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 $389 million to more than 8,542 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, granteeproduced information products and other educational materials.

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, and search for project number FW19-345.

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

Total funding: **$437,860**
- $142,481 Professional Development Program
- $260,507 Farmer/Rancher
- $24,872 On Farm
- Research/Partnership
- $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](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](western.sare.org/state-pages/northern-mariana-islands) to learn more.

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

For detailed information on SARE projects, go to [www.SARE.org](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.
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

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW06-042</td>
<td>Sustainable Forage and Livestock System for the Island of Tinian</td>
<td>$10,000</td>
<td>Dr. Allan Sabaldica</td>
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<td></td>
<td></td>
<td></td>
<td>NMC-CREES</td>
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</table>

### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

<table>
<thead>
<tr>
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<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>EW12-034</td>
<td>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</td>
<td>$45,407</td>
<td>Michael Ogo; Northern Marianas College; Cooperative Research, Ext, and Education Service</td>
</tr>
<tr>
<td>EW08-017</td>
<td>Technology Transfer of Alternative Plant Medicines for Livestock healthcare in the Western Pacific</td>
<td>$97,074</td>
<td>Dr. Allan Sabaldica; NMC-CREES</td>
</tr>
</tbody>
</table>

### FARMER/RANCHER GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
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<th>SARE Support</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FW19-345</td>
<td>Improve dragon fruit production in the Northern Mariana Island through hands-on student education</td>
<td>$14,900</td>
<td>Francis Mendiola; CNMI Public School System</td>
</tr>
<tr>
<td>FW11-002</td>
<td>“Mitigating Production and Environmental Costs in Shrimp Farming with the Use of Bio-floc Production Technology”</td>
<td>$15,000</td>
<td>Augustine Maratita; producer</td>
</tr>
<tr>
<td>FW10-033</td>
<td>Development of ready-to-cook frozen taro (Colocasia Esculenta) in the Northern Mariana Islands</td>
<td>$14,480</td>
<td>Asapmar Ogumoro; Marinas Farmer/NMC-CRESS</td>
</tr>
<tr>
<td>FW09-052</td>
<td>Demonstrating Alternative Poultry Production System in Tinian</td>
<td>$9,000</td>
<td>Ben Borja</td>
</tr>
<tr>
<td>FW09-051</td>
<td>Pineapple Production in the CNMI</td>
<td>$14,729</td>
<td>Alejandro Badilles; Northern Marianas College</td>
</tr>
<tr>
<td>FW09-050</td>
<td>Sustaining Deer Production in the Island of Rota</td>
<td>$10,000</td>
<td>Ricardo Atalig; marianas sweet pineapple</td>
</tr>
<tr>
<td>FW09-036</td>
<td>Maximizing Aquaculture Productivity with Sequential Polyculture Systems</td>
<td>$14,892</td>
<td>Carolyn Hosono</td>
</tr>
</tbody>
</table>
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 (Veronicella cubensis) Suppression Using Grazing Ducks, Neem (Azadirachia indica) 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**

<table>
<thead>
<tr>
<th>Project #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>OW10-305</td>
<td>Research and Development of Hydroponic Systems for the Commonwealth of the Northern Marianas Islands.</td>
<td>$24,872</td>
<td>Valrick Welch  Nothern Marianas College</td>
</tr>
</tbody>
</table>

Total funding from the USDA SARE program to Northern Mariana Islands
For further information on projects, contact Western SARE at (406) 994-4789 or wsare@montana.edu.

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