Sustainable Agriculture Research & Education

www.sare.org

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 $6.5 million to more than 136 initiatives [1].

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: Advancing the Frontier of Sustainable Agriculture in...

West Virginia

Project Highlight: Low Cost Self-Sustaining Year-Round High Tunnel Temperature Control

A group of researchers from Caldwell, West Virginia, worked with SARE to discover if they can use solar and wind energy to power temperature-controlled farming tunnels. For years, farmers who live in climates with highly variable weather conditions have struggled to maintain stable crop production. As a result, many producers whose farms are susceptible to these extreme temperature conditions have turned to temperature-controlled tunnels as a solution. Unfortunately, the energy costs that it takes to maintain these tunnels are very expensive and are therefore not readily available to most producers. To combat this, Tommye Rafes from T. L. Fruits and Vegetables LLC partnered with SARE to fund an experiment to see if powering the tunnels with solar and wind energy would be more cost effective.

After obtaining a SARE grant, Rafes and his team compared the cost of operating the tunnels using three different energy sources: 1) a propane/natural gas heating system, 2) a geothermal network that is not self-sustaining and 3) a self-sustaining solar/wind energy system. The researchers compared and analyzed every aspect of these three conditions, including energy output, equipment and installation costs, labor fees, etc. to find out which type of tunnel would be most beneficial for producers. This research provides a great insight into the costs and benefits of each method, providing producers with an educational resource that they can use to help decide which type of energy would be best for them. Overall, the data collected indicated that solar energy was the most cost effective and provided the most sustainable source of energy for farmers who want to grow crops in extreme weather conditions.

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

FNE20-962.

SARE in West Virginia

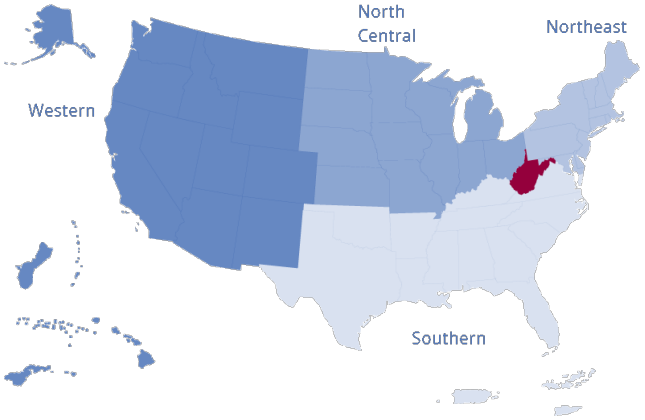
northeast.sare.org/state-profiles/west-virginia/

$6,531,057 in total funding

136 grant projects

(since 1988 [1])

For a complete list of West Virginia grant projects, go to projects.sare.org/state-fact-sheets/



[1] These totals reflect available data; complete information may not be available for all grant programs prior to 2016.

SARE in West Virginia, 2021–2026

This is a summary of recent SARE-funded activities and impacts in the state. To search all SARE projects visit projects.sare.org. For a list of all projects in West Virginia visit projects.sare.org/state-fact-sheets/.

Grants awarded

Total awards: **34 grants**

6	Farmer/Rancher
2	Research and Education
4	Professional Development Program
12	On Farm Research/Partnership
3	Graduate Student
2	Research Only
3	PDP State Program [2]
2	Farming Community

Total funding: **$2,636,575**

$117,758	Farmer/Rancher
$486,765	Research and Education
$599,777	Professional Development Program
$342,725	On Farm Research/Partnership
$44,923	Graduate Student
$398,057	Research Only
$346,936	PDP State Program [2]
$299,634	Farming Community

[2] The Professional Development Program (PDP) State Program is a non-competitive award that funds the activities of the state coordinator(s). See more below.

For a complete list of West Virginia awards, visit: projects.sare.org/state-fact-sheets/

Farmer and rancher impacts

SARE grantees have reported the following impacts from their projects:

1,889 farmers participated in a SARE-funded project

314 farmers changed a practice

Learn about local impacts at: northeast.sare.org/sare-in-your-state/west-virginia/

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 northeast.sare.org/state-profiles/west-virginia/ to learn more.

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SARE Sustainable Agriculture Research & Education

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