Cochise County, Ariz., is classified by the USDA as a food desert with high poverty rates, as well as high rates of diabetes and obesity. To help confront these problems, local farmer Aaron Cardona decided to look into aquaponics, which had not been tested in the desert regions of the Southwest or in areas with low-income populations.

With SARE funding, Cardona researched building an affordable aquaponic system in his greenhouse that could be replicated by others in the region, thus creating an economic opportunity for low-income producers and families. The system would also produce culturally relevant food as a means of bringing back traditional foods into the local population’s diet, thus improving the health of the community.

The aquaponic system that he built integrated two traditional greens, verdolagas (purslane) and berros (watercress) with tilapia. Purslane did not develop in the system but watercress was a success. Arizona is typically too hot for tilapia, so he used a solar-powered system to cool the greenhouse to within their optimal temperature range.

Due to the publicity of the project and availability of watercress, Cardona estimates that nearly 40 percent of his sales at the farmers’ market were to people of Hispanic descent, a population that typically makes up a much lower percentage of farmers’ market customers.

For more information on this project, see www.sare.org/projects, and search for project number FW13-142.

SARE: Advancing the Frontier of Sustainable Agriculture in Arizona

Project Highlight: Integrating Traditional Foods with Aquaponics

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SARE Grants in Arizona

SARE has awarded a total of 52 grants in Arizona since 1988.

![Pie chart showing the distribution of grants: 26 Farmer/Rancher Grants, 10 Research & Education Grants, 5 Professional Development Grants, 10 Graduate Student Grants.]

**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.

**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 www.westernsare.org/arizona to learn more.

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