture Workforce Development.** MSU Extension works closely with growers to identify and develop programming that addresses the educational needs of Michigan's floriculture industry. Most floriculture producers indicate they are chronically understaffed and regularly experience a pressing lack of reliable labor. In recognition of this critical issue, the floriculture and farm management teams co-developed a half-day attraction and retention workshop for food and agricultural employers. This introductory workshop is designed for small and medium-sized businesses interested in improving their employer value proposition by making their operation a more enticing place to work. Small businesses are a critical segment of Michigan's economy. They contribute to the social and economic vitality of the region by creating jobs and broadening career opportunities within their local communities. MSU Extension recognizes that small farms are small businesses and that helping them succeed improves the resilience of both local and state economies.

**90%**

of green industry operations intend to make changes because of programming



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