KITCHEN SYNC STRATEGIES

Returning to Abundance

Honoring Local Roots & Practices

Reimagining Local Food Economies and Returning to Local Roots + Practices in the USA's Non-Contiguous Regions

Support for the Islands & Remote Areas USDA Regional Food Business Center comes from the United States Department of Agriculture (USDA) Agricultural Marketing Service Regional Food Business Centers Program. The 12 USDA Regional Food Business Centers support all 50 U.S. States and Territories and are inclusive of all types of agricultural products produced locally or regionally.

Prepared by Kitchen Sync Strategies for the Islands and Remote Areas RFBC
With significant guidance and input from:

USDA Regional Food Business Centers Islands & Remote Areas
Guåhan Sustainable Culture
Alianza por la Agricultura
Virgin Islands Good Food
Alaska Food Policy Council
Hawai'i Good Food Alliance

Why us, why now?

Introduction

From July 2023 to June 2024, the subregions represented in the Islands and Remote Areas Regional Food Business Center (Hawai'i, Alaska, Guam, Commonwealth of Northern Marianas Islands, American Samoa, Puerto Rico, and the US Virgin Islands) have conducted hundreds of hours of community outreach, food systems research, economic and value chain analysis, and deep introspection about the nature of the food systems in their places. Alongside them, we at Kitchen Sync Strategies have devoted ourselves to understanding, integrating, and synthesizing the findings from each subregion and have- with fidelity to community-based participatory research principles and humility- compiled our key takeaways in Food Systems Reviews reports for each subregion (Alaska, Hawai'i, Pacific Islands and Territories, and US Caribbean). These 'baseline assessments' for each subregion describe not just the current state of Production, Processing, Aggregation & Distribution, Access to Markets, and Access to Capital (collectively the "Program Areas") for farm and food businesses in their places, but also key opportunities to address the challenges hindering their development and their resilience.

During the time of this Planning Year, our Kitchen Sync team conducted 3-part food systems reviews for each subregion: a simple overview of the food systems literature and existing resources describing the food systems in each place, a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis of each place's food system, and a robust, in-depth analysis of the state of the RFBC Program Areas in each place. For these documents, we analyzed hundreds of documents (from popular media to academic literature), in-person town hall style community meetings, discussions from conference sessions, and takeaways from dozens of key informant interviews.

This document, however, synthesizes the core elements of each of the Islands and Remote Areas RFBC subregional baseline assessments. As a non-contiguous region of oft-forgotten islands (along with Alaska's vast interior) outside the contiguous, so-called "Lower 48" US States, we uniquely understand the utility and power of a shared voice, and we have reached across the vast distances that separate us to share our common experiences here. This report explores the most essential themes we encountered in our assessments and attempts to outline why this group of disparate places merits being considered a cogent region, explores the shared histories throughout these places, explains the food systems innovations leaders in each place are using, and lastly makes the case that their local food systems need unique treatment and resources from the federal government and USDA. We hope this document challenges you. We hope it exposes you to new insight or information. And most of all, we hope it helps you see the path to building resilient, fair, and localized food economies across the Islands and Remote Areas region.

Islands and Remote Areas RFBC Key Partners gathered in Homer, Alaska, May 2024

Resilient Lands, Thriving Traditions: An Introduction

Across the world's oceans, from the warm and clear Caribbean to the deep and wide Pacific, islands that many call 'paradise' are sprinkled about. These places, which include the lands that have most recently become part of the US, are more than just postcard-perfect landscapes: they are home to vibrant communities with rich cultural heritage and deep roots in the land and sea that have sustained their peoples for generations. Beneath the surface of these idyllic places, however, lies a complex story of struggle and resilience.

For centuries, these islands and Alaska's interior have weathered storms both literal and figurative. Colonization by the US and others, militarization, economic upheaval, plantation agriculture, and tremendous natural disasters have befallen each place, and the echoes of these forces still reverberate through their food systems today. Where once the land and sea provided abundance and communities maintained a delicate balance with them both, now ships and planes import most of what residents here eat. This is the result of a harmful, predictable process of corporatization of the food economy and political aversion to change.

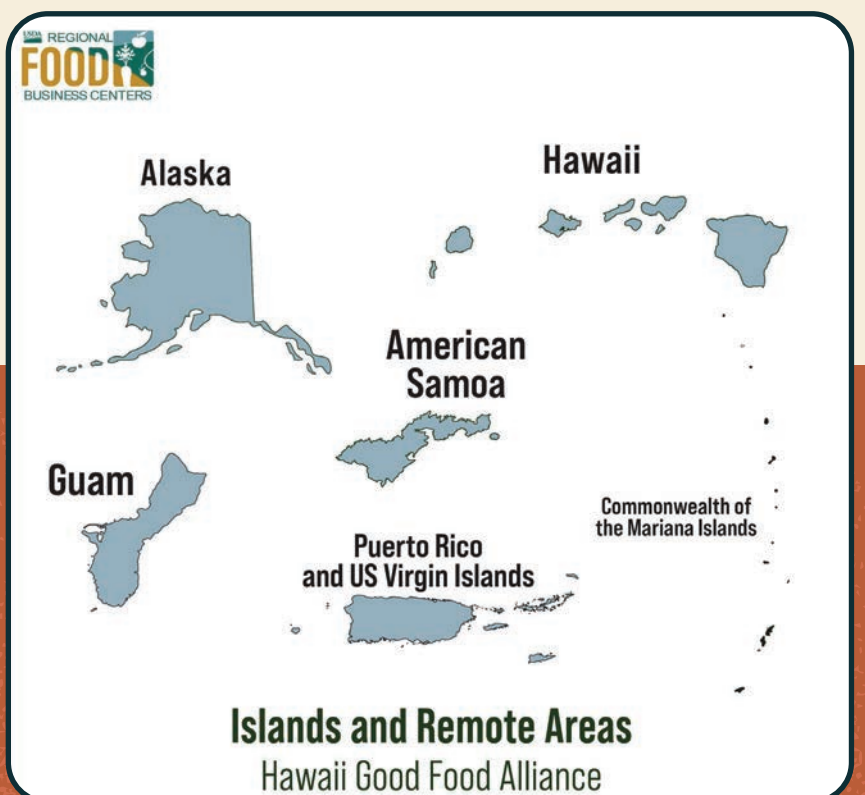
The connection between the people of these places and their traditional foods has been stretched thin. Nevertheless, hope, commitment, and power still grow here in abundance. In farms, fields, backyard gardens, and the surrounding waters of these islands and coastlines, producers continue to harvest abundance from their fertile soil with products like taro, breadfruit, and peppers, and harvest seafood staples like salmon, tuna, and countless other species that define their cuisines and food systems. In modern kitchens and markets, food entrepreneurs are creating new flavors that honor old traditions and remind us of ingredients that nourished locals for millennia. And nearly everywhere in this region, in community centers and around family tables, elders are passing down knowledge to new and beginning farmers, bridging past and future.

Practitioners in these food systems face steep challenges to scaling and stabilizing. Every field planted, every new food business launched, and every food policy drafted must contend with the realities of life in a place thousands of miles away from the continental US: the extreme costs of transportation, the scarcity of financial and technical resources suited for these environments, and the devastation that nature can unleash due to our rapidly changing climate just to name a few. The wounds of history run deep too; this is seen in the tangled web of land use practices and food sovereignty struggles but also in the long-kept flames of ecologically attuned agricultural and harvesting practices.

Yet it is precisely these challenges that have forged these communities' remarkable strength and creativity. Necessity has always been the mother of invention here, and today the spirit of innovation is alive in countless producers revitalizing sustainable growing methods, in food entrepreneurs finding new markets for old crops, and in consumers insisting the food businesses they patronize support their communities in turn.

The Islands and Remote Areas Regional Food Business Center was born out of a vision of these islands and the vast lands of Alaska not just surviving, but thriving. Key partners in each place seek to redevelop economies and systems where traditional foods nourish both body and spirit, where farmers, fishers, and food producers can make an honest, good living serving their communities, and where the next generation sees a viable future in working the land and sea. It's a vision of food systems as diverse, resilient, and interconnected as these ecosystems themselves.

As we embark on this RFBC journey with support from the USDA through 2028 (and looking to continue their work beyond this cooperative agreement period), the leaders in these places carry with them the wisdom of those who have called these islands and lands home for thousands of years. We at Kitchen Sync honor their deep attunement to the rhythm of land, air, and sea and their consistent practices of reciprocity and stewardship. As we look to the future with hope, we know that in nurturing these food traditions and bringing them to modern conceptions of regional food economic development, we are all watering seeds of resilience that will sustain these Islands and Remote Areas communities for generations to come.



Why is this a Region?

The meaning of the term "remote" depends on perspective. To those of us who call these "islands and remote areas" home, they are the center of our world, our culture, and our origin stories. It is from the perspective of policymakers, regulators, and economists based thousands of miles away that we are often viewed as distant outposts: challenging to accommodate and easy to overlook. This disconnect between how we see ourselves and how we are perceived (or forgotten) by the broader US governmental system lies at the very heart of the challenges we face in developing thriving regionalized food economies. This disconnect manifests in myriad ways that impact our food systems from national policies and programs that overlook our unique needs, to domestic supply chains ill-equipped to cover vast ocean distances, to even the basic understanding of what "local and regional food" means for our communities.

Our places share the unique experience of confronting this cognitive dissonance head-on, and collectively we understand the strategies to address the challenges facing our food systems, in many circumstances, must be unique from the so-called 'mainland'.[1] Value chain development here requires a constant balancing act, a dance between competing aspirations and realities. We are at once deeply connected to our ancestral lands while also playing an active role in a globalized food economy, and we strive for self-sufficiency even as we navigate complex relationships with the broader United States and global markets.

[1]We intentionally avoid the use of the term "mainland" in this report as it- like the term 'remote'- establishes a hierarchy wherein the continental US is central and these places are subjugated, or at best considered 'less than central' to the US. Instead, we refer to the landmass as the continental US, the US continent, or the Lower 48 (a term used often in Alaska).

These tensions give rise to profound questions:

- How do we maintain our unique cultural identities when policies about "local food" prioritize products from the US and not our more local, more culturally relevant international neighbors?
- How can we develop our food economy without further compromising the natural resources that have sustained us for generations?
- Who is a "local and regional food system" meant to benefit?
- What do food systems resilience and food sovereignty look like for places with long and recent histories of US colonial influence and control?

The perception of our remoteness, while definitely challenging, is precisely what helps us build resilience, foster creativity, and sustain deep connections to our places, all of which have been at times in their histories prime examples of sustainable, localized food systems. By embracing our unique identities and asserting our rightful place within the broader conversation of local and regional foods in the US, we can help show our colleagues in the Lower 48 States how to implement transformative value chain coordination to develop resilient food economies, and honor tradition and innovation.

Farmers with the Kagman Agricultural Farms and Producers Association in Saipan are eager to expand their markets and sell their prized hot peppers, including the donne sali variety shown here.

Where We Come From

Balance before disruption

Since the first humans built communities in the places of this RFBC thousands of years ago, there has been an ongoing dialogue between the people, the animals, the land, and the water. The food people eat - from starchy root vegetables to fresh fish- has always been reflective of that dialogue, with communities listening deeply to the foodshed and taking only what it offers up. Traditional Ecological Knowledge (TEK) like this is what helped establish the crop biodiversity and the animal and plant specialization that has come to form the foodways in each place. This dialogue between people and place is what helped communities to be self-sufficient; producing and harvesting to meet local needs and prioritizing remaining resilient to natural cycles became cornerstones of their food sovereignty. As a result, there is deep cultural significance (in addition to nutritional and economic importance) for the food systems in these places. Connection between people, food, land/water, and identity run deep and informs the very social structures these communities were built on.

In Hawai'i, the ahupua'a system divided land from mauka (mountains) to makai (sea) into communally-managed production zones which were responsive to specific microclimates and environmental conditions and yet scaled enough to sustain a population of nearly 1 million Native Hawaiians pre-contact from Westerners. In the Samoan islands, sophisticated societies developed around community-stewarded food systems sustained by fresh fish from surrounding reefs, starches like breadfruit and taro, and fruits and nuts like bananas and coconuts. Alaskan Natives like the Tlingit, Ahtna, and Yup'ik for thousands of years have (and continue to) placed critical importance on stewardship of salmon, relying on them to feed their communities and nourish their spiritual connection to nature throughout the year. Even in the Caribbean and Mariana Islands- which were both encountered by European explorers over five centuries ago - traditional agroecological and culinary wisdom have sustained food economies and cultures despite the efforts of colonial powers to manipulate and isolate communities who had been there all along or who were brought there against their will (as was the case with Africans brought the Caribbean).

Each of these subregions offers vitally important lessons with their pre-colonial and even pre-contact food systems. These places share a holistic approach to land, water, and 'resource' management, an understanding of the importance of cultural foodways and deep, spiritual relationships with their food sources, and a profound ability to evolve and adapt to changing landscapes without losing their traditional ecological knowledge. These deep food systems' taproots have helped farm and food businesses in each place stay connected to the wisdom that prevailed long before the disruption of colonialism arrived on their shores.

How We Got Here

History of European & American "Discovery"

European and American explorers arrived in each of these places long ago, usually with the goal of mapping the landscape. However, because what followed them was further invasion, colonialism, and land theft their arrival marked the beginning of major disruptions to the food economies of each location.

Puerto Rico

1493

Christopher Columbus lands in what is now called Puerto Rico (and later expeditions landed in US Virgin Islands) to claim Caribbean territory for Spain

Guam & CNMI

1521

Ferdinand Magellan sees the Ladrones islands, now the Marianas Islands, while searching for the Spice Islands. Spain invades and begins colonizing 150 years later

Hawai'i & Alaska

1778

Captain James Cook sails to the Hawaiian island of Kaua'i and, 6 months later, the Kenai Peninsula of Alaska to map the Northwest Coast (Russia had claimed Alaska as a colony nearly 40 years earlier)

American Samoa

1789 - 1839

Dutch, French, and German military men and explorers dock in Samoa islands first, and the US Exploring Expedition visits what is now American Samoa first in 1839

The tangled roots of our food systems histories, growing toward the future

The places in this RFBC share a litany of historical experiences, despite our geographic spread and cultural diversity. These shared narratives have profoundly shaped their current-day food systems and continue to influence how they are building strong, regionalized value chains.

Colonialism has left lasting imprints and scars on each of these places, disrupting traditional foodways and land and water management practices. While some places were first targeted by imperialist foreigners (Spanish, Danish, Russian, and American) centuries ago, American Samoa wasn't visited by Europeans until the late 18th century and by the US until 1839, after 26 states had joined its Union. People in all of these places suffered unspeakable stories of Spanish, British, Danish, Dutch, Russian, German, Japanese, and/or American invasion or colonial rule. In Puerto Rico, for instance, centuries of Spanish and American imperialism transformed a diverse farming economy into one a plantation-style ag economy dependent on an extractive monoculture sugar empire carefully designed by American policymakers and built on the back of enslaved people. Russian settlers in Alaska built some of the State's first commercial fishing industries that, after the US purchased the Territory in 1867 for $7.2 million, have ballooned into one of the world's largest volume fisheries and threatened sources of keystone species like salmon and halibut that thrived under environmental management of Alaskan Natives. This pattern of US government interests reshaping local agriculture for export-oriented agricultural markets has played out countless times across this region, from Hawaii's pineapple and sugar plantations in late 1800s all the way to Alaska's modern commercial fishing industries.

Militarization has been another significant force shaping these places' food systems in the past century, particularly in the Pacific Islands and Territories subregion. Guam and CNMI's experiences are emblematic of this, where both brutal Japanese occupation and subsequent decades of US military occupation have not only sectioned off large swaths of land (almost a third of Guam and roughly half of the island of Tinian) but have also upended dietary habits and led to cultural erasure. This military occupation of land has often come at the expense of traditional agricultural practices and food sovereignty for local CHamorus, and it paved the way for a heavy reliance on imported, processed foods that, due to early 20th century Federal policies (like those enshrined in the Insular Cases, the Doctrine of Territorial Incorporation, and the Jones Act), is required to arrive on US ships and not much cheaper, more local international barges.

The shift from vibrant subsistence food systems to profit-driven market-based food economies is another tectonic change that has challenged the balance in the food systems of these places. Apart from eroding traditional foodways and incentivizing overproduction, overharvesting, and overprocessing of foods, the Western approach to food economic development has largely disregarded the social and cultural norms that sustained these places for centuries. American Samoa, which has maintained strong ties to its original cultural tenants (like modern observance of fa'a Samoa, or the Samoan Way), has seen dramatic changes to how the communities of its main islands eat.[2] The prevalence of American food corporations, the volume of food being purchased that is imported (95-98%), and the incidence of chronic diet-related diseases like obesity and diabetes are signs that, unlike its cultural and historical sibling Independent Samoa, American Samoans have become systematically disconnected from their historical food economies. The once-thriving food economies in American Samoa produced, processed, and ensured access to local products like ulu (breadfruit), talo (taro), and fresh seafood. While local products like these were central to the development of whole societies in the places of this RFBC, in many communities they are now rare treats or even forgotten sources of nourishment because it has become more profitable to import other foods and resell them.

[2]Fa'a Samoa describes a set of social norms and a cultural paradigm at the foundation of Samoan life. It places great importance on the dignity and achievements of the group rather than on individual achievements, and recognizes the centrality of the 'aiga (family unit) and honors them.

How we are cultivating abundance, together

For all the specific ways the US government has disrupted the food systems in these places with its colonial, military, and economic intrusions, it can also support the healing of their food systems for generations to come. By listening closely to communities rooted in each place and taking heed to the solutions they have tended for centuries, US Federal and Territorial governments have the capacity to make repairs with the people and the land and become a true partner in the work of building resilient, localized food systems. Food systems leaders and local communities in each place understand their food systems the best, and across this vast, non-contiguous region- they also understand that they share unique food systems strengths. Through this RFBC, they are weaving together strategies that allow them to coordinate and share these strengths, and below we explore how this sharing works.

Self-reliance and food sovereignty as central goals

Woven through the food systems strategies in this RFBC region is a common thread: the pursuit of self-reliance and food sovereignty. Food systems leaders in these places aren't dedicated only to increasing local food production, but also reclaiming agency in their food systems that have long been shaped by foreign and US colonial forces. In several of these places, there are formal policies to dramatically increase local production of food in the coming 5-15 years, and there are long-standing efforts led by Indigenous and local leaders to increase the consumption of locally produced traditional foods. These initiatives are about more than just increasing yields, and they're more than simply goals; instead, they're intended to re-engineer the mechanics of the food systems in these places. They are meant to reduce dependence on imports, mitigate severe risks of food insecurity after natural disasters, and lessen reliance on external government support while also protecting against supply chain shocks like global pandemics.

This push for self-reliance is also deeply intertwined with cultural revitalization and sovereignty. In these places (all of which comprise the newest parts of the US) there is a strong and active memory of times of life before US occupation and the installation of western economic tenants. Cultural practices that are core to the predominant ethnic groups and the Indigenous populations in these places are still observed in very public, popular ways. For example, in American Samoa, the cultural phenomenon and interpersonal code of conduct called fa'a Samoa (the Samoan way) emphasizes community self-sufficiency, and the importance of maintaining connections with traditional foodways. Similarly, the Native Hawaiian sentiment of aloha a'ina (respect or love of the land) and kuleana (responsibility and privilege) ask residents to honor their sacred connection to the land and neighbors, and both are codified in rulings set by Hawaii's Supreme Court. By maintaining and strengthening these practices, Samoan and Hawaiian communities are not only improving their food security and food sovereignty, they are also preserving their cultural heritage and asserting their autonomy in the face of globalization.

Islands and Remote Areas RFBC Key Partners volunteer at a local food distribution event in Waianae on O'ahu Island. Federal programs like the Local Food Purchasing Agreement (LFPA) have been instrumental in creating and stabilizing wholesale markets for small and mid-sized producers across this RFBC region.

[3]In 2016, Governor Ige of Hawai'i proposed a doubling of food production in Hawai'i by 2030. In 2022, Governor Dunleavy of Alaska released an Administrative Order establishing an Office of Food Security and directing it to increase local production of food to improve food security and economic outcomes for local producers.

[4]Puerto Rico became a US Territory in 1897, Guam in 1898, and American Samoa in 1899. Though OK, NM, and AZ were all admitted as States after 1900, their presence within the US governmental system far precedes any federal engagement with the subregions of this RFBC. (The New Mexico Territory was forcefully created by the US government in 1850, the Arizona Territory in 1863, and the Oklahoma Territory in 1890.)

[5]In 2019, Hawaiian Supreme Court ruled that the State of Hawai'i has a constitutional duty to protect Native Hawaiian tradition-al and customary rights, including those related to kalo (taro) cultivation and other cultural practices that are fundamental to the concept of aloha 'āina (love of the land). Source: Sproat, D. Kapua'ala. (2008). The Duty To Aloha Āina. Hawai'i Bar Journal, 12(7), 4-23. Sourced from: https://manoa.hawaii.edu/kahuliao/wp-content/uploads/sites/122/2023/03/The-Duty-To-Aloha-Aina.pdf

Innovative, place-based solutions to systemic problems

It is said that "creativity loves constraints." As described in many of their food systems' reviews, these places face a multitude of challenges that limit their options for food systems development. Consequently, the unique challenges faced by each place in this RFBC region have spurred the development of innovative, locally-adapted solutions. This shared experience of creating place-based solutions to address systemic problems in our food economies defines our region.

In Alaska, where frigid climates and limited arable land pose significant barriers to agriculture (beyond the bountiful Mat-Su valley), communities are maximizing the use of hoop houses or high tunnels, solar soil-warming techniques, and other controlled environment agriculture efforts to grow fresh produce for a balanced diet. Innovation led by the University of Guam's Aquaculture Center provides another example, where shrimp farmers and researchers have developed niche products like pathogen-free shrimp for local consumption and global export. The University of Guam is also a leader in advancing low-cost, high-output solar-powered aquaponic systems that combine tilapia production with leafy green production, allowing locals to reduce their reliance on imported sources of protein and increasing fresh produce consumption. These solutions not only address local food production challenges but also create new economic opportunities that adapt to their local circumstances.

Importantly, innovation in these regions often involves blending Traditional Ecological Knowledge with modern technology. In the Northern Mariana Islands, Guam, and Hawai'i, there has been a steady resurgence of cultivation of traditional crops like breadfruit and taro, and of using both time-honored growing methods and new sustainable farming techniques. The success of the Hawai'i 'Ulu Cooperative, a food hub that incentivizes locals with highly productive 'ulu (breadfruit) trees to harvest and sell them to the aggregator, creates wholesale and retail format, heat-and-eat 'ulu and value-added products like pre-cooked mature 'ulu and 'ulu hummus to bring this local staple crop back to a broad range of customers.

This fusion of old and new approaches is fostering resilience in these places' food systems and leveraging what each place produces in culturally appropriate ways that also generate viable food enterprises.

Businesses like the 'Ulu Cooperative on Hawai'i Island are utilizing traditional crops like kalo (taro) and 'ulu (breadfruit) to make value-added products that reach broad retail markets

Community-driven aggregation and distribution efforts

In these places, community is everything. An intricate web of relationships has been woven among many actors in the value chains here, especially around aggregators and distributors of local food (because they sustain relationships with many different producers and consumers alike). Consequently, leaders across this RFBC are developing innovative models for food aggregation and distribution that focus on this web of relationships and highlight the critical importance of the middle of the food value chain. Longstanding and semi-formal cooperatives of producers in Saipan (like the Kagman Agricultural Farms and Producers Association) and American Samoa create collective voice for producers in communities there, and these organizations create central outlets for individual consumers and wholesale markets alike to access local food.

In Hawai'i, a more formalized network of aggregators and food hubs has developed since 2020, with 14 hubs now operating, trading products, and collaborating across five islands. These hubs not only create broad market access for small producers in each community but also provide them with a range of services including cold storage, processing, marketing, technical support, and distribution.

Deeply committed to community-based participation, community organizing, and value chain coordination, the Hawai'i Food Hub Hui exemplifies how prioritizing community needs (especially when disaster strikes) ensures that aggregators can scale their businesses while remaining reflective of and accountable to the people they serve.

Similarly transformative efforts are taking root in other places in this RFBC region. In the U.S. Virgin Islands, organizations like We Grow Food, Inc. are creating opportunities for local producers to aggregate and sell at farmers markets and agricultural festivals. In Puerto Rico, emerging food hubs like Frutos del Guacabo are pioneering new models for connecting small producers with individual consumers and values-aligned restaurants. Six food hubs in Alaska have launched a semi-formal network throughout the State where they are exchanging best practices, resources, and products to strengthen more localized, subarctic food economies. These aggregation initiatives are not just about moving food from farm to table; they're about building community resilience, creating local economic opportunities, and reshaping food systems to better serve the needs of communities.

The Hawai'i Food Hub Hui is a vibrant coalition of 14 food hubs across the Hawaiian Islands. They exchange resources, best practices, and products to make local food available to a range of markets across the islands.

Opportunities for Deeper Collaboration with Federal Agencies

From the warm Caribbean to the frozen tundra of interior Alaska, our experience shows that place-based solutions are critical to the success of food systems efforts in this RFBC region. But the longevity and sustainability of these efforts will also require place-based food systems policies and programs that account for the unique hurdles and assets faced in each place. The proverbial shoe that 'fits' the interconnected regional food systems in the continental US often doesn't here, and we need Federal agencies like USDA to find new ways of tailoring its funding, its programs, and its support to better serve farmers, ranchers, fisherfolk, and food businesses in our region. In order to accomplish our shared, universal goal of building a resilient, localized food system here, we need targeted policies and programs specifically designed for these communities: this policy approach is called Targeted Universalism.

We applaud the Agency's RFBC initiative as a step in the right direction towards fostering place-based solutions, and our Center is excited to leverage this sorely needed investment to strengthen our food systems. We also urge the USDA (and its other Federal agency collaborators) to use the strategies of Targeted Universalism to direct support to these uniquely complex local and regional food systems. As the points below outline, our food systems are fundamentally different from the continental US; and we urge the USDA to recognize this complexity by establishing an internal office focused on supporting our region (as it has with its Office of Tribal Relations, dedicated to bridging the Agency's broader initiatives to Tribal nations).

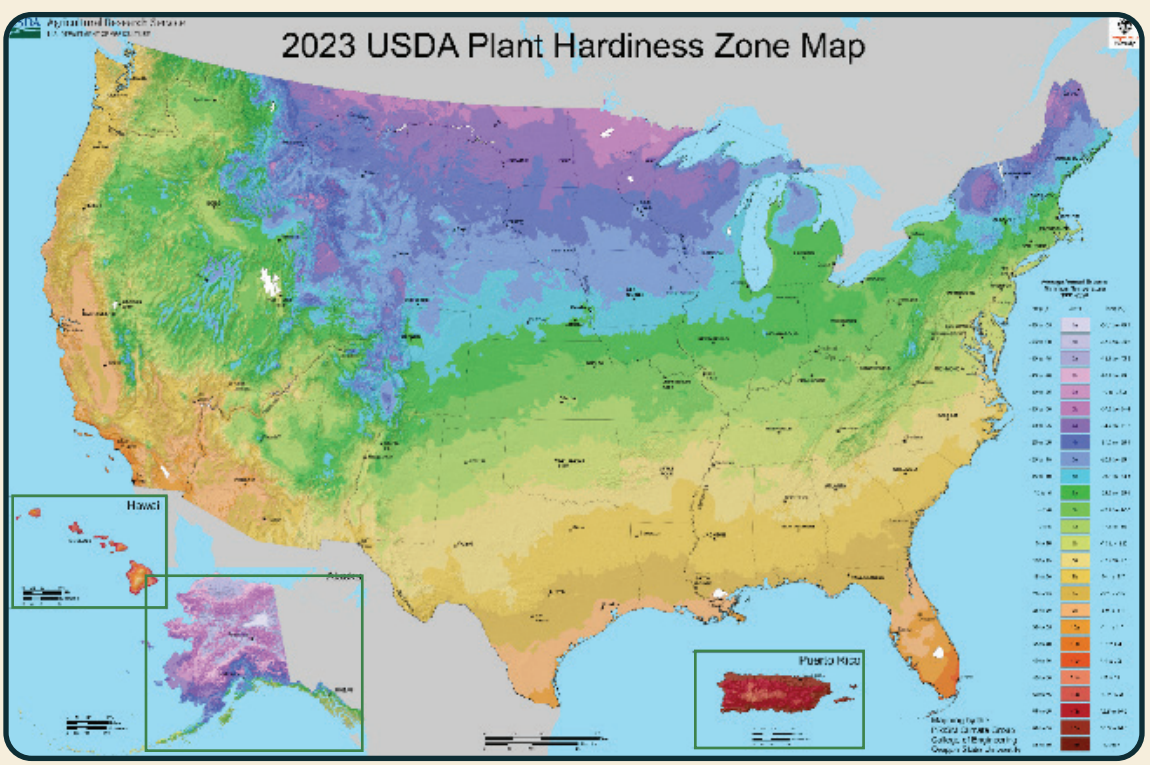
Agriculture and food economies are vastly different from the Continental US

The agriculture in the Islands and Remote Areas RFBC region is fundamentally distinct from that of the continental US. These territories represent the extreme edges of how the USDA even measures the agriculture and food systems. For example, as shown below, our farmers produce food on the extremities of the USDA's own plant hardiness zones, from the hot, tropical climates of the Caribbean to the subarctic conditions of Alaska.[6] This diversity presents unique challenges and opportunities for cultivation that are scarcely addressed by traditional programs of USDA designed much more for temperate mainland climates.

In places like Puerto Rico and Guam, farmers can grow tropical crops year-round while Alaskan growers must contend with extremely short growing seasons and permafrost. Meanwhile, the scarcity of land in most of CNMI and the USVI mean land-based protein production is severely limited while the Alaska and American Samoan seafood industries comprise some of the largest fisheries in the entire world. No matter the food product category, the food economies in these places fall outside the norm for most of the Continental US and, thus, often need support beyond what USDA AMS agricultural support systems and programming offer.

The unique agricultural conditions in these areas require highly specialized knowledge, crops that are often not the focus of USDA departments like FSA, AMS, and Commodity Procurement (but are often the traditional crops in each place), and producers here use innovative growing techniques that are historically undersupported by specialty USDA grant programs like the Specialty Crop Block Grants and LAMP programs. Understanding and supporting the individuality of these diverse agricultural systems is crucial for developing effective food policies and support mechanisms for these regions.

[6]As is common with these places, even the USDA's Plant Hardiness Zone map does not indicate all the areas of the US. While the figure below does include Puerto Rico, Alaska, and Hawai'i, it does not include the US Virgin Islands, Guam, CNMI, or American Samoa, all of which would be encompassed in Zone 11 or higher.



KITCHEN SYNC STRATEGIES

Data is insufficient

Poor data collection by US Federal government (and the USDA specifically) in these places creates cascading effects that fundamentally limit the development of their ag and food economies. The lack of dependable, standardized data particularly impacts climate resilience and market development for farm and food businesses as well as the local government's ability to pull sufficient Federal resources to local communities. For example, officials in Guam have noted that insufficient data gathering in the Island Areas Census (especially Guam's smaller communities) preclude them from other composite statistics like the Social Vulnerability Index "which helps local officials identify communities that may need support before, during, or after natural disasters." Even the US Department of Interior's own Office of Insular Affairs (which oversees US Territories) released a statement in June 2024 citing "Insufficient data affects the private sector's ability to leverage outside investment and understand labor needs and the government's ability to make informed policy decisions, like forecasting revenue for budget purposes."[7]

Because the ag economy in these places includes different types of farm/food businesses than in the Continental US, producers suffer the consequences of Federal data sets lacking their experiences. Despite often harvesting large volumes of products, and due to the fact they are considered "subsistence producers" in data collection, the support that local producers in many of these places need is rarely captured fully in USDA Ag Census surveys. For example, in American Samoa, inadequate tracking of these subsistence farmers despite their production scales means many are ineligible for USDA farm support programs. These growers may lack farm receipts, UEI numbers, and other USDA data points of interest, all of which limit how fully USDA survey tools measure their needs. Farm and food businesses in CNMI face other barriers to their business planning because local officials cannot rely on Bureau of Labor Statistics data like employment statistics to efficiently issue business licenses. Instead, with limited staffing, they must duplicate survey efforts at the Territory level, leading to delays in access to funding and programming for local farmers.

Local and regional food systems thrive when there are strong relational webs and well-coordinated value chains that facilitate products flowing from producers to markets. Because of the strong cultural norms that many food producers and aggregators in these places practice, data about the amount of food imported is almost certainly significantly inflated. In essence, data used for food import rates focuses on retail markets and gross sales. So-called "subsistence producers" who may not be selling

	American Somoa	Northern Mariana Islands	Puerto Rico	U.S. Virgin Islands	Guam
Decennial Census	Included	Included	Included	Included	Included
American Community Survey	Excluded*	Excluded*	Included	Excluded*	Excluded*
Population Estimates	Excluded	Excluded	Included	Excluded	Excluded
Current Population Survey	Excluded	Excluded	Excluded	Excluded	Excluded

US Government Accountability Office report to Congressional Requesters (GAO-24-106574) outlines how US Territories need federal support to close data gaps and to be included in existing federal data sets like those shown here.

their food per se (i.e. they don't have receipts), are not considered in these data sets despite producing local food and feeding people in their communities. Accounting for the cultural differences in communal food production/distribution is critical for USDA and other Federal agencies to understand challenges and opportunities facing local food system development.

Long-term growth in the agri-food sector in these places is stifled by these data gaps, and the gaps create a self-reinforcing cycle where limited information leads to limited Federal program access, which in turn restricts development opportunities for local farm and food businesses (which further restricts data collection for years to come).

[7]Braybrooks, M. (2024, June 13). Statement of Melissa Braybrooks, Economist – Office of Insular Affairs, United States Department of the Interior Before the United States House Committee on Natural Resources Subcommittee on Indian and Insular Affairs Regarding "Examining GAO's Findings to Address Data Gaps and Improve Data Collection in the Territories" [Congressional Testimony].

Unique impacts from natural disasters and the effects of climate change

The environments of the Islands and Remote Areas RFBC face a set of challenges that are both severe and distinct from those in the continental United States. These regions are on the very front lines of climate change, experiencing its impacts with particular intensity. Rising sea levels threaten coastal agricultural lands in places like CNMI and American Samoa, while changing precipitation patterns and increasing temperatures disrupt traditional growing seasons, harvesting patterns, migratory patterns of key species, and crop viability across all these places. The Arctic is warming at a pace approximately four times faster than the global average, a phenomenon often referred to as Arctic amplification: while this rate varies depending on the specific place in the Arctic zone and the timescale considered, it's undeniable that the Arctic is experiencing significantly faster warming than other parts of the planet.

Moreover, all of these areas are disproportionately vulnerable to natural disasters such as hurricanes, typhoons, and tsunamis, which have and can devastate local food systems in a matter of hours. It is almost impossible to overstate the depth of destruction caused by 2017 Hurricanes Irma and Maria in Puerto Rico and USVI, where many producers suffered total crop losses and communities were left without basic public infrastructure like running water and electricity for over two years. In Western Alaska, Typhoon Merboc in Fall of 2022 wreaked havoc and flooded thousands of miles of coastline, spoiling not just community members' freezers of fish, moose, and subsistence foods but also prevented communities from their seasonal harvesting to build reserves for the following year. The isolation of these places from the continental US (not to mention their limited representation in federal policy decision-making) also magnifies the impact of such events, as recovery and rebuilding efforts are hampered by physical distance and insufficient resource allocation. These unique environmental challenges require specialized support with disaster preparedness, food systems resilience strategies, and adaptive food production practices that are tailored to each place's specific context.

Socioeconomics are different here than the rest of the US

The socioeconomic realities of the Islands and Remote Areas RFBC region are distinct from US national trends, and this means the USDA must adjust its strategies around food system development in these places. Economically, these territories face higher costs of living (Hawai'i ranks as the state with the highest cost of living), lower median incomes (Puerto Rico's current median income is just over $22,000, roughly ⅓ of the US National Average), and unique economic forces heavily influenced tourism, US military presence, or singular industries like fishing, petroleum, mining, or other resource extraction industries. For instance, in American Samoa, the tuna canning industry dominates the economy: some 80% of all revenue generated in the entire territory's economy comes from a single Star-Kist tuna cannery. Meanwhile in the USVI, the tourism sector significantly shapes the broad economy (generating about 60% of the territory's economic output annually). The economic landscape in these places is often severely imbalanced.

Socially, these regions are remarkably diverse, with many areas having majority populations composed of people of color and unique cultural heritages that differ greatly from dominant cultures in the continental US. Languages vary widely, from Spanish in Puerto Rico and Yup'ik in Alaska to CHamoru in Guam and Samoan in American Samoa, and in several places, English is a second (or third) language for locals. This linguistic and cultural diversity impacts everything from agricultural practices to food preferences and market dynamics. Cultural values like land stewardship (versus land ownership) have sustained traditional land tenure systems (such as the communal land stewardship in American Samoa) and this further differentiates these regions from the mainland U.S. These cultural differences have strong, direct impacts on their economy and addressing the local food economies here requires new approaches to economic development and food system planning from Federal leadership.

[8]Source: US Census Bureau 2020 American Community Survey.

[9]Source: Center for Land Use Interpretation report on American Samoa: https://tinyurl.com/ycyk87tn

[10]Source: US Virgin Islands Economic Review - VI" VI Bureau of Economic Research. VI Bureau of Economic Research. May 15, 2016. Archived from the original (PDF) on November 30, 2016. Retrieved February 15, 2017.

“Local and regional” means something fundamentally different here

In the context of the Islands and Remote Areas RFBC, the concept of “local and regional” takes on a meaning fundamentally different from its application in the continental US. This is distinct from all the other RFBCs, and the unique geographic realities each of these places faces means that efforts to develop local food economies must contend with complex international trade relationships, customs regulations, and logistical challenges that most mainland U.S. producers rarely face- and which small or mid-sized farm or food businesses hardly ever encounter at their scales.

> For every state or territory represented in our RFBC, the nearest non-local market is international.

For example, farmers in Guam might find it more feasible to source inputs or sell products to nearby Asian countries like the Philippines, South Korea, or Japan than to connect with markets in the US (the closest of which is in Hawai’i, some 3,800 miles away- several hundred miles further than the distance from Portland, Maine to Seattle, Washington for comparison). Similarly, producers in Puerto Rico or the U.S. Virgin Islands could have stronger trade relationships with their Caribbean neighbors in the Dominican Republic or countries in the Eastern Caribbean than with the closest continental US port of Miami, some 1,000 miles away. While US federal programs like Local Food for Schools and the Local Food Purchase Agreement establish criteria for “local and regional food” as within a State’s boundaries or within 400 miles of its borders, places like American Samoa, Puerto Rico, and the USVI have only foreign neighbors within such a radius.[11] The Marianas archipelago (which includes Guam and CNMI) and Hawai’i have no other US places in that radius at all. Simply put, food systems practitioners in these places don’t have the benefit of robust interstate road and rail systems that are abundant in the continental US food economy (including its local and regional value chains). As such, we consider the very concepts of ‘local’ and ‘regional’ in a more holistic sense that incorporates cultural relatedness and shared Indigenous identities in addition to geographic proximity, and solutions to a regionalized food economy here require innovative transportation and distribution systems.

Redefining ‘local’ necessitates a reimagining of USDA’s food system transformation strategies as a whole, and the work in these places emphasizes the importance of building robust markets on-island/ nearby with a sharp focus on food sovereignty while also exploring regional partnerships that may cross international boundaries. Historically, food systems development policies in the US have been separated into local/regional and export-oriented: our places need a fusion of both. This RFBC underscores the need for flexible policies and programs that can accommodate these unique geographical and economic realities.

[11]On the other end of this spectrum, considering anything within Alaska’s state boundaries as ‘local’ requires covering over 665,000 square miles, an area 2.5 times the size of Texas.

What this RFBC can teach the rest of the US about local and regional food economies

Mary Kawena Pukui, the renowned Hawaiian cultural historian and author of ʻŌlelo Noʻeau wrote "I ka wā ma mua, ka wā ma hope": 'The future is in the past'. This proverb highlights the deep connection between past traditions and future directions, and it reminds us that understanding and honoring the past is critical in guiding the growth of modern movements in any field. This is particularly relevant in the work of developing sustainable, vibrant food economies. In all of these RFBC places, personal memories and ancestral connections to food are visible in the many strong community traditions that shape the current local food systems, and these memories and traditions in turn strengthen today's markets and food access points.

Until historically fairly recently in most of these places, communities enjoyed abundant localized food systems: vibrant networks of producers lived in close proximity to residents and communities or the residents themselves grew, harvested, or prepared food for their families and community members. Given how recently this was true, traditions and cultural practices around food (including its production, harvest, preparation, and consumption) are alive and well and in fact are defining factors of these places as a whole. For example, salmon in Alaska, kalo (taro) in Hawai'i, and yuca in Caribbean culture in Puerto Rico and USVI: these foods are so important to the diet and culture in these places that each of them also plays a central role even in the Indigenous creation stories of each place. Because so many individuals in each place still understand and observe their communities' traditional foodways, their food economies are able to support the development of value chains of locally grown and harvested food. In a sense, their strong cultural connection to food is a protective factor against corporate consolidation of the food economy.

While it is certainly true that food businesses in these places are plagued by the same economic pressure to consolidate, scale, and optimize as those in the continental US are, their distance from its shores may have created a buffer for some of the more insidious outcomes of the typical winner-take-all economic paradigm that pervades the US food economy. Former USDA Secretary Earl Butz (in)famously coined the phrase "get big or get out" when advising American farmers about scaling their production. What has become clear since this statement from 1973 is that this pressure to scale creates long-lasting harmful effects on small businesses, the land on which we rely, and ultimately the consumer markets by pushing externalized costs (like water, pollution, and health impacts) onto the public sector and private individuals. The thirst for rapid floods agricultural scaling has wreaked havoc on soil and watersheds nationwide and the explosion of the hyper-processed food industry has led to skyrocketing obesity rates (which costs the US healthcare system over $173 billion annually). Meanwhile, despite claims that pandemic inflation was driving the rise of their prices to consumers, consolidated food businesses like poultry giant Tyson Foods and retail megachain Walmart had record sales & earnings in 2022 and 2023, respectively. We do not believe these trends are coincidental.

This pressure from corporate consolidation divorces individuals (and, by extension, communities) from their food sources. Its success depends on consumers not valuing knowing the provenance, costs, and environmental impact of their food. In these islands and remote places where so many individuals maintain strong personal connections to local producers and small-scale food businesses, local communities have access to this information. Consequently, they can more directly and effectively develop local food economies than those stuck in the quicksand of corporate food businesses because they can understand the source of origin, economic impact, and environmental consequences of their food. The prevalence of genuine relationships between food producers, intermediaries, and consumers in these places allows consumers of many markets to resist the eroding forces of corporatized food.

Whether it is explained by the centrality of Indigenous belief systems that prioritize harmony with land and community, the socioeconomic differences of places with strong collectivist societies, or merely by the physical distance of these places from the continental US food economy, the spirit of the local food systems in these places is strong and distinct from the lower 48 states. Other regions of the US can learn how to strengthen their own localized food economies by studying the interconnectedness and human-centeredness of the food economies in these places. The same may well be true for the USDA and Federal government as a whole.

Islands and Remote Areas RFBC Key Partners shop for local produce like chinese broccoli, apple bananas, and bitter melon at a local retailer in Saipan, CNMI

Moving Forward, Together

Across all these diverse places, food is recognized not just as sustenance, but as a powerful tool for cultural preservation, community resilience, and self-determination. As these islands and remote areas work to untangle the complex legacies of their past, they are building a future where local food systems are at the heart of healthy, sustainable, and culturally vibrant communities. Their paths forward involve balancing tradition with innovation, self-sufficiency with global connection, and economic development with cultural and environmental stewardship.

Despite the imbalanced and deeply inequitable landscape that defines the US food economy as a whole, the value chain development strategies being led by Key Partners in each of these places are driven by a shared belief that people in these communities have a right to access food that is nourishing, locally-sourced, and grown with care. Over the course of the 4 years ahead these RFBC partners will continue collaborating with leaders in their areas and with each other across vast distances, linguistic boundaries, and cultural divides. This RFBC will guide the development of a disparate yet connected, strong, and sustainable food economy for the Islands and Remote Areas of the USA.

These partners are moving forward, together, towards a resilient food systems future.