

## 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 \$406 million to more than 8,803 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](http://www.sare.org)

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

# Northern Mariana Islands

*Project Highlight: Improve dragon fruit production in the Northern Marianas Island through hands-on student education*

Before World War II, almost 40,000 acres were farmed in Saipan. That has dropped to just a few thousand acres, and most food is imported.

Additionally, a super typhoon hit the island – the most powerful storm to hit the Marianas Islands ever. Families near the Koberville Elementary School were especially hard hit, with many students living in tents or shelters and without power.

Local farmers believe that dragon fruit is easy to sell and is in strong demand. This project added dragon fruit production to the Koberville school farm to enhance the quality of science and business management education; increase student income that could be used for educational activities; and provide information with the community who can also choose to be part-time or full-time farmers. The students took home or sold the dragon fruit they grew.

Despite challenges faced due to COVID-19, the students were still able to successfully harvest 290 pounds of dragon fruit. Through learning how to use marketing skills to advertise their produce for sale, the students sold the fruit for \$3.50/pound. From this project research, they learned that contained potted trellis as a production method was a much more effective way of growing dragon fruit than when grown in the ground.

For more information on this project, see [sare.org/projects](http://sare.org/projects), and search for project number [FW19-345](#).

## SARE in Northern Mariana Islands

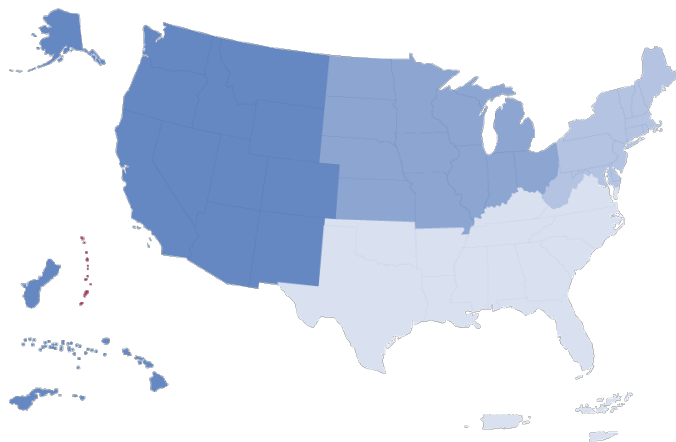
[western.sare.org/state-profiles/northern-mariana-islands/](http://western.sare.org/state-profiles/northern-mariana-islands/)

**\$14,900**  
**in total funding**

**1 grant project**

(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 in Northern Mariana Islands

## Grants awarded 2019-2024

Total awards: **1 grant**

1 Farmer/Rancher

Total funding: **\$14,900**

\$14,900 Farmer/Rancher

Find a complete list of projects on page 3.

## Farmer and rancher impacts 2019-2024

SARE grantees have reported the following impacts from their projects:

**67 farmers participated in a SARE-funded project**

**4 farmers reported a change in knowledge, awareness, skills or attitude**

**3 farmers changed a practice**



Learn about local impacts at:  
[western.sare.org/sare-in-your-state/northern-mariana-islands/](https://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-profiles/northern-mariana-islands/](https://western.sare.org/state-profiles/northern-mariana-islands/) to learn more.

State coordinator positions are temporarily vacant for Northern Mariana Islands.  
Contact your SARE region for additional information.



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](https://www.SARE.org)**

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

FW09-052	Demonstrating Alternative Poultry Production System in Tinian	\$9,000	Ben Borja
FW09-051	Pineapple Production in the CNMI	\$14,729	Alejandro Badilles Northern Marianas College JOSEPH BORJA marianas sweet pineapple
FW09-050	Sustaining Deer Production in the Island of Rota	\$10,000	Ricardo Atalig
FW09-036	Maximizing Aquaculture Productivity with Sequential Polyculture Systems	\$14,892	Carolyn Hosono
FW09-006	Demonstration of the Feasibility of Solar Energy in Sustainable Aquaculture to Address High Costs in Conventionally Produced Electricity	\$10,469	Pedro Ariola
FW08-024	Sustaining Tilapia Production in the CNMI Through the Use of an Artificial Fry Incubation System	\$15,000	Ines Guererro
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
FW08-025	An Integrated System for Growing Vegetables	\$12,456	Joshua Calvo
FW07-307	Livestock Genetic Improvements in the Commonwealth of the Northern Mariana Islands	\$29,974	Dr.Allan Sabaldica NMC-CREES
FW07-001	Neem Tree Production for Alternative Pesticides, Nematode Control and Fertilizers	\$14,500	Francisco Atalig
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
FW01-092	Rota Coffee Company	\$14,980	Beato Calvo CREES Coordinator
FW01-091	Luta Windbreak / Agroforestry Project	\$7,485	Ephram Taimanao
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 (406) 994-4785 or [wsare@montana.edu](mailto:wsare@montana.edu).  
Sustainable Agriculture Research and Education (SARE) is funded by USDA's National Institute of Food and Agriculture (NIFA).