

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 \$310 million to more than 7,433 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, grantee-produced information products and other educational materials.



www.sare.org

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 sare.org/projects, and search for project number [FW09-006](#).

SARE in Northern Mariana Islands

western.sare.org/sare-in-your-state/northern-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

SARE Grants in Northern Mariana Islands

Total awards: 25 grants



21 Farmer/Rancher
1 On Farm
Research/Partnership
2 Professional Development
Program
1 Research and Education

Total funding: \$437,860



\$260,507
Farmer/Rancher
\$24,872
On Farm
Research/Partnership
\$142,481
Professional Development
Program
\$10,000
Research and Education

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:

western.sare.org/sare-in-your-state/northern-mariana-islands

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 western.sare.org/state-pages/northern-mariana-islands to learn more.

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For detailed information on SARE projects, go to
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.



AGRICULTURE PROJECTS FUNDED IN NORTHERN MARIANA ISLANDS

by USDA's
Sustainable Agriculture Research and Education (SARE) Program

Northern Mariana Islands has been awarded \$437,860 grants to support 25 projects, including but not limited to, 1 research and/or education project, 2 professional development projects and 21 producer-led projects. Northern Mariana Islands has also received additional SARE support through multi-state projects.

RESEARCH AND EDUCATION GRANTS

Project #	Project Title	SARE Support	Project Leaders
SW06-042	Sustainable Forage and Livestock System for the Island of Tinian	\$10,000	Dr.Allan Sabaldica NMC-CREES

PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

Project #	Project Title	SARE Support	Project Leaders
EW12-034	Building Capacity within the Commonwealth of the Northern Mariana Island's (CNMI) Aquaculture Development Program (ADP) in Marine Finfish Hatchery Production to Create Opportunities for Farmers and Alleviate Pressure on Wild Fish Stocks	\$45,407	Michael Ogo Northern Marianas College; Cooperative Research, Ext, and Education Service
EW08-017	Technology Transfer of Alternative Plant Medicines for Livestockhealthcare in the Western Pacific	\$97,074	Dr.Allan Sabaldica NMC-CREES

FARMER/RANCHER GRANTS

Project #	Project Title	SARE Support	Project Leaders
FW19-345	Improve dragon fruit production in the Northern Marianas Island through hands-on student education	\$14,900	Francis Mendiola CNMI Public School System
FW11-002	"Mitigating Production and Environmental Costs in Shrimp Farming with the Use of Bio-floc Production Technology"	\$15,000	Augustine Maratita producer
FW10-033	Development of ready-to-cook frozen taro (Colocasia Esculenta) in the Northern Marianas Islands	\$14,480	Asapmar Ogumoro Marianas Farmer/NMC-CRESS
FW09-006	Demonstration of the Feasibility of Solar Energy in Sustainable Aquaculture to Address High Costs in Conventionally Produced Electricity	\$10,469	Pedro Ariola
FW09-036	Maximizing Aquaculture Productivity with Sequential Polyculture Systems	\$14,892	Carolyn Hosono
FW09-050	Sustaining Deer Production in the Island of Rota	\$10,000	Ricardo Atalig
FW09-051	Pineapple Production in the CNMI	\$14,729	Alejandro Badilles Northern Marianas College JOSEPH BORJA marianas sweet pineapple

FW09-052	Demonstrating Alternative Poultry Production System in Tinian	\$9,000	Ben Borja
FW08-024	Sustaining Tilapia Production in the CNMI Through the Use of an Artificial Fry Incubation System	\$15,000	Ines Guererro
FW08-025	An Integrated System for Growing Vegetables	\$12,456	Joshua Calvo
FW08-305	Comparative Study of Cuban Slugs (<i>Veronicella cubensis</i>) Suppression Using Grazing Ducks, Neem (<i>Azadirachia indica</i>) Extract and Chemical Baits in the CNMI	\$23,673	Alejandro Badilles Northern Marianas College
FW07-001	Neem Tree Production for Alternative Pesticides, Nematode Control and Fertilizers	\$14,500	Francisco Atalig
FW07-307	Livestock Genetic Improvements in the Commonwealth of the Northern Mariana Islands	\$29,974	Dr.Allan Sabaldica NMC-CREES
FW06-010	Coconut Crab Production Using Recycled Food Sources	\$10,000	Henry Atalig
FW04-206	The Further Development of Organic Systems for the Production and Multiplication of the Polynesian Arrowroot and Other Medicinal Plants in the CNMI	\$7,500	Felix Mendiola
FW03-020	Sustainable Slug Control for Vegetable Growers and Gardeners on Rota, Commonwealth of the Northern Mariana Islands	\$6,000	Francisco Calvo F.J. Calvo Enterprises
FW03-017	Rat Control in Pineapples on Rota	\$5,969	Lino Mendiola
FW01-091	Luta Windbreak / Agroforestry Project	\$7,485	Ephram Taimanao
FW01-092	Rota Coffee Company	\$14,980	Beato Calvo CREES Coordinator
FW00-104	Aquaculture and Fertigation Project	\$5,000	Vincent Calvo
FW98-003	Local Feed Production for Tilapia	\$4,500	Nicolas Songsong

ON FARM RESEARCH/PARTNERSHIP GRANTS

Project #	Project Title	SARE Support	Project Leaders
OW10-305	Research and Development of Hydroponic Systems for the Commonwealth of the Northern Marianas Islands.	\$24,872	Valrick Welch Northern Marianas College

**Total funding from the USDA SARE program to
Northern Mariana Islands**

\$437,860



For further information on projects, contact Western SARE at (435) 797-2257 or wsare@usu.edu.

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