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 $307 million to more than 7,384 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, granteeproduced information products and other educational materials.

www.sare.org

SARE: Advancing the Frontier of Sustainable Agriculture in...

Oklahoma

Project Highlight: Growing a Local Understanding of Soil Health

Some farming practices commonly used in Oklahoma have reduced the state’s soil quality, leading to soils that are often low in organic matter. To remain productive, attention needs to be placed on improving and monitoring soil quality.

Realizing the importance of such attention, Kefyalew Desta used a SARE grant to obtain local soil quality information and develop a soil quality assessment index that can be used to quantify the overall soil quality status of a farm. As Desta was testing soil properties on-farm, 65 percent of the owners participated in the sampling and discussed the results.

This engagement of the farmers paid off. According to Desta, at the beginning of the project, 65 percent of them did not know the difference between soil health and soil fertility. Following the on-farm sampling and trainings, 80 percent of the farmers are now communicating with ag educators to seek help in soil health analysis. At least 60 percent plan to use on-site soil quality testing as part of their routine soil management. Desta also coordinated in-service trainings and demonstrations, reaching over 200 people.

For more information on this project, see sare.org/projects, and search for project number OS11-058.

SARE in Oklahoma

southern.sare.org/sare-in-your-state/oklahoma

$2,757,719 in total funding

44 grant projects

(since 1988)

For a complete list of grant projects state by state, go to www.sare.org/state-summaries
SARE Grants in Oklahoma

Total awards: 44 grants
- 13 Farmer/Rancher
- 2 Graduate Student
- 8 On Farm Research/Partnership
- 7 Professional Development Program
- 14 Research and Education

Total funding: $2,757,719
- $122,429 Farmer/Rancher
- $19,969 Graduate Student
- $113,934 On Farm Research/Partnership
- $635,389 Professional Development Program
- $1,865,998 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/oklahoma

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/oklahoma to learn more.

Terry Gipson
Langston University
(405) 466-6126
terry.gipson@langston.edu

Jason Warren
Oklahoma State University
(405) 744-1721
jason.warren@okstate.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 OKLAHOMA
by USDA’s Sustainable Agriculture Research and Education (SARE) Program

Oklahoma has been awarded $2,774,583 grants to support 45 projects, including but not limited to, 13 research and/or education projects, 7 professional development projects and 13 producer-led projects. Oklahoma 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>LS20-338</td>
<td>Researching &amp; Networking Native American &amp; Socially Disadvantaged Farmers Traditional Market Gardening Production System Resiliency</td>
<td>$299,411</td>
<td>Dr. Joshua Ringer Langston University School of Agriculture and Applied Sciences Julie Gahn Oklahoma Farmers and Ranchers Association Denis Haga Pawnee Nation College Dr. Tracey Payton-Miller Langston University School of Agriculture and Applied Sciences Dr. Monte Randall College of the Muscogee Nation</td>
</tr>
<tr>
<td>LS06-189</td>
<td>Increasing Sustainability of Southern Great Plains’ Agriculture Through No-till Production Systems</td>
<td>$183,000</td>
<td>Jeff Edwards Oklahoma State University</td>
</tr>
<tr>
<td>LS02-139</td>
<td>Developing Sustainable Stored Grain IPM Systems in Oklahoma and Texas</td>
<td>$133,371</td>
<td>Thomas Phillips Oklahoma State University</td>
</tr>
<tr>
<td>LS01-119</td>
<td>Use of goats for sustainable vegetation management in grazing lands</td>
<td>$172,210</td>
<td>Arthur Goetsch Langston University</td>
</tr>
<tr>
<td>LS00-116</td>
<td>Developing Plans for Sustainable Beef Marketing Strategies</td>
<td>$19,700</td>
<td>Eric Allenbach The Kerr Center for Sustainable Agriculture, Inc.</td>
</tr>
<tr>
<td>LS96-074</td>
<td>Improving Integrated Resource Management Skills of Beef Producers</td>
<td>$163,642</td>
<td>Damona Doye Oklahoma State University</td>
</tr>
<tr>
<td>LS96-079</td>
<td>Multi-Cropping Cattle and Watermelon in the Southern Plains</td>
<td>$54,752</td>
<td>Warren Roberts Oklahoma State University, Department of Horticulture</td>
</tr>
<tr>
<td>LS96-081</td>
<td>Controlling Cheat and Annual Ryegrass in Small Grains Using Novel Crop Harvesting Technologies (AS96-025)</td>
<td>$83,624</td>
<td>Thomas F. Peper Oklahoma State University</td>
</tr>
<tr>
<td>LS94-058</td>
<td>Post-CRP Land Management and Sustainable Production Alternatives for Highly Erodible Land in the Southern Great Plains</td>
<td>$196,100</td>
<td>Thanh H. Dao USDA ARS</td>
</tr>
</tbody>
</table>
LS91-036  Pest Management and Orchard Floor Management Strategies to Reduce Pesticide and Nitrogen Inputs  $150,000  Michael Smith  Oklahoma State University

LS90-028  Substitution of Cultural Practices for Herbicides to Control Annual Rye Grass and Cheat in Small Grains  $60,000  John B. Solie  Oklahoma State University

LS89-013  Substitution of Cultural Practices for Herbicides to Control Annual Rye Grass and Cheat in Small Grains  $140,000  John B. Solie  Oklahoma State University

### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>ES19-145</td>
<td>Southern Region SARE Professional Development Grant – The Road to Soil Health</td>
<td>$59,442</td>
<td>Amy Hays  Noble Research Institute, LLC</td>
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<tr>
<td>ES02-062</td>
<td>A Training and Educational Program to Ensure the South’s Future</td>
<td>$119,905</td>
<td>Jim Horne  Kerr Center for Sustainable Agriculture</td>
</tr>
<tr>
<td>ES98-037</td>
<td>Oklahoma Master Woodland Owner Program</td>
<td>$23,640</td>
<td>William Ross  Oklahoma State University Department Of Forestry</td>
</tr>
<tr>
<td>ES97-027</td>
<td>A Training Program for Agriculture Educators Targeting Integrated Cow/calf Operation Management Systems</td>
<td>$342,389</td>
<td>Steven Smith  Oklahoma State University</td>
</tr>
<tr>
<td>ES97-020</td>
<td>State Training in Integrated Erosion Control Systems</td>
<td>$70,013</td>
<td>Gerrit Cuperus  Oklahoma State University</td>
</tr>
<tr>
<td>ES97-021</td>
<td>State Training Enhancement Project to Ensure Effective Sustainable Agriculture Training in Integrated Erosion Control Systems</td>
<td>$10,000</td>
<td>Gerrit Cuperus  Oklahoma State University</td>
</tr>
<tr>
<td>ES97-024</td>
<td>Barriers to Sustainable Agriculture Training in Oklahoma</td>
<td>$10,000</td>
<td>Derrell Peel  Oklahoma State University</td>
</tr>
</tbody>
</table>

### FARMER/RANCHER GRANTS

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>FS14-283</td>
<td>Diversification of Winter Wheat &amp; Beef Cattle Production fields Through Agroforestry &amp; Covercrop integration</td>
<td>$9,107</td>
<td>Doug Ringer  Farmer</td>
</tr>
<tr>
<td>FS11-254</td>
<td>Hitting Seasonal Market Highs by breeding Meat Goats during the Summer months</td>
<td>$2,821</td>
<td>James Jones  Rockin Double J Boer Goats</td>
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<tr>
<td>FS04-183</td>
<td>Sustainable Hair Sheep Silvopastoral System</td>
<td>$9,980</td>
<td>Brother Joseph-Marie Owen</td>
</tr>
<tr>
<td>FS03-162</td>
<td>Oklahoma Farm Direct Retail Market Project</td>
<td>$15,000</td>
<td>Kathy Carter-White  Cherokee Small Farm Project</td>
</tr>
<tr>
<td>FS03-166</td>
<td>White Wheat Marketing System</td>
<td>$15,000</td>
<td>Bob Dietrick  Oklahoma White Wheat Producers’ Alliance</td>
</tr>
<tr>
<td>FS02-150</td>
<td>Fixed Film Anerobic Methane Digester</td>
<td>$9,184</td>
<td>Michael H. Green</td>
</tr>
</tbody>
</table>
FS01-133  Low Cost Method of Establishing High Seral Native Grass Species $8,519  Terry Stuart Forst

FS99-092  The Effect of Crop Land Applied Poultry Litter on Water Quality $9,556  Rick Jeans

FS98-069  Integrated Goat Management System for Fiber and Meat $10,000  Claud Evans

FS97-060  Economics of Extended-season Cut Flower Production $8,100  Vicki Stamback

FS97-063  Sustainable Wheat Management Systems $9,344  Curtis Torrance

FS95-022  Demonstration of No-Tillage Grain Production for Soil and Moisture Conservation $9,818  Bob Dietrick

FS94-014  Cut Flowers as a Sustainable Agriculture Alternative $6,000  Vicki Stamback

GRADUATE STUDENT GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
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<th>SARE Support</th>
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</thead>
</table>
| GS08-066   | Conservation of Predatory Carabid Beetles (Coleoptera: Carabidae) in agroecosystems of the Southern Great Plains | $9,996       | Kristopher Giles
                      Oklahoma State University
                      Sarah Donelson
                      Oklahoma State University |
| GS03-025   | Integrating Effects of Natural Enemies into Winter Wheat Greenbug Management  | $9,973       | Kristopher Giles
                      Oklahoma State University
                      Douglas Jones
                      Oklahoma State University |

ON FARM RESEARCH/PARTNERSHIP GRANTS

<table>
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<tr>
<th>Project #</th>
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</thead>
</table>
| OS18-115   | Practical Approaches to Microbial Community Analyses for Production Agriculture in the Southern Great Plains | $9,745       | Dr.David Brown
                      USDA-ARS
                      Dr.Curtis Dell
                      USDA-ARS |
| OS18-120   | A Comparison of Row Cover Materials for Use in Excluding Major Insect Pests from Cucurbit Crops  | $14,933      | Dr.Eric Rebek
                      Oklahoma State University
                      Dr.Jim Shrefler
                      Oklahoma State University |
| OS14-091   | Row Cover Use Methods for Cucurbit Pest and Pollinator Management               | $14,995      | Dr.Jim Shrefler
                      Oklahoma State University |
| OS13-080   | Companion Plants as Tools for Pest Management of Squash Bug on Summer Squash  | $14,792      | Dr.Brian Kahn
                      Oklahoma State University |
| OS11-058   | Comparison of soil quality of farms managed with sustainable and conventional soil management practices in Oklahoma | $15,000      | Dr.Kefyalew (Girma) Desta
                      Montana State University |
| OS09-048   | Teff: An Alternative Crop for Oklahoma                                            | $14,948      | Dr.Kefyalew (Girma) Desta
                      Montana State University
                      Kefyalew Desta
                      Oklahoma State University |
<table>
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<tbody>
<tr>
<td>OS08-041</td>
<td>Increasing the Sustainability of Oklahoma Cropping Systems Using Cover Crops</td>
<td>$15,000</td>
<td>Dr. Chad Godsey&lt;br&gt;Oklahoma State University</td>
</tr>
<tr>
<td>OS03-012</td>
<td>Introducing Legume Cover Crops into Large Scale Grain-Cattle Production Systems</td>
<td>$14,521</td>
<td>Steve Kraich&lt;br&gt;Oklahoma State University Extension</td>
</tr>
</tbody>
</table>

**SUSTAINABLE COMMUNITY INNOVATION GRANTS**

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>CS11-084</td>
<td>Traditional Mvskoke Foods Recovery Project</td>
<td>$9,964</td>
<td>Stephanie Berryhill&lt;br&gt;Mvskoke Food Sovereignty Initiative</td>
</tr>
<tr>
<td>CS02-007</td>
<td>Pioneering the Way to the Future</td>
<td>$6,900</td>
<td>Diann Neal&lt;br&gt;Okemah Chamber of Commerce</td>
</tr>
</tbody>
</table>

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

$2,774,583

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).