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 $389 million to more than 8,519 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.

SARE in Oklahoma

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

$3,448,812 in total funding

48 grant projects

(since 1988)

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

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.

www.sare.org
SARE Grants in Oklahoma

Total awards: 48 grants
15 Research and Education
2 Sustainable Community Innovation
8 Professional Development Program
13 Farmer/Rancher
2 Graduate Student
8 On Farm Research/Partnership

Total funding: $3,448,812

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and Education</td>
<td>$2,464,653</td>
</tr>
<tr>
<td>Sustainable Community Innovation</td>
<td>$16,864</td>
</tr>
<tr>
<td>Professional Development Program</td>
<td>$710,963</td>
</tr>
<tr>
<td>Farmer/Rancher</td>
<td>$122,429</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>$19,969</td>
</tr>
<tr>
<td>On Farm</td>
<td>$113,934</td>
</tr>
</tbody>
</table>

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

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 $3,448,812 grants to support 47 projects, including but not limited to, 14 research and/or education projects, 8 professional development projects and 13 producer-led projects. Oklahoma has also received additional SARE support through multi-state projects.

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| LS20-344  | Developing a Sustainable Meat Goat Production and Marketing System for the Southeastern United States through an 1890 Universities Consortium | $600,000     | Terry Gipson  
Langston University  
Dr.Richard Browning, Jr.  
Tennessee State University  
Dr.Nirodha De Silva  
Langston University  
Dr.Kesha Henry  
Prairie View A&M University  
Dr.Uma Karki  
Tuskegee University  
Dr.Brou Kouakou  
Fort Valley State University  
Angela McKenzie-Jakes  
Florida A&M University  
Dr.Roger Merkel  
Langston University  
Dr.Dahlia O’Brien  
Virginia State University |
| LS20-338  | Researching & Networking Native American & Socially Disadvantaged Farmers Traditional Market Gardening Production System Resiliency | $298,066     | 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 |
| LS06-189  | Increasing Sustainability of Southern Great Plains’ Agriculture Through No-till Production Systems | $183,000     | Jeff Edwards  
Oklahoma State University |
| LS02-139  | Developing Sustainable Stored Grain IPM Systems in Oklahoma and Texas         | $133,371     | Thomas Phillips  
Oklahoma State University |
| LS01-119  | Use of goats for sustainable vegetation management in grazing lands            | $172,210     | Arthur Goetsch  
Langston University |
| LS00-116  | Developing Plans for Sustainable Beef Marketing Strategies                    | $19,700      | Eric Allenbach  
The Kerr Center for Sustainable Agriculture, Inc. |
| LS99-102  | Demonstration of a Sustainable Integrated Production System for Native Pecan and Beef Cattle Producers and its Effect on Ecology in Flood Prone Areas | $210,188     | B. Dean McCraw  
Dept. of Horticulture |
### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ES21-160</td>
<td>Assisting Agricultural Professionals in Training and Developing Community-Based Prescribed Fire Cooperatives</td>
<td>$75,574</td>
<td>John Weir, Oklahoma Prescribed Burn Association, Russell Stevens, Noble Research Institute</td>
</tr>
<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>
</tr>
<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>ES97-020</td>
<td>State Training in Integrated Erosion Control Systems</td>
<td>$70,013</td>
<td>Gerrit Cuperus, Oklahoma State University</td>
</tr>
<tr>
<td>ES97-027</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>ES97-024</td>
<td>Barriers to Sustainable Agriculture Training in Oklahoma</td>
<td>$10,000</td>
<td>Derrell Peel, 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>
</tbody>
</table>

### FARMER/RANCHER GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
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</tr>
</thead>
<tbody>
<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. Peeper, 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>LS96-074</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>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>
<tr>
<td>LS91-036</td>
<td>Pest Management and Orchard Floor Management Strategies to Reduce Pesticide and Nitrogen Inputs</td>
<td>$150,000</td>
<td>Michael Smith, Oklahoma State University</td>
</tr>
<tr>
<td>LS90-028</td>
<td>Substitution of Cultural Practices for Herbicides to Control Annual Rye Grass and Cheat in Small Grains</td>
<td>$60,000</td>
<td>John B. Solie, Oklahoma State University</td>
</tr>
<tr>
<td>LS89-013</td>
<td>Substitution of Cultural Practices for Herbicides to Control Annual Rye Grass and Cheat in Small Grains</td>
<td>$140,000</td>
<td>John B. Solie, Oklahoma State University</td>
</tr>
</tbody>
</table>
FS14-283 Diversification of Winter Wheat & Beef Cattle Production fields Through Agroforestry & Covercrop integration $9,107 Doug Ringer Farmer

FS11-254 Hitting Seasonal Market Highs by breeding Meat Goats during the Summer months $2,821 James Jones Rockin Double J Boer Goats

FS04-183 Sustainable Hair Sheep Silvopastoral System $9,980 Brother Joseph-Marie Owen

FS03-162 Oklahoma Farm Direct Retail Market Project $15,000 Kathy Carter-White Cherokee Small Farm Project

FS03-166 White Wheat Marketing System $15,000 Bob Dietrick Oklahoma White Wheat Producers’ Alliance

FS02-150 Fixed Film Anerobic Methane Digester $9,184 Michael H. Green

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

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

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

FS95-022 Demonstration of No-Tillage Grain Production for Soil and Moisture Conservation $9,818 Bob Dietrick Oklahoma White Wheat Producers’ Alliance

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

GRADUATE STUDENT GRANTS

Project # Project Title SARE Support Project Leaders
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

Project # Project Title SARE Support Project Leaders
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
A Comparison of Row Cover Materials for Use in Excluding Major Insect Pests from Cucurbit Crops

Row Cover Use Methods for Cucurbit Pest and Pollinator Management

Companion Plants as Tools for Pest Management of Squash Bug on Summer Squash

Comparison of soil quality of farms managed with sustainable and conventional soil management practices in Oklahoma

Teff: An Alternative Crop for Oklahoma

Increasing the Sustainability of Oklahoma Cropping Systems Using Cover Crops

Introducing Legume Cover Crops into Large Scale Grain-Cattle Production Systems

**SUSTAINABLE COMMUNITY INNOVATION GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| CS11-084 | Traditional Mvskoke Foods Recovery Project        | $9,964       | Stephanie Berryhill  
Mvskoke Food Sovereignty Initiative |
| CS02-007 | Pioneering the Way to the Future                  | $6,900       | Diann Neal  
Okemah Chamber of Commerce |

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

$3,448,812

For further information on projects, contact 770-412-4787 or ssare@uga.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).