

Representatives from American-affiliated Pacific islands at the Guam Hilton.

Islanders Focus On Sustaining Pacific Agriculture

Stakeholders meet to discuss the needs and issues for future ag production

AGANA, Guam – Promote local foods. Prevent invasive species. Improve livestock genetics, production and feeds. Share food-growing ideas among Pacific islands. Promote farming as a noble profession.

These are among the many issues and needs raised by nearly 100 representatives from American-affiliated Pacific islands during a conference on Guam last October.

The conference, sponsored by the Western Sustainable Agriculture Research and Education program (Western SARE), focused on sustaining Pacific island agriculture.

The results were overwhelming.

"You have so exceeded what I thought was possible," Jerry Dewitt, conference moderator and director of the Leopold Center for Sustainable Agriculture in Iowa, told participants.



Western

Sustainable Agriculture Research and Education

Region

Moderator Jerry Dewitt

"Never have we put on a conference where so many attendees stayed through the whole thing," said Phil Rasmussen, a soil scientist and Utah State University and coordinator of Western SARE, the conference sponsor.

"The best conference I've ever attended," said Bob Barber, Western SARE coordinator for Guam and one of the conference organizers.

The conference, "Sustaining Tropical Pacific Island Agriculture: Counting Our Success, Charting Our Future," was the first of half a dozen subregional conferences the Western SARE Administrative Council initiated in 2007. The goal is to assess SARE since it began providing competitive grants in 1988 and to chart the course for future grants and activities.



Phil Rasmussen

"As Western SARE anticipates the beginning of its third decade, it aims to reflect on what it has accomplished and what challenges it should be addressing in the future," said the charge for developing the conference. "One of SARE's strengths has been its commitment to involve farmers, ranchers and a broad cross-section of other stakeholders in the program's design and delivery. Western SARE turns once again to its customers to



reflect on its past and shape its future."

The Pacific customers, including producers, nonprofit organizations, ag professionals and government agencies, were invited as key stakeholders by organizers of the conference, Barber and extension veterinarian Manny Duguies, both with the University of Guam.

We're here to listen

Conference moderator Dewitt, a three-time interim head of the National SARE program, set the tone for the conference.

"We are here to listen," he told participants. "We need your ideas for planning the future of Western SARE. You are the first of our subregional conferences, and we're going to listen to meet your needs as a grower, as a researcher, as a nonprofit.

"We're going to start with your ideas and we're going to build on that," Dewitt added.

In preparation for the Pacific conference, planners asked each of seven island groups to assess and respond to these five questions:

1. What will be needed to create stronger local food systems that are less reliant on imports?

- 2. What are the local food production trends on your island? Do you think your local farmers can produce enough food for your area 5-10 years from now? What areas of production need improvement?
- 3. The SARE program was commissioned, by Congress, to get its research results to the farmer and rancher. Has this been a success in your area of influence? Why or why not?
- 4. What type of research, education and development is going to be necessary over the next 10 years to help economically sustain farming and the environment?
- 5. If Western SARE received (from Congress) an additional \$1 million per region, what types of projects should be targeted or emphasized?

The responses expressed a wide range of needs and goals:



Bob Barber of Guam

Guam

Bob Barber, an extension economist with the University of Guam, spoke on behalf of 39 participants from Guam. He said that to create strong local food systems Guam will need to enhance local ag marketing efforts, engage government support, address invasive species and promote enterprise diversity and value-added processing.

He said available technical support for local producers has shrunk in recent years, and while many retired people are trying out farming, few young people find the occupation fruitful, viewing agriculture as hard, dirty work.

Specifically, said Barber, Guam needs to develop local sources for feed and fertilizer, build local markets with consumers and chefs, focus on alternative energy and document the contributions agriculture makes to the local economy.

Guam participants see a need for more farmer participation in Western SARE grants, support for grant writing and long-term extension and on-farm demonstrations for producers.

Federated States of Micronesia

Jackson Phillip, SARE coordinator for the Federated States of Micronesia and an extension ag specialist with the College of Micronesia, joined six people attending from Pohnpei. Phillip said his group sees a need for more technical assistance, an emphasis on producing local protein, practical demonstrations on gardening, cooking and local food use, targeted training for producers and engagement of policy makers and funding sources.



Jackson Phillip of FSM

Phillip said the next five to 10 years will see a shortage of protein sources but an increase in vegetable production. To help deal with food gaps, Micronesian islands will need to focus on increased plant propagation, improved production of local protein and stepped up efforts to control invasive species, "anything related to local production and utilization," he said.



Northern Mariana Islands

Sixteen people traveled from the Northern Mariana Islands, represented by Allan Sabaldica, a veterinarian with Northern Marianas College stationed on Tinian and the CNMI SARE coordinator. To achieve self-sufficiency, he said, will require education, starting with youth through programs like ag in the classroom, and the promotion of sustainable livestock and aquaculture production, alternative livestock enterprises and integrated systems. Also important are marketing programs, like farmer cooperatives, community supported agriculture and valueadded, government incentive and support programs.

Allen Sabalica of CNMI

Specifically, research in the Marianas should focus on pest and disease management, animal waste management, improved processing and marketing, slug and rodent infestations and ag diversification.

With increased SARE funding, Sabaldica said the Northern Marianas could increase professional development, engaging in distance education with Western land grant colleges. Undergraduate scholarships and flexible graduate fellowships would also be of value.

"Improved educational programs are needed at all levels – farmers, consumers, extension and youth," said Sabaldica.

American Samoa

Logistical challenges of traveling limited attendance from American Samoa to two. Alfred Peters, an agricultural extension agent from American Samoa Community College, cited needs for more people to join Samoa's agricultural workforce, which will require education and outreach to motivate people to farm and grow more local produce. This can also be enhanced by helping producers secure loans and to develop value-added products from local produce.

For the near term, Peters said there will be an abundance of some local foods, like banana and breadfruit, but less taro, which was hit with blight. Pork and chicken production are on the rise as are fruits and vegetables. To help propel production, however, local producers will need education on vegetable production, reduced tillage, correct pesticide use and improved breeding programs.



Alfred Peters of American Samoa

If SARE were to receive increased funding, Peters said it should focus on things like education about farming and the environment, training and enforcement in pesticide use and increased opportunities for undergraduate and graduate students in sustainable agriculture.

Hawaii

Six individuals were able to attend the conference from Hawaii. Ken Love, a Kona farmer and tropical fruit expert, said Hawaii is losing its young replacement farmers and needs new farmer programs to teach production and marketing. Indeed, educational programs are needed at all levels – growers, consumers, buyers, chefs, politicians – to increase the political support for agriculture.

Hawaii needs more value-added processing and economic information on costs of labor and production. Some of the things that currently work for Hawaii producers are farmer-chef connections, campaigns to buy fresh and local, support for agri-tourism, recipe development, agroforestry and diversification by season.



Ken Love of Hawaii

Love said that Hawaii could use coordinated marketing with a centralized information source of locally produced crops for consumers and chefs. He said a critical need in the tropics is more information on insects, diseases and integrated pest management, especially natural control of pests.



Tarita Holm of Palau

Palau

From Palau, which was able to send five participants to the conference on Guam, Tarita Holm of the Palau Natural Resources Council, emphasized that Palau, once self-sufficient in food, a mandatory component of many customs, now depends heavily on imports. The dietary shift from "traditional" foods to imported foods, she said, erodes the quality of life.

To help rectify this imbalance, Palau will need help with fruit fly eradication as well as developing consistency and variety in produce and livestock production. Government incentives, like tax breaks, and an agricultural plan are critical. The resources, interest and demand are in place to meet island food needs, said Holm, but politics and poor planning are holding back development.

Palau, in part because of its geographic isolation, is grossly underserved, she said, adding that SARE could help promote "farming as a noble profession" and support model farms and training and certification programs.

Marshall Islands

Nat Tuivavalagi, an agricultural researcher at the College of Marshall Islands on Majuro, spoke on behalf of three Marshall Island participants. To promote stronger local food systems, he said the islands need to promote consumption of local foods, develop organic agriculture and collaborate more with stakeholders.

Specifically, the Marshalls need more research into breadfruit, including flour, recipes, preservation and use as animal feed, as well as a focus on other tradition foods, vegetables and organic options. More agricultural education is needed in elementary schools, and more locals need overseas training for advanced degrees. There is also a need to develop extension materials in local languages and linkages and networks with other food-related entities.



Nat Tuivavalagi of the Marshall Islands

Tuivavalagi emphasized the need for small SARE projects in line with human resources – rather than big projects – with an emphasis on empowering groups and individuals, such as supporting NGOs and providing farmer-to-farmer mentoring.

Tabletop discussions

As the conference evolved, participants were broken into several groups for tabletop discussions to refine the issues they deemed important for their respective island groups. Many of the groups continued their conversations through the breaks and deep into lunch. Surveys taken on the go reflected their dedication. After the first tabletop discussion, 96 percent of participants agreed it was useful, 79 percent said it all made sense and 94 percent said they had a chance to participate. An evaluation of a second tabletop session

showed declining but still high numbers: 81 percent agreed that the discussion was useful, 75 percent found that it made sense and 86 percent said they had a chance to be involved.

The conference also included 3-foot by 4foot posters of 20 of the nearly 80 projects Western SARE has funded in the Pacific island protectorates over the past 20 years. Each poster came with a handout for participants.



A conference poster by Craig Elevitch of Hawaii

Taking the pulse

After the first day of discussions and the poster session, moderator Dewitt took the pulse of the conference, noting a lively engagement from participants and offering these observations:

- There were well organized presentations from seven island groups with excellent, thoughtful input and good, candid comments.
- People were deeply engaged in the tabletop discussions. "People are paying attention," he said, "I can tell by the body language."
- The posters session was a dynamic event.
- Participants showed an eagerness to move forward in "this whole thing called sustainability."
- Everyone is dedicated to a new agriculture that embraces health, diet and nutrition, "a full package looked at holistically."

Dewitt summarized the feedback heard from tabletop discussions, noting a number of common issues:

- livestock genetics and feedstocks
- local food systems, including health, nutrition, self-sufficiency and links to culture
- youth, women and retiree involvement in agriculture
- overcoming limited personnel and geographic distance and enhancing technical assistance
- the need for increased networking
- certification programs, including organic
- distance and undergraduate education
- marketing
- quality of life
- decisions on appropriate land use
- enterprise diversity

"We all have similar challenges and opportunities," said Dewitt. "They're similar in Iowa and the islands, and there's 80 percent continuity between where you're at and where you are with your neighboring island communities."

Need Networking

Cross-pollination among participants was deemed a big plus of the conference, drawing together Pacific islanders whose great distances from one another inhibit interaction. For example, Guam, which has no organic certification, will be working with Western SARE



Administrative Council member Chuck Boerner, a certified organic farmer from Hana, Maui. The goal is to get a certification team from Hawaii to visit Guam and teach producers and ag professionals about developing a certification program.

Love of Kona praised networking as a critical element of the conference.

"I'm hearing a lot of the same ideas," said Love. "I'd like to see SARE find some way to continue this kind of dialogue, some kind of website, for example, to share this kind of information and so we can all keep in touch with one another."

The conference ended with the four members of the Western SARE Administrative Council who attended the conference moving to the front of the room to listen to final comments and suggestions from the program participants. (For more on the needs and issues expressed by conference participants, visit the "Needs and Issues" tab.)



Western SARE Coordinator Phil Rasmussen, back left, and conference moderator Jerry Dewitt look on as members of the Administrative Council respond to comments from the audience. From left, Stacie Clary of California, Rick Melnico of California, Cindy Lair of Colorado and Chuck Boerner of Hawaii.