



COLLABORATION SESSION REPORT for the proposed AGRICULTURE INNOVATION CENTER

Held at Afook-Chinen Civic Auditorium in Hilo
on August 9th, 2022, 9:00am - 12:45pm HST

Introduction

This report summarizes the participation, findings, conclusions and recommendations from the multi-stakeholder collaboration session designed to gather stakeholder input into the plans for the proposed Agriculture Innovation Center (AIC). A total of 48 people participated in the collaboration session, representing a diverse cross-section of producers, processors and supporters of the island’s agricultural cluster. In addition to the hosts Kristin Frost Albrecht, Sarah Freeman and Dennis Flemming, participants included the following people, grouped by the tables in which they participated in discussions.

Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7
Andrea Carbine	Nina Ann Tanabe	Carly Wyman	Ken Love	Julia Zee	Douglass Adams	Michael Shintaku
Sarah Lesch	Bob Agres	Chelsea Takahashi	Adhann Iwashita	Jane Tai	Amanda	Anthony Florig
Lisa Disantis	Meghan O'Connor	Trisha Yamamoto	Christine Kaehuaea	Leanne Kami	Dino Morrow	Dennis Lin
Nathan Trump	Michael DuPont	Casey Halpern	Sandra Barr Rivera	Catarina Zaragoza	Andrea Kuch	Mark Krzyzanowski
Dana Shapiro	Rachel Solemsaas	Carey Yost	Matt Kanealii-Klein felder	Sarah Hamakawa	Leelan Park	Cheryl Matsumura
Maya Parish	Stephen Ueda	Ashley Kierkiewicz	Ann Ebesuno		Warren Lee	Glenn Sako
Emily Emmons					Britton Price	Melissa Nagatsuka
Kea Keolanui						

Welcome and Presentations

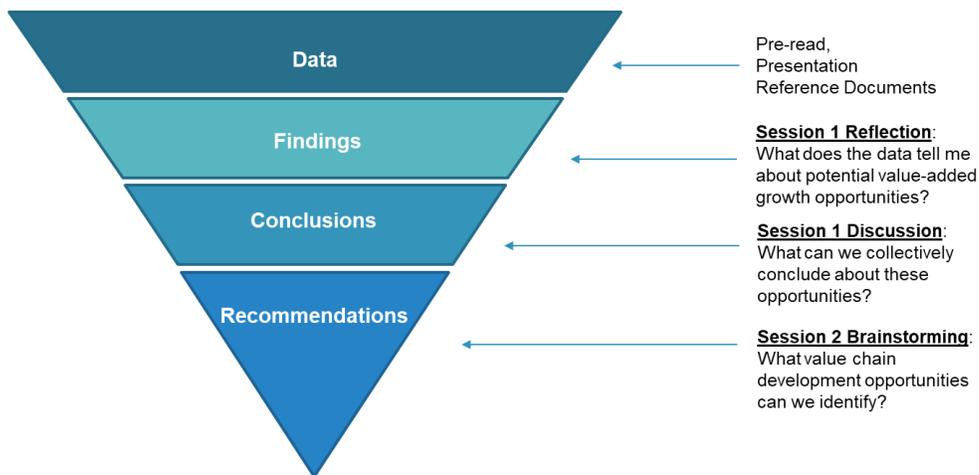
The session started out with a welcome by Doug Adams, Director of Research & Development for the County of Hawai'i. Kristin Frost Albrecht, Executive Director of The Food Basket, introduced her team and provided an introduction to the day's event. Sarah Freeman, Food Access Coordinator for the County of Hawai'i gave a brief [presentation](#) explaining the AIC as a part of the coalition of projects competing for a Phase 2 Award from the US Economic Development Administration (EDA) Build Back Better Regional Challenge.

Data Review

Andrea Carbine of New Venture Advisors (NVA) gave a [presentation](#) outlining the basic elements of the AIC design and summarizing feedback from interviews conducted by her and her NVA colleagues in gathering input for project design and planned usage. This was followed by a [presentation](#) by Dennis Flemming, Executive Director of the Hamakua Institute, who summarized stakeholder input and data collected for identifying value chain opportunities that can be developed with the agricultural processing capacity proposed for the AIC. His presentation summarized the more detailed data summary sent as a pre-read before the collaboration session.

Analysis Discussions

At each table, a diverse mix of stakeholder representatives discussed the data presented. They started by each individually drafting their own findings (observations and reflections about what the data is telling us about value added growth opportunities) and then discussing their findings to develop a collective set of conclusions about those opportunities. The discussions were designed to collectively take the data presented to the diverse representation of experienced stakeholders and develop a shared understanding of the specific opportunities we can collectively identify for our County's farms and agricultural related businesses. Thus we start with a wide selection of information and input and gradually worked towards more specific recommendations with each set of discussions as outlined below.



Key Findings

A full list of the findings generated at each table during the collaboration session is included in [Appendix A](#). Participants reviewed the findings generated from the other tables and placed stickers next to the findings they endorsed the most. Those findings with the most participant endorsements are listed below in order of ranking:

Finding	Endorsements
There is a need for centralized support for Food Safety Certification and for a Food Lab to support testing for food safety certification.	***** ***** ***** *****
There is a need for satellite mobile commercial kitchens where people can do basic processing and can be sent to other main processing facilities, allowing smaller producers in rural areas to combine with other producers.	***** ***** *****
Need to increase education resources on how to produce - recipes, legal requirements, food safety.	***** ***** *****
Farmers are great at farming, but they need the most support with other value chain links.	***** ***** *****
Need to determine how to best unify/collaborate around services/programs to assist producers with scale (market connect, space, service/business programs, certifications).	***** ***** **
There is a need to have satellite processing services around the island.	***** *****
We need more networking between buyers and producers.	***** ***
There is a huge opportunity for big island eggs. also dairy needs.	***** ***
The affordability of local crops limits market demand.	***** ***
If we can unify demand, farmers will know what to grow.	***** **
Need to increase agriculture waste processing, finding ways to reduce and reuse.	***** **
Marketing is critical for growth. We need to create, develop, scale, expand, and explore our market potential.	***** **
Value Added for fruit, veg, etc. should include not only final product but upcycling opportunities as well.	***** *
We should be identifying potentially restrictive laws/policies at all levels to start working on needed changes.	***** *
Tropical fruit represents an strong growth opportunity for value-added processing, especially lilikoi.	***** *
Tropical fruit and tree nuts have high potential for development as value-added products.	*****

Finding	Endorsements
We need to educate producers on safe processing systems.	*****
There is a cost of sustainability that needs to be recognized.	*****
We're not competing with the farm next door, we're competing with international markets and other places.	*****

Key Conclusions

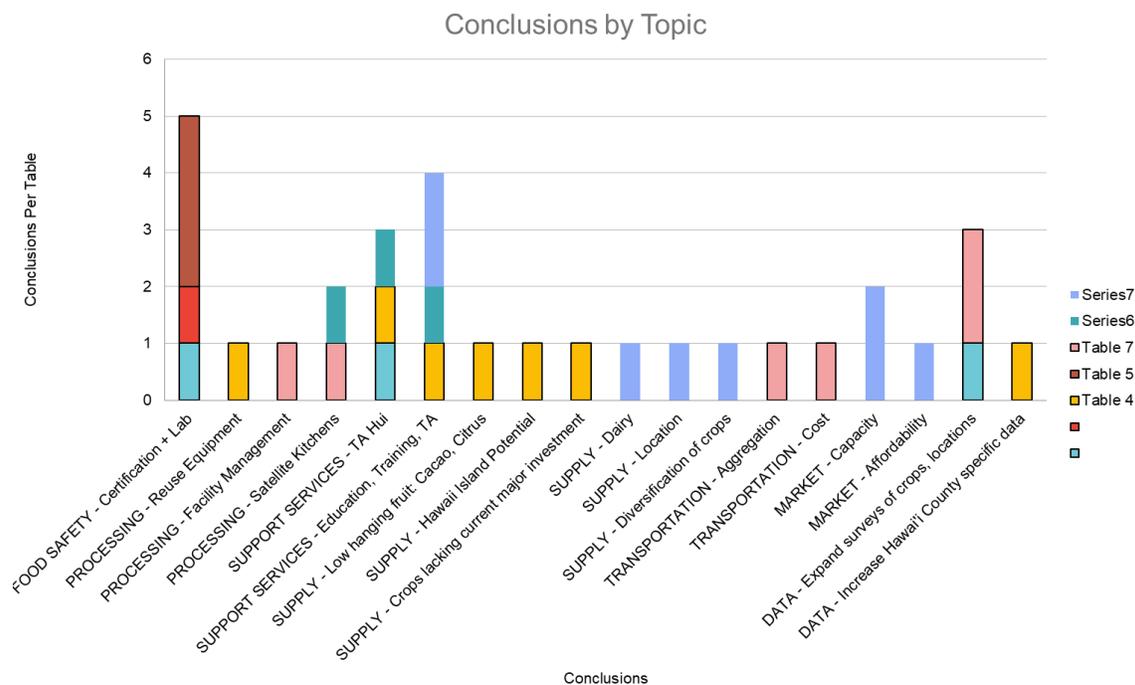
At each table, a diverse mixture of stakeholders discussed their own findings as well as those that were generated at other tables. They developed a set of shared conclusions emerging from their discussions. The full set of conclusions developed at each table is included in [Appendix B](#). A summary of some of the key conclusions and topics raised during the session is provided below.

Topic	Conclusion
Food Safety	There is a need for centralized support for Food Safety Certification and for a Food Lab to support testing for food safety certification. More training and technical assistance can assist producers with FSMA regulations, FDA labeling.
Processing Needs	Some juicing/puree equipment is available on island. The manufacturer still makes the equipment and can supply replacement parts if needed. Originally these were purchased to produce guava juice for Mountain Apple Company POG product.
	Satellite Mobile Kitchens can offer basic processing facilities. If extra processing steps are needed, products can be later sent to other main processing facilities. This allows smaller producers in rural areas to combine their products with others.
	The project should have effective management of shared-use facilities, with someone onsite at all times and someone who can help with marketing and ancillary needs of commercial kitchen producers.
Support Services	We need to identify how we can best unify/collaborate around services and programs to assist producers with scaling up (market connect, space, service/business programs, certifications).
	We should look to other groups on the other islands to learn what they are doing and see where possible partnerships can be formed (ex. Maui Innovation Center, Wahiawa food hub, Kōkuā Hawai'i Foundation).

Topic	Conclusion
	<p>There is a need for more networking between buyers and producers, like Farmlink to connect farmers to businesses. Creates freshness and less waste as crops are only harvested when buyers are interested in purchasing. Farmers with extra crops are able to connect with buyers in need so the "extra" does not go to waste.</p> <p>Education for local farmers/producers should offer information on how to create value-added products (recipes, necessary steps). It should also offer information on how to scale up their business into actual production that follows DOH requirements, FDA requirements, food safety requirements, selling regulations, etc.</p> <p>Farmers need business support systems, information on regulations, technology. They need additional programs such as GoFarm.</p>
Supply	<p>Cacao and citrus are "low-hanging fruit" ready for increased investment to scale production and create value-added products. Big Island citrus can easily displace shelf space reserved for mainland citrus/juice products in local stores. Cacao already has momentum with the presence of local chocolatiers sourcing from local cacao farms and owning the equipment for processing. These existing cacao processors could easily add new value-added products to their offerings such as cacao powder.</p> <p>There are other priority crops not identified that should be included, such as ginger. Hawai'i Island has the most potential for diverse agriculture out of all the islands in the state.</p> <p>Dairy should be a priority. There is zero supply at the moment locally in production. There is also huge demand and products can get a high price.</p>
Data	<p>There is a lot missing from the data. Survey work needs to be expanded to get wider producer groups (crops), locations.</p> <p>Current Hawai'i County data is needed to make informed decisions on products we should be investing in vs statewide data</p>
Product Movement	<p>The cost of transportation is a big factor. There is a need for aggregation and transportation that will make value added processing in Hilo worth it for those who are in Kona or somewhere else far from Hilo.</p>

Topic	Conclusion
Market Efficiencies	We need to create a business model for the Ag Innovation Center that enables it to produce food cheaper than the cost of importing it.

The following graph highlights which topics were of most interest to stakeholders in the collaboration sessions, with food safety and support services having the most interest across multiple tables.



Participant Recommendations

Participants then discussed the value chain development opportunities that exist on Hawai'i Island, identifying the crops they see with value added potential and listing the equipment, products and target markets associated with that potential. A full list of the recommended value chains from each table is included in [Appendix C](#).

The following graph summarizes the equipment most frequently recommended by participants, highlighting which crops were recommended for each equipment identified.

Production	Processing	Product	Market
abalone lobster uni, ogo, ong choi		fresh packaged product	International (Pacific)
Aquaculture: tilapia Oyster Depuration Facility	Dehydrator	Oysters Fresh and Barbecue	Canada
Dairy: Cow's milk Goat's milk	pasteurizing	cheese milk butter ice cream yogurt	Local consumption Other islands Continent International (Pacific)
Eggs	packing, washing, candling, weighing, sorting	carton of eggs	local grocery stores (KTA's, et.) , restaurants
TROPICAL FRUITS AND CITRUS			
Tropical fruits: Lilikoi Ohelo Poha Mulberry Cherries Jaboticaba Guava Mango Pineapple Durian	juicer slicer bottling packaging milling sterilization distillation dehydrator steam kettle canning jar storage flash freezer co-packing/ bottling freeze drying equipment paddle finisher certified kitchen aseptic juicing machine high speed juicers	frozen and fresh enzymes puree juice powder plant extracts dry fruit/snack fiber animal feed coloring seeds baked goods desserts butter/jam/jellies medicinal supplement cosmetics Salsa Sauces Syrups Popsicles Jams Skin Extracts Essential Oils baby food	Hawai'i Island statewide mainland international high-end markets, gift boxes restaurants
Citrus: Oranges Lemons Limes	paddle finisher dehydrator freezer/refrigerator certified kitchen	Fresh and frozen Concentrated juice Essential Oils Citrus Pectin	Hawaii Island Statewide Institutional

Production	Processing	Product	Market
	citrus juicing line (oil extractor, etc.) pasteurizing, bottling slicing, grating peeling	Peels Syrup Cleaners Jams, Jellies Kombucha, Vinegars	
STAPLE STARCHES			
'Ulu Cassava Kalo Sweet Potato 'Uala Ube	Flour mill steamer flash freezer storage, wet + dry grinder dehydrator pasta maker juicing food safety training Paddle finisher Commercial kitchen pounding Fryer Washing	flour (gluten flour) noodles desserts tortilla mashed and baked bread fertilizers animal feed pet food juice chips hypoallergenic products tapioca coco yams powder Steamed and frozen product Flour mix of different crops 'ulu flour hummus Plant based patties bulk chunk packaged puree/baby food Ready to eat (poi, kulolo, luau)	Hawaii Island + State + Export Local/State, Institutions Local Retailers
SPECIALTY TROPICAL			
Cacao Vanilla Mamaki Ginger Turmeric	grinder milling storage packaging juicer/extractor/pulper sterilizer distillation dehydrator Equipment for fermentation + grinding	medicinal health food cosmetics teas dye flavor extracts spices/seeds butter jams/jellies Cocoa powder Chocolate Vanilla Extract	local other island continent Global Tourists Export Bakers Restaurants Japan Export as a 'superfood'

Production	Processing	Product	Market
	Humidity controlled room (for sweating) Certified kitchen Cleaning Pressing Bottling Canning equipment	Vanilla Bean Tinctures Candied products Pickled products	
NON-CITRUS FRUIT, TREE NUT & COFFEE			
Avocado	juicer milling grinder flash freezer cold storage blender packaging bottling dehydrator Certified kitchen USDA-FNS certified packing rooms for export	guacamole desserts puree powder cosmetics chips oil frozen and fresh medicinal wood products Seeds/seed oil mousse	Hawai'i Island Statewide Mainland International
Coffee Tea	distiller sterilizer milling packaging bottling grinder dehydrator storage food safety testing drying area roasting parchment	drink powder fertilizer medicinal dessert additive feed cosmetics flavor extracts coffee dry leaf tea chocolate covered coffee bean beauty products ice cream	Hawai'i Island Statewide Mainland International
Coconut	Commercial Kitchen Mill Freezer Dehydrator Husker, cracker, grater Pasteurization	Water Milk Syrup Oil Ag Inputs Meat (shredded, etc.) Health and beauty products	Local Retail Hospitality Export
Nuts	shelling/husking water bath	snacks culinary	Hawaii Island + State + Export

Production	Processing	Product	Market
	drying sorting press	beauty oils	
OTHER			
Honey	Extractor Bottler Certified kitchen	Honey Propolis Wax	Hawaii Island + State + Export
Spices	Commercial Kitchen Mill Dehydrator Distiller Slicing/Peeling	Seasoning Medicinal Herbal Teas Juices Whole/Single	Local Retail Export
Vegetables (including lettuce, beans, and other legumes)	Commercial Kitchen Space	Fresh Fruit	Local Military

Conclusion

The collaboration session concluded with Sarah Freeman explaining that the results will be shared with the participants and the dialogue around designing and planning the Agriculture Innovation Center will continue with more opportunities for stakeholder input in future sessions.