2019 Statewide Economic Impact

UT Extension extends the knowledge and expertise of the university to the people of Tennessee through agents and specialists in all ninety-five counties of the state. Educational programs in 4-H youth development, agriculture and natural resources, family and consumer sciences, and community economic development produce substantial returns to the state.

Using research, questionnaires, observations, and sales records, an economic impact was estimated at more than $687 million from January 1, 2019, through December 31, 2019, for statewide educational programs.

RECURRING ECONOMIC IMPACTS
$430.4 MILLION // 8,608 JOBS CREATED OR MAINTAINED

Recurring economic values (increased revenue, increased savings, and one-time capital purchases) for up to two years after program

<table>
<thead>
<tr>
<th>Category</th>
<th>Impact</th>
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<tbody>
<tr>
<td>Sustainable Row Crop Production</td>
<td>$194.5 million</td>
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<tr>
<td>Sustainable Livestock Production</td>
<td>$139.5 million</td>
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<tr>
<td>Commercial Landscape and Turfgrass Production</td>
<td>$67.4 million</td>
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<tr>
<td>Pesticide Safety Education Program and Pest Management</td>
<td>$23.2 million</td>
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<tr>
<td>Farm MANAGE Programs</td>
<td>$2.86 million</td>
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<tr>
<td>Sustainable Nursery, Fruit, and Vegetable Production</td>
<td>$2.1 million</td>
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Sustainable Row Crop Production
UT Extension crop variety testing data is used extensively by Tennessee farmers to select the seed that they use to plant their oilseed, grain, and cotton crops. The higher yields resulted in more than $106.3 million in additional income to Tennessee farmers. Row crop and tobacco producers who adopted best management production practices and implemented integrated pest management practices reduced input costs and increased yields for an economic impact of $29.3 million. The Crop Nutrient Stewardship Educational Project recommended practices have improved crop fertility on over 579,000 acres for an economic impact over $9.83 million. Row crop producers increased returns by $10.7 million on 174,099 acres of cotton, 4,136 acres of corn and soybeans, and 111,448 acres of wheat all by using forward pricing market opportunities as compared to selling at harvest. Direct farm marketing practices and financial planning and risk management practices have generated more than $3.4 million in increased sales for farm families.

Sustainable Livestock Production
Nutritional, reproductive, genetic, and health management are areas that most impact profitability in cattle. Extension agents delivered more than 29,000 hours of educational programming that reached more than 181,802 direct contacts with an economic impact of over $124.25 million. Tennessee farmers saved more than $13 million from better forage production practices. Equine owners saved $777,503 through rotational grazing to increase forage production, vaccinations, dental care, and correct deworming practices. Dairy producers developed risk mitigation strategies to maintain profitability valued at $525,000.

Commercial Landscape and Turfgrass Production
Residential landscapes play a significant role in Tennessee’s economy. Consumers received information regarding correct plant selection, sustainable cultural practices, and recommendations on environmental stewardship.

Pesticide Safety Education Program and Pest Management
The Pesticide Safety Education Program trained 4,041 applicators with an estimated annual benefit of greater than $2 million. More than 2,600 Tennessee herbicide applicators were trained to apply dicamba to Xtend crops in 2019, resulting in a total weed control savings of $21.2 million.

Farm MANAGE Programs
MANAGE was designed specifically to help Tennessee farm families carefully evaluate their individual situation and assist them in improving their quality of life. The MANAGE program cooperative beef cattle marketing effort increased $378,886 for those producers. Fourteen dairy producers completed the dairy benchmarking program for an economic impact of more than $2.33 million. QuickBooks workshop participants estimated the value to their business at $100,900.

Sustainable Nursery, Fruit, and Vegetable Production
The state’s fruit and vegetable growers depend on Extension agents and specialists regarding variety selection, management, and marketing. The state’s ornamental, fruit, and vegetable producers had more than $2.2 million in increased revenue or savings as a result of UT Extension recommendations.
Extension community economic development programs produced an estimated $826,000 in increased revenues and capital purchases. Examples include assisting Tennessee farmers with transition planning and risk management in the dairy business.

### ONE-TIME ECONOMIC IMPACTS

**$256.6 MILLION**  
*One-time, nonrecurring economic values*

#### Financial Management Programs

The Tennessee Saves program instructs Tennesseans in sound financial practices and encourages them to build assets, reduce dependence on credit, and discharge debt. The estimated economic impact of clientele’s saving and debt reduction was more than $2 million. In addition, more than 1,135 families bought homes in Tennessee as a result of participating in homebuyer education—increasing economic stability and bringing in $146.8 million to urban and rural communities.

#### Nutrition Education

Family and Consumer Sciences nutrition education programs reach approximately 2.4 million adults and youth each year across Tennessee through group meetings, worksite sessions, television, and radio programs. Nutrition education studies have found a cost/benefit ratio of $1.00/$10.64. This translates to a return of more than $65.7 million for the investment in UT Extension’s nutrition education programs for the state of Tennessee.

#### Health Initiatives

Increasing exercise and participating in health screenings has shown to improve health and reduce the risk of many chronic diseases. UT Extension Family and Consumer Sciences health education programs have been at the forefront of state and national initiatives to improve community health through the promotion of physical activity and increased access to healthy foods. Health programs saved residents more than $9.5 million in estimated direct medical costs and indirect expenditures.

#### Strengthening Families

Family and Consumer Sciences human development programs helped families improve parenting behaviors, strengthen communication skills, manage anger, and cope with stress. Afterschool programs resulted in improved grades in math and reading and reduced school absenteeism. These initiatives were estimated to contribute more than $8.39 million in economic benefits to individuals and families.

#### Volunteerism and Community Service

UT Extension agents and specialists manage volunteers for many programs and services including 4-H and Tennessee Extension Master Gardeners. Volunteers extend the education offered by paid staff. Using the Independent Sector’s dollar value of a volunteer hour in Tennessee ($25.43/hour), the value of more than 147,000 volunteer hours served in 4-H was $3.47 million. In 2019, approximately 2,702 volunteers reported 200,033 hours of service in consumer horticulture education in Tennessee valued at $5,086,076 (Independent Sector). As part of the Citizenship Project, the Tennessee 4-H All-Stars (74 counties) completed 514 service learning projects with 617,475.65 hours of service completed. The economic impact of these projects is more than $15.7 million.

### COST-BENEFIT ANALYSIS — $1 TO $9.31

For every $1 invested in UT Extension programs, an estimated $9.31 is returned to the people of Tennessee.

- For every $1 provided to UT Extension by county governments, an additional $8.01 was provided by the state, federal, and other sources to help the people of Tennessee.
- For every $1 provided to UT Extension by the federal government, an additional $7.96 was invested by county, state, and other sources to help the people of Tennessee.
- For every $1 provided to UT Extension by state government, an additional $1.14 was matched by county, federal, and other sources to assist the people of Tennessee.

Compiled from faculty and staff reports by Hannah E. Wright, Extension Specialist, Extension Evaluation and Staff Development.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.