Waimea Farmer Needs Assessment

THE KOHALA CENTER®

Project Supervisor: Nicole Milne
Agricultural Intern: Marielle Hampton

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1. INTRODUCTION

Hawai‘i’s farming communities are in transition, as the average age of farmers in Hawaii continues to rise. Today the average age of Hawai‘i’s farmers is 61.8, up slightly from 60.4 years of age in 2012 (U.S. Census, 2018). A total of 2,057 of Hawai‘i’s farmers, or 28%, have been operating farms for less than 10 years and are considered beginning farmers according to the USDA definition. The farming and ranching community of Waimea, on Hawai‘i Island, is displaying similar trends as new farmers enter into the industry, and refine and expand their operations, and long-time producers begin to think about retirement.

In 2018 the State of Hawaii’s Department of Agriculture (HDOA) initiated a project to further support Waimea’s agricultural community. HDOA contracted with SSFM International to develop a Master Plan for the Kamuela Vacuum Cooling Plant (KVCP), a state-owned post-harvest facility located in Waimea. In addition, HDOA contracted with The Kohala Center (TKC) to conduct a needs assessment of farmers in the Waimea area. The objectives of TKC’s needs assessment were to 1) better understand the demography of the local agricultural community, and 2) capture the future plans and needs of existing farmers, in order to provide the Hawaii Department of Agriculture with community-grounded recommendations on the future of the KVCP.

The Kamuela Vacuum Cooling Plant is located on over 3 acres of land adjacent to the Lalamilo Farm Lots on Mamalahoa Highway in Waimea, Hawai‘i Island. In 1993 the Kamuela Vacuum Cooling Cooperative (KVCC) entered into a 35 year lease agreement with HDOA to manage the facility, which provides farmers with cooling and cold storage infrastructure, and a plug-in and loading dock for inter-island shipping. A total of 12 farmers belong to KVCC with approximately 9 members actively using the KVCP facility. Approximately 7 million pounds of food pass through the facility annually, with 1.1 million pounds of produce chilled via the facility’s vacuum cooling chambers.

This project collected and consolidated information from 30 farmers in the Waimea area through structured in-person interviews; survey questions covered a range of topics related to farming, including production challenges, interest in proposed services, land access, infrastructure and equipment needs, and more. Project recommendations include: 1) technical assistance for individual farmers to facilitate compliance with the Food Safety Modernization Act (FSMA); 2) infrastructure upgrades to the KVCP to bring the facility in compliance with FSMA; 3) cooperative development assistance and training, including growing the size of KVCC and bulk purchasing programs for members/area growers; 4) and further research to determine the demand for a certified commercial kitchen or market at KVCP.

The completion of the State-funded Kamuela Vacuum Cooling Plant Expansion Master Plan and Feasibility Study (SSFM, 2019) and this report provide the State, KVCC, and local stakeholders with an opportunity to engage and generate momentum for continued development of local agriculture, including both KVCC and KVCP, with the end goal of supporting the viability and longevity of production agriculture in the Waimea region. At their June 2019 Annual Meeting KVCC elected a new Board of Directors. Current board membership includes

representation from diverse farming histories and production styles. It is recommended that the Hawaii Department of Agriculture deepen their relationship with the KVCC Board of Directors via discussions of the recommendations put forth in the SSFM and TKC reports, and promote community support for any modifications being considered for the KVCP.

2. OBJECTIVES

In 2018 the Hawaii Department of Agriculture (HDOA) contracted with SSFM International to develop a Master Plan for KVCP. Concurrently, HDOA provided funding to The Kohala Center to conduct a needs assessment of farmers operating in and around the town of Waimea, Hawai‘i Island. The objectives of the needs assessment were to 1) better understand the demography of the local agricultural community, and 2) capture the future plans and needs of existing farmers, in order to provide the State Department of Agriculture with community-grounded recommendations on the future of the Kamuela Vacuum Cooling Plant.

3. METHODS

Survey design

Survey content was designed to facilitate learning around the demography of the Waimea area agricultural community and the current needs and future plans of local farmers. TKC's agricultural intern served as the primary researcher, supervised by TKC's director of food and agricultural initiatives. To design the survey, the supervisor and intern met with the Chairperson of the Hawaii Department of Agriculture (HDOA) and other HDOA staff, and consultants from SSFM International. The intern consulted other surveys used for farmer needs assessments in Hawai‘i and across the U.S., including farm transition surveys. Using this information, the intern developed a survey tailored to Waimea farmers and the KVCP planning initiative. Several drafts were reviewed by the project supervisor and the survey was pre-tested with two farmers before the final survey was completed. Survey topics included: challenges and barriers, labor, markets, food safety, pricing, transportation, storage, retirement, technical assistance needs, and potential infrastructure initiatives. For the complete survey refer to Appendix C.

Participants and interviews

A contact list for Waimea farmers was developed based on KVCC membership, farmer and buyer input, and farmers' market outreach. Interviews were scheduled and conducted with farmers between July and August, 2018. The intern conducted 33 interviews with farmers. This report excludes data from 3 farms due to project eligibility criteria: participants must own or operate a farm business in Waimea, meet the USDA definition of a farm by earning at least $1,000 annually in gross sales of agricultural products, and be over 18 years of age. Therefore, a total of 30 interviews with Waimea farmers comprised the data for this report.

Typically, the interviewer would drive to the interviewee's farm and sit with the farmer(s) in an office or garage to conduct the survey. On several occasions, farmers met the interviewer in another location due to convenience or farm accessibility. At each interview, the intern first

explained the purpose of the survey and allowed each participant to read and sign the consent form. Consent forms were filed in a project binder kept by the interviewer. The interviewer then recorded audio files of each meeting with an iPad and a microphone clipped to the farmer's lapel or set on the table. The audio was recorded onto the iPad using the Tapmedia Voice Recorder application, and then uploaded to a backup folder using cloud computing once connected to the internet. The iPad, application, and all uploaded files were password protected. The interviewer also took notes during the interview using a hard copy of the survey, which were filed in the project binder.

The interviewer would first ask the eligibility questions. If the interviewee(s) did not meet the eligibility criteria, a condensed version of the interview would be given. In these instances the survey results were excluded from the final analysis. With eligible entities, the interviewer would ask each survey question if relevant, skipping irrelevant sections such as labor questions for farms without employees. The interviewer asked unscripted follow-up questions when further clarification was needed. Interviewees received a gift-wrapped bag of macadamia nuts as a token of appreciation at the interview. After the interviews, survey responses were recorded manually into SurveyMonkey based on the handwritten notes, with audio records referenced when further clarification was needed; automated transcriptions were made for each interview using the Tapmedia application.

Notes on methodology

Two significant farm operations in Waimea were not interviewed for this project: Wow Farms and Hirabara Farms. These are important farms for the region and should be consulted in planning for the future of the Kamuela Vacuum Cooling Plant. Two farmer-landowners in Lalamilo were also not interviewed–H.T. Hori Farms and Onodera Farms; the owners of both farms belong to the Kamuela Vacuum Cooling Cooperative.

Throughout the course of this project the intern was dating a farmer with a business in the project area. This was generally disclosed to interviewees as a way of introduction, as the majority of the surveyed farmers knew the individual. This may have resulted in the reluctance of some interviewees to discuss sensitive business information.

4. SURVEY FINDINGS

Participant characteristics

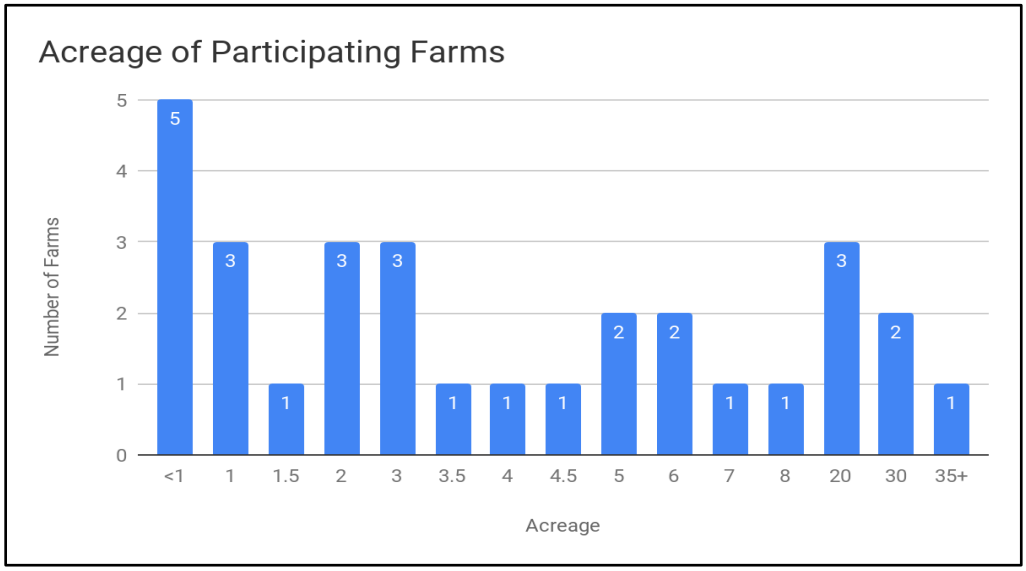
The age of participating farmers ranged from 28 to 75 years old. A total of 60% of participating farms were owned by farmers aged 60 or older; only 23% of participating farms were owned by farmers under age 45. Self-described ethnicities included Caucasian (40%), Japanese (33%), Native Hawaiian (26%), Chinese (10%), and Hispanic (6%). About one third of farmers described themselves as more than one race. Participating farmers had a wide range of agriculture experience, from 1 year to about 55 years. One third of surveyed farmers had at least 40 years of experience and about half of surveyed farmers had at least 25 years of experience. A total of 40% of those interviewed would be considered beginning farmers, with ten years of

experience or less. A total of 12 surveyed farms (40%) were members of the Kamuela Vacuum Cooling Cooperative.

Operations

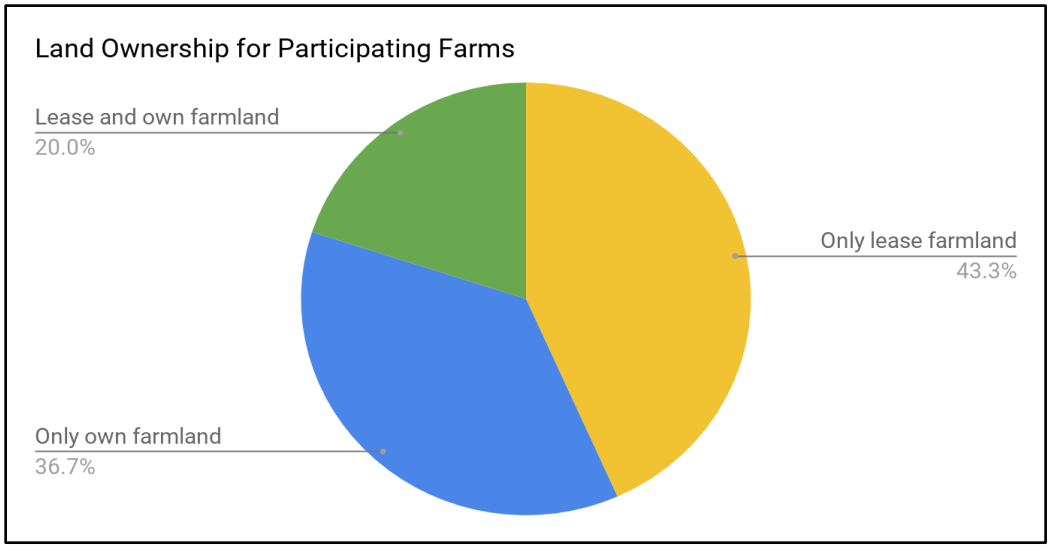
Acreage

The production acreage of surveyed farms ranged from 900 square feet to 100 acres. A total of 26% of farms (8/30) had one acre or less, 53% (16/30) had 1.5 to 10 acres, and 20% (6/30) of farms had at least 20 acres.



Land

Approximately 57% of surveyed farms owned agricultural land while 43% of farms only farmed on leased land. About half of participating farms had land in the Lalamilo Farm Lots. The remaining half of surveyed farms were located near Pu‘ukapu or Mana Road area.



Labor

A total of 73% of participating farms were family operations with at least two family members working for the business. Only half of the participating farms had employees and the number of employees at these operations ranged from 1 to 30. Only three farms had more than eight employees.

Crops

The most commonly grown crops, in order, include:

1. Lettuce
2. Beets, broccoli
3. Cabbage, cucumbers, tomatoes, kale
4. Zucchini, herbs

Other crops grown by participants include carrots, chard, Chinese cabbage, daikon radish, mustard greens, microgreens, radishes, flowers, and potted plants (i.e., orchids, fruit trees and native plants, berries, and squash).

Only one surveyed farm was USDA Certified Organic. However, almost half of all surveyed farms stated that they only use organic methods or do not use "chemicals". One farm had been USDA certified organic in the past. The most common reasons farmers were not interested in organic certification were cost and paperwork. Some farmers had concerns about the management or practices of the USDA National Organic Program.

Farm and business evolution

Farmers were asked about what changes their farm has experienced in the last 5-10 years. Nine participants (30%) talked about their businesses growing, and six individuals (20%) discussed scaling back or downsizing. Four farms mentioned that they had built at least one greenhouse. A couple growers mentioned that their farm business is constantly changing.

Challenges/barriers

Finding and maintaining a good workforce was one of the major issues for surveyed farmers, mentioned by about 26% of farmers. Regulations were another commonly mentioned barrier. Sixteen percent of farmers are concerned about food safety regulations. Several farmers specifically mentioned the rising costs of labor due to worker's compensation and other required benefits, while others talked about issues with the County regarding building requirements. Thirteen percent of farmers discussed the challenges of markets or marketing. Twenty-three percent of farmers cited weather as a major challenge, 13% talked about disease pressure, and 13% of farms mentioned pests. A few farmers talked about consumer perceptions of food safety, especially as it relates to rat lungworm disease. One farmer said that it was difficult to find chemicals approved for use on various crops and mentioned that insects develop resistance quickly. Two farmers mentioned the challenge of finding suitable land and one noted the

difficulty in obtaining capital or financing. Several farms talked about the difficulties of logistics as they relate to transportation or machinery.

Production assistance sources

The most common source of production assistance cited by farmers was the Internet, followed by 'other farmers'. A total of 33% of farmers rely on university extension services. Some farmers turn to books, magazines, and other publications to answer production questions, while others rely on consultants and expertise gained at trade shows. Some farmers in Lalamilo often consulted with chemical/fertilizer companies on the island, such as Nutrien Ag Solutions (formerly Crop Production Services). Farmers also mentioned that they used to have more interaction with extension agents, who would come out to visit farms and attend monthly KVCC board meetings; farmers expressed the desire to have more communication with extension agents.

Need for land

Only 16% (5/30) of surveyed farmers were willing to lease more acreage immediately, with two farms specifying that it depends on factors including labor availability and land quality. Of those farms, two are already in the process of leasing additional land. Two additional farms would potentially lease more land under optimal conditions, such as flat, affordable acreage located nearby in good condition. There is immediate demand for agricultural land from 1 to 15 acres in size; farmers looking for land in this range noted that existing landowners willing to lease land are an ideal source for this acreage. The total aggregated acreage requested immediately is approximately 90 acres. Approximately 70 acres is in process of lease negotiation, leaving an unsatisfied demand of approximately 20 acres. About the same number of farms (5/30) would be interested in leasing additional land in the next five years, for a total of 250 acres.

Water

Almost all farms used County water, and the majority also used the Waimea Irrigation System. Only one farmer surveyed did not have access to potable water. Most farmers were satisfied with their water services, with a few notable exceptions. Several farmers cited issues with the process of obtaining meters, especially the long wait times for installation or removal. One farmer said that the County only allows the use of limited quantities of potable water unless the user purchases a meter which costs approximately $50,000. Farmers on residential land may not be able to access more affordable agricultural water.

Farms that need to come into compliance with FSMA's Produce Rule will have to begin expensive ($90 minimum per test, 20 tests in first 2-4 years and 5 tests/year thereafter) microbiological testing on the Waimea Irrigation System water in the next five years, as they depend on surface water. Some farmers also mentioned that the irrigation water carries crop diseases, such as *Pythium* spp.

The business side of operations

A total of 70% of surveyed farms used software (QuickBooks) to track sales and expenses. Other farmers used computer spreadsheets or pen and paper, with only two farms not tracking their sales and expenses. Half of the farmers interviewed had no employees and therefore no payroll. About 70% of the farmers with employees used a payroll service, and the remaining 30% of farms processed their own payroll.

A total of 56% of farmers surveyed knew their costs of production. Constant changes in prices for shipping, inputs, and labor made it difficult for some of the larger operations to know their exact costs at a given time. A little over half of surveyed farms set prices based on their market research and almost half used their cost of production in setting prices. About 25% said buyers set their prices. About 16% of farmers mentioned that they had not changed their prices in 2-5 years, with a few having raised their prices in the last year.

Almost all farmers expressed interest in seeing more market information. Many larger farms desire the market information previously offered by USDA, and some requested the landed price of crops imported from the continental U.S., such as tomatoes, cucumbers, lettuce, and cabbage. Small farmers were interested in prices for other Hawai‘i Island markets including Kona and Hilo. Organic farmers are interested in organic prices.

Labor issues

Almost all farms with employees expressed difficulty with finding labor. Established farms often noted that expanding production was not currently feasible due to labor constraints. Several greenhouse operations noted that indoor production was partly driven by their challenges finding labor, as employees prefer not to work outdoors. A few farms have used housing and other incentives like vacation time or profit-sharing to help retain workers. A couple farms wanted to have fewer employees, but were limited by workload and quality of labor. By far, the most common method for finding labor was word-of-mouth, followed by Craigslist. Some farmers had success finding workers by hiring family or friends of existing employees.

Several established farms had developed a reliable core crew over time, but newer operations often struggled with absenteeism. One farmer noted that providing on-farm housing prevents employees from skipping work. A few larger farm operations mentioned that workers often leave to work at hotels. Several farmers mentioned they had high turnover rates among their workers; however at some well-established operations, employees have worked there for decades.

One farmer requested worker safety training materials translated into Filipino languages, and another mentioned language barriers could be an issue with labor, especially in obtaining necessary paperwork for employment or transportation (e.g., driver’s license).

Farm needs

Food Safety Modernization Act (FSMA)

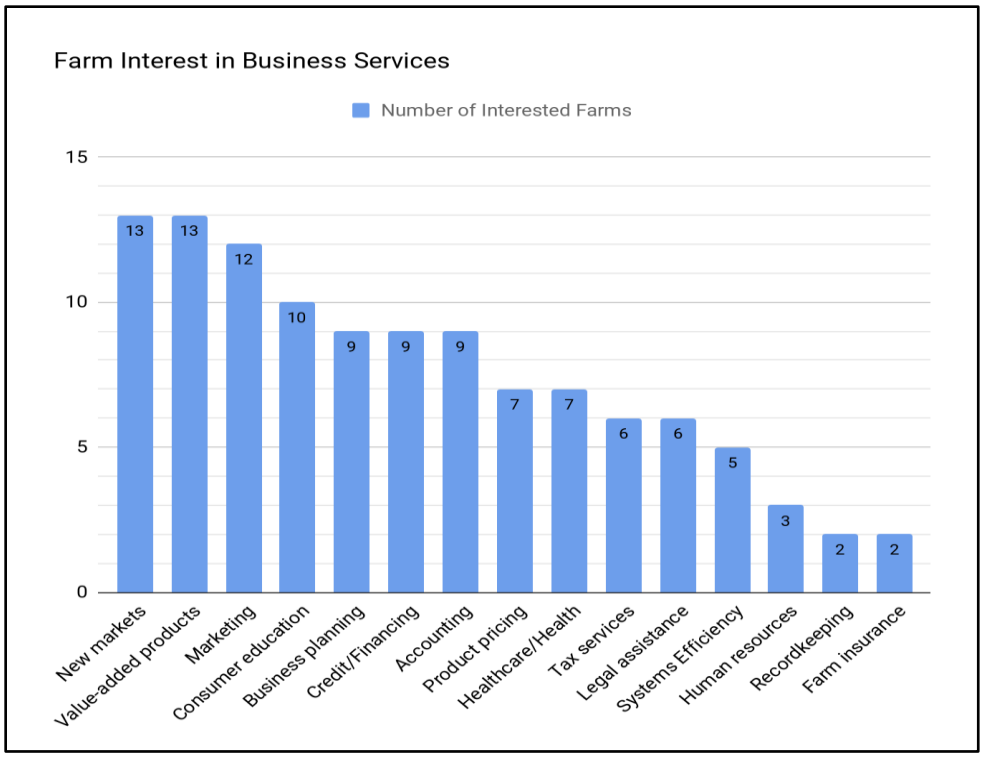
Based on the interviewer’s knowledge of each farm’s business as a result of this survey, the majority of surveyed Waimea farms will be granted some form of exemption due to income

and/or markets (less than 50% of volume to wholesalers/distributors). Of the remaining surveyed farms that will be covered under the FSMA Produce Safety Rule, a total of four to five of the farmers are already third-party certified for good agricultural practices. The survey responses suggest that less than 10 Waimea farms will need to come into compliance in the next five years. Efforts to assist farmers with FSMA compliance should focus first on this small segment of growers in order to establish the necessary procedures by working with food safety educators, developing Food Safety Plans, creating worker trainings with visuals and/or translations, and establishing water quality baselines by testing *E. coli* levels in agricultural water (e.g., for irrigation, crop sprays, post-harvest practices, etc.).

Storage

One third of surveyed farms are in need of additional storage as soon as possible. Of those farms, 90% need cold storage and 60% need dry storage. Farms prefer on-farm storage, but some would be willing to use off-farm storage. Two farms mentioned an interest in freezer storage if they were able to make value-added products. Approximately 20% of farms anticipate needing storage in five years. About 13% said their storage needs were unknown and depend on whether they or their successors grew or diversified the farm business.

Farm interest in business services



Farmers were asked whether or not they had an interest in a list of business services. The most popular services requested related to finding new markets and value-added product

development. Assistance with business planning, credit/financing, and accounting were also requested by about 30% of surveyed farms.

Website management (1 farm) and cost of production analysis (1 farm) were also requested. Value-added products mentioned by farmers included frozen produce, pickled vegetables, dried herbs, and fruit preserves/products. Several farms passing the business on to their children as successors anticipate a desire for business development assistance.

Supplies

Seven surveyed farms mentioned that it was challenging to purchase supplies affordably, such as boxes or labels, as a small operation. Other supplies requested included fertilizer, harvest bins, nursery supplies, and cover crop seed. These farms expressed interest in cooperative bulk purchases in the "Interest" section below.

Equipment

Over 55% of farms need at least one piece of equipment, typically tractor implements. Five farms requested at least one tractor. One farm needs a BCS or walk-behind tiller. Only two farms requested equipment for washing, such as a stainless steel sinks or a barrel washer. Several farmers noted difficulty finding aluminum pipe for irrigation.

Buildings and energy systems

About two thirds of surveyed farms expressed a need for at least one new building on their land. Greenhouses were the most common need, followed by packing houses and storage structures. One farmer mentioned a need for on-farm worker housing. Several farms were interested in building a certified kitchen on their property. Almost half of surveyed farms expressed interest in installing alternative energy systems on their farm, particularly solar energy. One farmer surveyed has an off-grid operation without electricity.

Transportation

The majority of surveyed farms provided their own transportation services for deliveries. Several farmers had complaints with the inter-island shipping process. Some farms shipping off-island expressed concern that shipping is exempt from food safety requirements (per the FSMA Final Rule on Sanitary Transportation of Human and Animal Food), leaving farmers responsible for any problems that may arise during transport. Respondents mentioned that shipping containers are often not clean; with mold or broken glass inside that farmers have to clean before loading. Respondents also noted that containers may sit out in the sun for hours or even overnight, changing the container's internal temperature. Lastly, respondents stated that on the receiving end of the port, customers can wait in long lines to pick up containers and are sometimes turned away at the end of the day and told to come back tomorrow.

New crops

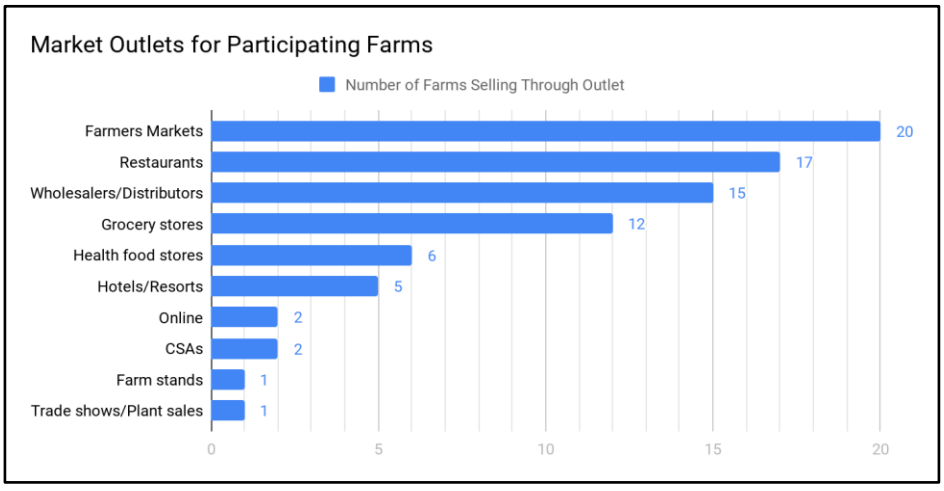
Farmers named a wide range of crops they would like to try or have not yet had success growing. In order of popularity, these include:

1. Sweet onions
2. Tomatoes
3. Cucumbers
4. Eggplant
5. Asparagus
6. Peppers
7. Celery
8. Potatoes
9. Mints
10. Blueberries
11. Hops
12. Tuberose
13. Radishes
14. Beets
15. Squash
16. Mizuna
17. Cover crop

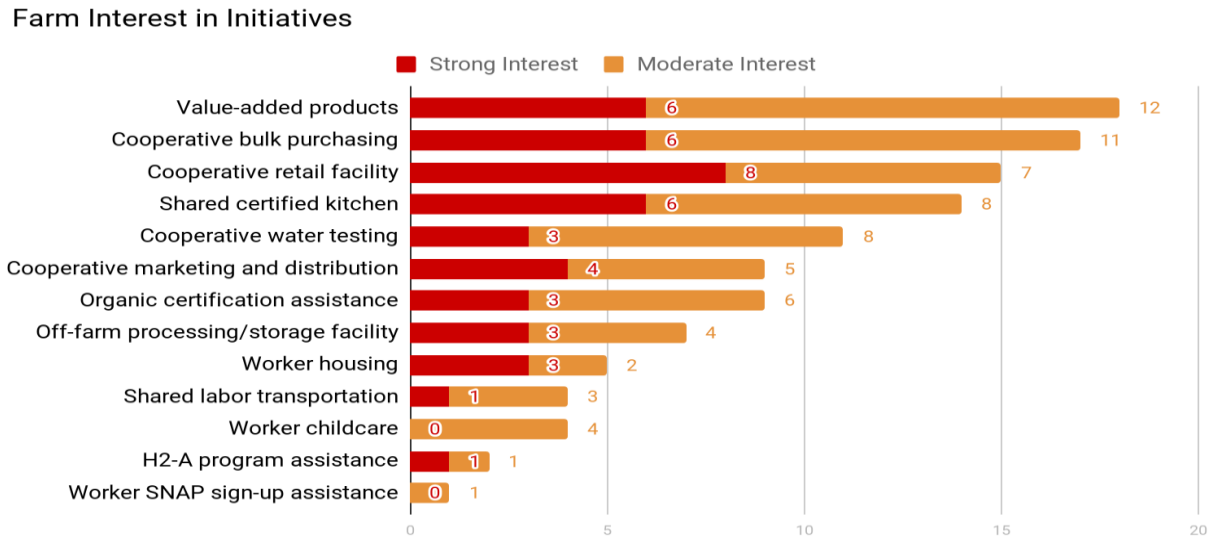
Markets

All participating farms sold to on-island markets. A total of 40% of farms (12/30) sold crops off-island (O‘ahu, Maui, and Kaua‘i). No fresh produce farms sold to the continental U.S. markets or buyers in other countries. Several nursery or flower growers had end markets outside of the state, but none sold to these markets directly.

Sixty-six percent of participating farms sold at farmers’ markets, making it the most common sales outlet for surveyed farms. The next most popular outlet was restaurants (56%), followed by wholesalers/distributors (50%), and grocery stores (40%). A few farms sold to farmers’ markets exclusively. One farm sold through an on-site farm stand. Only 6% of farms sold to community supported agriculture (CSA) markets, and the remaining farms expressed no interest in selling to CSAs in the future. No farms sold direct-to-institution, though some wholesalers are known to sell to institutions such as schools or military bases; only one farm expressed interest in selling to this market. One farm sold potted plants at trade shows or plant sales. Two farms sold their products online; these farms were not produce operations.



Initiatives



Value-added products

Twelve farms (40%) expressed moderate interest in creating their own value-added product, and six expressed strong interest. Farms expressing moderate interest often planned to do value-added products in the future but were not ready to produce them at the time of the interview. Several large operations in Waimea have significant quantities of off-grades or crops left in the field, up to 1 ton/day in some cases. Some farmers surveyed stated that a certified kitchen is a good idea, despite having no need for it themselves. One farmer feels they are more profitable as a producer, rather than doing value-added products, and that their farm would only be interested in doing value-added if it was done through a cooperative model.

Cooperative purchasing for farm inputs

More than half of surveyed farms expressed some interest in cooperative bulk purchases for farm inputs. Six farms indicated strong interest in bulk purchasing and eleven expressed moderate interest. Requests for bulk purchases in order of popularity include cardboard boxes, fertilizer, potting media, seeds (e.g., cover crop), and harvest containers. Some farmers suggested that it no longer makes sense to do bulk purchases for certain items such as fertilizer, as the increased volume does not significantly impact the price per unit. Follow-up research about specific items, pricing, shipping, and other bulk purchase options could provide insight into the value of this initiative.

Cooperative retail facility

There was significant interest in a cooperative retail facility such as a farm stand, on-site store, or a farmers' market (half of surveyed farms stated moderate or strong interest). However, further research is needed to determine consumer demand for such an outlet. For example, if a farmers market was developed on the KVCP site, it is necessary to gauge the potential for

cooperation among current Waimea farmers markets and vendors to merge and change locations. In the past few years, existing markets have splintered, resulting in a total of four markets in Waimea on Saturdays. There are currently eight farmers markets operating in or around the Waimea area on a weekly basis.

Farmers Market	Town	Day of the Week
Waimea Midweek Market at Pukalani Stables	Waimea	Wednesday
Waimea Town Market at Parker School	Waimea	Saturday
Kamuela Farmers Market	Waimea	Saturday
Waimea Homestead Market	Waimea	Saturday
Kuhio Hale Farmers Market	Waimea	Saturday
Keauhou Farmers Market by the Kona County Farm Bureau	Kona	Saturday
Hawi Farmers Market	Hawi	Saturday
The Farmers Market at Hāmākua Harvest	Honokaʻa	Sunday

Shared certified kitchen

Farmers shared concerns about a certified community kitchen, such as the rules for user eligibility, how hours are allocated, and the potential for unfair user preferences or priorities for different farmer groups. About 5 farms are considering building their own certified kitchen facility on-farm. The Waimea Nui Project, located on Department of Hawaiian Homes land in east Waimea, broke ground in 2016 and plans to eventually provide a shared certified kitchen, but some homestead farmers stated they would use another facility in the meantime.

Cooperative marketing and distribution

Four farms expressed strong interest in cooperative marketing and distribution for their crops. Five indicated moderate interest. One farmer spoke positively about their past experience with a cooperative that would organize bulk purchasing of boxes, fertilizer, and other inputs, and provide steady paychecks for farmers.

Off-farm processing and storage

Three surveyed farms expressed strong interest in an off-farm processing or storage facility, and four farms indicated moderate interest. More research is needed to assess the level of

demand for off-farm processing and storage should KVCP modifications be considered for these purposes.

Cooperative water testing

Three farmers had strong interest and eight had moderate interest in cooperative water testing, to reduce the cost of FSMA compliance. This initiative must be evaluated for feasibility after the FSMA Produce Safety Rule's requirements for agricultural water are finalized. Farms will not need to participate until the compliance date, after final guidance for FSMA's agricultural water rule.

USDA Organic certification

Three farms had a strong interest in becoming USDA certified organic, and six had moderate interest. Several farmers mentioned that the desire to be certified organic depends on the potential price premium.

Farm worker initiatives

Three farms expressed strong interest in worker housing and two had moderate interest. Only one farm had a strong interest in shared labor transportation with three farms indicating moderate interest. Three farmers mentioned using H2-A or other seasonal worker programs in the past with mixed success. H2-A rules require that jobs be advertised throughout the continental U.S. and pay for travel and housing, and one farmer said this resulted in unreliable workers seeking a trip to Hawai‘i. Four farms had moderate interest in worker childcare; no respondents indicated strong interest. Only one farm had any interest in receiving assistance signing their workers up for the federal Supplemental Nutrition Assistance Program (SNAP).

Future farm plans

Goals and considerations

Larger-scale older farmers are concerned about the effect of government regulations and food safety concerns. Some older farmers stated that they would like to be able to have more time for family and hobbies. Young farmers expressed a desire to expand their operation. Almost all larger-scale farms are concerned about the availability of labor. Another common goal shared among farmers was continuing to produce high-quality fruits or vegetables. Farms looking to expand are concerned about finding land. Very small farms want to maintain a rewarding lifestyle based on principles of sustainability.

The future of Waimea farming

For the most part, surveyed farmers were not optimistic about the future of agriculture in Waimea. Many feel the farmland values are too high to support farming, and they see a lack of interest from the younger generation. Farmers foresee less small farms, more big farms, and outsiders [to Hawai‘i] coming in and taking over land or operations. Some farmers also predict

more greenhouse operations in the Waimea area. A few growers mentioned that there are some new farmers with a focus on sustainability.

What farmers would do differently?

Most farmers stated that they would not have done anything differently with their farm given the chance to do it again. Some young farmers wished they invested in mechanization and better equipment sooner. Several farmers wished they had taken certain steps sooner, such as moving their operation to better land or hiring consultants. One part-time farmer wished they had gone full-time into farming rather than take off-farm jobs.

Advice for new farmers

Surveyed producers were asked what advice they would give to new farmers, with wide-ranging and sometimes contradictory results. For example, one farmer advised "do it!" while another suggested, "don't do it". Despite these divergent attitudes, several themes were repeated throughout the interviews. According to surveyed growers, farmers should have a passion or love for their career, as it is a challenging path and not necessarily very profitable. Another common theme was persistence; in the face of setbacks and difficulties, farmers must find ways to continue forward and not to give up. Several farmers offered more specific advice, such as pursuing education through agricultural classes and training programs, or choosing high-quality land for their operation.

Retirement plans

About 36% of surveyed farmers intend to retire in the next five years. Other farmers plan to scale back without fully retiring. About 27% of surveyed farmers hope to pass the business down to a successor whenever they retire. A few of the interviewed farms had completed the transition (generally within the last five years). One farmer noted that even though their operation is very profitable, the potential successors were uninterested in taking over the business.

Farmland plans

Of farms with owners eventually planning to retire, only 20% plan to lease their land to another farmer. Up to 60 acres of Waimea agricultural lease land may be given up in the next ten years. A number of growers with leases with the Department of Hawaiian Home Land were concerned about the future of their farms, as they had not identified a qualified successor for their land with the required blood quantum to take over the lease. In general, farm landowners expressed interest in finding a good steward for the land who will keep it in agriculture.

5. RECOMMENDATIONS

Several recommendations were developed based on the results of the survey. Recommendations are grouped into five key areas: a) food safety and KVCP operations; b) cooperative development; c) on-farm infrastructure, supplies, and equipment; and d) land access.

Recommendations are to be considered by the Hawaii Department of Agriculture, Kamuela Vacuum Cooling Cooperative, The Kohala Center, and other local entities focused on community-based economic development on Hawai‘i Island. To evaluate the economic feasibility of any proposed services through the KVCP facility, additional outreach is needed with non-farm stakeholders such as value-added producers.

a. Food safety and KVCP operations

Several Waimea farm businesses have changed hands in the last five years and other businesses are currently for sale. As farmers scale back or retire over the next five to ten years and land becomes available, existing Waimea farmers will expand their operations and new farmers will join the local agricultural community. Farmers will need access to food safety certified post-harvest facilities, whether on- or off-farm, to facilitate market development and farm viability. Having a facility like KVCP available for farmers in the area is so important as it reduces the financial burden of bringing post-harvest cooling facilities onto their respective farms and investing in distribution infrastructure to maintain the cold chain while they bring their product to market.

Recommendations concerning food safety and KVCP operations are provided in the following areas: 1) KVCP FSMA upgrades; 2) farm FSMA compliance; 3) storage/cooling upgrades, 4) wash/pack facility, 5) certified commercial kitchen, 6) collective marketing and co-packing services, 7) meat processing, and a 8) KVCP/KVCC on-site manager position.

KVCP FMSA upgrades

The priority recommendation from this assessment is bringing the KVCP facility into compliance with FSMA. A food safety plan should be developed for the KVCP facility that responds to the requirements under the FSMA. The State should work with its tenants, currently KVCC, to ensure the plan is enforced. The facility must have backup power sufficient to run without electricity in the case of outages; this is a food safety concern and should be included in the list of priorities for the upgrade. As FSMA inspections are scheduled to begin in 2019, this process should be undertaken as soon as possible. Local organizations, such as The Kohala Center, are able to work with KVCP/KVCC on identifying financial and human resources necessary to maintain compliance with FSMA, such as managing the facility’s food safety plan, engaging pest control services, etc. Additional farmers from Waimea and the nearby communities of Honoka‘a and North Kohala may consider using the facility and joining KVCC if the facility was compliant with FSMA; increased membership could help minimize member costs associated with usage (e.g., energy) and provide funds for maintaining FSMA compliance and associated services.

Farm FSMA compliance

Based on this survey, approximately six to eight Waimea farms will be covered, or required to comply, with the FSMA Produce Safety Rule that are not currently third-party food safety

certified. Other farms will likely be eligible for a qualified exemption based on their buyers and their income levels, and very small farms will be exempt due to their income levels. Funding and services for food safety plan development, employee training, and other necessary upgrades should focus on FSMA-covered operations currently lacking certification in order to prevent them from being forced out of business by new regulations. At least three uncertified covered farms stated that they intend to retire or shut down the business when these requirements come into effect due to the increased financial and administrative burden. Farms covered by the FSMA Produce Safety Rule can work with FSMA coordinators at the University of Hawai‘i and local organizations, including The Kohala Center, to prepare for third-party certification or compliance. This may involve Group GAP certification, development of Food Safety Plans for individual operations, facility planning for KVCP, and on-farm wash/pack operations as needed.

Farmers with third-party food safety certification or those covered under the FSMA's Produce Safety Rule expressed interest in cooperative agricultural water testing if feasible. The Produce Safety Rule requires a sampling schedule for agricultural water used for growing activities to create a microbial water quality profile. The profile is a collection of up to 4 years of water quality results, with frequency of testing determined based on the water source, with ground water requiring 4 or more samples and surface water requiring 20 or more samples. According to local water testing services, the relevant tests cost a minimum of $90 each. Hawaii Agriculture Research Center currently offers tests for $10 per sample and hopes to provide the service statewide.

Storage/cooling upgrades

Food storage and cooling upgrades could be implemented to accommodate different crops and facilitate increased KVCP usage. The operational reefer is maintained at approximately 35 degrees Fahrenheit (suitable for leafy greens), while the area's greenhouse operations typically grow cucumbers and tomatoes, requiring an ideal storage temperature of approximately 55 degrees Fahrenheit. Additional refrigeration unit(s) would allow the space to be shared by farms with crops requiring different storage conditions and promote crop diversity for current users. Adding a commercial ice machine could also encourage crop expansion by improving the quality and shelf life for produce like broccoli and sweet corn.

Wash/pack facility

Under KVCC's current model, where co-op members utilize the facility fairly independently of one another, members could utilize an upgraded space to wash and pack their produce, and continue to share facility use costs (e.g., utilities, maintenance, rent, insurance, bookkeeping, etc.). Demand for KVCP-based wash/pack facilities is limited to approximately seven surveyed farmers; additional farmers from Waimea and the nearby communities of Honoka‘a and North Kohala may consider using the facility and joining KVCC if the facility provided this infrastructure.

Currently, surveyed farmers interested in washing produce prefer to use or build wash/pack facilities on their own land for convenience and ease of compliance with food safety regulations. Larger farms can avoid washing their produce as it is simpler to ensure compliance with food safety certification if produce is unwashed, rather than obtaining certification for an on-site wash/pack facility. The existence of a food safety certified facility where produce could be washed may encourage farmers to expand into root vegetables, particularly small farmers who would not have the volume to purchase their own equipment. However this use is purely speculative as older farmers with large operations appear uninterested in diversifying their crops further and small operations did not indicate a need/desire for this use.

Certified commercial kitchen

Anecdotal evidence suggests there is demand for a shared certified commercial kitchen in the region, however only six farmers surveyed expressed strong interest in producing value-added products. Since completion of the survey, an additional farm and two value-added businesses expressed interest in commercial kitchen space in Waimea. Eight farmers surveyed expressed moderate interest in value-added products. Value-added products mentioned by farmers included frozen and pickled fruits and vegetables, dried herbs, juice, baked goods, tomato sauce, and salsa. Farmers currently using the KVCP facility were concerned about the increased traffic flow and congestion–between kitchen users, KVCC farmers, and shipping companies–in the parking lot that could arise if a commercial kitchen was built.

Meat processing

The Hawai‘i Island Meat Cooperative expressed an interest in utilizing the KVCP facility as a chill and cut/wrap facility. Given the concentration of ranchers in the Waimea area, a site to create value-added meat products may be a logical addition to KVCP if the facility is upgraded. However, in order to comply with food safety regulations and prevent cross-contamination, such a site must be located in a separate building and any animal-source waste products must be managed to eliminate the presence of pests, odors, and pathogens. KVCC has expressed their opposition to a meat facility on the site.

b. Cooperative development

Kamuela Vacuum Cooling Cooperative is central to the future and success of the KVCP facility. Most KVCC members are reaching retirement age, impacting the productivity and leadership of the organization. In order for the facility to continue serving local farmers, KVCC may need to increase membership participation and potentially diversify operations. The KVCC Board of Directors has an opportunity to work with the State and local stakeholders to guide the organization, increase membership, generate revenue, integrate additional services for food safety compliance, and expand member use through infrastructure additions and modifications.

Cooperative development training

Cooperative development and training is recommended for the KVCC to support proactive board leadership and engagement, evaluate financial viability, outline and think creatively about member roles and responsibilities, revisit and potentially update KVCC's bylaws to allow for broader membership (i.e., allow community members to join as a means of raising capital), identify opportunities and encourage special committee work, and potentially develop a strategic or wayfinding plan to guide and sustain the organization. These efforts may require assistance from outside cooperative and small business developers, such as The Kohala Center and Hawai'i's Small Business Development Center.

KVCP/KVCC on-site manager position

If the KVCP is upgraded to become FSMA compliant, it is recommended that KVCC, or any anchor tenant having responsibility for the facility, hire an on-site manager to support new and existing operations, and ensure compliance with all standards and regulations. Membership and/or the allocation of hours for a shared facility should be fair and unbiased, and the position should be supported by a wage agreeable to user-members. The following administrative job duties could be provided by an on-site manager:

a. bookkeeping including billing, accounting, banking;
b. food safety certification and audit preparation;
c. record-keeping (produce volume data, food safety);
d. pest services;
e. equipment and facility maintenance;
f. on-island and inter-island shipping;
g. bulk order coordination;
h. membership management and solicitation;
i. grant-writing for facility and/or co-op development;
j. advocacy in the State legislature for funding and relevant issues; and
k. market research.

Initially, KVCC or the State may choose to hire an independent contractor to manage the facility part-time, and this person may write grants or lobby for funding to support a salaried or long-term position.

Collective marketing and co-packing services

Future research may yield more support for cooperative marketing and distribution, and potentially a co-packing facility. Co-packing is when the packaging (and sometimes the processing) of a product is outsourced. A farm business will hire a co-packer when they do not have the necessary processing and/or packing capacity, machinery, or knowledge themselves. Co-packing services can include processing, special packaging, price labeling, marketing, and

distribution. Determining the feasibility of collective/cooperative marketing and/or co-packing requires working with farms that are likely to be in business for the next ten years, creating financial projections and pricing options based on current levels of production, crop prices, cost of production, and buyers' willingness to pay. If this service is pursued further, confidential details about pricing and produce volumes should obtained from farms interested in participating in any collective or cooperative endeavor, to ensure the success of KVCP users' farms and the success of the facility.

The management structure of the facility would be critical to its success and requires further study and outreach. Potential options for a managing entity or entities include, but are not limited to the following:

a. a local non-profit (e.g., Friends of the Future, The Kohala Center, etc.),
b. a local for-profit,
c. an anchor farm or value-added business,
d. a co-packer (facility leased by an anchor co-packer that specializes in purchase/wash/sell/delivery),
e. a cooperative, such as the existing KVCC ,
f. local/state government, and/or
g. a combination of these entities.

Follow-up research would be needed to explore the potential for these options, and further outreach must be conducted with the facility's current stakeholders to determine the financial viability and interest for the proposed operation. If an anchor business or co-packing entity was selected, HDOA would need to clearly define the entity's responsibilities and contractual obligations, and ensure that local farms did not lose access to the facilities. Alternatively, KVCC could hire a manager to collectively wash, pack, and market products for co-op members who lacked the capacity to wash/pack on their respective farms.

c. On-farm infrastructure, supplies, and equipment

Small farms looking to expand often had major equipment needs in order to mechanize and expand production. Several farms expressed a desire to grow but face barriers and concerns about "making the jump" to a larger-scale operation. The most commonly requested needs included greenhouses, washing and storage sheds, and tractors and tractor implements (e.g., plow, cultivating shanks, harrow blades, bearings, bed shaper, harvesting equipment, spader, sprayer, transplanter, and tiller). Additional needs included a commercial kitchen, a BCS tiller, stainless steel sinks and tables, a barrel washer, a packing line, and a seeding line. A number of farmers expressed interested in cooperative bulk purchasing for cardboard boxes, fertilizer, and potting media.

Hawai‘i's technical assistance providers to farm and ranch businesses (i.e., Farm Bureau, Hawai‘i Farmers Union United, The Kohala Center, etc.) should deepen their engagement with KVCC and Waimea-area farmers to help address these needs. Investment in infrastructure,

equipment, and supplies can facilitate production efficiencies on-farm and in post-harvest processing, allowing small to midsize operations to increase production and farm economic viability.

d. Land access

A total of 10 surveyed farms indicated that they have an immediate to 5-year demand for 170 acres of agricultural land in Waimea, a conservative estimate that is dependent on favorable conditions including labor availability, land quality, distance to existing farm, infrastructure, lease longevity, etc. Over the next ten years, surveyed farmer-landowners plan to sell an estimated 30 acres and lease an additional 60 acres. To ensure the viability of area farms, new farmers and expanding operations should connect with farmer-landowners planning to lease land to ensure that Waimea farmland stays in production and newer businesses can scale up efficiently. If connections are made between farmers seeking land and farmer-landowners or farmers selling leases, the increased demand for expansion may be satisfied by lands becoming available for sale or lease. Organizations like The Kohala Center have assisted in succession planning, and can continue to play a role in farm succession planning or transitions to new management, linking retiring farmers to younger producers, and potentially securing financial resources for purchasing land or businesses.

6. CONCLUSION

Farming in Waimea is poised to undergo major shifts in the next ten years. Many older growers plan to scale back and newer operations are moving into the area and expanding, including hydroponic greenhouses and a cannabis grower. Several larger farms may continue operations if family members or young farmers take over the business. However, this is only possible if farms can maintain profitability when faced with aging infrastructure, new regulations, and labor challenges. To sustain agricultural diversity and productivity in the Waimea region, the State and local stakeholders must provide infrastructure, financial support, technical assistance, and organizational guidance to develop food system leaders and self-sustaining businesses and initiatives.

APPENDICES

1. Informational postcard text
2. Consent form
3. Waimea Farmer Needs Survey

1. Informational Postcard Text

THE KOHALA CENTER®

Waimea Farmer Needs Assessment and Planning Survey

The Kohala Center is overseeing a graduate research project to inform the development of a Master Plan for the Kamuela Vacuum Cooling Facility for the Hawaii Department of Agriculture. Marielle Hampton is an M.S. Candidate in Agriculture, Food, and Environment at Tufts University's Friedman School of Nutrition Science and Policy. She is conducting interview surveys with Waimea farmers in summer 2018 to determine farmer needs and opportunities for the future of agriculture in the local community.

For questions or farm assistance, contact us!

Marielle Hampton
Agricultural Intern
(808) 430-1876
marielle.hampton@gmail.com

Nicole Milne
Program Director
(808) 987-9210
nmilne@kohalacenter.org

2. Consent Form: Page 1

P.O. Box 437462 | Kamuela, Hawai'i 96743 | +1 808 887-6411 | Fax +1 808 885-6707 | kohalacenter.org

THE KOHALA CENTER®

Waimea Farmer Needs and Planning Survey
Consent Form

You are being asked to take part in an interview survey for Waimea farmers conducted by Marielle Hampton for The Kohala Center. This survey represents the community outreach component for the development of a Master Plan for the Kamuela Vacuum Cooling Facility. Please read this form carefully and ask any questions you may have before agreeing to take part in the survey.

What the survey is about:
The purpose of this survey is to learn what Waimea farmers need for their businesses to succeed over the next five to ten years.

What we will ask you to do:
If you agree to participate in this survey, we will conduct an interview with you. The interview will include questions about your farm business, services and assets you may need, and your plans for the business in the future. The interview will take about one hour to complete. With your permission, we would also like to record an audio file of the interview.

Risks and benefits:

- There is the risk that you may find some of the questions about your business and future plans to be sensitive.
- The potential benefits include access to business services and initiatives to address the reported needs of participants and the Waimea farming community.

Compensation: There will be no compensation for participation in this survey.

Your answers will be confidential. The records of this study will be kept private. In any sort of report we make public we will not include any information that will make it possible to identify you. Interview records will be kept in a password-protected folder; only the interviewer will have access to the records. We will delete the audio recording of the interview after it has been transcribed, which we anticipate will be within two months of its taping.

Taking part is voluntary: Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. If you decide to take part, you are free to withdraw at any time.

If you have questions: The interviewer conducting the survey is Marielle Hampton. She can be reached at (808) 430-1876 or Marielle.hampton@tufts.edu. The supervisor for the survey is Nicole Milne at The Kohala Center. She can be reached at nmilne@kohalacenter.org or (808) 987-9210 Please ask any questions you have now.

You will be given a copy of this form to keep for your records.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the survey.

Your Signature _____ Date _____

Your Name (printed) _____

In addition to agreeing to participate, I also consent to having the interview audio recorded.

Your Signature _____ Date _____

Signature of person
obtaining consent _____ Date _____

Printed name of
person obtaining consent _____ Date _____

This consent form will be kept by the interviewer for at least three years beyond the end of the study.

3. Waimea Farmer Needs Survey

Survey Introduction

Thank you for agreeing to be interviewed for this farmer needs assessment and future planning survey. The findings of this survey will help inform the development of agricultural infrastructure and services for the Waimea region.

I have a list of questions I'm going to ask you, and I've provided a copy of the survey for you to follow along. My job is to ask you each of the questions and listen to your responses, making sure we cover everything in the survey without taking up too much of your time.

This interview will be like a conversation, except the goal is for me, the student, to learn everything that you, the expert, can share about what your business needs to succeed today and years in the future. That could mean expanding, buying equipment, reaching more markets, or even selling the business. I'm here to learn about your opinions and perspective, so there are no right or wrong answers.

As the consent form stated, everything you share is anonymous and we encourage you to be honest. However, if you feel uncomfortable with any of the questions, you can choose not to answer and you are free to withdraw from the survey at any time.

This information will help the State and other local organizations or businesses decide where to focus their efforts and funding to provide services and support for Waimea farmers. We're incredibly grateful that you've taken the time to speak with us. If you're ready, let's get started!

Eligibility Questions

Before we begin our survey, we have three questions to verify your eligibility for this project by indicating whether you are 18 years of age or older and own or operate a farm business in Waimea that meets the USDA definition of a farm.

* 1. Do you own or operate a farm business in Waimea?

- ◯ Yes
- ◯ No

* 2. Does your farm business make at least $1,000 in gross annual sales of agricultural products?

In order to be eligible for this survey, a business must meet the USDA definition of a farm by making (or normally making) a minimum of $1,000 in annual gross sales of agricultural products.

- ◯ Yes
- ◯ No

* 3. How old are you?

Basic Information

These questions will cover basic information about you and your farm business.

4. What is your name?

Name 1	
Name 2	
Name 3	
Relationship (if applicable)	

5. What is your title or position at the farm business?

Name 1 Position	
Name 2 Position	
Name 3 Position	

6. Gender

Name 1 Gender	
Name 2 Gender	
Name 3 Gender	

7. How would you describe your ethnicity?

8. How many years have you been farming?

9. How many acres are you farming in total (including fallow fields?)

10. Where is your farmland located?

- [ ] Lalamilo
- [ ] Puukapu
- [ ] DHHL
- [ ] Other (please specify)

11. What crops do you produce for sale?

- [ ] Lettuce
- [ ] Spinach
- [ ] Cabbage
- [ ] Broccoli
- [ ] Cucumbers
- [ ] Tomatoes
- [ ] Sweet corn
- [ ] Strawberries
- [ ] Salad Mix
- [ ] Radishes
- [ ] Beets
- [ ] Napa Cabbage/Won Bok
- [ ] Pac choi
- [ ] Celery
- [ ] Fennel
- [ ] Cilantro
- [ ] Parsley
- [ ] Other Herbs
- [ ] Sunflowers
- [ ] Orchids
- [ ] Other flowers
- [ ] Daikon radish
- [ ] Blueberries
- [ ] Pumpkin
- [ ] Winter Squash
- [ ] Zucchini
- [ ] Luau leaf
- [ ] Kalo/Taro
- [ ] Onions
- [ ] Artichokes
- [ ] Sweet potato
- [ ] Summer Squash
- [ ] Other (please specify)

12. Are you USDA Certified Organic?

- ( ) Yes
- ( ) No

If not, do you have any interest in becoming certified organic?

13. Are you a member of the Kamuela Vacuum Cooling Cooperative (KVCC)?

- ◯ Yes
- ◯ No
- ◯ Not sure

Farm Survey

14. How has your farm changed in the last five to ten years?

15. What are the biggest challenges or barriers for your business?

16. How have you addressed these challenges or barriers?

17. Do you have any other ideas for solutions to these issues?

18. How do you learn to handle production problems, such as pests or disease?

- [ ] Internet
- [ ] Extension agents
- [ ] Other farmers
- [ ] Consultants

Other (please specify)

19. Do you own or lease your agricultural land, or both?

- ◯ Own land
- ◯ Lease land
- ◯ Both

20. Would you lease additional farmland in Waimea if it was available right now? In five years? Ten years?

Need land now?	
Need land in the next five years?	
Need land in the next ten years?	

21. If so, how many additional acres would you be willing to lease?

Acres now	
Acres in 5 years	
Acres in 10 years	

22. What water sources do you use for production and processing?

- ☐ Waimea Irrigation System
- ☐ Well water
- ☐ County water
- ☐ Catchment
- ☐ Other (please specify)

23. Does your water system meet your current needs in terms of cost, pressure, quality, or other characteristics? If not, please describe your water challenges.

- ◯ Yes
- ◯ No

Other (please specify)

24. How do you track sales and expenses?

- ◯ Pen and paper
- ◯ Software
- ◯ Computer spreadsheet
- ◯ Software and Computer spreadsheet
- ◯ Other (please specify)

25. Do you know your costs of production? For example, do you know how much it costs to grow an acre of your crop, including fertilizer, labor, and all other expenses?

- ◯ Yes
- ◯ No
- ◯ Not sure
- ◯ Other (please specify)

26. How do you set prices? (Select all that apply)

- ☐ Market research
- ☐ Buyers set price
- ☐ Determined by cost of production
- ☐ Other (please specify)

27. What kind of market information would be helpful for your business, for example monthly prices for vegetables in different parts of the state or the island?

28. Do you process your own payroll or use a payroll service?

- ◯ We process our own payroll.
- ◯ We use a payroll service.
- ◯ No employees, no payroll

29. How many employees do you have?

Full-time	
Half-time	

30. How many employees would you like to have?

Full-time	
Half-time	

31. Besides yourself, how many family members work for the farm?

32. How do you find workers?

33. Are there any other issues with farm labor that affect your business, such as turnover, absenteeism, or health problems?

Farm Needs

For this section, I'm going to ask you about what your business currently needs, or will need in the next five to ten years. My questions are just a starting point, so please share anything you think may be important.

34. How does your farm comply or plan to comply with the Food Safety Modernization Act?

35. Does your farm have enough storage space and refrigeration for your crops right now? If not, do you need on-farm or off-farm storage, and what type? (Dry, cold, freezer)

Need storage now?

On-farm or Off-farm?

Type of Storage (Dry, cold, freezer)

36. Will you need additional crop storage in the next five years? If so, on-farm or off-farm? What type?

Need storage in the next five years?

On-farm or Off-farm?

Type of Storage (Dry, Cold, Freezer)

37. Does your farm have any need for any of the following business services:

- [ ] Business planning
- [ ] Identifying new markets
- [ ] Marketing
- [ ] Credit/Financing
- [ ] Accounting
- [ ] Consumer education
- [ ] Product pricing
- [ ] Tax services
- [ ] Human resources
- [ ] Record keeping
- [ ] Legal assistance
- [ ] Value-added product development
- [ ] Healthcare/Health insurance
- [ ] Farm insurance
- [ ] Systems efficiency analysis

Other (please specify)

38. Are there any additional pieces of equipment that would help your business, such as tractor implements or value-added processing equipment?

39. Does your farm need new buildings such as greenhouses, worker housing, or a packinghouse?

40. Are you interested in installing alternative energy systems on your farm, like solar panels?

41. Are you satisfied with your current freight, trucking, and shipping services for your crops? If not, please describe your issues.

- ◯ Yes
- ◯ No

Detail:

42. Are there any crops you would like to experiment with growing? If so, which crops and what prevents you from growing them?

Markets and Future Initiatives

In this section, we'll ask you about your current markets and which markets you'd like to sell to in the future. We'll also ask about your interest in participating in cooperative services with other farmers.

43. What are your current markets, and what markets would you like to sell to in the future? (Select all that apply)

	Now	5 years	10 years
On-island	☐	☐	☐
Off-island	☐	☐	☐
Wholesalers/Distributors	☐	☐	☐
Grocery stores	☐	☐	☐
Health food stores	☐	☐	☐
Restaurants	☐	☐	☐
Hotels/Resorts	☐	☐	☐
Farmers Markets	☐	☐	☐
Farm stands	☐	☐	☐
CSAs	☐	☐	☐
Direct-to-institution	☐	☐	☐

Other (please specify)

44. Please indicate your interest in the following initiatives.

	No interest	Moderate Interest	Strong Interest
Shared certified kitchen	○	○	○
Cooperative marketing and distribution	○	○	○
Off-farm processing/storage facility	○	○	○
Worker housing	○	○	○
Shared labor transportation	○	○	○
Worker childcare facility	○	○	○
Worker SNAP sign-up Assistance	○	○	○
Value-added products	○	○	○
Cooperative direct-to-consumer retail facility, such as a storefront or market	○	○	○
Cooperative purchasing for farm inputs	○	○	○
Cooperative water testing services	○	○	○
H-2A program eligibility assistance	○	○	○
Organic certification assistance	○	○	○

Other (please specify)

Future Planning

45. What goals do you have for your farm in the next five to ten years?

46. What is your biggest consideration when planning your business' future?

47. What do you see for the future of Waimea's farming community?

48. If you could go back in time, would you do anything differently with the farm?

49. What advice would you give to new farmers in Waimea?

50. Does The Kohala Center have permission to contact you about the services you've expressed interest in?

- ◯ Yes
- ◯ No

Other (please specify)

Retirement and Transition Planning

51. Do you intend to retire from farming in the next five to ten years?

- ◯ Yes
- ◯ No
- ◯ Maybe
- ◯ Don't Know
- ◯ Other (please specify)

52. Once you retire, what do you anticipate will happen to your farm business?

- ◯ Sale of business
- ◯ Pass on business to successors
- ◯ Dissolve business
- ◯ Don't know
- ◯ Other (please specify)

53. What are your plans for your farmland?

- ◯ Give up lease
- ◯ Sell lease
- ◯ Sell all land
- ◯ Sell portion of land
- ◯ Pass on to successors
- ◯ Leave land idle
- ◯ Other (please specify)

54. Have you discussed your farm retirement plans with anyone?

- ◯ Yes
- ◯ No

55. If so, who did you discuss it with? (Select all that apply)

- ☐ Spouse
- ☐ Children
- ☐ Lawyer
- ☐ Accountant
- ☐ Banker
- ☐ Financial Advisor
- ☐ Sibling (s)
- ☐ Other (please specify)

56. Have you identified any potential successors who will eventually take over management of the farm?

- ◯ Yes
- ◯ No
- ◯ Maybe

Other (please specify)

57. What is your relationship with the most likely successor for your farm?

- ◯ N/A
- ◯ Spouse
- ◯ Child/Children
- ◯ Sibling(s)
- ◯ Other family
- ◯ Non-Family

Other (please specify)

58. Would you like technical assistance from The Kohala Center for farm transition or retirement?

- ◯ Yes
- ◯ No
- ◯ Maybe

Other (please specify)

59. If so, which of the following topics would you be interested in?

- ☐ Estate or transition planning
- ☐ Finding a buyer for the business
- ☐ Finding someone to lease all or part of your land
- ☐ Retirement planning
- ☐ Other (please specify)

Your survey is complete! Thank you!

Please feel free to reach out if you would like to follow up on any needs or barriers for your business and we will do our best to connect you to the right services:

Marielle Hampton: (808) 430-1876