



NOURISHING HAWAII'S FUTURE

Strategic
Investments to
Scale Agriculture



EAT THINK DRINK 27
October 29, 2024



30% local

Innovation
mindset at
all levels

- Local infrastructure (food hubs, processing);
- Procurement policies and targets
- Capital flows
- Land access
- Workforce support

Large scale market demand and institutional best practices

- Public and political will -
- Active advocacy
- Networks and alliances;
- Pilot programs

95% imported food

42



Paula Daniels
Center for Good Food Purchasing



OLIVIER DE
SCHUTTER

2014, U.N. Special
Rapporteur on the Right
to Food

“GOVERNMENTS HAVE FEW
SOURCES OF LEVERAGE OVER
INCREASINGLY GLOBALIZED
FOOD SYSTEMS, BUT **PUBLIC
PROCUREMENT** IS ONE OF THEM.”

“**When sourcing food for schools, hospitals, and public administrations,** governments have a rare opportunity to support more nutritious diets and more sustainable food systems in one fell swoop.”

First Lady Jaime Kanani Green

"As First Lady, I'm excited to continue my advocacy work for Hawaii's children and families. Whether it is spreading awareness, supporting food banks, or advancing childhood literacy, I am ready to serve."

First Lady Jamie Green, official biography



Regional Kitchens 101

What are regional kitchens?

- Centralized facility for producing school meals and component ingredients
 - **Creates volume production using specialized equipment** capable of processing hundreds or thousands of products daily
 - Example: vegetable washers capable of safely prepping lettuce in the hundreds of pounds

How do regional kitchens operate?

- Produces items like mains or sides that can be **finished or reheated at school cafeterias**
 - Example: salads safely prepped and bagged for serving, sauces, dressings, prepped meats, fully-cooked soups or stews
- School cafeterias will need consistent **equipment to reheat or finish products** received by the central kitchen
 - Combi ovens can be used to reheat and finish products and tested at the regional kitchen to ensure consistent quality



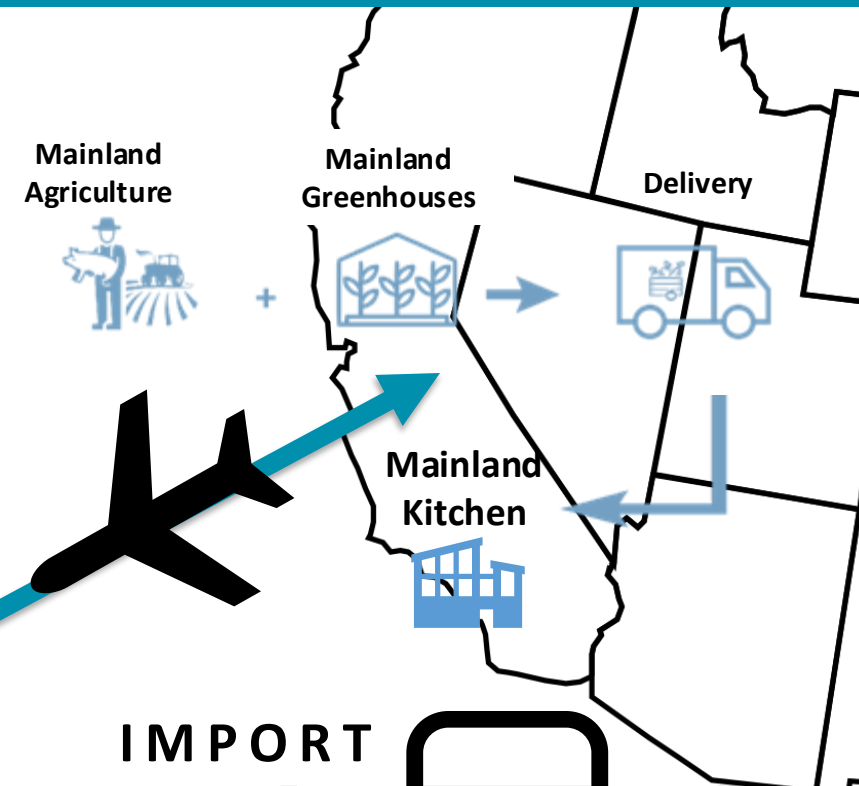
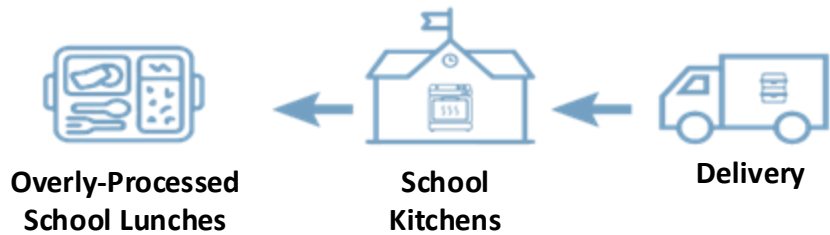
Regional Kitchens 101

- **Why move to regional kitchens?**
 - Without shared facilities to aggregate and process local products, cafeterias cannot receive directly from farmers
 - One cafeteria may serve a few hundred meals per day, a regional kitchen can serve over ten thousand meals per day per shift.
- **How can regional kitchens help agriculture?**
 - Regional kitchens are **a new market opportunity for local farmers**

Current Food Service Model

85%-90% of Hawai'i's food is grown, processed, imported from the mainland, and delivered to school kitchens across the island chain. ¹

HIDOE serves over 100,000 students a day – or about 15 million meals per school year. ²



IMPORT

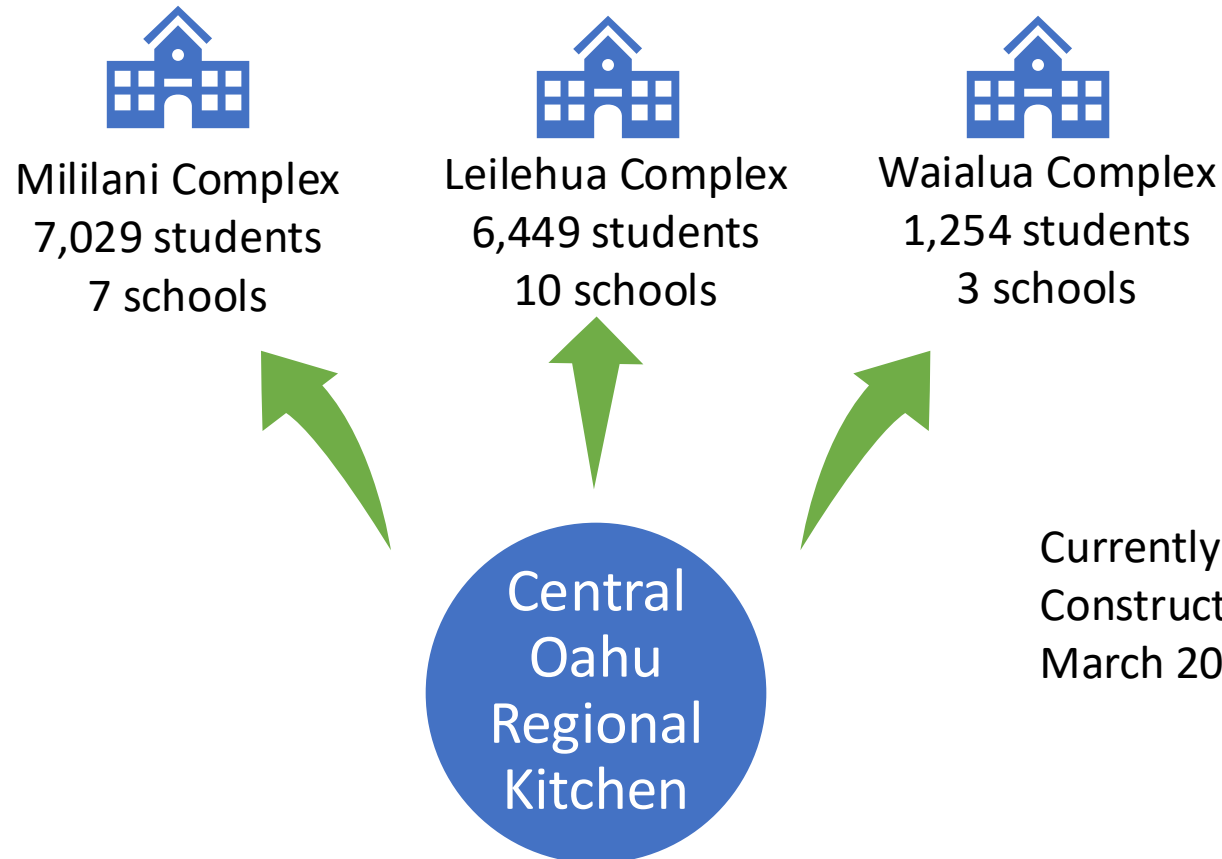
	Beef: 56,635 pounds
	Pork: 63,243 pounds
	Eggs: 17,976 pounds ³

¹ Office of Planning DBEDT, 2012

² DOE School Food Services Branch

³ Y. Hata DOE Usage_Vol only_7.1.23-5.31.24

What would part of the new system of regional kitchens look like?



Currently in design.
Construction completion date:
March 2027

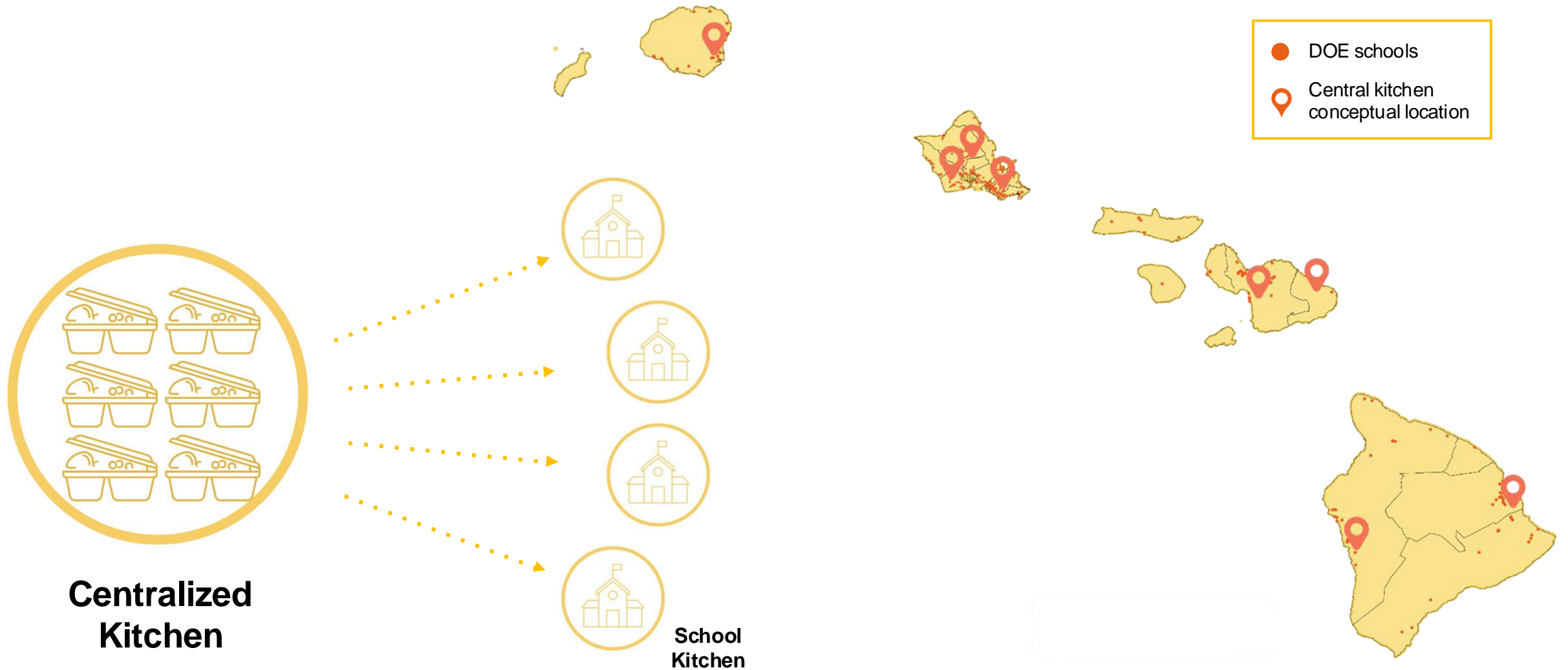
Who are we feeding and how many?

Statewide implementation of regional kitchens.

Complex Area	Schools	Students
Farrington-Kaiser-Kalani	25	14,158
Kaimuki-McKinley-Roosevelt	28	12,527
Aiea-Moanalua-Radford	22	13,405
Leilehua-Mililani-Waialua	20	14,732
Campbell-Kapolei	18	16,620
Nanakuli-Waianae	9	6,581
Pearl City-Waipahu	17	13,135
Castle-Kahuku	16	7,337
Kailua-Kalaheo	14	5,964
Oahu	169	104,459
Hilo-Waiakea	13	7,343
Honokaa-Kealakehe-Kohala-Konawaena	19	9,684
Kau-Keaau-Pahoa	9	5,655
Hawaii	41	22,682
Baldwin-Kekaulike-Kulanihakoi-Maui	21	15,149
Hana-Lahainaluna-Lanai-Molokai	11	4,254
Maui	33	19,403
Kapaa-Kauai-Waimea	16	8,678
Kauai	16	8,678
Statewide Total	258	155,222



Statewide centralized kitchen benefits



Who's using the regional kitchen model now?

Sacramento City Unified School District



Established: 2022
Daily Meals: 43,000
Schools: 80

Bethel School District



Established: 2015
Daily Meals: 14,000
Schools: 27

Zippy's Restaurants



Established: 1966
Restaurants: 22

Boulder Valley School District Culinary Center, Oakland Unified School District, Campbell Union School District, Ocean View School District, Grass Valley School District, Santa Clarita Food Services Agency, Porterville Unified School District also operate on centralized models for food service.

Zippy's Restaurants

The secret to our success: Our not-so-secret centralized kitchen. Our centralized kitchen has helped us ensure consistent food safety, quality, and, most importantly, taste. I can confidently say the same would be true for the DOE.



Jason Higa

CEO of FCH Enterprises, parent entity of Zippy's Restaurants

"Regionalized Kitchens Are The Secret To Zippy's Success"
Honolulu Civil Beat, March 9, 2023



Size and Operations:

- Kitchen: 7,000 sq ft
- Bakery: 2,000 sq ft
- Total Staff: 180-200

Service Distribution:

- 22 restaurants on 3 islands
- Retail operators

Delivery trucks for Zippy's regional kitchen operations.

Regional Kitchens: Local Ingredients, Local Nutrition for Local Kids

- Increase local food production through market creation and import replacement

Hawaii Department of Education



Currently in design.
Construction completion date for
Central Oahu: March 2027

Agribusiness Development
Corporation / Department of
Agriculture



Menu Creation Needs to be Based on Local Commodities



Papaya Salad

Menu

Pork Chops
Scrambled Eggs
Papaya
Lettuce
Hamburger
Milk
Sweet Potato
Hashbrowns
Rolls (Ulu, Buckwheat, Wheat
blend)
Ulu
Poi
Rice
Hoio
Pia

Opportunities for Edible Native Plants



Pia (Arrowroot)



Hō'i'o (Warabi)



Mililani Complex
7,029 students
7 schools



Leilehua Complex
6,449 students
10 schools



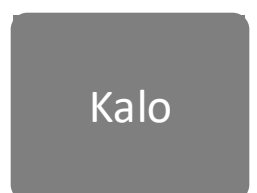
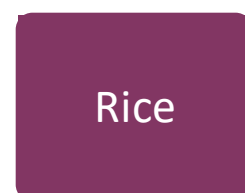
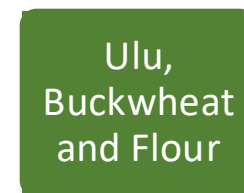
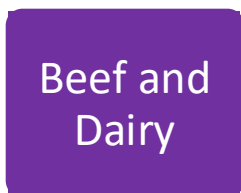
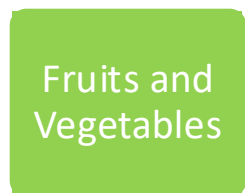
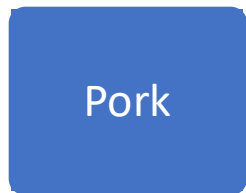
Waialua Complex
1,254 students
3 schools

Hawaii Department of Education



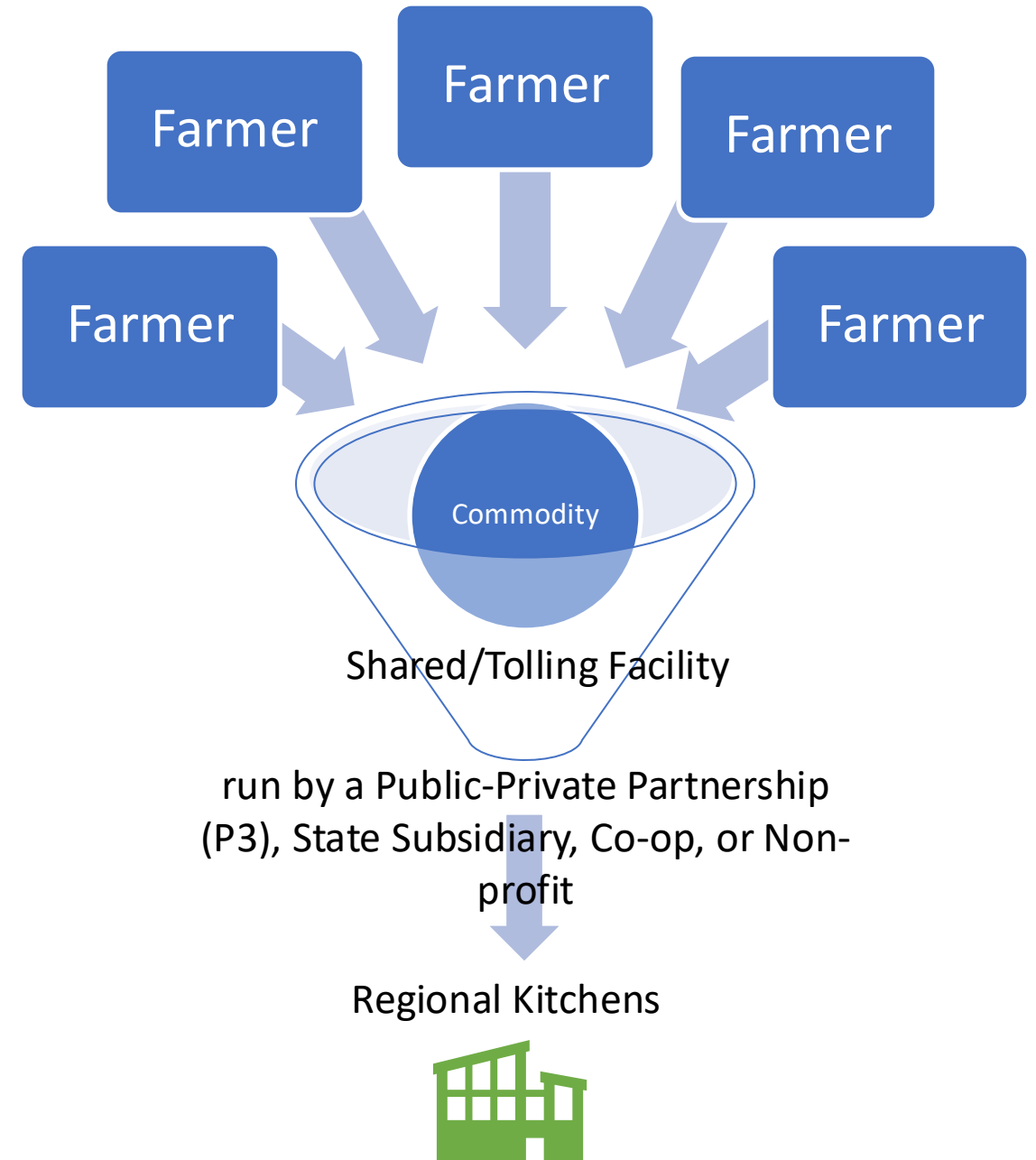
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Agribusiness Development
Corporation / Department of
Agriculture



Farmers will require shared facilities

- What is a shared facility?
 - Milling, slaughterhouse, processing, cold and dry storage
- Who builds a shared facility?
 - State can fund it
 - State can create a public-private partnership (P3)
 - State funds/land and private operator
 - A group of farmers can create a co-op
- How does it work?
 - Farmers can pay a fee (toll) to utilize the equipment and facilities
- Why does it help farmers?
 - Lowers cost to access facilities/equipment
 - Lessens capital investment needed by farmers to scale up



Pork

Eggs and Liquid Eggs

Fruits and Vegetables

Beef and Dairy

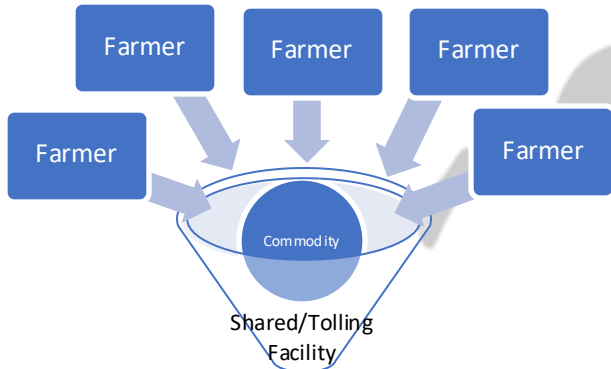
Fish

Sweet Potato/Potato

Ulu, Buckwheat and Flour

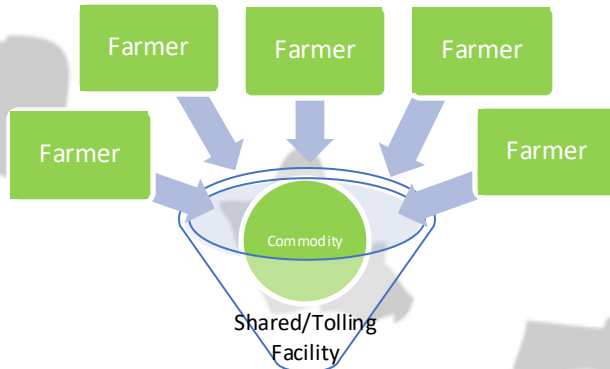
Rice

Kalo



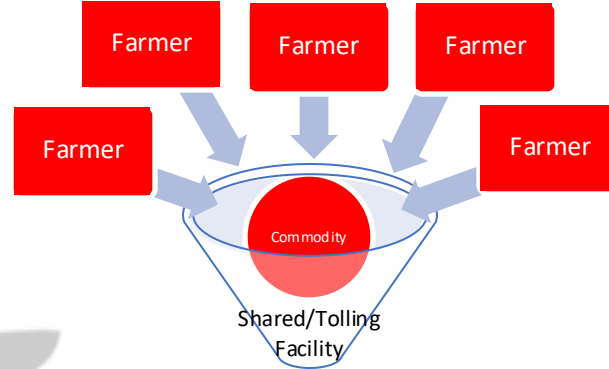
run by a Public-Private Partnership (P3), State Subsidiary, Co-op, or Non-profit

Regional Kitchens



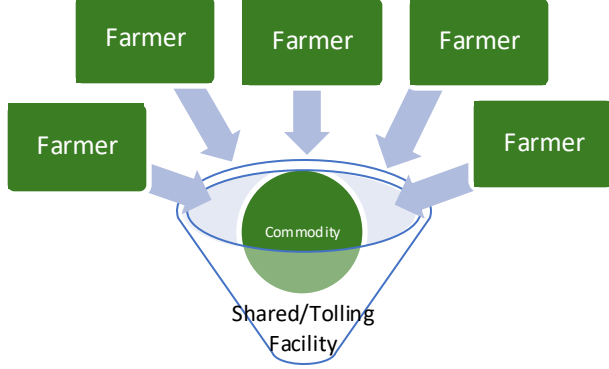
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Regional Kitchens



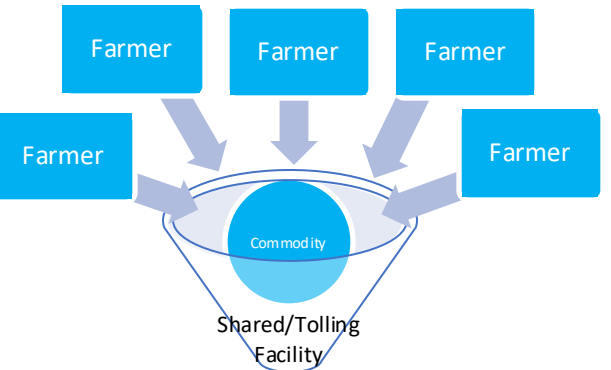
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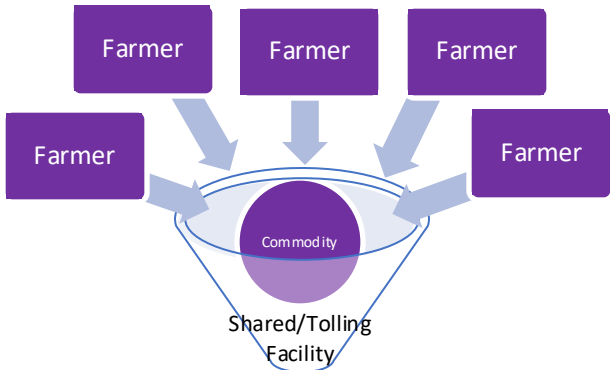
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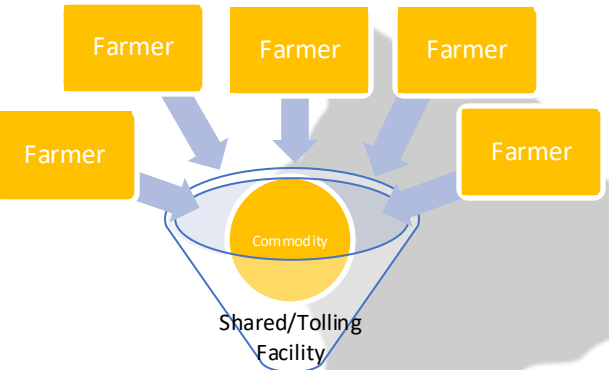
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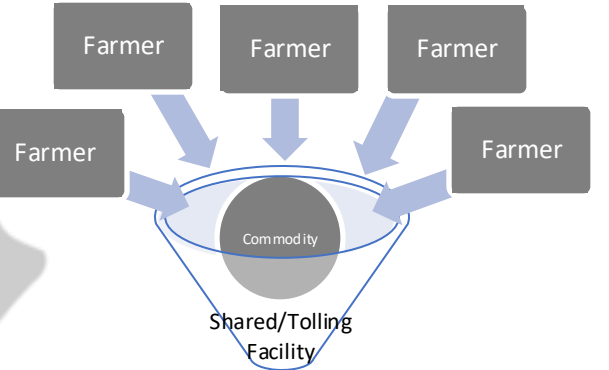
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Regional Kitchens



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Regional Kitchens



How do regional kitchens and shared facilities help local farmers?

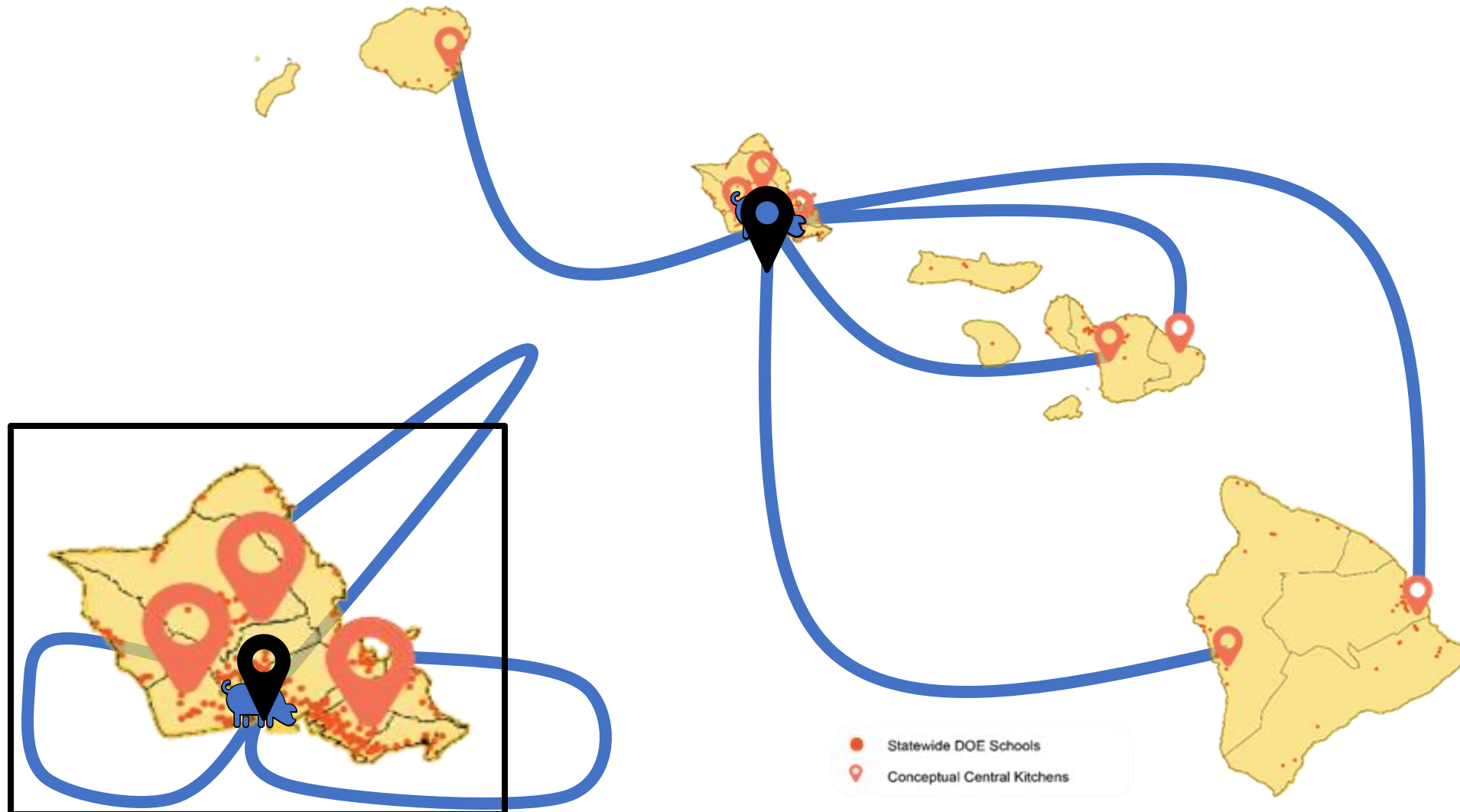
- **Aggregation**
 - Allows small local farmers opportunities to come together to fill DOE orders by March 2027
 - Regional contracting allows for regional economic development
- **Consistent contracts**
 - Provides stability in revenues and growing cycles for local farmers
- **Financing**
 - Consistent revenue streams and contracts provide farmers the opportunity to get private financing for farm upgrades and infrastructure
- **Forward planting contracts**
 - Opportunity for advance funding during planting cycle to provide farmers start-up capital if financing remains unavailable

Shared Facilities: Examples by Commodity

- Pork
 - Small animal slaughterhouse
 - Processing
 - Cold-storage
 - Economic benefits for scaling local pork
 - Centralized model (Oahu)
 - Potential pig husbandry classes at Nanakuli-Waianae Complex Area and LCC's Waianae Moku Campus



Centralized Model for Pork Commodity



Potential of Rice and Soba (Buckwheat)

Milling machines

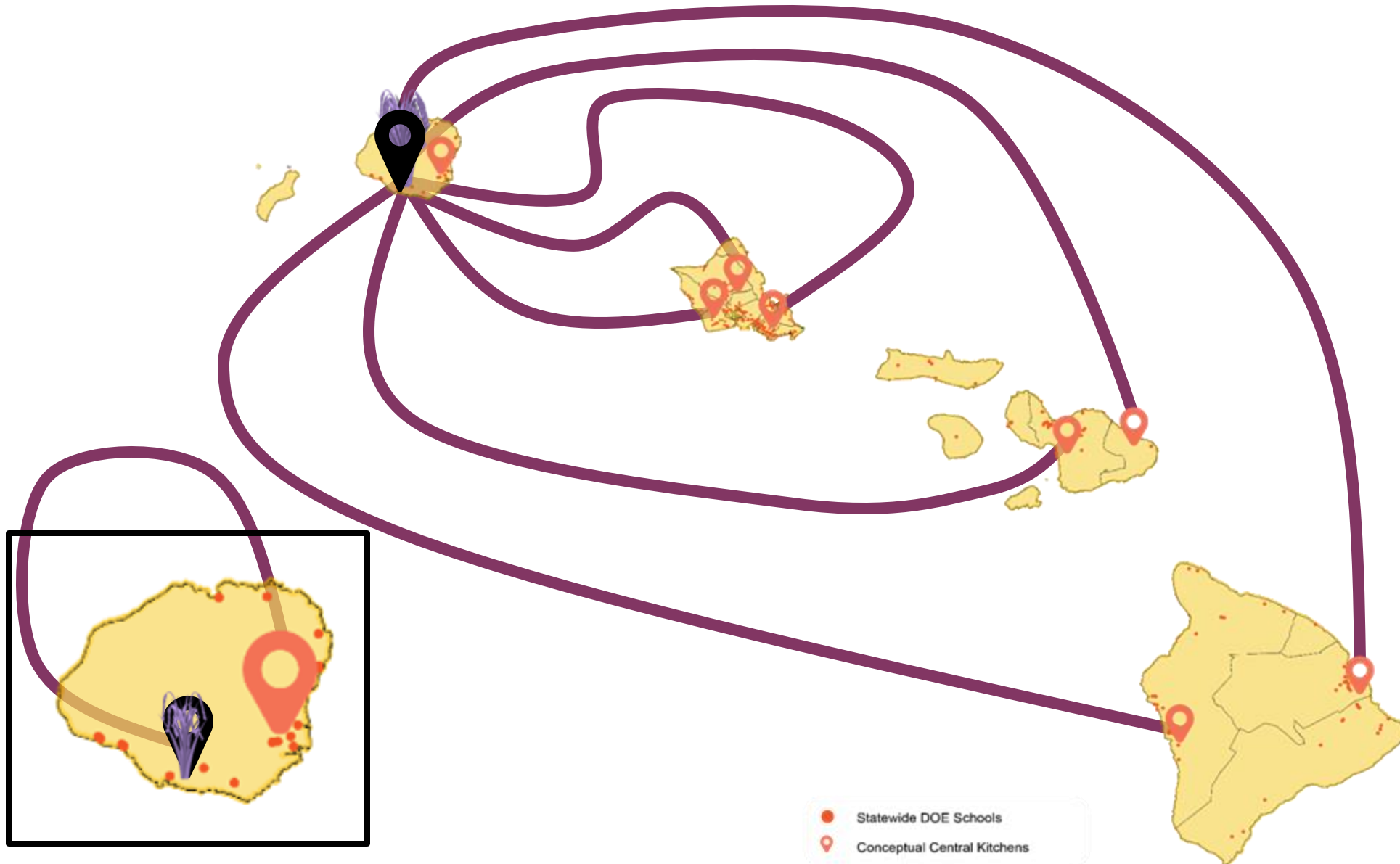
Dry storage capacity

Centralized model (Kauai)

Potential wetland farming at Kapaa-Kauai-Waimea Complex Area and Kauai Community College



Centralized Model for Rice Commodity

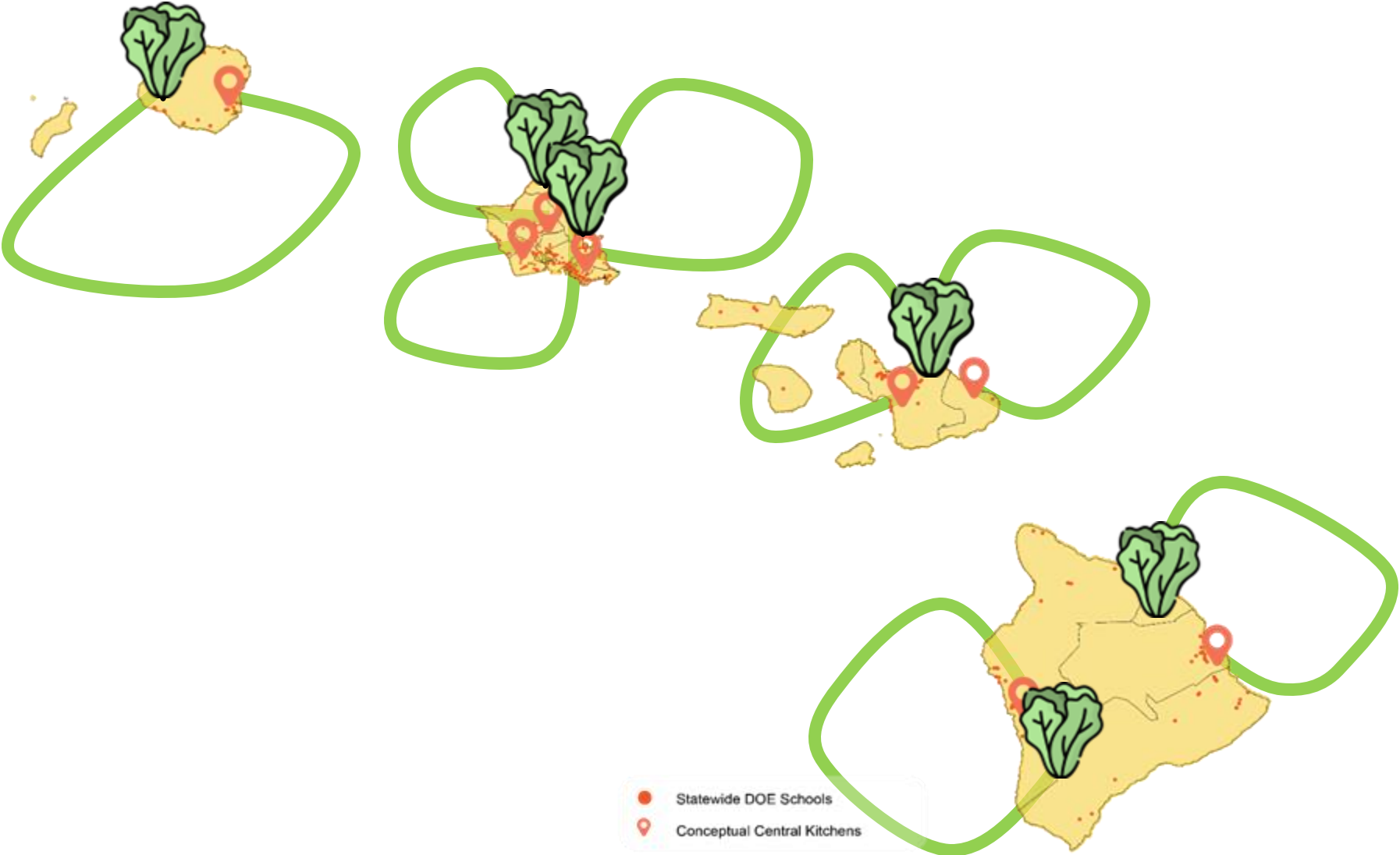


Potential of Fruits and Vegetables: Lettuce

- Can be grown statewide
- Potential for greenhouse development for consistent delivery
- De-centralized model



Decentralized Model for Lettuce

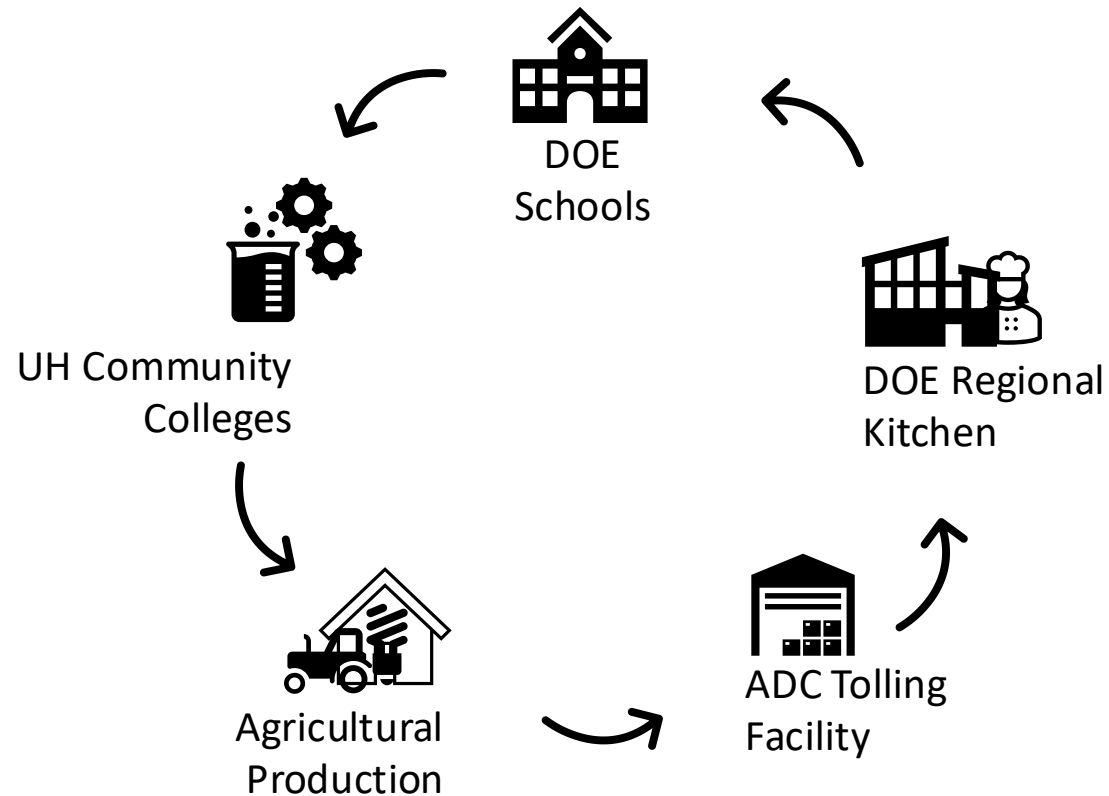


Suquamish Seafoods

- Tribal owned enterprise
- Supports tribal members through employment, training, equipment, and export
- Aggregates, processes, packs, and retails geoduck, oysters, clams, and other seafood
- Potential model for DHHL and OHA



It begins and ends with DOE



DOE: High School Ag programs can focus on commodities grown in their areas. Creation of sister-school connections.

The Middle

- LCC: Pathways for entrepreneurs and farmers to develop products through the food and product innovation network
- DOA: Loans and grants to farmers. Regulation
- DOA/CTAHR: Mapping where local commodities can be grown for import replacement
- CTAHR: Increasing extension agents to focus on local commodities supporting regional kitchens
- DBEDT: Increasing opportunities for small businesses focused on value-added production to manage increasing amounts of off-grades
- ADC: Acquisition of land, building infrastructure and shared facilities
- DOT: Transportation investments to ensure flow of local commodities between islands

Potential Sister School Relationships

Embetsu Agricultural High School
Hokkaido, Japan

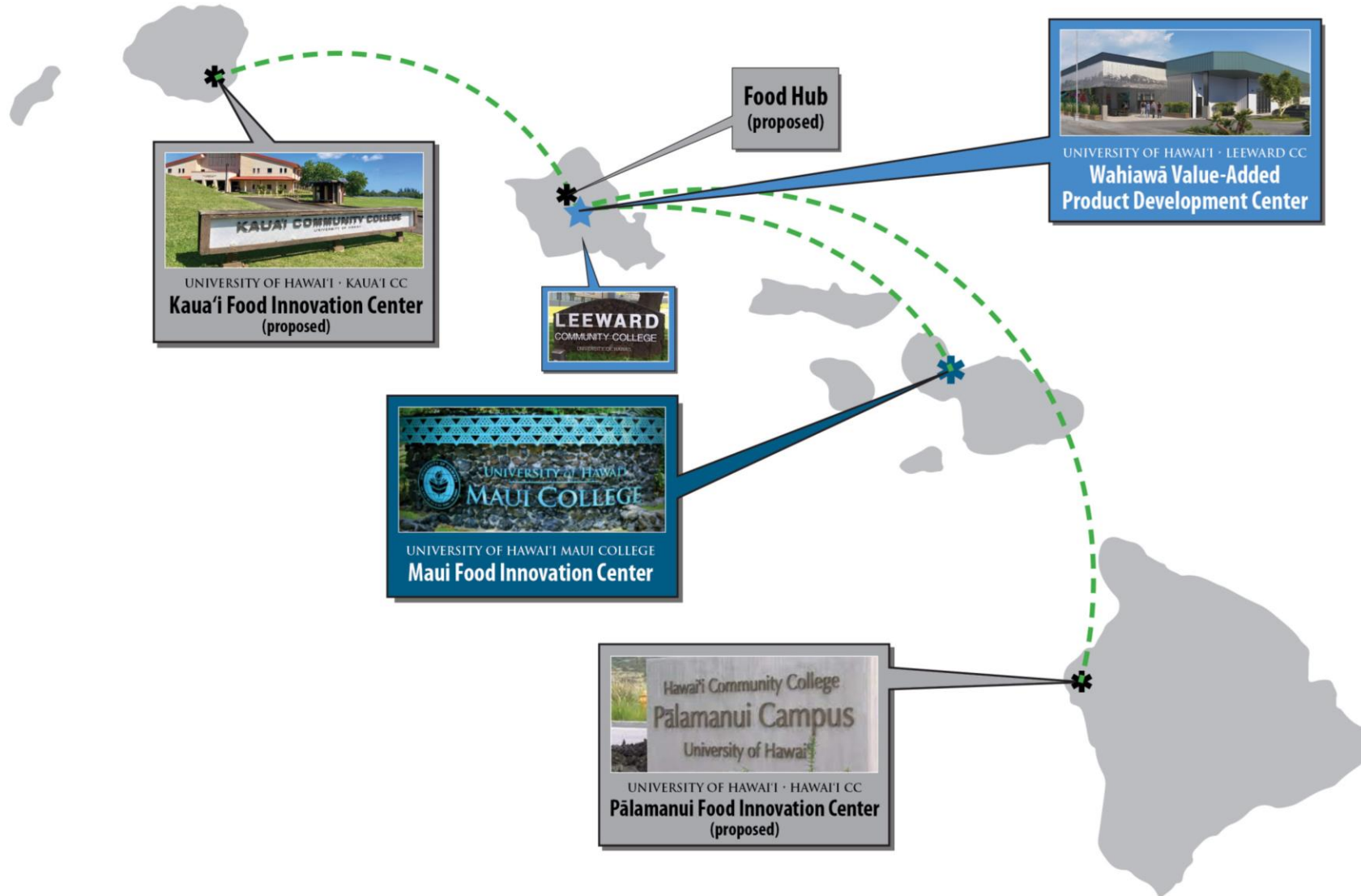


Scaling Commodities Creates More Value-Added Products

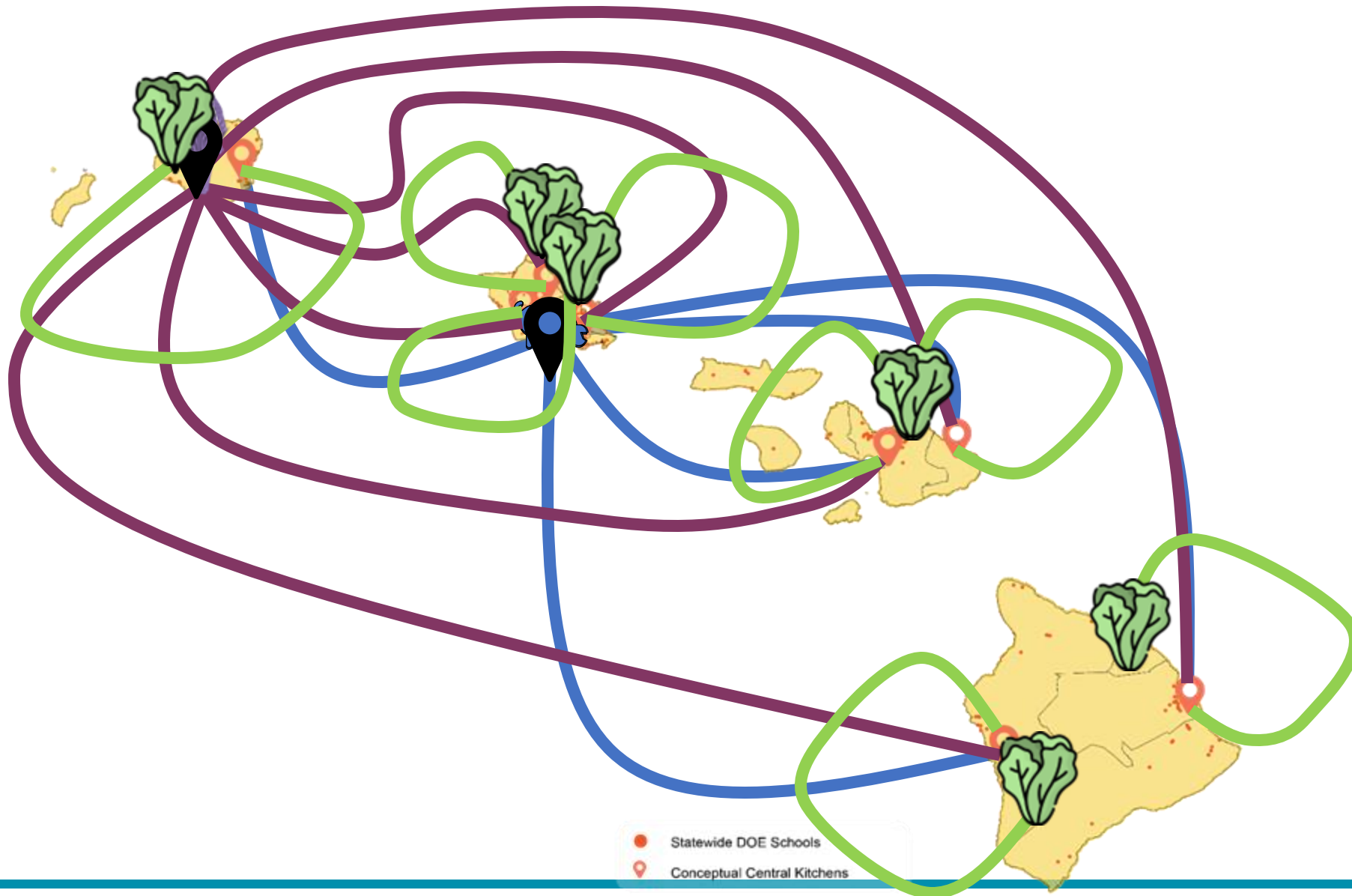
- An average of 30% of products are considered “off-grades”
- As commodities scale up, total off-grade products will increase
- Statewide expansion of Food and Product Innovation Network



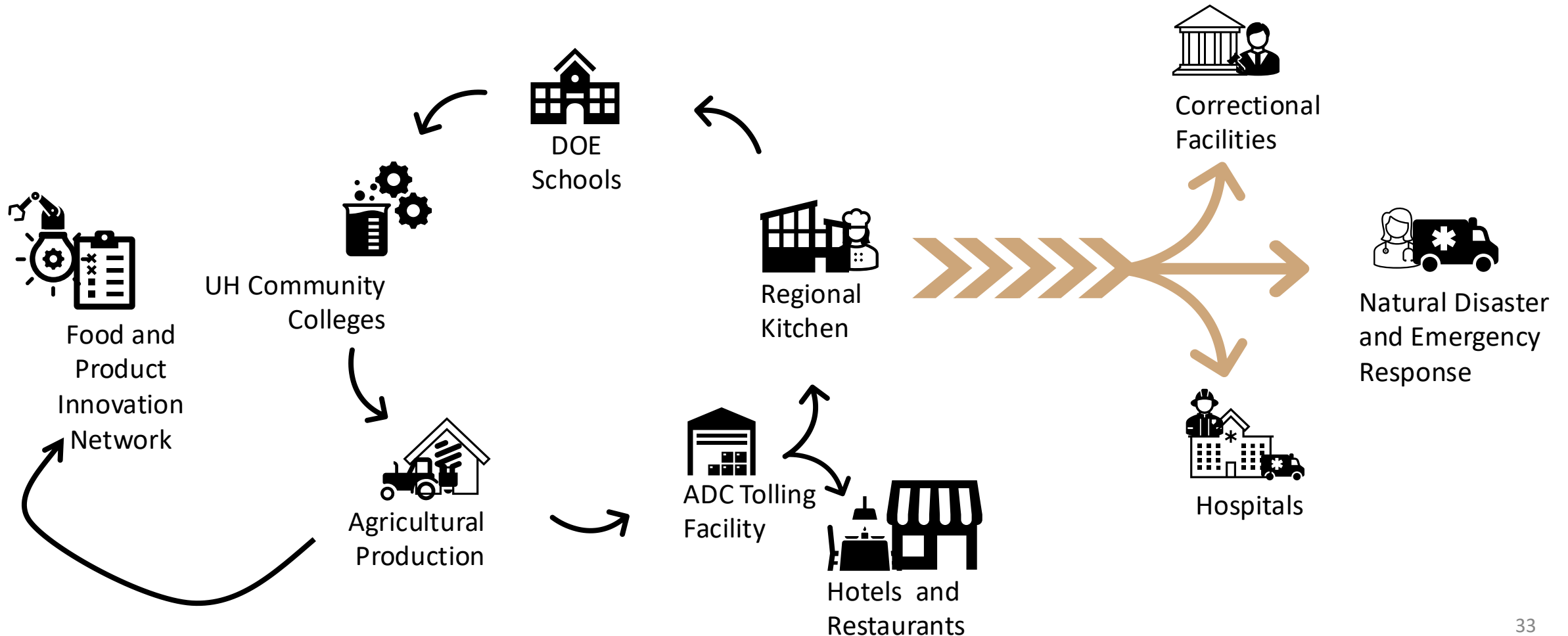
Expanding Model Statewide – The Power of Coordination



Nourishing Hawaii Is a Statewide Effort



It begins and ends with DOE...and beyond





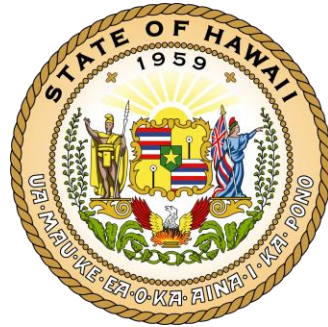
Supports:

- Creating local infrastructure, workforce capacity, and shared facilities to scale local agriculture
- Leveraging the State's purchasing power to help local farmers
- Better child nutrition through locally produced food

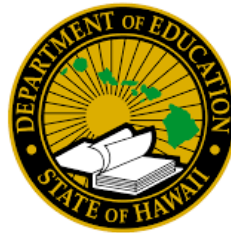


**NOURISHING
HAWAII'S
FUTURE**

Mahalo to Our Partners



COLLEGE OF TROPICAL AGRICULTURE
AND HUMAN RESOURCES
UNIVERSITY OF HAWAII AT MĀNOA



"Our farmers and ranchers are key to making this vision a reality. With the proper support and collaboration, we can build a sustainable farm-to-state system that not only feeds our keiki but also strengthens our local agricultural industry."

- Chair Sharon Hurd, DOA



"Ensuring healthy, locally sourced meals for our students is a top priority, and what we've seen in Tacoma reinforces that this is not only achievable but essential for improving student nutrition. We remain dedicated to exploring innovative approaches to bring this vision to life in Hawai'i"

- Superintendent Keith Hayashi, DOE

To download
tonight's
presentation:

