What is SARE?

Since 1988, the Sustainable Agriculture Research & Education (SARE) program has been the go-to USDA grants and outreach program for farmers, ranchers, researchers and educators who want to develop innovations that improve farm profitability, protect water and land, and revitalize communities. To date, SARE has awarded over $308 million to more than 7,395 initiatives.

SARE is grassroots with far-reaching impact

Four regional councils of expert practitioners set priorities and make grants in every state and island protectorate.

SARE communicates results

SARE shares project results by requiring grantees to conduct outreach and grower engagement, and by maintaining an online library of practical publications, grantee-produced information products and other educational materials.
SARE Grants in Alabama

Total awards: 71 grants

- 20 Farmer/Rancher
- 9 Graduate Student
- 9 On Farm Research/Partnership
- 10 Professional Development Program
- 23 Research and Education

Total funding: $3,827,523

- $182,565 Farmer/Rancher
- $92,264 Graduate Student
- $107,779 On Farm Research/Partnership
- $706,401 Professional Development Program
- $2,738,514 Research and Education

Find a complete list of projects on page 3.

SARE's Impact

53 percent of producers report using a new production technique after reading a SARE publication.

79 percent of producers said they improved soil quality through their SARE project.

64 percent of producers said their SARE project helped them achieve higher sales.

Learn about local impacts at: southern.sare.org/sare-in-your-state/alabama

Contact Your SARE State Coordinator

SARE sustainable ag coordinators run state-level educational programs for Extension and other ag professionals, and many help grant applicants and recipients with planning and outreach. Visit southern.sare.org/state-pages/alabama to learn more.

Ayanava Majumdar
Auburn University/Alabama Extension
(251) 331-8416
azm0024@auburn.edu

Rudy Pacumbaba
Alabama Cooperative Extension System
(256) 372-4266
rop0001@aces.edu

Franklin Quarcoo
Tuskegee University
fquarcool@tuskegee.edu

For detailed information on SARE projects, go to www.SARE.org

SARE is funded by the USDA’s National Institute of Food and Agriculture (NIFA).

This report includes summaries of competitive grant programs only. Some competitive grant programs that are no longer offered may be included or excluded from the totals in this report depending on the grant program and SARE region.
AGRICULTURE PROJECTS FUNDED IN ALABAMA
by USDA's Sustainable Agriculture Research and Education (SARE) Program

Alabama has been awarded $3,972,479 grants to support 82 projects, including but not limited to, 22 research and/or education projects, 10 professional development projects and 20 producer-led projects. Alabama has also received additional SARE support through multi-state projects.

### RESEARCH AND EDUCATION GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS20-331</td>
<td>Building Grassroots Infrastructure for Peer-to-Peer Learning and Support for Sustainable Farmers in Alabama</td>
<td>$49,992</td>
<td>Alice Evans, Alabama Sustainable Agriculture Network</td>
</tr>
<tr>
<td>LS19-307</td>
<td>Biofertilization of Bermudagrass: A step toward sustainable forage production</td>
<td>$221,115</td>
<td>Dr. Leanne Dillard, Auburn University</td>
</tr>
<tr>
<td>LS18-289</td>
<td>Development and Implementation of Ecologically Sound, System-based Tactics for Managing Pests and Insect-vectored Diseases in Cucurbit Production in the Southeast</td>
<td>$270,000</td>
<td>Henry Fadamiro, Auburn University</td>
</tr>
<tr>
<td>LS11-242</td>
<td>Adoption of Sustainable Farming and Ranching Practices among African-American Farmers: Helping and Hindering Factors and the Role of the 2008 Farm Bill</td>
<td>$126,770</td>
<td>Heather Gray, Federation of Southern Cooperatives/Land Assistant Fund, Tuskegee University</td>
</tr>
<tr>
<td>LS10-234</td>
<td>Enhancing the Economic Stability of Select Limited Resource Farms through the Establishment of Micropropagated Pecan Orchards Integrated with Crops and Animals</td>
<td>$15,000</td>
<td>Dr. Leonard Githinji, Tuskegee University</td>
</tr>
<tr>
<td>LS10-237</td>
<td>Understanding Small Landowners’ Perspectives in Adoption of Goat-Agroforestry Land Management System</td>
<td>$27,961</td>
<td>Dr. Buddhi Gyawali, Kentucky State University</td>
</tr>
<tr>
<td>LS09-223</td>
<td>Nutrient optimization for sustainable goat production systems in the southeastern U.S.</td>
<td>$170,000</td>
<td>Dr. Sandra Solaiman, Tuskegee University</td>
</tr>
<tr>
<td>LS09-218</td>
<td>A farmer-researcher collaborative effort to design no-till systems appropriate for small-scale organic producers in Alabama and the Deep South</td>
<td>$250,000</td>
<td>Joseph Kloepper, Auburn University, Dr. Jan Garrett, Auburn University</td>
</tr>
<tr>
<td>LS08-207</td>
<td>Enhancing the long-term sustainability and profitability of small, limited resource farmers in the Black Belt South through marketing research &amp; education</td>
<td>$122,000</td>
<td>Dr. Tasha Hargrove, Tuskegee University</td>
</tr>
</tbody>
</table>
LS08-209 Producing, processing and marketing forage-finished beef for consumers in the southeastern United States $151,000 Chris Kerth Auburn University, Department of Animal Sciences
Chris Kerth Texas A&M University

LS05-174 Understanding Plant-Soil-Livestock Interactions: A Key to Enhanced Sustainability in Southern-Pine Silvopasture Systems $120,000 Mary Goodman Auburn University

LS05-181 The use of renewable energy to improve the sustainability of Southeastern U.S. pond aquaculture: technical, economic, and industry evaluations of solar power options $14,850 Barrett Temple-Vaughan Tuskegee University

LS03-183 Barriers to the Adoption of Sustainable Agricultural Practices: Working Farmer and Change Agent Perspectives $50,000 Robin Fazio Sonrisa Farm

LS02-137 Participatory Implementation of Sustainable Vegetable Systems for Small and Limited Resource Farmers $161,280 Joseph Kloepper Auburn University

LS02-141 Sustainable Year-Round Forage System for Goat Production in the Southern USA $178,120 Dr. Sandra Solaiman Tuskegee University


LS94-062 Intercropping Small Grains and Lupin for Sustainable On-Farm Utilization $143,151 Edzard Van Santen Auburn University

LS93-051 Warm-Season Forage Grasses as Rotations for Sustaining Profitable Peanut Production $183,000 Rodrigo Rodriguez-Kabana Auburn University, Plant Pathology

LS93-053 Sustainable Whole Farm Grain/Silage Production Systems for the Southeast $240,639 D. Wayne Reeves USDA-ARS

LS91-033 Reference Manual of LISA Resource Management Strategy Budgets for the Mid-South Region $50,000 Larry A. Johnson Tennessee Valley Authority Agricultural Institute

LS91-034 Total Resource Budgeting of LISA Related Management Strategies $19,500 Jerry R. Crews Auburn University

**PROFESSIONAL DEVELOPMENT PROGRAM GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES18-143</td>
<td>Cattle and Small Ruminant IPM Educational Materials: A systems approach that will lead to a sustainable future</td>
<td>$79,900</td>
<td>Kelly Palmer Auburn University</td>
</tr>
<tr>
<td>ES16-129</td>
<td>The Systems 360° Initiative: Curriculum development and delivery of land management educational tools for Alabama cattle producers</td>
<td>$74,298</td>
<td>Dr. Kim Mullenix Auburn University/Alabama Cooperative Ext</td>
</tr>
<tr>
<td>ES13-114</td>
<td>Trainer’s Training in Agroforestry Practices in the Southeastern Region: 1890 Agroforestry Consortium Initiative</td>
<td>$99,540</td>
<td>Dr. Uma Karki Tuskegee University</td>
</tr>
<tr>
<td>ES12-111</td>
<td>Tuskegee University Goat Production Training Programs</td>
<td>$71,164</td>
<td>Olga Bolden-Tiller Tuskegee University</td>
</tr>
</tbody>
</table>
**ES12-112**  Expanding the Expertise of Agricultural Professionals to Serve New Constituents: Practical Training on Organic Horticulture and High Tunnels  
$99,736  
Jim Lukens  
Southern Sustainable Agriculture Working Group

**ES11-107**  Training for sustainable year-round forage production and grazing/browsing management in the Southern Region  
$69,843  
Dr. Uma Karki  
Tuskegee University

**ES10-102**  Organic Agriculture Hands-on Training and Educational Materials for Extension Professionals in the Southeast  
$98,850  
Dr. Leonard Githinji  
Tuskegee University

**ES09-099**  Developing Successful Organic Horticulture Farms: Practical Training for Agricultural Professionals  
$62,915  
Jean Mills  
Southern SAWG

**ES00-050**  We can do something about fire ants — Training Professionals and Developing Teaching Materials in Sustainable Fire Ant Management  
$40,155  
Kathy Flanders  
Auburn University

**LST94-005**  Sustainable Cotton Production for the South  
$10,000  
Elizabeth Ann Guertal  
Auburn University

---

**FARMER/RANCHER GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| FS20-322    | Increasing Sustainability of Crawfish and Low Salinity Shrimp Production in West Alabama | $12,581      | DAVID CODDINGTON  
GREENE PRAIRIE AQUAFARM |
| FS17-302    | Soil Effects of Animal Grazing for Selected Summer Crops in the Southern United States | $9,955       | Franklin Randle  
Farmer |
| FS17-304    | Use of Probiotics to Increase Survival and Sustainable Yield of Inland Farmed Shrimp | $14,869      | DAVID CODDINGTON  
GREENE PRAIRIE AQUAFARM |
| FS13-272    | Increasing Sustainability of Goats Production through Management of Gastrointestinal Nematodes | $10,000      | Samuel Fairley  
Farmer |
| FS13-275    | Insect Exclusion Using Woven Shade Cloth                                         | $9,320       | Will Mastin  
Local Appetite Growers LLC |
| FS09-235    | Water Catchment Systems for Mobile and Permanent Farm Structures                  | $9,970       | Lima Santiago |
| FS08-226    | Native-Grass Prairie Restoration and Soil Remediation Program                     | $9,995       | Fitz Hudson |
| FS08-224    | Organic Strawberry Production: Extending the Season with Low Tunnels             | $10,000      | Carol Garrett  
Auburn University  
Jan Garrett |
| FS07-215    | Diversify Production Methods of Medicinal Herb Crops with Tissue Culture         | $9,946       | Mary Janis |
| FS06-201    | Evaluating Poultry Breeds Suitable for Pastured Production                       | $7,988       | Bill Findley  
Rough House Farm |
<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS06-202</td>
<td>Small Scale Rabbit, Production, and Marketing Project</td>
<td>$10,000</td>
<td>Jeanette Grayson</td>
</tr>
<tr>
<td>FS05-187</td>
<td>Soil Building and Fertility through Cover Cropping among Limited Resource Farmers</td>
<td>$11,968</td>
<td>John Brown, Selma-Dallas Small Farmers Association</td>
</tr>
<tr>
<td>FS05-195</td>
<td>Alternative techniques for harvesting inland saltwater shrimp</td>
<td>$6,557</td>
<td>DAVID CODDINGTON, GREENE PRAIRIE AQUAFARM</td>
</tr>
<tr>
<td>FS02-159</td>
<td>Improving Stocking and Insect Control Procedures to Increase Survival of Saltwater Shrimp Post-larvae in Inland Ponds</td>
<td>$6,667</td>
<td>DAVID CODDINGTON, GREENE PRAIRIE AQUAFARM</td>
</tr>
<tr>
<td>FS00-122</td>
<td>Using Caged Filter-Feeding Fish to Increase Production and Profits from Fertile Catfish Ponds</td>
<td>$3,282</td>
<td>William R. Odom, Jr.</td>
</tr>
<tr>
<td>FS98-080</td>
<td>Establishment of a Grazing Management School for Producers</td>
<td>$9,760</td>
<td>Kenneth Rogers</td>
</tr>
<tr>
<td>FS97-049</td>
<td>Crop Production Systems for Nonchemical Control of Reniform Nematodes</td>
<td>$8,892</td>
<td>Richard Edgar</td>
</tr>
<tr>
<td>FS97-052</td>
<td>Sustainable Pumpkin Production in the Southeast</td>
<td>$4,655</td>
<td>Dwight James</td>
</tr>
<tr>
<td>FS97-064</td>
<td>Evaluation of a Low-Cost Innovative Ensiling System for Small- to Medium-Sized Dairy Operations</td>
<td>$10,000</td>
<td>David and Leianne Wright, Canebrake Farms</td>
</tr>
<tr>
<td>FS94-011</td>
<td>Clover Clippings as Replacement for Chicken Litter in Compost</td>
<td>$6,160</td>
<td>Jean Mills, Southern SAWG</td>
</tr>
</tbody>
</table>

**GRADUATE STUDENT GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS16-165</td>
<td>Development of Sustainable Seaweed Aquaculture on Alabama’s Gulf Coast</td>
<td>$9,392</td>
<td>Dr. William Walton, Auburn University Pandor, Auburn University</td>
</tr>
<tr>
<td>GS11-098</td>
<td>Dewatering Aquaculture Effluent For The Hydroponic Production of Pak Choi (Brassica rapa chinensis) and Production of Vegetable Seedlings</td>
<td>$9,932</td>
<td>Dr. Jesse Chappell, Auburn University Jason Danaher, Auburn University</td>
</tr>
<tr>
<td>GS08-069</td>
<td>Effects of Forage-finished Beef on Cool- or Warm-Season Forages</td>
<td>$9,685</td>
<td>Chris Kerth, Auburn University, Department of Animal Sciences Clint Rowe, Auburn University, Department of Animal Sciences</td>
</tr>
<tr>
<td>GS05-049</td>
<td>Organic mulches and high residue no-till for collard production in Alabama</td>
<td>$10,000</td>
<td>Wes Wood, Auburn University, Department of Agronomy and Soils Michael Mulvaney, Auburn University, Dept. of Agronomy and Soils</td>
</tr>
<tr>
<td>Project #</td>
<td>Project Title</td>
<td>SARE Support</td>
<td>Project Leaders</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GS04-036</td>
<td>Assessing the Viability of the Inland Shrimp Farming as a Viable Enterprise in Alabama</td>
<td>$9,901</td>
<td>Ntam Baharanyi Tuskegee University, Barrett Temple-Vaughan Tuskegee University, Anthony Deanes Tuskegee University</td>
</tr>
<tr>
<td>GS04-037</td>
<td>Evaluating the Efficacy of Tasco-14® Supplementation on Carcass and Performance Characteristics of Cattle Finished on Winter Annual Forages as a Sustainable Alternative finishing system in the Southeast</td>
<td>$9,814</td>
<td>Chris Kerth Auburn University, Department of Animal Sciences, Kirk Braden Auburn University</td>
</tr>
<tr>
<td>GS04-042</td>
<td>Determination of Microbiological Hazards and Critical Control Points in Regional Rabbit Processing Facilities</td>
<td>$10,000</td>
<td>Leonard Williams Alabama A&amp;M University, Cornelius Howard Alabama A&amp;M University</td>
</tr>
<tr>
<td>GS03-023</td>
<td>Aphids as Beneficial Insects? Using a Fire Ant – Aphid Interaction for the Sustainable Management of Insect Pests in Southern Cotton</td>
<td>$7,040</td>
<td>Micky Eubanks Auburn University, John Styrsky Auburn University</td>
</tr>
</tbody>
</table>

**ON FARM RESEARCH/PARTNERSHIP GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS20-136</td>
<td>Validation of a Spotted Wing Drosophila Growing Degree Day Model for the Southeast for Sustainable Blueberry Production</td>
<td>$16,581</td>
<td>Dr.Edgar Vinson, III Department of Horticulture, Auburn University &amp; Alabama Cooperative Extension System</td>
</tr>
<tr>
<td>OS18-117</td>
<td>Evaluation of High-residue Cover Crop Systems and Biodegradable Mulches for Weed Control in Vegetable Production in Alabama</td>
<td>$14,977</td>
<td>Steve Li Auburn University</td>
</tr>
<tr>
<td>OS14-088</td>
<td>On-Farm Evaluation and Use of Sunn Hemp (Crotalaria juncea L.) legume to Improve Sustainable Meat Goat Production and Health in Southern USA</td>
<td>$15,000</td>
<td>Dr.Byeng ryel Min Tuskegee University</td>
</tr>
<tr>
<td>OS13-071</td>
<td>Comparison of on-farm winter feeding strategies for sustainable meat goat production</td>
<td>$14,500</td>
<td>Dr.Nar Gurung Tuskegee University</td>
</tr>
<tr>
<td>OS11-059</td>
<td>Sustainable goat farming: Pasture enhancement and diet selection by goats</td>
<td>$14,493</td>
<td>Dr.Uma Karki Tuskegee University</td>
</tr>
<tr>
<td>OS08-040</td>
<td>Sustainable Irrigation Methods for Alternative Crop Production</td>
<td>$15,000</td>
<td>Dr.Elina Coneva Auburn University</td>
</tr>
<tr>
<td>OS04-018</td>
<td>Recirculating Production Pond Inflows to Increase Production and Reduce Effluents on Small-Scale Fish Farms</td>
<td>$14,145</td>
<td>David Cline Alabama Cooperative Extension System</td>
</tr>
<tr>
<td>OS02-003</td>
<td>Central Alabama Soil Quality Improvement for Cotton Growers</td>
<td>$2,116</td>
<td>Leonard Kuykendall AL Cooperative Extension System/Autauga County</td>
</tr>
<tr>
<td>OS02-004</td>
<td>Incorporation of Triticale/Clover into Existing Grazing Management Systems to Enhance Beef Cattle Production Sustainability</td>
<td>$967</td>
<td>Perry Mobley</td>
</tr>
</tbody>
</table>

**SUSTAINABLE COMMUNITY INNOVATION GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS02-003</td>
<td>Central Alabama Soil Quality Improvement for Cotton Growers</td>
<td>$2,116</td>
<td>Leonard Kuykendall AL Cooperative Extension System/Autauga County</td>
</tr>
<tr>
<td>OS02-004</td>
<td>Incorporation of Triticale/Clover into Existing Grazing Management Systems to Enhance Beef Cattle Production Sustainability</td>
<td>$967</td>
<td>Perry Mobley</td>
</tr>
</tbody>
</table>
The following projects have received funding for their work in sustainable agriculture in Alabama:

**CS10-083** United Cherokee Ani-Yun-Wiya Nation Blackberry Development Project (UCANBD Project) $10,000
- Judy Dixon
  United Cherokee Ani-Yun-Wiya Nation
- Gina Williamson
  United Cherokee Ani-Yun-Wiya Nation

**CS09-074** Producers/Buyers Cooperative: Linking Family Farms and Institutions $10,000
- Kathryn Strickland
  Food Bank of North Alabama

**CS08-067** The Alabama Blackbelt Community Food System Project $10,000
- Andrew Williams
  The United Christian Community Association

**CS08-068** Training for Sustainable Community Development: Phase IIIb $5,000
- Dr.Robert Zabawa
  Tuskegee University

**CS07-060** Training for Sustainable Community Development: Phase III $10,000
- Dr.Robert Zabawa
  Tuskegee University

**CS06-046** Training for Sustainable Community Development: Phase II $10,000
- Dr.Robert Zabawa
  Tuskegee University
- Dr.Tasha Hargrove
  Tuskegee University

**CS06-051** The Clean Food Network $40,000
- Dove Stackhouse
  ASAN (Alabama Sustainable Agricultural Network)

**CS05-037** Agritourism and Agribusiness Entrepreneur Training, Assistance and Product Marketing in the Eastern Alabama Black Belt $9,956
- Barrett Temple-Vaughan
  Tuskegee University

**CS05-039** Partnerships for Sustainable Communities $10,000
- Dr.Robert Zabawa
  Tuskegee University

**CS04-019** Sustainable Agriculture for Future Economics (SAFE) $10,000
- Wendy Allen
  Mobile Bay National Estuary Program

**CS04-032** Developing a Marketing Network for Central Alabama $10,000
- Karen Wynne
  Alabama Sustainable Agriculture Network

**CS03-016** Taylor Community Supported Agriculture Project $10,000
- Evelyn Williams
  The United Christian Community Association, Inc.

---

**Total funding from the USDA SARE program to Alabama**

$3,972,479

---

For further information on projects, contact Candace Pollock, Southern SARE public relations coordinator, at (770) 412-4786 or cpollock@uga.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).