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 $312 million to more than 7,507 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: Advancing the Frontier of Sustainable Agriculture in...

Texas

Project Highlight: Training for a Sustainable Agriculture Future

Thousands of Texas ranchers hurt by drought are seeking new ways to make their land profitable. Large Texas farms are being subdivided. Farms of all sizes are now in closer contact with non-agricultural communities due to urban growth.

Agriculture in Texas is changing, and the technical professionals who support producers must keep up by learning innovative, research-based production and marketing strategies relevant to their clientele’s interests. This need prompted Texas A&M Extension educators to organize a SARE-funded training program on the sustainable and organic practices that are of emerging interest to Texas’ farmers and ranchers. The program reached 45 employees of Texas A&M and Prairie View A&M Extension, and the USDA Natural Resources Conservation Service. It included hands-on farm training conducted at six locations, with classroom presentations and discussions over four days. Eleven farmers and ranchers served as trainers during the on-site visits. Participants reported back on what they did in their communities as a result of their involvement in the program. Five months after conclusion of the training, they brought information about sustainable and organic practices to 1,000 farmers in 37 different counties through a combination of events and one-on-one outreach.

For more information on this project, see sare.org/projects, and search for project number ES13-120.

SARE in Texas

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

$7,648,522 in total funding

113 grant projects

(since 1988)

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

Total awards: **113 grants**
- 25 Farmer/Rancher
- 23 Graduate Student
- 17 On Farm
- Research/Partnership
- 8 Professional Development Program
- 36 Research and Education
- 4 Sustainable Community Innovation

Total funding: **$7,648,522**
- $241,676 Farmer/Rancher
- $268,173 Graduate Student
- $258,413 On Farm
- Research/Partnership
- $643,658 Professional Development Program
- $6,196,602 Research and Education
- $40,000 Sustainable Community Innovation

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/texas](southern.sare.org/sare-in-your-state/texas)

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/texas](southern.sare.org/state-pages/texas) to learn more.

Diane E. Boellstorff  
Texas AgriLife Extension Service  
(979) 458-3562  
dboellstorff@tamu.edu

Nelson Daniels  
Prairie View A&M University  
(936) 261-5112  
daniels@ag.tamu.edu

For detailed information on SARE projects, go to [www.SARE.org](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.
Texas has been awarded $7,648,522 grants to support 112 projects, including but not limited to, 35 research and/or education projects, 8 professional development projects and 25 producer-led projects. Texas 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>
</table>
| LS20-341      | Assessing Water Use Efficiency, Soil Health, and Pollinators within a Transition from Irrigation to Dryland Management in the Texas High Plains | $299,208     | Dr.Charles West
Texas Tech University
Dr.Veronica Acosta-Martinez
USDA-ARS
Dr.Krishna Bhandari
Texas Tech University
Dr.Scott Longing
Texas Tech University |
| LS20-343      | Toward Culturally Responsive Disaster Management for Limited Resource Producers: The Role of Person, Place and Professional Agencies | $300,000     | Dr.Noel Estwick
Prairie View A&M University
Dr.Nelson Daniels
Prairie View A&M University
Dr.Marco Robinson
Prairie View A&M University |
| LS19-313      | Organic and Conventional Agriculture: Learning from Each Other to Promote Soil Health and Economic Viability in West Texas | $299,667     | Dr.Katie Lewis
Texas A&M AgriLife Research |
| LS19-312      | Regional Food Transportation for Texas Farmers                                 | $299,311     | Caroline Krejci
The University of Texas at Arlington |
| LS18-288      | A Southern Regional Water Conference to Improve Producer Adoption of Sustainable Water Management Practices | $48,000      | Dr.Diane Boellstorff
Texas A&M AgriLife Extension Service |
| LS17-277      | Indicators and Soil Conservation Practices for Soil Health and Carbon Sequestration | $312,000     | Dr.Barbara Bellows
Tarleton State University/ TIAER |
| LS17-283      | Developing Organic Cropping Systems for Grain Production in Texas              | $276,000     | Ronnie Schnell
Texas A&M University, Soil & Crop Sciences |
| LS17-286      | Long-term Agroecosystems Research and Adoption in the Texas Southern High Plains - Phase III | $300,000     | Dr.Charles West
Texas Tech University |
| LS16-275      | Evaluating Organic Pest Control Products for Strawberries in Combination with High and Low Tunnels for Limited Resource Farmers in the Mid-South | $246,413     | Dr.Russell Wallace
Texas A&M University AgriLife Extension |
| LS16-271      | Intensifying Cropping Systems in Semi-Arid Environments to Enhance Soil Health and Profitability | $232,827     | Dr.Paul DeLaune
Texan A&M AgriLife Research / Soil and Crop Sciences |
| LS14-261      | Long-term AgroEcosystems Research and Adoption in the Texas Southern High Plains - Phase II | $300,000     | Dr.Charles West
Texas Tech University |
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Title</th>
<th>Budget</th>
<th>Principal Investigator(s)</th>
</tr>
</thead>
</table>
| LS14-264     | Beyond Fresh: Expanding Markets for Sustainable Value-added Food Products in Texas | $220,000 | Mike Morris  
               |                                 |        | National Center for Appropriate Technology                                                |
| LS12-249     | Improving Soil Quality to Increase Yield and Reduce Diseases in Organic Rice Production | $225,000 | Fugen Dou  
               |                                 |        | Texas A&M AgriLife Research                                                              |
| LS11-238     | Long-term AgroEcosystems Research and Adoption in the Texas Southern High Plains – Phase I | $329,999 | Dr.Charles West  
               |                                 |        | Texas Tech University  
               |                             | Philip Brown  
               |                                 |        | Texas Tech University          |
| LS10-236     | Traceability in Specialty Crop Production and Supply Chains: Distilling a Research and Extension Agenda | $33,000 | Kathryn Boys  
               |                                 |        | Virginia Tech  
               |                             | Kathryn Boys  
               |                                 |        | Clemson University            |
| LS10-229     | Integrated Crop and Livestock Systems for Enhanced Soil Carbon Sequestration and Microbial Diversity in the Semiarid Texas High Plains | $160,000 | Dr.Jennifer Moore-Kucera  
               |                                 |        | Texas Tech University                                                                  |
| LS08-202     | Crop-livestock Systems for Sustainable High Plains Agriculture                 | $200,000 | Dr.Vivien Allen  
               |                                 |        | Texas Tech University                                                                  |
| LS08-208     | Marketing of locally produced sustainable animal fiber products                | $140,000 | John Bernard  
               |                                 |        | University of Delaware  
               |                             | Hikaru Hanawa Peterson  
               |                                 |        | Kansas State University       |
| LS07-201     | Pigeon pea: a multipurpose, drought resistant forage, grain and vegetable crop for sustainable southern farms | $200,000 | Dr.John Sloan  
               |                                 |        | Texas AgriLife Research                                                                 |
| LS05-175     | Sustainable and profitable control of invasive plant species by small ruminants | $178,000 | Dr.James Muir  
               |                                 |        | Texas A&M AgriLife Research                                                              |
| LS05-214     | SARE Research and Education Program Impacts and Diffusion                      | $31,526 | Marari Suvedi  
               |                                 |        | CARRS Center for Evaluative Studies                                                     |
| LS03-144     | Expanding the Marketing Opportunities for Organic Growers in Texas             | $19,924 | Douglas Constance  
               |                                 |        | Sam Houston State University                                                            |
| LS03-150     | Sustainable and profitable control of invasive species by browsing goats on small farms | $14,199 | Dr.James Muir  
               |                                 |        | Texas A&M AgriLife Research                                                              |
| LS02-131     | Forage and Livestock Systems for Sustainable High Plains Agriculture           | $251,805 | Dr.Vivien Allen  
               |                                 |        | Texas Tech University                                                                  |
| LS00-117     | System for value-added export of manure nitrogen and phosphorus through turfgrass sod | $149,726 | Donald Vietor, PhD  
               |                                 |        | Texas A&M University, Soil & Crop Sciences                                             |
| LS99-100     | Systems for sustainability of alfalfa production on acid, Coastal Plain soils using various harvesting strategies | $149,750 | Vincent Haby  
               |                                 |        | Texas Agricultural Experiment Station                                                    |
| LS99-108     | System for Conserving and Adding Value to Manure Sources of Nutrients in Turf-grass Sod | $16,854 | Donald Vietor, PhD  
<pre><code>           |                                 |        | Texas A&amp;M University, Soil &amp; Crop Sciences                                             |
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<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
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</thead>
<tbody>
<tr>
<td>LS98-097</td>
<td>Introducing Alternative Crops Into Traditional Cotton-Grain Farming to Aid Transition To “Freedom to Farm” Agriculture</td>
<td>$114,279</td>
<td>Roland E. Roberts Texas A&amp;M University Research and Extension Center</td>
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<tr>
<td>LS97-082</td>
<td>Sustainable Crop/Livestock Systems in the Texas High Plains</td>
<td>$222,125</td>
<td>Dr. Vivien Allen Texas Tech University</td>
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<tr>
<td>LS95-069</td>
<td>Managing Soil Phosphorous Accumulation From Poultry Litter Application Through Vegetable/Legume Rotations</td>
<td>$135,000</td>
<td>D. R. Earhart Texas Agricultural Experiment Station</td>
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<tr>
<td>LS92-047</td>
<td>Farm Scale Evaluation of Alternative Cotton Production Systems</td>
<td>$60,000</td>
<td>William M. Lyle Texas Agricultural Experiment Station</td>
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<tr>
<td>LS92-048</td>
<td>Developing Environmentally Sound Poultry Litter Management Practices for Sustainable Cropping Systems</td>
<td>$140,000</td>
<td>D. R. Earhart Texas Agricultural Experiment Station</td>
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<tr>
<td>LS89-015</td>
<td>Enhancement of the Stability of Southern Region Agroecosystems Through Profitable Transition to Sustainable Agriculture</td>
<td>$121,989</td>
<td>Keith Jones Texas Department of Agriculture</td>
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<tr>
<td>LS88-002</td>
<td>Whole-farm Low/Reduced Input Farming Systems and Educational Program</td>
<td>$90,000</td>
<td>Hoover Carden Prairie View A &amp; M University</td>
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<tr>
<td>LS88-010</td>
<td>Solarization and Living Mulch to Optimize Low-Input Production Systems for Small Fruits (88-87-4)</td>
<td>$80,000</td>
<td>Charles Long Texas A &amp; M University</td>
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**PROFESSIONAL DEVELOPMENT PROGRAM GRANTS**

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<th>Project Leaders</th>
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<tbody>
<tr>
<td>ES20-151</td>
<td>Beekeeping Curriculum and Training for Texas Agricultural Extension Agents and 4-H Youth Leaders</td>
<td>$79,516</td>
<td>Nicole Gueck AgriLogic Consulting, LLC</td>
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<td></td>
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<td>Elizabeth “Wizzie” Brown Texas AgriLife Extension Service</td>
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<td></td>
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<td></td>
<td>Leesa Hyder Texas Beekeepers Association</td>
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<td></td>
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<td></td>
<td>Molly Keck Texas AgriLife Extension Service</td>
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<td></td>
<td>Texas Apiary Inspection Services</td>
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<tr>
<td>ES19-147</td>
<td>Training Texas County Extension Agents and Mentor Ranchers to Improve Small Ruminant Health and Productivity Through Natural Genetic Selection Strategies</td>
<td>$76,996</td>
<td>Dr. Reid Redden Texas A&amp;M AgriLife Extension</td>
</tr>
<tr>
<td>ES18-139</td>
<td>Natural Resource Management for Sustainable Agriculture Production in East Texas</td>
<td>$42,773</td>
<td>Dr. Vanessa Corriher-Olson Texas A&amp;M AgriLife Extension</td>
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<tr>
<td>ES18-142</td>
<td>Promotion and Adoption of Sustainable Agriculture Practices in Texas: Training the Trainers</td>
<td>$80,000</td>
<td>Dr. Jake Mowrer Texas A&amp;M Agrilife Extension</td>
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<tr>
<td>ES13-120</td>
<td>Farming for the Future: Adopting Sustainable Agriculture Practices</td>
<td>$55,904</td>
<td>Dr. Megan Clayton Texas A&amp;M AgriLife Extension Service</td>
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<tr>
<td>Project #</td>
<td>Project Title</td>
<td>SARE Support</td>
<td>Project Leaders</td>
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<tr>
<td>FS19-312</td>
<td>Tagasaste: A new feed source for West Texas</td>
<td>$9,670</td>
<td>Malinda Beeman</td>
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<tr>
<td>FS18-306</td>
<td>Subsoiling as an Effective and Affordable Water Capture Tool</td>
<td>$9,720</td>
<td>Amanda Krause</td>
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<tr>
<td>FS17-299</td>
<td>Organic Sweet Potato as a Commercial Crop in South Texas</td>
<td>$10,000</td>
<td>Lois Kim</td>
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<tr>
<td>FS14-281</td>
<td>Organic Cultivation Methods for Asparagus as an Alternative Crop in South Texas</td>
<td>$14,736</td>
<td>Gilbert Garza</td>
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<tr>
<td>FS13-277</td>
<td>Evaluating switchgrass in marginal land as a beneficial insect habitat and as compost source for vegetable production</td>
<td>$8,379</td>
<td>Cynthia Remsing</td>
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<tr>
<td>FS12-262</td>
<td>Development of an innovative forage crop system for pasture raised swine</td>
<td>$8,303</td>
<td>Ron Luce</td>
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<tr>
<td>FS10-246</td>
<td>Low Cost Geothermal Greenhouse Heating System for Southern Climates</td>
<td>$9,999</td>
<td>Tanya Miller</td>
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<tr>
<td>FS07-219</td>
<td>Treating Soil Compaction Using Woven Weed Fabric</td>
<td>$9,886</td>
<td>Roy Riddle</td>
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<tr>
<td>FS06-198</td>
<td>Evaluation of Mulches for Organic Cantaloupe Production in Semi-Arid Regions</td>
<td>$9,855</td>
<td>John Chandler</td>
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<tr>
<td>FS06-205</td>
<td>Cover Crop Optimization for Sustainable Forage Systems on a Southern Dairy Farm</td>
<td>$9,872</td>
<td>Neil R. Miller</td>
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<tr>
<td>FS05-190</td>
<td>Addressing Cedar Infestations - Using Animal Impact to Increase Forage Production and Improve Soil Health</td>
<td>$14,987</td>
<td>Peggy Cole Jones</td>
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<tr>
<td>FS05-196</td>
<td>Weed Control for Row Crops Using Corrugating Linerboard/Medium Paper</td>
<td>$7,399</td>
<td>Michael E. Tolbert</td>
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<tr>
<td>FS03-161</td>
<td>Sustainable Pastured Layer Research Project</td>
<td>$9,992</td>
<td>Graciela Alvardo</td>
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<tr>
<td>FS03-174</td>
<td>Goat Range-Nutrition Performance Test</td>
<td>$13,113</td>
<td>Marvin F. Shurley</td>
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<tr>
<td>FS02-151</td>
<td>Increase Soil Organic Matter in Citrus Soils</td>
<td>$8,112</td>
<td>Jim Hoffimann</td>
</tr>
</tbody>
</table>
Pepitas de Ajo: permanent ground cover in garlic production $14,132 Lydia Villanueva Comm. Approaching Sustainability w/ Agroecology

Internal Parasite Resistance Selection Method for Sheep $4,844 Ray Cloudt

Crop Rotation and Rotational Grazing Study $9,876 Ken Graff

An Intensive Marketing Workshop for Growers and Ranchers $7,561 Sue Johnson Texas Organic Growers Association

Effects of Conservation Tillage on Water Quality in Southern Texas $8,000 Charles Eubanks Cameron County Field

Cool Season and Warm Season Grasses to Stabilize Erodible Soils and Increase Profitability $10,000 David Kearney Wichita County Field Crops Committee

Native Warm Season Grasses As Alternative Hay Source to Annual Sorghum/Sudan Grasses on Family- Operated Goat Dairy $9,640 Lee B. Dexter White Egret Farm

Pecan IPM Using Black-Eyed Peas as a Trap Crop $4,000 Kyle Brooksheir

Controlling Aphids with Harmonia Lady Beetle in Pecan Orchards $4,600 Cindy Wise Texas Pecan Growers Assoc.

Site Specific Applications of Seed/Fertilizer/Chemicals $10,000 Ricky & Becky Meinen

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**GRADUATE STUDENT GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| GS20-226 | Comparing the Effects of Forage Mix and Nutrient Management on Soil Greenhouse Gas Flux in Semi-arid Improved Pastures $16,450 | Lindsey Slaughter Texas Tech University  
Billi Petermann Texas Tech University |
| GS20-227 | Texas Little Bluestem (Schizachyrium scoparium) Phenotypic Attribute Correlations to Collection Site Environment Characteristics $11,889 | Dr. James Muir Texas A&M AgriLife Research  
Kimberlee Howell Tarleton State University  
Tarleton State University |
| GS20-229 | Cannabis sativa L. as a Feed Source in Backyard Rabbit Production $16,419 | Dr. William Smith, Ph.D. Tarleton State University  
Kristen Jacobson Tarleton State University |
| GS19-211 | Roadblocks to Success: Needs assessment of small producers in Texas $10,132 | Ken Mix  
Katie Tritsch Texas State University |
| GS19-209 | Improving Resilience, Sustainability and Nutritional Properties of Specialty Crops Using Composted Spent Coffee Grounds $16,044 | David Reed  
Amanda Birnbaum Texas A&M University |
| GS19-198 | The Success of Organic and Other Sustainable Dual-Purpose Wheat Systems Depend on Access to Adapted Varieties $16,500 | Dr. Curtis Adams Texas A&M AgriLife Research  
Philip Hinson Texas A&M University |
<table>
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<tr>
<th>Project ID</th>
<th>Title</th>
<th>Award Amount</th>
<th>PI(s)</th>
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</table>
| GS18-193   | Investigating Controls Over Nodulation and Nitrogen Fixation in Leguminous Cover Crops in Subtropical South Texas | $16,500      | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Stephanie Kasper  
University of Texas Rio Grande Valley |
| GS18-196   | Effects of Cumulative Cattle Trampling on Soil Bulk Density and Infiltration of Rain Water on an Annual Forage Crop Pasture | $9,001       | Dr. Charles West  
Texas Tech University  
Dr. Kathryn Radicke  
West Texas A&M University / Purdue Global University / Unity College |
| GS18-179   | Developing Suitable Cover Crop Systems for South Texas: Evaluating Different Late-Summer and Winter Cover Crop Species | $16,352      | Muthu Bagavathiannan  
Texas A&M University  
Spencer Samuelson  
Corteva Agriscience |
| GS16-160   | Agroecological methods to manage brassica pests on organic farms     | $11,000      | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Madeline Marshall  
Corteva Agriscience |
| GS16-161   | Examining the role of bats in pest management in agroecosystems of south Texas | $10,223      | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Katharine Jones  
The University of Texas at Rio Grande Valley |
| GS15-148   | Multifunctionality of Cover Crops in South Texas: Looking at multiple benefits of cover cropping on small farms in a subtropical climate | $8,953       | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Savannah Rugg  
University of Texas Pan-American |
| GS15-152   | Evaluation of winter annual cover crops under multiple residue managements: Impacts on land management, soil water depletion, and cash crop productivity. | $9,383       | Dr. Charles West  
Texas Tech University  
Dr. Lisa Baxter  
University of Georgia (Tifton Campus) |
| GS14-133   | Effects of Simulated and Insect Herbivory on Total and Protein Percipitable Phenolic Concentrations of Two Legumes | $9,040       | Dr. James Muir  
Texas A&M AgriLife Research  
Tiana Blackmon  
Tarleton State University |
| GS14-138   | Use of Artificial Lighting to Increase Photoperiod Length for Pasture-Raised Laying Hens to Improve Egg Productivity and Quality | $10,997      | Dr. Jackie Wahrmund  
University of Kentucky  
Margaret Morgan  
Texas A&M University-Commerce |
| GS12-109   | Factors contributing to the economic impact of cotton flea hoppers, Pseudatomoscelis seriatus | $9,336       | Micky Eubanks  
Auburn University  
Loriann Garcia  
Texas A&M University |
| GS11-108   | Evaluating functional diversity in an organic intercropping system   | $10,000      | Dr. Astrid Volder  
Texas A&M University  
Jose Franco  
Texas A&M University |
| GS11-107   | Managing Climate Change on Apple Orchards                            | $9,954       | Dr. James Veteto  
University of North Texas  
Stephen Carlson  
University of North Texas |
| GS07-056   | Allelopathic effects of small grain cover crops on cotton plant growth and yields | $10,000      | Dr. Vivien Allen  
Texas Tech University  
Yue Li  
Texas Tech University |
| GS07-064   | Cropping systems for sustainable nutrient management and dairy production | $10,000      | Donald Vietor, PhD  
Texas A&M University, Soil & Crop Sciences  
Ronnie Schnell  
Texas A&M University, Soil & Crop Sciences |
| GS04-040   | Cycling of composted biosolids through turfgrass sod enhances sustainability across agricultural and urban landscapes | $10,000      | Donald Vietor, PhD  
Texas A&M University, Soil & Crop Sciences  
Nels Hansen  
Soil & Crop Sciences Department |
<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>GS03-021</td>
<td>Development of Methodology to Measure Net Feed Efficiency in Bulls to Enhance Profitability and Environmental Sustainability of Beef Production</td>
<td>$10,000</td>
<td>Gordon Carstens Texas A&amp;M University</td>
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<tr>
<td>GS02-012</td>
<td>Optimizing Water Use for Three Old World Bluestems in the Texas High Plains</td>
<td>$10,000</td>
<td>Dr. Vivien Allen Texas Tech University</td>
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<td>Dirk Philipp Texas Tech University</td>
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**ON FARM RESEARCH/PARTNERSHIP GRANTS**

<table>
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<tr>
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<th>SARE Support</th>
<th>Project Leaders</th>
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<tbody>
<tr>
<td>OS20-138</td>
<td>Strategic Management of Legume Cover-forage Crops to Optimize Utility in a Challenging Environment</td>
<td>$20,000</td>
<td>Dr. Reagan Noland Texas A&amp;M AgriLife Extension</td>
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<tr>
<td>OS20-139</td>
<td>Incorporating Native Plants in Insectary Strips to Promote Insect Diversity and Belowground Beneficial Microbes</td>
<td>$20,000</td>
<td>Pushpa Soti University of Texas Rio Grande Valley</td>
</tr>
<tr>
<td>OS19-128</td>
<td>Sustainable Pasture Management in Texas: Optimizing forage production and nutrient use in various environments and soils</td>
<td>$14,298</td>
<td>James Kiniry</td>
</tr>
<tr>
<td>OS19-131</td>
<td>Advancing the Frontier of Legume Cover Crops and Building Integrated System Resilience in Semi-arid West Texas</td>
<td>$15,000</td>
<td>Dr. Reagan Noland Texas A&amp;M AgriLife Extension</td>
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<tr>
<td>OS18-121</td>
<td>Integrating Cover Crops as Potential Weed and Pest Management Strategy in Organic Vegetable Farms in South Texas</td>
<td>$15,000</td>
<td>Pushpa Soti University of Texas Rio Grande Valley</td>
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<tr>
<td>OS18-119</td>
<td>Supporting Alternative Crop Options Through Improved Fertility Recommendations for Canola in Central and South Texas</td>
<td>$14,811</td>
<td>Fernando Guillen-Portal Texas A&amp;M University</td>
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<tr>
<td>OS17-108</td>
<td>Using Mycorrhizal Fungi to Improve Soil Health and Increase Yield in Organic Vegetable Farms</td>
<td>$14,995</td>
<td>Dr. Alexis Racelis University of Texas - Rio Grande Valley</td>
</tr>
<tr>
<td>OS16-095</td>
<td>Deep Soil Profile Sampling of Nitrate for Residual Nitrogen Credit in Winter Wheat - Texas Blacklands</td>
<td>$15,000</td>
<td>Dr. Jake Mowrer Texas A&amp;M Agrilife Extension</td>
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<tr>
<td>OS14-087</td>
<td>Determining accurate nitrate level requirements in an aquaponic system.</td>
<td>$9,737</td>
<td>Dr. Joseph Masabni Texas A&amp;M</td>
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<tr>
<td>OS14-089</td>
<td>Developing farmer- appropriate integrated pest management strategies in South Texas: The potential of push-pull technologies to regulate organic brassica pest</td>
<td>$15,000</td>
<td>Dr. Alexis Racelis University of Texas - Rio Grande Valley</td>
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<tr>
<td>OS13-072</td>
<td>Huitlacoche Production as an Alternative Crop in South Texas</td>
<td>$14,962</td>
<td>Dr. Alexis Racelis University of Texas - Rio Grande Valley</td>
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<td>OS12-067</td>
<td>Adaptable Wide Stale Seedbed System Combining Precision Fertilizer Placement, Conservation Irrigation Management with Reduced Tillage Practices for Long Term Farm Sustainability</td>
<td>$15,000</td>
<td>Dionicio Valdez Texas A&amp;M AgriLife Extension Service</td>
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OS10-053  BIOLOGICAL CONTROL OF SALTCEDAR ON WEST TEXAS RANCHES CONSERVES FORAGE AND WATER RESOURCES  $14,965  Allen Knutson  Texas AgriLife Extension Service

OS06-031  Use of Guar (Cyamopsis tetragonolaba (L.) Taub) for cover crop rotation and green manuring  $15,000  Dr. Russell Wallace  Texas A&M University AgriLife Extension

OS05-023  Livestock and Feedstock: Distiller’s Grain and Fuel Ethanol  $15,000  Peggie Korth  Water Assurance Technology Energy Resources

OS04-021  Comparison of Stockpiled Bermudagrass + Annual Ryegrass and Traditional Hay-Only Winter Feeding Practices  $14,645  Larry Redmon  Texas Cooperative Extension

OS02-006  Evaluation and Maintenance of Sustainable Systems for Alfalfa Production and Marketing Strategies on Coastal Plain Soils  $15,000  Larry Redmon  Texas Cooperative Extension

SUSTAINABLE COMMUNITY INNOVATION GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
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<tbody>
<tr>
<td>CS10-076</td>
<td>Investing in Community Linkages to Improve our Food System</td>
<td>$10,000</td>
<td>Jay Crossley  Houston Tomorrow</td>
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<tr>
<td>CS10-081</td>
<td>Establishing Sustainable Agriculture &amp; Community Development in Elgin Texas</td>
<td>$10,000</td>
<td>Amy Miller  City of Elgin</td>
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<td>CS06-040</td>
<td>Building Local Food &amp; Local Communities in Western Oklahoma</td>
<td>$10,000</td>
<td>Darryl Birkenfield  Ogallala Commons</td>
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<tr>
<td>CS03-012</td>
<td>Sustainable Agriculture Innovations Lead to Rural Success</td>
<td>$10,000</td>
<td>Gayla Kessinger  Canutillo Independent Schoo</td>
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</table>

Total funding from the USDA SARE program to Texas  
$7,648,522

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).