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 $404 million to more than 8,776 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.

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

Northern Mariana Islands

Project Highlight: Improve dragon fruit production in the Northern Mariana 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/state-profiles/northern-mariana-islands/

$590,360 in total funding

28 grant projects

(since 1988)

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

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/ 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

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>
</table>
| SW06-042 | Sustainable Forage and Livestock System for the Island of Tinian                                                                           | $10,000      | Dr. Allan Sabaldica  
NMC-CREES                                                                 |

### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| 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 Livestock healthcare in the Western Pacific                                                           | $97,074      | Dr. Allan Sabaldica  
NMC-CREES                                                                 |

### FARMER/RANCHER GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| 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                                                                                                          |
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Title</th>
<th>Cost</th>
<th>Investigator(s)</th>
</tr>
</thead>
<tbody>
<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&lt;br&gt;Northern Marianas College&lt;br&gt;JOSEPH BORJA&lt;br&gt;marianas sweet pineapple</td>
</tr>
<tr>
<td>FW09-050</td>
<td>Sustaining Deer Production in the Island of Rota</td>
<td>$10,000</td>
<td>Ricardo Atalig</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>
<tr>
<td>FW09-006</td>
<td>Demonstration of the Feasibility of Solar Energy in Sustainable Aquaculture to Address High Costs in Conventionally Produced Electricity</td>
<td>$10,469</td>
<td>Pedro Ariola</td>
</tr>
<tr>
<td>FW08-024</td>
<td>Sustaining Tilapia Production in the CNMI Through the Use of an Artificial Fry Incubation System</td>
<td>$15,000</td>
<td>Ines Guerrero</td>
</tr>
<tr>
<td>FW08-305</td>
<td>Comparative Study of Cuban Slugs (Veronicella cubensis) Suppression Using Grazing Ducks, Neem (Azadirachia indica) Extract and Chemical Baits in the CNMI</td>
<td>$23,673</td>
<td>Alejandro Badilles&lt;br&gt;Northern Marianas College</td>
</tr>
<tr>
<td>FW08-025</td>
<td>An Integrated System for Growing Vegetables</td>
<td>$12,456</td>
<td>Joshua Calvo</td>
</tr>
<tr>
<td>FW07-307</td>
<td>Livestock Genetic Improvements in the Commonwealth of the Northern Mariana Islands</td>
<td>$29,974</td>
<td>Dr.Allan Sabaldica&lt;br&gt;NMC-CREES</td>
</tr>
<tr>
<td>FW07-001</td>
<td>Neem Tree Production for Alternative Pesticides, Nematode Control and Fertilizers</td>
<td>$14,500</td>
<td>Francisco Atalig</td>
</tr>
<tr>
<td>FW06-010</td>
<td>Coconut Crab Production Using Recycled Food Sources</td>
<td>$10,000</td>
<td>Henry Atalig</td>
</tr>
<tr>
<td>FW04-206</td>
<td>The Further Development of Organic Systems for the Production and Multiplication of the Polynesian Arrowroot and Other Medicinal Plants in the CNMI</td>
<td>$7,500</td>
<td>Felix Mendiola</td>
</tr>
</tbody>
</table>
### Sustainable Slug Control for Vegetable Growers and Gardeners on Rota, Commonwealth of the Northern Mariana Islands

- **Project #:** FW03-020
- **SARE Support:** $6,000
- **Project Leaders:** Francisco Calvo, F.J. Calvo Enterprises

### Rat Control in Pineapples on Rota

- **Project #:** FW03-017
- **SARE Support:** $5,969
- **Project Leaders:** Lino Mendiola

### Rota Coffee Company

- **Project #:** FW01-092
- **SARE Support:** $14,980
- **Project Leaders:** Beato Calvo, CREES Coordinator

### Luta Windbreak / Agroforestry Project

- **Project #:** FW01-091
- **SARE Support:** $7,485
- **Project Leaders:** Ephram Taimanao

### Aquaculture and Fertigation Project

- **Project #:** FW00-104
- **SARE Support:** $5,000
- **Project Leaders:** Vincent Calvo

### Local Feed Production for Tilapia

- **Project #:** FW98-003
- **SARE Support:** $4,500
- **Project Leaders:** Nicolas Songsong

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**ON FARM RESEARCH/PARTNERSHIP GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</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, Northern Marianas College</td>
</tr>
</tbody>
</table>

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