

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

## Northern Mariana Islands

### Project Highlight: *Giving aquaculture a boost with solar energy*

The Northern Mariana Islands have one of the highest electrical utility rates in the United States, which is a huge barrier to profitability for shrimp and tilapia farmers, who must run air and water pumps 24 hours a day, seven days a week. With SARE funding, aquaculture farmer Pedro Ariola is showing his peers that solar power can be the solution.

With a 2009 SARE grant, Ariola installed solar panels that have taken him off the grid for 12 hours each day, cutting his monthly energy bill in half. This is significant considering energy accounts for 40 percent of aquaculture production costs.

When Ariola began this project, he was slowed by a lack of capacity to assist with renewable energy projects

such as this—in fact, this project was the first of its kind in the Northern Mariana Islands. He had to go out and find the people with the expertise to help with design and installation of the system, and he had to purchase much of his equipment from the mainland United States.

Ariola's experience has paid off in more ways than one. His success has caught the attention of other farmers who were discouraged with the high costs of aquaculture production. He is now fielding regular inquiries from fellow farmers and hosts tours of his operation. At least one other farmer has installed solar equipment as a result.

For more information on this project, see [www.sare.org/projects](http://www.sare.org/projects), and search for project number FW09-006.

### SARE in N. Mariana Islands

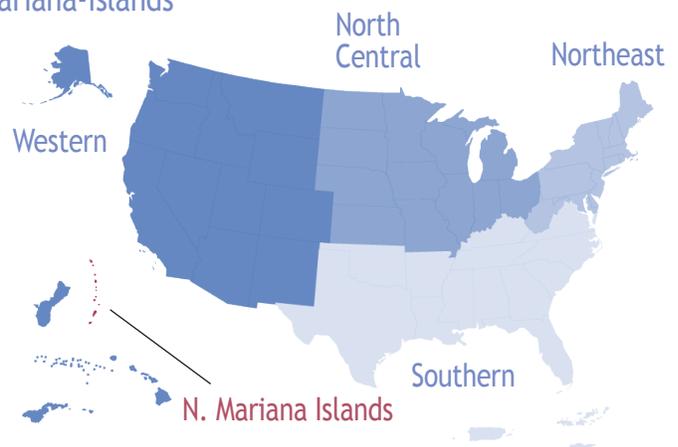
[www.westernsare.org/n-mariana-islands](http://www.westernsare.org/n-mariana-islands)

**\$437,860 in total funding**

**25 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.

## 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 \$287 million to more than 7,000 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.

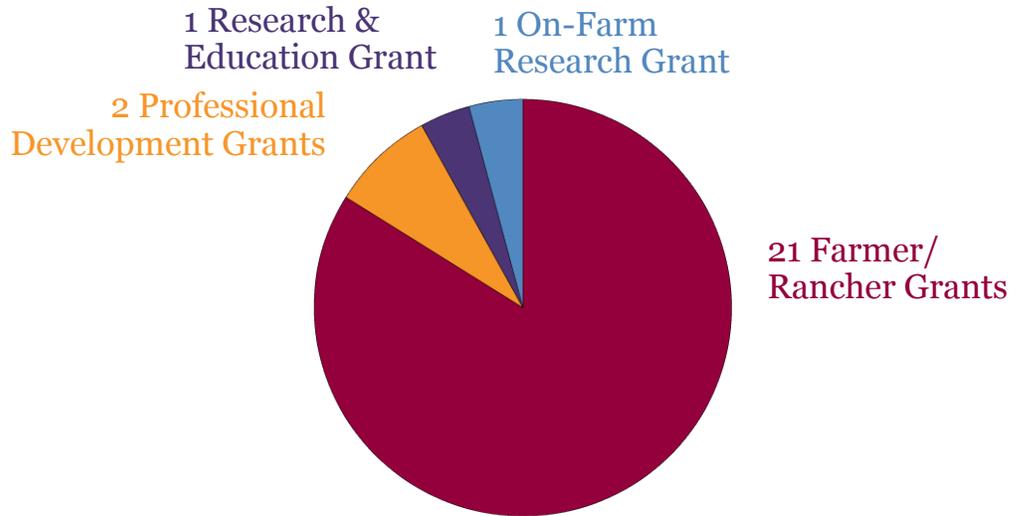


Sustainable Agriculture Research & Education

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

# SARE Grants in Northern Mariana Islands

SARE has awarded a total of **25 grants** in Northern Mariana Islands 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 Us For More Information

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.westernsare.org/n-marianas-islands](http://www.westernsare.org/n-marianas-islands) to learn more.

Virendra M. Verma  
NMC-CREES  
(670) 237-6851  
[virendra.verma@marianas.edu](mailto:virendra.verma@marianas.edu)



SARE is funded by the USDA's National Institute of Food and Agriculture (NIFA).

For detailed information on SARE projects, go to

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