

## 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 \$273 million to more than 6,800 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 the SARE Learning Center—a library of practical publications, grantee-produced information products and other educational materials.



[www.sare.org](http://www.sare.org)

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

# Puerto Rico

## Project Highlight: *Cover Crops Improve Soil in Plantain Crops*

Cover crops bring many benefits to farming systems, from protecting the soil against erosion to suppressing weeds to improving yields and profitability through healthier soil. In Puerto Rico, a team of researchers, educators and service providers used a SARE grant to start bringing these benefits to one of the island's main crops, the plantain.

Starting In 2013, the research team conducted on-farm experiments to identify cover crops species that could be intercropped with plantains to improve soil health. They focused on jack beans, sunnhemp and sorghum, planted as cover crops both individually and as mixes. The team collected soil samples to measure soil fertility, microbial activity and other indicators of soil health, and they made some important discoveries that should help Puerto Rico

farmers make informed decisions about using cover crops. Jack beans established most successfully and showed the most promise overall, whereas rodents and heavy rains impacted the sorghum, and the sunnhemp performed well but was more susceptible to weather conditions than the jack beans.

Most importantly, the cover crop trials revealed an economic benefit. To achieve yields of high-quality plantains by market standards, no nematicides were needed and fungicide applications were reduced 78 percent—representing a cost savings to the farmer.

For more information on this project, see [www.sare.org/projects](http://www.sare.org/projects), and search for project number FS13-271.

## SARE in Puerto Rico

[www.southernsare.org/puertorico](http://www.southernsare.org/puertorico)

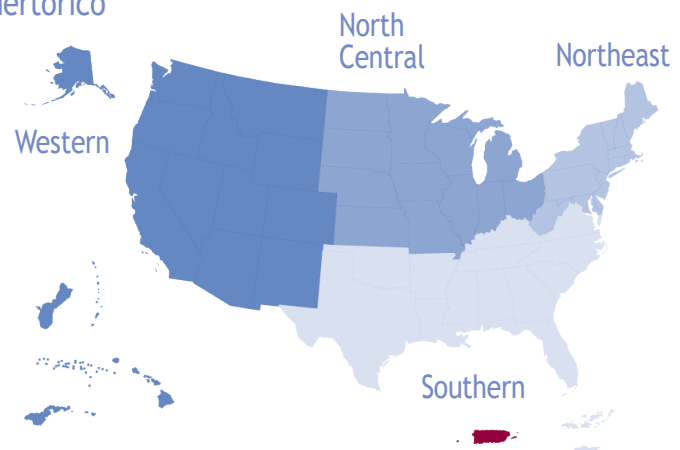
\$971,675 in total funding

20 grant projects

(since 1988)

For a complete list of grant projects state by state, go to

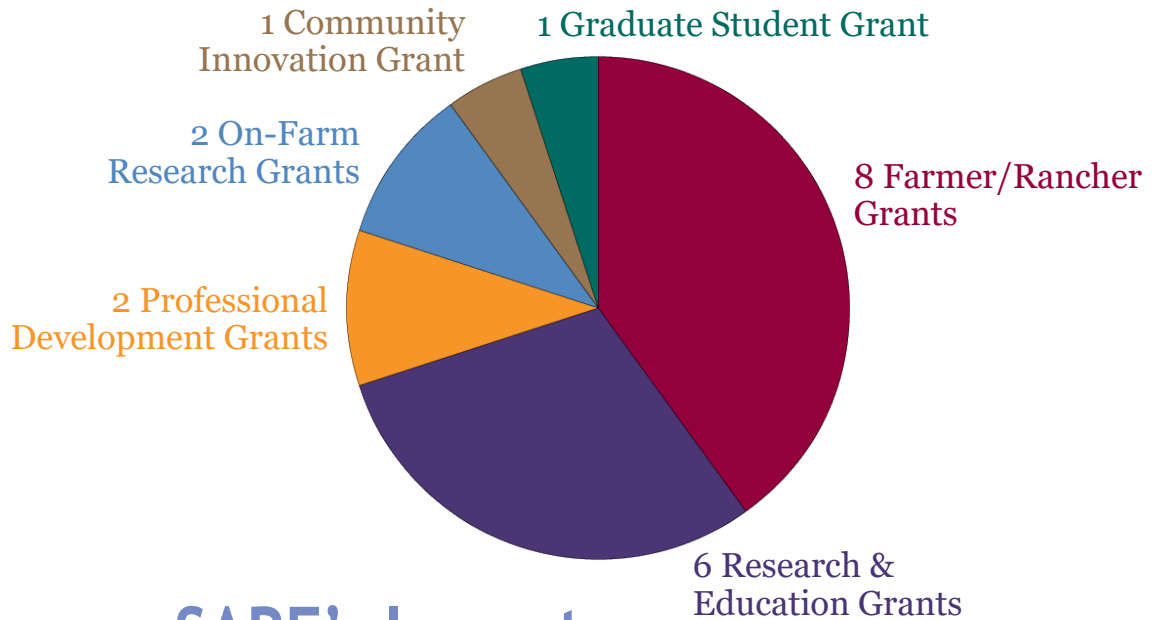
[www.sare.org/state-summaries](http://www.sare.org/state-summaries)



SARE's four regional programs and outreach office work to advance sustainable innovations to the whole of American agriculture.

# SARE Grants in Puerto Rico

SARE has awarded a total of **20 grants** in Puerto Rico since 1988



## 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.

### 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 [www.southernsare.org/puertorico](http://www.southernsare.org/puertorico) to learn more.

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For detailed information on SARE projects, go to [www.SARE.org](http://www.SARE.org)