



Good Food for

*Hawai'i
Island*

Building Resilient
Community Food Systems

“ Food connects us to the earth, to our families, to our culture, to our community and gives us a deep sense of belonging to a place. ”

-Nancy Redfeather

from *Nourish the Revitalization of Foodways in Hawai'i*

Aloha,

The good food movement is strong on Hawai'i Island and communities are striving to build new systems of food trade that prioritize resilience, health, and social justice. Growing, selling, eating, and recovering food locally creates jobs, supports food security, strengthens the economy, improves health, and reduces environmental impacts.

In just a few generations there has been a fundamental change in how food is grown, processed, transported, eaten and disposed of. Hawai'i has shifted from an entirely self-sufficient chain of islands to a state that is dependent on imported fuel and supplies, vulnerable to disaster, and part of a global food system that doesn't support the health of the environment or people.

So, the question is: **what are we going to do about it?**

Built on decades of dedicated work by leaders in the community, this document uses the most current data available for Hawai'i County and draws from: **Hawai'i's Food System: Food for All (Meter & Goldberg, 2017)** and its summary, **Hawai'i County Food Self-Sufficiency Base-line (Melrose & Delparte, 2012)**, **County of Hawai'i General Plan update draft (2020)**, **the work of Hawai'i Island residents, and the Hawai'i Island Food Alliance (HIFA)**, whose mission is to create a resilient, economically just, ecologically sound, and culturally rich food system for Hawai'i Island.





11.8%

of residents are food insecure ¹



19.5%

of keiki are food insecure ¹



85-90%

of food is imported ⁵



36%

of residents earn less than a livable wage ²

Hawai'i Island

Food Security Snapshot



Every \$1 in SNAP spending leads to


\$1.79

in economic activity ³




61%

of families with children struggle to afford basic necessities ²



Over **80%** of public school students are eligible for free and reduced meals, that's 27% higher than the rest of the state ⁴



Hawai'i is ranked #1 in health nationally, yet

25.2%

of residents are living with diabetes or prediabetes ⁶



Food costs in Hawai'i are

81%

higher than in the rest of the U.S. ⁷

There are 4,220 farms, still



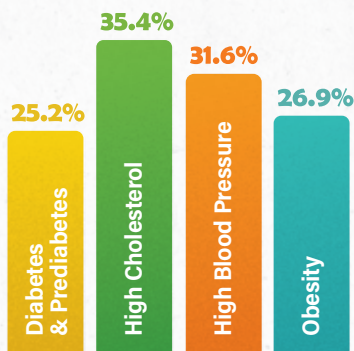
54%

of farmland remains unused ^{8,9}

Good Food is Good Health

No one deserves to be hungry. Access to food should be a basic human right. Both the State and County of Hawai'i have called food security a priority, yet 11.8% of Hawai'i Island residents and 19.5% of keiki are food insecure, and approximately 65,000 people earn below the federal guidelines for a "living wage."^{1,2}

Diet related diseases are a public health crisis. Diabetes, heart disease, obesity, and high blood pressure often disproportionately affect Hawaiians and Pacific Islanders and are projected to increase if trends continue. Programs and policies should recognize the essential role of nutrition, physical activity, and a health-supporting environment in promoting good health and reducing the prevalence of preventable diseases.



Hawai'i Island diet related disease rates
Community Health Needs Assessment, 2018⁶

Barriers to Food Access

Beyond household economics, other factors impact what we eat throughout the day and how we feed our families.



HOUSING: For many Hawai'i Island residents who have no home, kitchen, or live off-grid, it can be difficult to get, store, and cook food.



TRANSPORTATION: Lack of affordable and reliable transportation is a major barrier to food access for residents.



TIME: Modern life is busy and people often work more than one job. It can be challenging to make time to prepare food or shop for groceries.



SKILL: Food preparation and cooking, meal planning, basic nutrition, and shopping with a list or on a budget all take knowledge and practice.



ISOLATION: Some residents are on their own and may not know the opportunities and benefits they are eligible for, or have support they need to apply for them.



Local Institutions Leading the Way

Institutions have tremendous buying power. Buying more local food could expand the market for local producers and encourage new production. Creating sustainable changes to the way food is bought and prepared by institutions is an ongoing process, but on Hawai'i Island, schools and hospitals like the Kona Community Hospital (pictured), are showing what is possible.

“ Farm fresh produce harvested to order is bursting with nutrition and doesn't travel through the traditional supply chain from off-island. A hospital's concern is health and our food hub enables the cafeteria team to focus on providing tasty, healthy meals for their patients, staff, and visitors. ”

-Maureen Datta
Owner, Adaptations Inc.



Why farm to school:

In public schools on Hawai'i Island, over **80%⁴ of keiki qualify for free or reduced meals**, so what goes into those meals matters. Hawai'i spends \$65 million a year buying food through federal child nutrition programs and **100,000 meals are served daily by HIDOE School Food Services Branch**, essentially making schools the largest restaurant chain in the state.¹⁰



Good for Keiki

Farm to school provides hands-on food, health, agriculture, and nutrition education as well as access to nutritious, high quality, local food so keiki are ready to learn and grow.



Good for Farmers

Farm to school offers farmers, fishermen, ranchers, and food businesses a good opportunity to access a stable market worth millions of dollars.



Good for Communities

Farm to school benefits everyone from teachers to food processors and parents. Buying from local producers and processors creates new jobs and strengthens the local economy.





Spotlight: Bodacious Women of Pāhoa:

The all-volunteer group, Bodacious Women of Pāhoa, provided daily relief services of emergency food, supplies, and hygiene kits as well as hot cooked meals out of the Nānāwale Longhouse Community Center for hundreds of families affected by the Kilauea eruption and Hurricane Lane in 2018. Their motto is “**bodacious is contagious,**” and they continue to encourage residents to be prepared and resilient through regular food pantry distributions and workshops that teach emergency preparedness basics.

Good Food for All

Many Hawai'i Island residents receive food assistance through the emergency food relief system. Despite the innovative efforts of many organizations, food donated through this system is often of poor nutritional quality, with high sugar and fat content, which can lead to nutritional deficiencies and higher rates of obesity and chronic disease. It is no surprise then that low-income Hawai'i residents report poor health at nearly twice the rate of middle-class residents.⁶

The Food Basket, Hawai'i Island's Food Bank, distributes two million pounds of food annually and is committed to ensuring all residents have access to affordable, healthy, locally-grown food through their programs:



DA BOX: Ho'olaha Ka Hua Community Supported Agriculture Program (CSA) purchases Hawai'i Island-grown produce from local farmers and distributes shares to both Supplemental Nutrition Assistance Program (SNAP) aka “Food Stamps” and retail customers islandwide.



DA BUX: Double Up Food Bucks SNAP Incentives Program, addresses food insecurity on Hawai'i Island by encouraging SNAP participants to eat more locally-grown fresh fruits and vegetables through nutrition incentive discounts at grocery stores, farmers markets, CSAs, and farm stands.



DA BUS: Mobile Market and Food Pantry Project, provides access to affordable locally-grown produce, emergency staple food items, seeds, and garden starts to low-income residents on Hawai'i Island, particularly in areas without grocery stores.

Eating from the 'Āina

Home and school gardens are a great way to feed our families and pass on essential health and environmental information to our keiki. Over the past decade, school garden programs on Hawai'i Island have sprouted and grown in most schools, engaging our keiki's understanding of where their food comes from, how to make healthy food and environmentally -conscious choices, and deepening connections between food and culture.

Gardening is a way to strengthen the health of our families, cut food costs, and reconnect with the 'āina. On average, every **\$1 spent on gardening supplies grows \$25 worth of food.** ¹¹ Gardens come in all shapes and sizes, even pots on a lanai can produce a lot of food.



Eat Wild!



Recreational and subsistence hunting, gathering, fishing and diving can feed families affordably and preserve local culture. Hunters harvest as many as 10,000 feral pigs, sheep, and goats annually on Hawai'i Island; that means almost 400,000 pounds of meat. ⁸ Access to hunting and gathering places means security for many local families. To learn more about invasive species on Hawai'i Island, look up **Big Island Invasive Species Committee.**

Save the Fruit! Kōkua Harvest



Every year approximately **one-third of all food produced globally is wasted.** ¹² On Hawai'i Island, many fruit trees and other fresh produce are left unharvested. Kōkua Harvest is a new project that aims to connect this neglected produce with those who need it most. Check out their website to volunteer.

SNAP Can Grow Gardens!



SNAP customers can use their benefits to buy seeds, seedlings, and fruit trees to grow their own food. This includes:

- Seeds, bulbs, and roots (like onions and ginger)
- Plant starts (like tomato and pepper plants)
- Fruit-producing trees and plants (like citrus, banana)



Growing & Harvest

“ Thanks to The Food Basket’s local produce-purchasing programs, we’ve been able to make enough money to build four new greenhouses to expand our farm business and cafe. ”

-Forrest and Maria Shirley
owner's of Dimple Cheeks Market and Café

Compost & Recycle

Global food loss and waste generate about **8%** of total greenhouse gas emissions caused by humans. That’s almost equal to global road transport emissions.¹⁴

“ Every day we divert around **400 pounds** of leftover produce from our local farmers’ market and turn it into pork. ”

- Brittany & Bodhi Anderson
owners of Sugar Hill Farmstead



Eat

Low-income consumers are wrongly assumed to have little buying power. SNAP is more than a way to help families get food, it’s an economic stimulus. In 2018, SNAP purchases made directly to farmers and at farmers’ markets, contributed **\$1,749,020 to the local economy.**¹³ Yet, less than half of the 62,947 people eligible participated.¹³ More people using SNAP means more money in the pockets of consumers, farmers, and local business owners. **Go to the Department of Human Services office nearest you to find out if you qualify.**

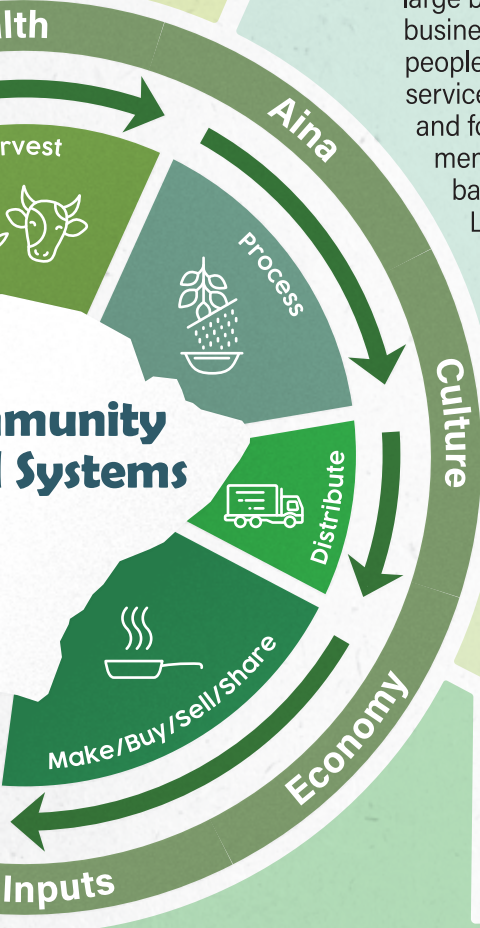


A food system is an interconnected network that includes everything that happens with food - where and how it is grown, distributed, sold, consumed, and ideally, recovered. A sustainable food system is locally based and benefits everyone.



Process

By working together small producers are finding ways to meet the demand from large buyers. A cooperative is a business owned and controlled by the people who use its products, supplies, or services. Co-ops vary in type and membership size and form to meet the specific needs of its members, who share both costs and profits based on their share of use in the business. Local co-ops include beef cattle, breadfruit, swine, coffee, and the Kamuela Vacuum Cooling Plant, among others.



Distribute

High transportation costs for farmers, both getting inputs to the island and moving products around the island, are two of the challenges producers face. Food hubs are a way for small farmers to get their products to market, increase production, meet food safety standards, and share costs and profits.



Make/Buy/Sell/Share

Know your farmer, know your food! Farmers' markets allow farmers and producers to connect with their customers and get a better price than selling through retail stores. Customers can get fresher produce, learn about growing practices, and build community connections. Also, more than half of farmers' markets on Hawai'i Island accept SNAP.¹³



After feeding 14 crewmembers for 30 days from food sourced only from Hawai'i Island, the voyagers came back healthier, stronger, and inspired.

“We all know from the deck of Makali'i there is no turning back to what provisioning has been for modern voyaging. We are setting the course to sustainability of our honua, moku, communities, families and ourselves.”

-Chadd Paishon

Mālama 'Āina

Thanks to the work of farmers, kūpuna, scholars, and community organizations, Hawai'i is seeing a revitalization of traditional foodways.

Kalo, 'uala, mai'a, and 'ulu, along with wild and raised proteins, are the basis of the traditional diet and remain important parts of the food system today. Besides being delicious and connected to culture, these crops are nutritious and well-suited to the environment. As Hawai'i works to improve food security and increase locally-grown food, we can look to the past to inform modern production and conservation of land and ocean resources:

- Support for equitable access to land and water for cultivation, and conservation of hunting, fishing, and gathering places.
- Incorporate traditional foods into healthcare through “Veggie Rx” programs.
- Implement Hawaiian cultural practices in agricultural and aquaculture education and support groups teaching Hawaiian food skills.
- Provide incentives and research for traditional crop production at all scales.
- Support researchers and groups working on restoration and traditional food projects.

Waiāhole Fishpond Restoration Project, Honohonou in Hilo

Loko i'a are important parts of the ahupua'a (traditional land stewardship framework). During 1988-90, the Department of Land and Natural Resources estimated 488 loko i'a statewide, which had a potential annual yield of over a million pounds of fish.¹⁵ Investing in loko i'a restoration can increase local food production while fostering ocean stewardship.



Climate Resilience & Emergency Preparedness

Climate change is daunting and will impact the food system at every level. Increasingly extreme weather is disrupting food production, negatively impacting air, soil and water quality, ecosystem functions, and damaging the infrastructure that our food system depends on.

According to FEMA every dollar spent on disaster preparedness can save \$7 in recovery.¹⁶ Recent disasters like the 2018 Kilauea eruption show how major disruptions can create long-lasting food access issues. It is estimated that Hawai'i Island has around a week of food available in stores.⁵ So, what happens if the barges stop coming?



Resilience

Capacity over time in the face of disturbances



Sustainability

Long term capacity to preserve the system

“ Besides having 11 of the 13 climate zones, the County of Hawai'i has more types of natural hazards than any other county in the U.S. ”

-William Hanson,

County of Hawai'i Civil Defense administrative officer

Hawai'i has the opportunity to lead in food systems adaptation and climate change mitigation. Here are ways to prepare and reduce our impact:

- Implement an emergency food plan that supports trusted community organizations.
- Invest in infrastructure, like community kitchens and food storage spaces to serve as business incubators day-to-day and as trusted disaster response hubs and shelters in times of emergency.
- Support the growth of small, diversified farms and farmers that use regenerative or carbon offsetting practices.
- When possible, communities, residents, and businesses should prepare and develop an all hazards emergency plan. County of Hawai'i Civil Defense has materials to help you get started.
- Help where you can, volunteer your time or donate to emergency food efforts.





“ Farming isn't a 9 to 5 job: it is a life. Small farmers can fill the demand for locally grown foods, but we need to be able to live on the land we farm, love the land, be there. If we want farmers to farm, they need to be able to make a living at it and have their farms also be a home for their families. ”

-Jim Cain
Waipio Taro Farmer

Growing Farmers

Farmers in Hawai'i are getting older, and as they move towards retirement there is a need to pass on their local knowledge and facilitate the transition of farms from one generation to the next.

“ For us, the farm has become an opportunity to figure out how to be modern Pacific Islanders who can navigate the capitalist world while being rooted in our cultural traditions and do our part to contribute to our communities. ”

-Dr. Angela Fa'anunu
Professor at UH Hilo and 'ulu farmer



State investment in agricultural education is needed to restore pride in farming and create pathways for farmers to thrive in Hawai'i's unique production and market conditions. This includes a focus on P-20 (preschool through post-secondary) which would infuse agricultural education into teacher development programs and support teachers using school gardens as outdoor classrooms for standards-based instruction and experiential learning.

Innovative local agriculture programs include: The Kohala Center's Ōhāhā and Beginning Farmer-Rancher Development Programs, UH Hilo, Hawai'i Community College, GoFarm Hawai'i (pictured below), UH Manoa Cooperative Extension, 4-H, Kamehameha Schools' Mahi'ai a Ola initiative, Kahua Pa'a Mua, Hawai'i Institute of Pacific Agriculture, and others. Programs like these should be made as accessible as possible and encouraged to grow.



“ For people that are thinking about making the jump, farming is one of those occupations where you will need all the skills, all the tools in your tool box, to be able to make it. ”

-Misa Maruyama-Jones
GoFarm Hawai'i Island Cohort 1 Alumni



Formed in 2016, Hawai'i 'Ulu Cooperative is a grassroots, community-based business with a mission to revitalize 'ulu as a viable crop and dietary staple. Now with almost 80 members and a dedicated 'ulu processing facility, the co-op supports small farmers and builds on the strong history of agroforestry in Hawaiian agriculture. In the early 1800s South Kona's "'ulu belt" produced an estimated 55 million pounds of 'ulu a year. From 1997 to today, the number of 'ulu trees in commercial production rose from 385 to over 6,200.¹⁷ More 'ulu trees means less dependence on imported food, which is great for people and the environment.

Increasing Local Food Production

“A healthy food system involves both large and small-scale players.”

-Ken Meter,

Hawai'i's Food System: Food for All

Hawai'i Island has a rich and varied landscape with deep roots in agriculture, and strong local leadership. However, following the plantation era, much of the agriculture on Hawai'i Island remains export oriented and macadamia, coffee,

papaya, flowers, and potted foliage dominate the industry. While exports contribute to the local economy and family incomes, they do little to increase local food security. Increased focus on producing for the local market is crucial to improving self-sufficiency, resiliency, and access to healthy, fresh food.

What are a few ways to expand local food production in the face of an increasing population, growing tourism industry, high real estate prices, competitive global food markets, and changing natural environment?

- Invest in infrastructure for post-harvest processing, storage, and distribution to supply local markets. Incentivize and encourage local production of agricultural inputs.
- Update county codes to allow for the construction of smaller and shared farm labor housing.
- Enact policies that support the expansion of agritourism as a marketing tool and revenue stream for farms and ranches.
- Enforce compliance with existing agricultural land tax incentives.

What does “good food” mean to you?



“ Good food to me is savory, salty, sweet, sour, and delicious – any combinations thereof. Good food is good company. ”

Jane Sherwood
Chef, Waimea Community Meal Co-Chair

“ Good food is fresh, tasty, and nutritious, and is appreciated for those who produce and prepare it. We learn the traditions of our families and cultures through good food (favorite recipes and ono grinds), and we share good food that we grow in our yards and harvest from the ocean and on land. ”

- Julia Zee, Hilo,
UH CTAHR Extension Agent



“ Good food can be vegetables, fruits, grapes, blueberries, celery, corn, tomatoes, broccoli... It makes you healthy and feel good! ”

-Kalei & Kathy
Keiki

“ Diversity, minimal processing, locally grown, packaging with the least amount of environmental impact (if at all). ”

- Jason Yee,
Farmer



“ The three components of good food – it has to taste good, nourish us, and have a connection to place. ”

-Steve Roussel
Chef

Mahalo

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'Ai Pono

Ways to make change:

- Grow, make, and preserve food at home.
- Talk story with kūpuna, experienced gardeners, and 'ohana to share knowledge and skills.
- Donate to a local food pantry or community meal.
- Learn about and prepare traditional foods and nourishing meals with family and friends.
- Buy local and direct from farmers when you can: it matters. Family farms and local food businesses count on your business to survive.
- Volunteer or donate to a school garden, community garden, or youth agriculture program.
- Spread the word about SNAP DA BUX Double Up Food Bucks and SNAP Gardens.
- Try to limit buying packaged and processed food.
- Compost and recycle and encourage businesses to do so too.
- Learn about local food policy and engage in our political process. For community food systems to thrive, policy makers need to make local food security and agriculture a priority. Tell them what matters to you & register to vote!
- Become a member of Hawai'i Island Food Alliance.