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Testimony to the U.S. Senate Committee on Indian Affairs
*Upholding the Federal Trust Responsibility: Funding & Program Access for Innovation in the
Native Hawaiian Community.*

The State and Needs of Hawaiian Agriculture

Introduction

I appreciate the invitation to provide this testimony to the U.S. Senate Committee on Indian Affairs. I would like to clarify that my testimony, although pulling from knowledge and expertise obtained through my employment and organizational relationships, represents my own views and beliefs as a Native Hawaiian and concerned citizen of Hawai'i, the United States, and our planet.

I feel it is paramount to begin with a reminder that the Kingdom of Hawai'i, which was a member of the family of nations, a status recognized through dozens of international treaties including with the United States, was illegally overthrown in 1893, with the assistance of the US military, followed by the subsequent annexation, against the wishes of over 95% of the Native population, to the United States, eventually becoming the 50th State in 1959. Both the occurrence and the illegality of the overthrow has been formally acknowledged by the United States (US Public Law 103-150) and the United Nations (Office of the High Commissioner for Human Rights, Memorandum issued February 25th, 2018). The above facts can only result in the conclusion that Hawai'i currently exists as a form of prolonged military occupation by the United States, and the highest pursuit of justice would be to support the repossession of the approximately 1.8 million acres of Hawai'i's ceded governmental lands to an independent Native Hawaiian government.

Background: Native Hawaiian Agriculture

The Hawaiian archipelago was settled by Polynesian ocean voyagers no later, but possibly much earlier, than 1000AD. Over centuries, Native Hawaiian cultivators developed a range of cultivation strategies and constructed vast infrastructural developments to support widespread food production. Hawai'i is among the most ecologically diverse locations on the planet, containing over two-thirds of the Holdridge life zones and ten of the 12 soil orders of the world. Native Hawaiians, in adapting their agricultural systems to the extreme ecological and topographic diversity of the islands, arguable developed the most diverse agroecological diversity of world – an underappreciated fact. The ability to sustainably cultivate food in a wide variety of ecosystems was highly dependent, as with many indigenous cultivation systems globally, upon intimate knowledge and understanding of the local environments, preservation of ecosystem function and services, and adaptive management strategies. In total, the best estimates to date suggest that Native Hawaiians, in various forms, cultivated approximately one million acres of land to supply food, timber, textiles, medicine, and other resources to a population of 400,000 to 800,000.

Within Hawaiian society, agriculture was not an economic pursuit, but an integrated system of sustenance that incorporated education, religion, and other social norms. It is essential to include the context of a kinship worldview, in which, unlike western cultures, Native Hawaiians perceive that humans do not supersede the environment, but rather have a familial relationship with all components of the natural world. This is perhaps most clearly manifested and communicated in Native Hawaiian cosmology, in which mankind is portrayed as the younger brother of the kalo (taro) plant, placing humans not only as direct relatives to the environment, but also in a subservient position. The central tenant of Hawaiian culture is critically important, because the separation of Native Hawaiians from their land that accompanied the socioeconomic changes associated with the overthrow does not only impact the agricultural economy of the Hawaiian people, but destroys their entire cultural identity. This concept was well articulated by congressional testimony by Reverend Akaiako Akana over a century ago, in which he states on behalf of Ahahui Pu‘uhonua in favor of the establishment of what eventually passed as the Hawaiian Homes Commission Act of 1920.

The soil is a redeeming factor in the life of any race, and our plan for the rehabilitation of the Hawaiians is futile unless the question of returning to mother earth takes precedent to all other considerations in such a plan.

Background: Current Food System of Hawai‘i

Hawai‘i’s economy was dominated from 1850 to 1960 by plantation agriculture producing specialty crops for export markets, which began to decline with statehood, after which tourism, construction, and military spending all rapidly surpassed agriculture. Starting in 1970, the plantations began to shut down, with the last plantation in the state shuttering operations in 2016. Some substantial export agriculture still exists in terms of macadamia nuts (~21,500 acres), coffee (~10,000 acres) and cattle operations (~761,000 acres). Other specialty markets were also maintained, such as flowers and foliage (~2,400 acres) and tropical fruit (~12,300 acres), while some new specialty markets emerged, such as seed production (~24,000 acres) and aquaculture (~650 acres). Offshore fisheries should not be ignored, as Pacific fishing fleets that operate out of Hawai‘i land ~\$62 million annually.

Hawai‘i is a state of small farms, with 7,328 farms in the state and 90% of those being less than 50 acres. Total agricultural value has consistently declined over the past decade, and in 2017 stood at \$563 million, with 90% of this value produced by only 13% of the farms. In the wake of the plantations, several programs aimed at supporting the development of new industries, but programs were fragmented and were ultimately met with minimal success. The Hawai‘i Department of Agriculture received ~0.4% of the state’s operating budget and is hampered by oftentimes obscene bureaucratic protocols. Currently, Hawai‘i imports approximately 85-90% of its food supply, equating to \$5.9 billion in food imports annually. By food category there is tremendous variation. Hawai‘i produces about 60% of its fruits and vegetables, 40% of its seafood, and 10% of its meat locally. However, in critical categories such as staple carbohydrates and dairy, we produce less than 0.5% locally. Recently, and particularly in the wake of the COVID-19 pandemic, there has been a strong movement to increase the local food system for food security, resilience, landscape preservation, and culture revitalization.

Needs and Barriers

- **Land.** High cost and demand for land is prohibitive to most farmers. State lands are poorly administered, often creating insurmountable barriers to engagement, or the loss of operations on state land due to negligence. Poor enforcement of zoning standards on agricultural lands has led to misuse of much agricultural land (e.g. “gentleman farms”). Some agricultural lands lack adequate infrastructure such as water or fencing from ungulates. Competing interests for agricultural lands threaten production, including rezoning for urban development and alternative land usage such as solar energy production.
- **Infrastructure.** There are many basic infrastructural issues in Hawai‘i that prevent local food system, in particular by our small farms. Investment over the past century has focused on export by large private producers and a “just in time” importation of food. Hawai‘i lacks adequate infrastructure for aggregation, processing, storage, and transportation of local food within the state. Significant investments in state- or cooperatively-owned infrastructure is necessary.
- **Social Infrastructure.** Due to the small producer nature of the islands, organizational structures are necessary in order to access adequate scale and operational capacity in order to access and operate infrastructure. The recent establishment of several local food hubs has worked to fill this gap, with growing capacity and support.
- **Farm and Food Management.** Appropriate technical support is essential for success of emergent farms and food system actors. The University of Hawai‘i, and in particular the College of Tropical Agriculture and Human Resources (CTAHR, which is the state’s Land Grant Institution, has a critical role to play through workforce development and extension services. CTAHR is moderately effective, but has shrunk severely since the closure of the plantations and has not fully pivoted its services to represent the new agricultural realities of Hawai‘i.
- **Capitalization.** Access to capital is essential for the establishment and growth of agricultural businesses. Limited options exist, with the State largely underfunding capital pools and overburdening applicants with paperwork and reporting. This is a particularly pervasive issue with the Department of Hawaiian Homeland and other agricultural leases, as their land cannot be leveraged to access liquid capital.
- **Scale.** Scale of operations is an important component that help to induce investment and optimize efficiency, and offer opportunities for a reasonable risk-adjusted return. While some operations can achieve scale, many small producers need collaborative opportunities to reach such scale.
- **Labor.** A sufficient quantity of skilled labor must be attracted and available at a cost that provides just compensation and financial viability, and they must possess the passion and resilience to endure volatility. Currently, access to labor, and in particular access to skilled labor, is a significant barrier.
- **Integrated value chain.** Robust communication and balance of demand and supply must be developed. Increased processing is essential to increasing total value of the small agricultural industry and to deal with seasonal excess. Equitable sharing of revenues across the value chain is necessary.

Opportunities and Successes

Here I highlight some key success stories that demonstrate where some key opportunities lie in terms of rebuilding Hawai'i's food system, culture, and Native Hawaiian wellbeing.

- **MA'O Organic Farms.** MA'O Farms has grown to be the largest certified organic vegetable farm in the state, with 100% of production going towards local markets. Their success is rooted in their approach that marries agricultural production to community outcomes, focused on engaging local youth, enhancing Hawaiian culture, and providing educational opportunities to emphasize the potential social benefits of local agriculture. By realigning food production with Hawaiian epistemology—emphasizing engagement with land, community health, and integration of agriculture and food with education—MA'O has attracted a new generation of individuals interested in working in agriculture, new sources of capital, funders, and investors, and new partnerships in health, education, and social work.
- **Hawai'i 'Ulu Producers Cooperative (HUPC).** Cooperative organizations are not extensive in Hawai'i but are marked by some notable examples including the Kaua'i Island Utility Cooperative. HUPC, established in 2017, focuses on aggregating, processing, and distributing traditional local staples, and has grown to represent 124 farmers. As a cooperative organization, it is directly owned by the farmer-members, providing an equitable, democratic processes of engagement and revenue sharing. HUPC has leveraged its network to achieve a scale of production and processing that has allowed them to gain infrastructure and markets that would not have been possible by any of its individual members.
- **Ho'oulu 'Āina.** This organization operates a 100-acre farm and nature preserve that supports community feeding, health, and subsistence. While the mission and activities are not necessarily unique, it is unique that this organization operates on a lease of a state park. Such public-private partnership could provide unique access to land for local food services that provide direct community benefit as opposed to private profit.
- **Mahi'ai Matchup.** A competitive program supported by Kamehameha Schools (the largest private landowner in the state), in which agricultural leases are presented based on a business plan pitch that emphasizes a multiple-bottom line (economics, culture, community). While this program has been limited and small-scale to date, it is a potential model for redistributing agricultural lease lands to individuals who are dedicated to community impact and local agriculture.
- **Da Bux.** A local program largely funded through private philanthropy that matches the federal SNAP program, doubling the purchase power for SNAP users to purchase locally grown foods. This has the double outcome of increasing demand for local food while allowing access to healthy, local foods to our most disadvantaged populations, which are disproportionately Native Hawaiian and Pacific Islanders.
- **Legalize Pa'i 'Ai.** Not an organization, but a movement that sought to provide regulatory exemption for a traditional food production method. Ultimately SB101 was passed in 2011 (although with amendments that removed the practitioner suggestions and put the rule-making authority under the Department of Health). The grassroots effort to move this bill forward also spawned in "Ku'i at the Capital," in which thousands of proponents of our Native foods gather at the State Capital on opening day to bring awareness to our local legislators.

- **Nā Moku Aupuni O Ko‘olau Hui.** A non-profit collection of Native Hawaiian kalo farmers and subsistence gatherers fought, and recently won, and 20+ year legal battle against the state, claiming the state of Hawai‘i violated water leasing laws by allowing the endless renewal of large, temporary water permit to a massive land-holder without environmental review. The reaffirmation by Hawai‘i’s supreme court of the important of cultural subsistence and environmental health is an important victory for Native Hawaiian communities that persist in our remote regions.

Actionable Items

The main progress towards an equitable and just local food system have been made by small, grassroots organizations. While the barriers to growing Hawai‘i’s local agricultural system are substantial and many are not easily address by federal bodies, I offer a few key areas where potential action may have impact.

- **Infrastructure.** The historical trajectory of Hawai‘i has resulted in a severe lack of physical infrastructure necessary to support local food. While some of this can and should be accomplished by private businesses, in order to ensure equitable access and opportunities for Hawai‘i’s 7,000+ small farms, public-owned, or at least not-for-profit, infrastructure is essential. Federal infrastructural investment into state lands and facilities could catalyze projects to overcome some of the needs and spur private investment. For instance, the Hawai‘i ‘Ulu Producers Cooperative operates in a state-owned warehouse, but has outfitted that warehouse with over \$1 million in equipment and building upgrades.
- **Capital.** Access to reasonable capital is a constant bottleneck for players at all levels within Hawai‘i’s food system. Generating loan funds that offer fair rates, with barriers to access and reporting that are not onerous, could overcome some of these issues without requesting a handout. Of particular emphasis should be the access of capital for Hawaiian Homeland recipients, who are often socially disadvantaged and due to not owning the land cannot access normal lines of capital.
- **Community and Indigenous Health.** Furthering funding on community health and equity plays to the strengths of many of the most impactful organizations. This includes mental and physical health. Any opportunities to better tie agriculture and engagement with land to mental and physical health outcomes would support better integration of our food, land, and community health.
- **Environmental Advocacy.** Furthering any agendas or advocacy regarding environmental health, and particularly regulating the environmental impacts of agriculture, levels the playing field between small producers, who tend to engage in more environmentally friendly and diversified practices, and large-producers, who tend to have substantially higher inputs, impacts, and reduced labor.
- **Farm Bill.** The farm bill inherently subsidizes much of the large-scale commodities in the market, skewing the price of food to support highly processes wheat and corn products, and fundamentally placing all other agricultural forms and products at a disadvantage. Improved support for “specialty crops” and rural development would aid in supporting diversified, small producers.



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