

Healthier Communities through a More Sustainable Food System

A Framework for CTAHR Extension on Contributing to a Sustainable Food System for Hawai‘i

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Food Systems Design Team

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A. OVERVIEW

Our Goal

A healthy Hawai'i.

Our Endeavor

To support and enhance a local food system for healthier communities in Hawai'i.

Question

How can we—CTAHR Extension—contribute to a more sustainable food system in Hawai'i that also promotes health and wellness?

Guiding Principles

1. Our food systems ought to simultaneously serve our populations' health (physical, mental, and social well-being), the environmental health of our land and planet, and the economic health of our food and agricultural sectors. Our public policies should support, rather than hinder, a food system that supports public health and indigenous practices.
2. Commitment to the common good: to ensure food security for all residents through a community based, locally integrated, and diverse food system—let's do this together for Hawai'i.
3. Embrace trust, the synergistic glue that will enable us to build social capital, thrive, and achieve our goal.
4. Our responsibility as a Land Grant institution is to provide science-based information and educational programs in agriculture, human sciences, and natural resources through collaborative, culturally-relevant, and integrated efforts in Extension, research and instruction within CTAHR as well as broad and diverse public and private partnerships.

Defining a Sustainable Food System

A sustainable food system is defined as one that provides sufficient food to meet current food needs while maintaining healthy ecosystems to assure food production for generations to come. Sustainable food systems have minimal negative impact to the environment; encourage local production and distribution infrastructures; make nutritious food available, accessible, and affordable to all; and are humane and just—protecting farmers, ranchers, other workers, consumers and communities. As such, the goal of a sustainable food system lies within the intersection of population health, economic health, and the health of our environment and natural resources (figure 1). A sustainable food system for Hawai'i reduces the foods being imported into the state, improves the overall state economy, and reduces poverty, food insecurity and malnutrition among our vulnerable population.

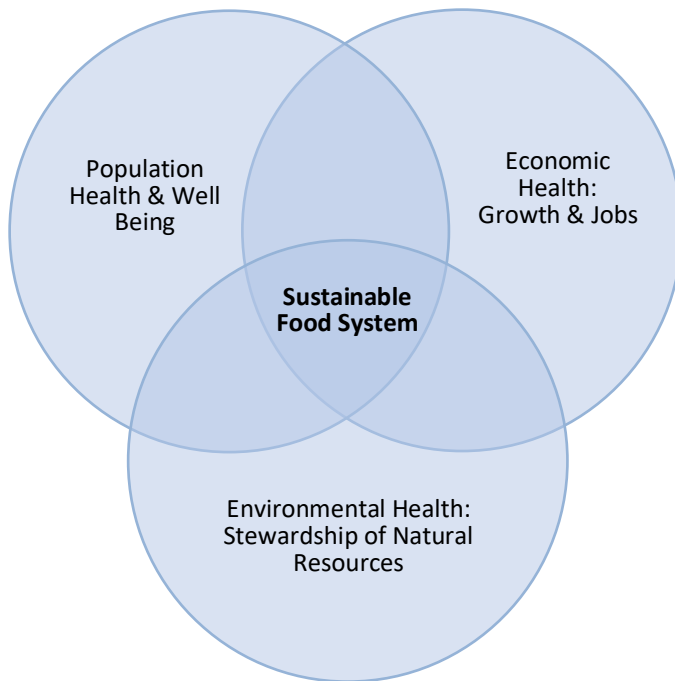


Figure 1. Sustainable food system goals intersect population, economic and environmental health (adapted from UC Davis, 2010, p.3)

The Need for a Systems Approach

In recognition of the complex and interrelated factors surrounding food and health, a food systems approach addresses all stages involved in getting local food from farm to consumer, including the inputs, mechanisms, and structures for food production, processing, distribution, acquisition, preparation, and consumption. This systematic approach addresses the human resources that contribute to the strengthening of the local food system, the farmers, ranchers, fishers, workers, government organizations, institutional purchasers, communities, and consumers. The approach recognizes that in complex systems, parts have not a single but many inputs and outputs. Therefore, the greatest potential for positively impacting health and creating other impact emerge from approaches that address multiple components of this integrated system. Interacting parts work synergistically, each as a complement to the other and each supporting the system as a whole.

The Process to Achieve a Healthy Hawai'i

A sustainable food system provides more affordable and accessible food for all, making a healthier lifestyle the social norm and reducing the prevalence of health disparities. The road to achieving a healthy Hawai'i is an evolutionary process. Without a start or end date, as we continuously strive to improve the health of our residents and our economy by addressing the current needs of our communities while simultaneously planning for the future.

Key Strategies

These six key strategies were identified as ways that CTAHR Extension can contribute to a sustainable food system in Hawai'i.

- Strategy 1: Expand access to affordable and safe local food for all people in the state.
- Strategy 2: Increase sustainable production of local food throughout the state by engaging with more farmers, ranchers and producers in producing for local markets.
- Strategy 3: Build knowledge, practice and interest for home food systems.
- Strategy 4: Develop sustained funding for people and programs that support local food systems.
- Strategy 5: Identify and build external partnerships to support a food system that promotes public health.
- Strategy 6: Measure and monitor relevant data indicators.

B. EXTENSION'S INVOLVEMENT IN FOOD SYSTEMS, 2017–2018

To understand the involvement of CTAHR Extension in Hawai'i's food system, the Design Team conducted an online survey of extension faculty from December 8, 2017, to February 2, 2018. A total of 45 individuals completed the survey, representing a 56% response rate. It is estimated that 89% of those who are involved with food-system related programs responded to the survey. The respondents were asked to provide the names of their food-system related programs, identify key strategies used (of those 6 identified above), and provide feedback on the key strategies and the concept paper. Some highlights of the findings are presented in the figures and bullets below.

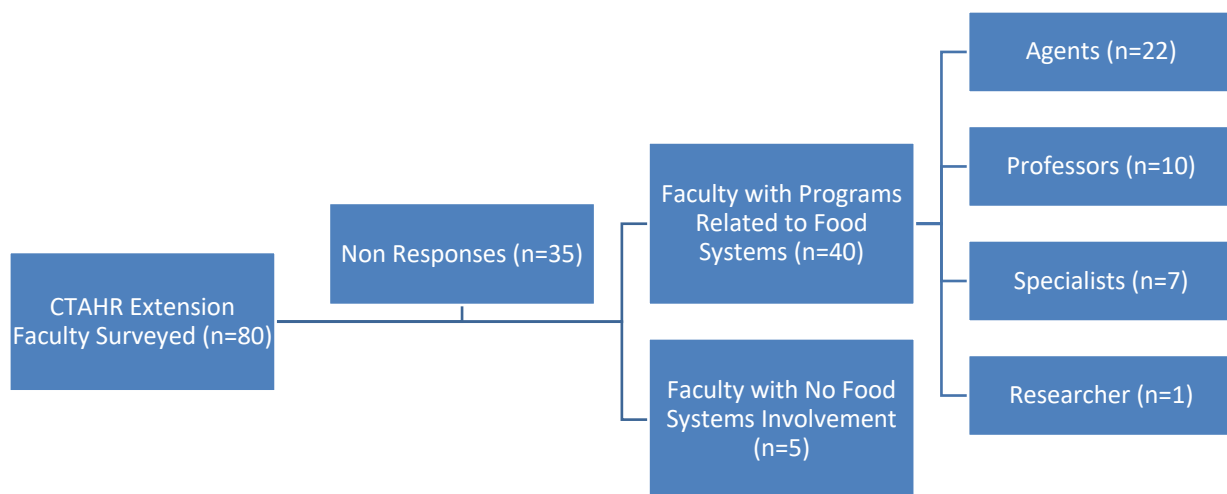


Figure 2. CTAHR Extension Food Systems Survey Sample, 2017–2018

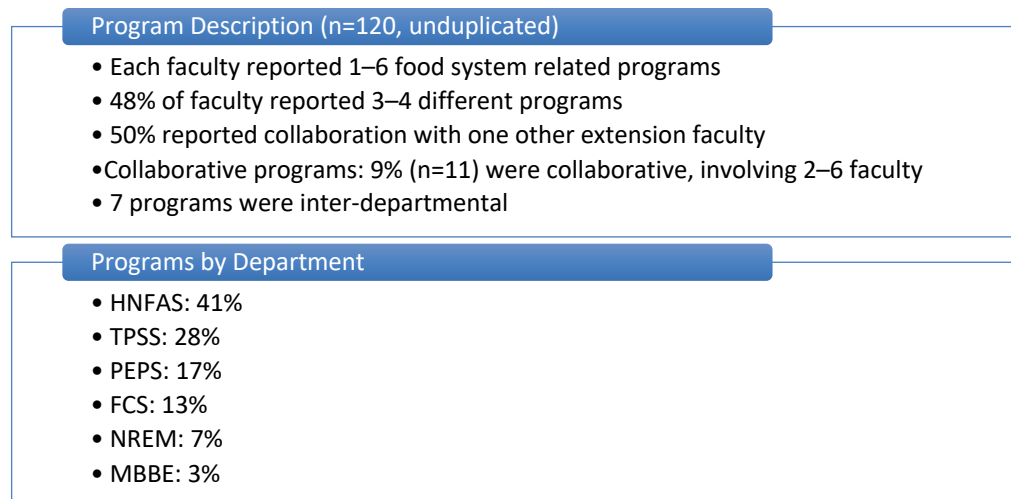


Figure 3. Food-system Related Programs, CTAHR Survey 2017–2018

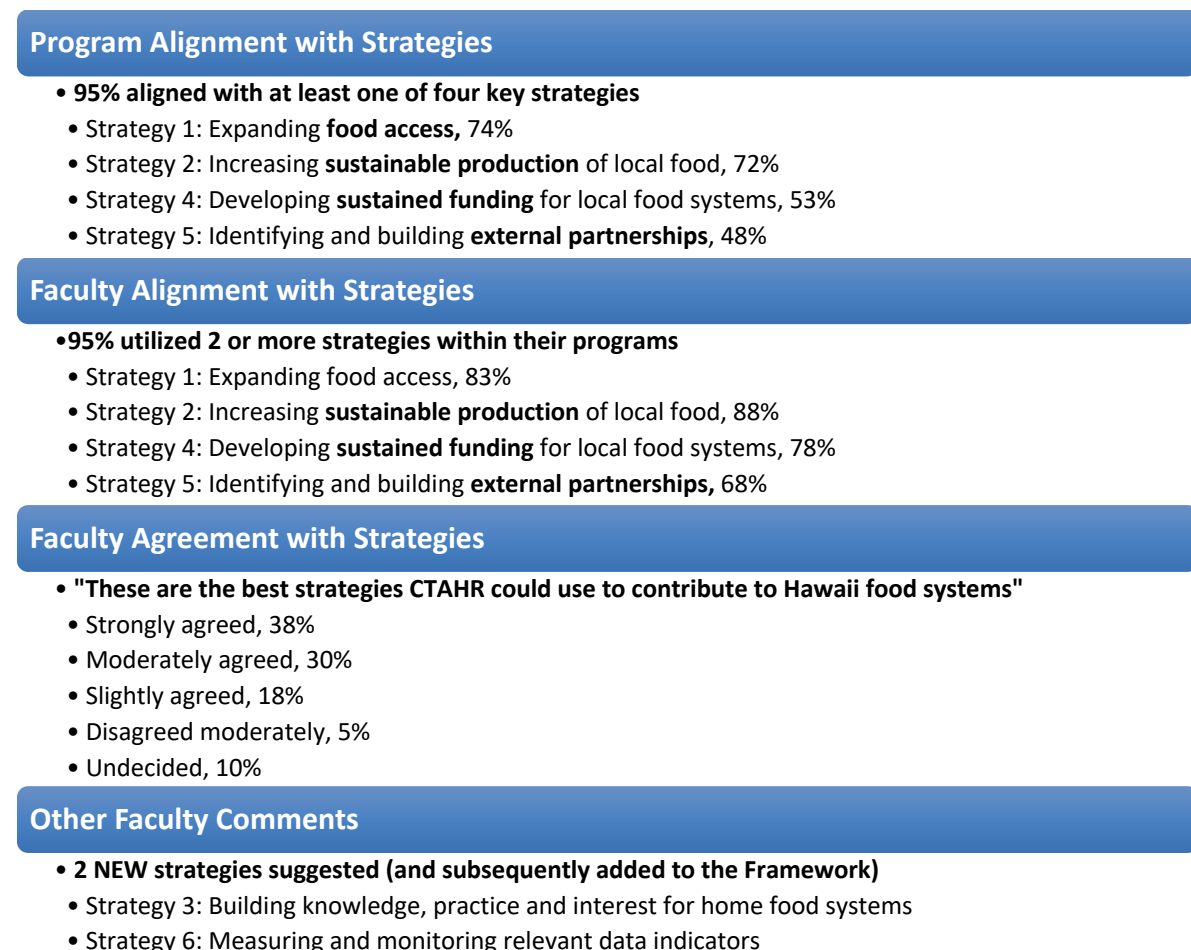


Figure 4. Alignment and Agreement with Food-system Strategies, CTAHR Survey 2017–2018

- **40 extension faculty** members reported having involved **with programs related to food systems**.
- The faculty included **22 Agents, 10 Professors, 7 Specialists** and **1 Researcher**.
- About half of them (**48%**) **reported three to four programs** and the highest number reported was six.
- Half of them (**50%**) **collaborated** with other extension faculty members in at least one food-systems related program.
- They reported a total of **120** food-systems related **programs** (unduplicated).
- 11 (9%) were collaborative programs among extension faculty members: 7 programs involved 2 members, 2 involved 3–4 members, and another 2 involved 6 members.
- Of the collaborative programs, 7 (6%) involved inter-departmental collaboration.
- Overall, extension faculty in **HNFAS accounted for 41% of the food-systems** related programs, followed by TPSS at 28%, PEPS at 17%, FCS at 13%, NREM 7%, and MBBE 3%.
- Almost all programs (**95%**) utilized at least **one of the four key strategies** listed in the survey. The most commonly used strategy was expanding access while the least common was building external partnerships.
 - **74%** of programs involve with expanding **access to affordable and healthy local food**.
 - **72%** of programs involve with increasing **sustainable production** of local food.
 - **53%** of programs involve with developing **sustained funding** for local food systems.
 - **48%** of programs involve with identifying and building **external partnerships**.
- Of the faculty involved with food-systems related programs, 95% utilized two or more strategies in their programming. The **most utilized strategy was production** and the **least was building partnerships**.
 - 88% of faculty members involved with production related strategy.
 - 83 of faculty members focused their programs on expanding access.
 - 78% of faculty members had developing funding as a strategy.
 - 68% of faculty members utilized building external partnerships as a strategy.
- The majority of faculty strongly agreed (38%), moderately agreed (30%) or slightly agreed (18%) that these are the best strategies CTAHR could use to contribute to Hawai'i's food systems, while a few disagreed moderately (5%) or undecided (10%) on this regards.
- Based on the comments collected from the survey, two new strategies were identified (and subsequently added to the Framework):
 - Building knowledge, practice and interest for home food systems.
 - Measuring and monitoring relevant data indicators.

C. STRATEGIES, OUTCOMES, AND ACTIVITIES

Strategy 1: Expand access to affordable and safe local food for all people in the state.

Outcome: Increased local food access among all people in Hawai'i.

- 1.1: Support local community organizations in their efforts to serve/provide vulnerable populations with access to affordable, healthy, local food.
 - Example activities:
 - Continue partnerships with agencies who provide food to vulnerable children and families in Hawai'i (i.e.: SNAP retailers, WIC retailers, Food Banks/Pantries).
 - Assist growers, ranchers and producers to meet FSMA and other requirements to become suppliers of foods needed to prepare meals at senior meal sites, meals on wheels, etc.
 - Educate participants about healthy food choices through food pantries and community outreach.
 - Support SNAP eligibility screening and enrollment at outreach events.
- 1.2: Engage people through marketing and educational programming about nutrition, wellness, and the food system.
 - Example activities:
 - Support programming focused on cooking with local commodities, gardening, small-scale animal production, and nutrition.
 - Encourage businesses, health care organizations, and institutions to create employee wellness programs that support local food consumption (e.g. grow your own, farmer's markets, CSA programs).
 - Support Farm to School activities in early childhood education and K-12 settings, raise awareness for 'Aina Pono DOE school food services initiatives to encourage participation.
 - Support farmer organization efforts in marketing healthy, local food.
 - Develop a toolkit on providing healthy meals and snacks at community events.
 - In conjunction with food system partners, develop consistent messaging and robust marketing strategies that support consumer beliefs and values.

- 1.3: Engage partners on policies and practices to increase access to healthy and safe local food into businesses, schools, and other institutions.
 - Example activities:
 - Assist organizations (e.g., schools, UH, senior programs and facilities, food banks/pantries, businesses) with developing institutional policies and practices that support access to healthy and safe local food.
 - Assist organizations with developing local food procurement policies.
 - Encourage and support policies at early education settings with science-based nutrition standards and practices that increase access to healthy and safe local food.

Strategy 2: Increase sustainable production of local food throughout the state by engaging with more farmers, ranchers and producers in producing for local markets.

Outcome: Increased community capacity to become more self-sufficient in food production.

- 2.1: Provide resources to local food farmers, ranchers and producers to help them start-up or expand local food production.
 - Example activities:
 - Organize and provide field days, farm tours, workshops and webinars, including education on farm and food production, food safety, and agriculture business management.
 - Educate farmers, ranchers and producers on pre- and post-harvest production, GAPs, recordkeeping, marketing, etc.
 - Facilitate connections for local food farmers, ranchers and producers to gain access to land and capital.
 - Support policies that support local food farmers, ranchers and producers.
 - Explore diverse markets that are appropriate for small and mid-size local food producers and consumers at all purchasing levels.
 - Support “buy local” marketing efforts.
 - Support purchases of healthy, local food.
 - Assist small- and mid-size food producers to break into larger markets through cooperatives or strategic partnerships/programs with food distributors.
 - Support food production and processing for the export market.
 - Create and maintain positions for food systems technical support.
 - Distance outreach, project management, content expertise (climate change, small scale ag production systems, nutrition, etc.)

- 2.2: Create opportunities for local food farmers, ranchers and producers to build relationships, collaborate, learn, and share information with each other, and with key groups.
 - Example activities:
 - Support and expand networks for farmers, ranchers and producers.
 - Provide leadership and expertise towards the development of food hubs, organizations and associations, cooperatives, and other shared resources.
 - Create and enhance platforms (website, email lists, meetings) to facilitate collaboration and the sharing of information and resources between producers.
 - Provide apprenticeship, internship and mentorship opportunities.
 - Regularly bring farmers, ranchers and producers together to discuss market opportunities and challenges.
 - Develop a system for sharing tools and equipment, labor training, and resources.
 - Collect and analyze data on local food for economic development and share information with key groups.
 - Educate farmers/ranchers on succession planning for family businesses.
- 2.3: Expand and deepen local food system knowledge and expertise among local organizations to further their ability to support local food farmers and producers.
 - Example activities:
 - Expand knowledge of local food systems within CTAHR.
 - Connect local organizations with outside resources and expertise as a way to build capacity and develop local support networks.

Strategy 3: Build knowledge, practice and interest for home food systems.

Outcome: Increased number of residents growing and raising of their own food.

- 3.1: Partner with other agencies to recruit and encourage people to grow their own food and become local food producers.
 - Example activities:
 - Encourage residents to grow food for home and community consumption, e.g. aquaponics, hydroponics.
 - Establish structures for passing on knowledge through apprenticeships, field days, and other programs.
 - Foster and support student-led school gardens and build excitement about local food production and agricultural-related careers within the next generation.

- Capture and strategically share small food production success stories as a way to make farming/ranching attractive to aspiring and beginning farmers/ranchers and the next generation.
- Support and encourage immigrant populations who know how to farm.
- Encourage sustainable agriculture programs at UH Mānoa and other UH campuses.

Strategy 4: Develop sustained funding for people and programs that support local food systems.

Outcome: Secured funding to support the expansion of education, research and Cooperative Extension outreach programming related to local food systems.

- 4.1: Collaborate with existing programs and funding streams to include an emphasis on the local food system.
- 4.2: Secure extramural funding to support maintenance and expansion of the local food system.
- 4.3: Identify and hire cluster of key faculty focused on the interrelated human, agricultural, and economic aspects of Hawai'i's food system.

Strategy 5: Identify and build external partnerships to support a food system that promotes public health.

Outcome: Developed strategic partnerships among academia, industry, government, non-profit organizations, communities, health care providers and consumers on improving access to healthy and safe local foods.

- 5.1: Develop and implement robust production systems so producers can meet more of the local market demand.
 - Example activities:
 - Support and expand venues to gather buyers from restaurants, institutions, food hubs and grocery stores for planning meetings.
 - Support integration of tools and technology that would be effective for planning and organizing production planning data.
- 5.2: Address issues related to food distribution and storage logistics to increase efficiency of food chain partners.
 - Example activities:
 - Engage in a statewide food hub network and attend national food hub conferences to learn best practices and share lessons learned.
 - Support food hub supply nodes and cross-docking nodes to provide market opportunities to more farmers.

- Support the development of a master map and easy online access to existing logistics, routes and schedules.
 - Support the exploration of cooperative local distribution networks.
 - Support connections between food producers and food banking organizations to increase farm/ranch sales while making off-grade products available to residents in need.
 - Secure or create appropriate logistics technology to better manage the flow of goods in the local food system.
- 5.3: Support local food processing and storage systems that address challenges of seasonality and convenience.
 - Example activities:
 - Network with local food businesses and distributors to find ways of ensuring local products are available throughout the year.
 - Support the development of value-added products, community kitchens and processing facilities.
 - Support partners in establishing processing, storage and packing infrastructure on each island.

Strategy 6: Measure and monitor relevant data indicators.

Outcome: Established the collection and reporting of data indicators of food production and consumption, food economics, and public health.

- 6.1: Measure and monitor relevant data indicators across the state related to the food system.
 - Example activities:
 - Partner and collaborate with other agencies and programs to measure changes in food production, sales and consumption, food accessibility, and rates of chronic diseases, poverty and hunger among residents.

D. NEXT STEPS

Organize a workshop on food systems asset mapping

- Faculty involved or interested in food systems related work would come together to identify CTAHR's strengths and gaps in our food systems endeavors, and to identify key outcomes and indicators to be tracked overtime.
- The workshop would also create an opportunity for food systems related faculty to network and to generate new synergy.

Baseline data collection

- Develop a plan for collecting and reporting data.

Invest in food systems related projects

- Provide funding through a RFP process.

E. READING AND RESOURCES

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