Michigan State University (MSU) Extension consumer horticulture programs directly influence improvements in Michigan's economy while protecting natural resources.

- Eighty-seven percent of hotline callers with pesticide-use questions were directed away from or reduced their pesticide use.
- Nearly 3,500 Extension Master Gardener volunteers shared science-based, environmentally sound gardening knowledge with 336,449 Michigan residents.
- Sixty-three percent of Smart Gardening program participants shared environmentally-friendly gardening practices with others.

In 2015, the state's $56.6 million investment in MSU AgBioResearch and MSU Extension generated more than $1 billion for Michigan residents. Every dollar the state invested in MSU AgBioResearch and MSU Extension leveraged an additional $2.59 in federal funds and external contracts, grants and other revenues, including nearly $1.3 million leveraged by MSU Extension children and youth programs alone. As a result, MSU Extension and MSU AgBioResearch are able to serve Michigan residents with a benefit/cost ratio of 18:1.

THE ISSUE

The actions of home gardeners positively or negatively impact important aspects of a sustainable future such as water quality, food security, healthy soils and pollinator protection. These actions can be influenced through science-based gardening education and increased knowledge of all areas of plant agriculture and research.

MSU EXTENSION ACTION

National gardening statistics reveal that nearly 70 percent of households engage in some type of gardening. Taking into consideration 2010 census data of Michigan households and average number of people per household, this equates to a potential consumer horticulture audience of over 6.7 million Michigan citizens.

In 2015, the MSU Extension Consumer Horticulture team reached over 16,000 Michigan residents with science-based, environmentally-sound gardening messages. Through trained volunteers, nearly 350,000 additional Michigan residents were reached.

THE IMPACTS

- Through the MSU Extension Master Gardener Program, 3,441 Extension Master Gardeners from 75 counties volunteered 162,818 hours to educate 336,449 Michigan residents on environmentally-friendly gardening practices.
- Economic contribution provided by Extension Master Gardeners to Michigan in 2015: $3.87 million.
- More than 600 new Extension Master Gardener trainees from 44 counties were trained in 2015.
  - Twenty-four percent took the training to enhance their profession in green industry, education, health or food service related businesses.
Twenty-one percent are using the training to help them become better qualified to start a green industry business or work in the green industries.

Twenty percent enrolled in the training to receive the credentials and skills to help them in their current employment position with 14 percent indicating this would advance their current employment position.

Twelve percent will use the MSU Extension certification to help market their business.

**Smart Gardening** provides gardeners with environmentally-friendly, science-based gardening practices.

- One hundred and seventy Extension Master Gardeners were trained as Smart Gardening volunteers to be strong public ambassadors of MSU Extension Smart Gardening messages.
- Seventy educational programs and exhibits offered throughout Michigan reached 6,846 individuals with Smart Gardening messages.
- More than 200,000 Smart Gardening tip sheets were distributed to the general public.
- One hundred percent of the participants adopted Smart Gardening practices with 63 percent of these people indicating they shared what they learned with others.
- Ninety-two participants learned smart approaches to vegetable gardening through “Smart Gardening – Vegetable 101,” a multi-lesson, online webinar course. Participants’ knowledge increased an average of 35 percent, and 69 percent intend to implement Smart Gardening practices in their own vegetable gardens.

More than 10,000 questions from residents representing every Michigan county were answered in 2015 through the MSU Extension toll-free Lawn and Garden Hotline and Ask an Expert.

- Eighty-seven percent of hotline callers with pesticide-use questions were directed away from or reduced their pesticide use.

Nearly 3,500 soil tests and interpretations from 82 counties (an increase of 12 percent from 2014) were processed.

Nearly 200 additional local consumer horticulture programs were conducted, further enhancing educational outreach and MSU Extension’s visibility in communities.

Over $73,000 was spent on Michigan agriculture products as a result of the Plants of Distinction program.

“The Master Gardener Training Course helped me get a part-time retirement job that has allowed me to grow and be linked to a larger community of plant enthusiasts. As a former English teacher, I am teaching a new botanical curriculum to others.”

- Training course participant