



Pictured: He'eia loko i'a and one of its mākāhā or sluice gates in Kāne'ohe, O'ahu.

Welcome to the ***Enhancing Hawai'i's Food Security through Aquaculture Newsletter***

Tuesday, December 12th

- Sharing current Hawai'i seafood market and supply chain research.

- Brought to you by the Hawai'i Team of the Swette Center for Sustainable Food Systems, Arizona State University. Hawai'i serves as a significant model in examining sustainable food systems, including seafood. Our team is dedicated to offering insights and suggestions to enhance sustainability in our food systems via in-depth research and community collaboration.
- *Funding for Enhancing Hawai'i's Food Security through Aquaculture Newsletter was made possible by the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service through grant AM22LFPPAZ1104. Its contents are solely the responsibility of the authors, and do not necessarily represent the official views of the USDA.*

Seeking Aquaculture Producer & Kia'i Loko Input

We are conducting an in-depth market and supply chain analysis for seafood raised in Hawai'i, with the goal to uplift commercial aquaculture and loko i'a (Native Hawaiian fishponds) as sustainable seafood options for the islands. Your insights and experiences are invaluable, and we invite you to participate.

Aquaculture Producer Survey

- Commercial aquaculture producers
- Producing edible food for human consumption
- 10-minute online survey

Kia'i Loko Survey

- Kia'i loko, caretakers of Native Hawaiian fishponds
- 10-minute online survey

[Aquaculture Producer Survey](#)

[Kia'i Loko Survey](#)

Research Updates

Barriers to Sourcing Local Seafood: Input from Hawaiian Businesses

Preliminary Data

As of December 12th, 2023, our team has invited 119 seafood-related businesses throughout the Hawaiian Islands to take part in a commercial seafood buyer survey. This group includes fish markets, grocery stores, distributors, and restaurants. The survey focused on the types of seafood they source for their business and their perceptions of various seafood varieties. To date, we have received 21 completed surveys, resulting in a response rate of 17.6%.

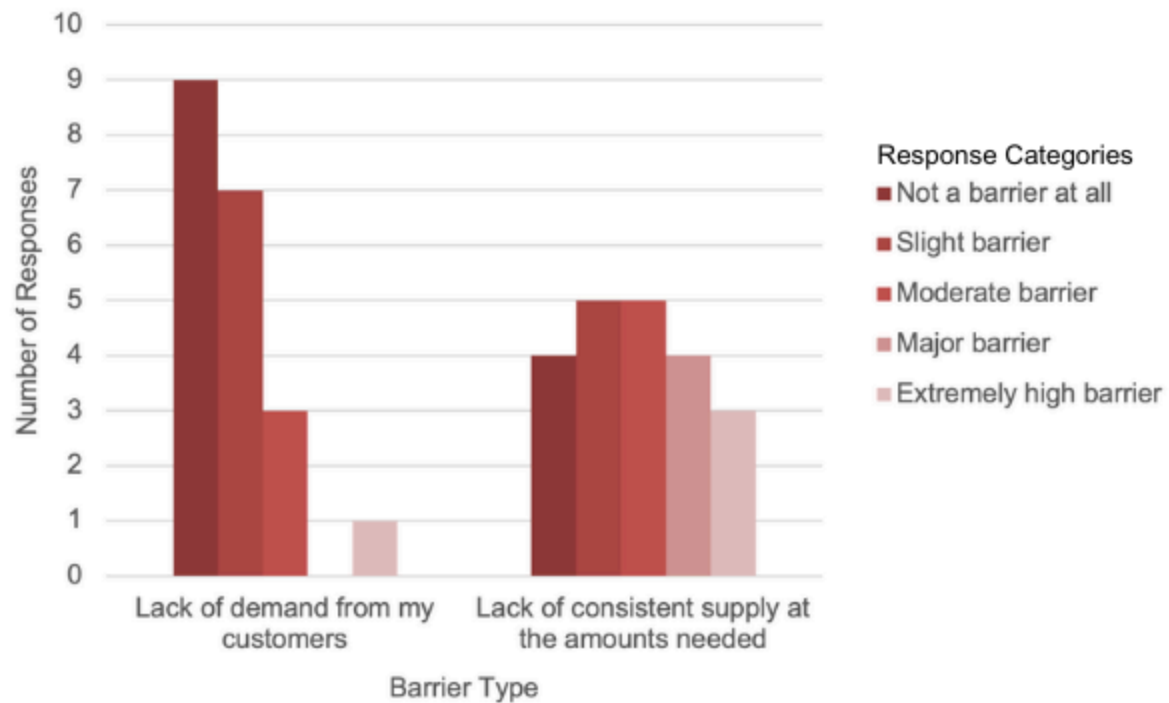
In a series of questions on barriers to sourcing local seafood, business representatives were asked:

1. "How much of a barrier does *lack of demand from customers* present to your ability to source local Hawai'i-grown seafood?"
2. "How much of a barrier does *lack of consistent supply at the amounts needed* present to your ability to source local Hawai'i-grown seafood?"
3. "How much of a barrier does *cost* present to your ability to source local Hawai'i-grown seafood?"
4. "How much of a barrier does *lack of relationships with local seafood producers or distributors* present to your ability to source local Hawai'i-grown seafood?"
5. "How much of a barrier does *lack of infrastructure or logistics systems in place for handling such products* present to your ability to source local Hawai'i-grown seafood?"

Answers were given on a 5-point Likert scale: "not a barrier at all" to "extremely high barrier."

Comparison of Barriers: Lack of Demand vs. Lack of Supply

Preliminary Data (n=21)



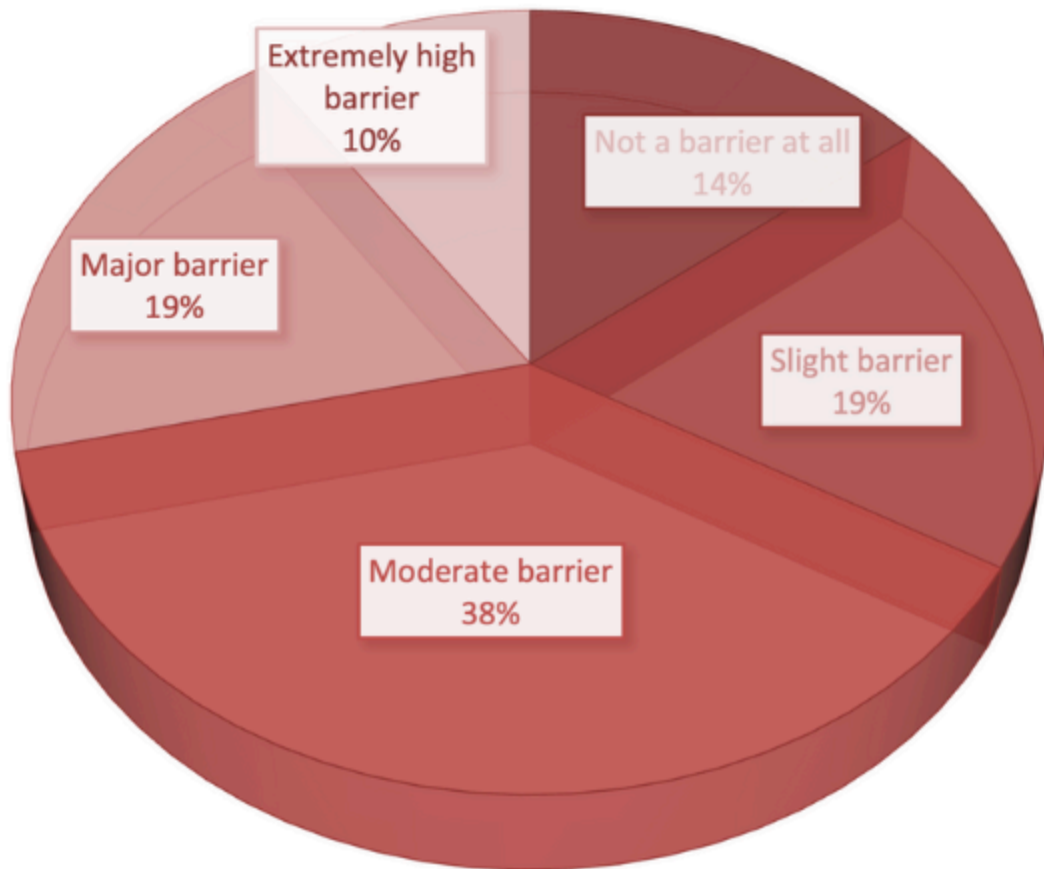
Demand & Supply

Preliminary Conclusions

- The majority perceive a lack of customer demand as a minor barrier.
 - Lack of consistent supply at the amounts needed is perceived as a bigger barrier.
 - There is customer demand for local seafood.
 - Improving the quantity and dependability of the supply chain could help Hawai'i's local seafood industry to meet local demand.
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Cost as a Barrier to Sourcing Local Seafood

Preliminary Data (n=21)



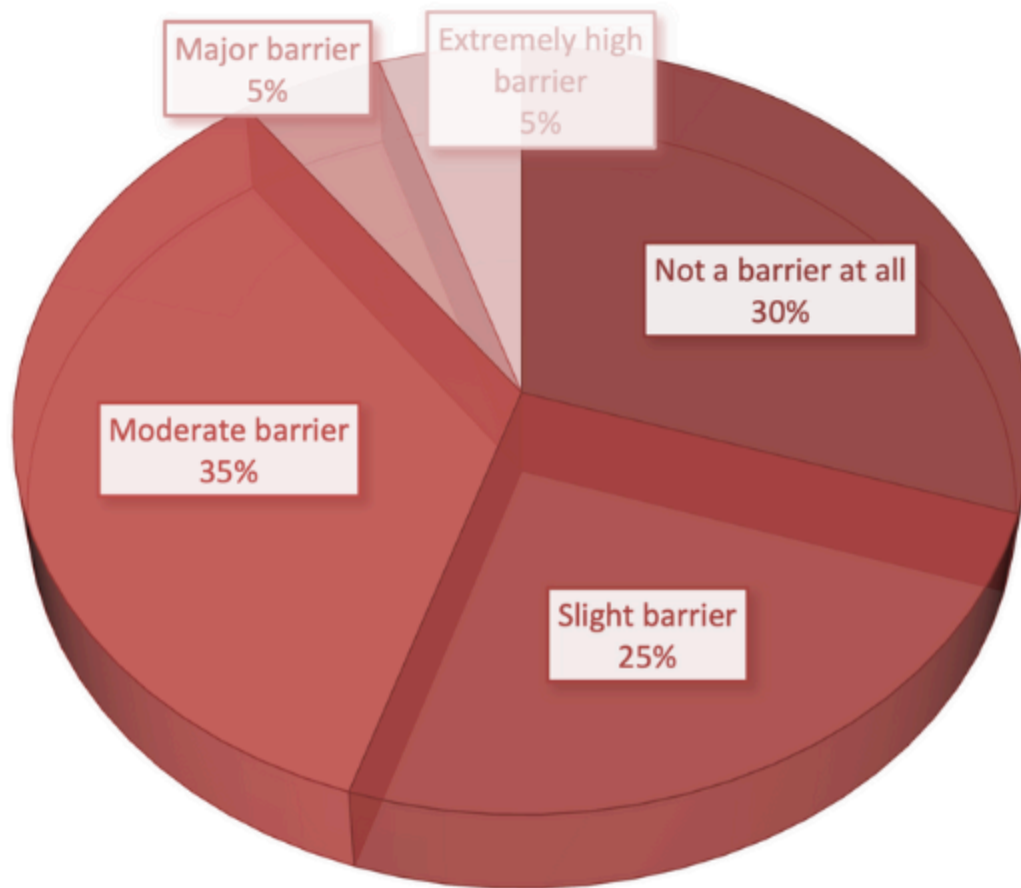
Cost as a Barrier to Sourcing Local Seafood

Preliminary Conclusions

- The majority (67%) view cost as a moderate to extremely high barrier.
 - 33% consider it a minor or non-issue.
 - Implies cost is a critical barrier for many commercial seafood buyers when sourcing Hawai'i-grown seafood.
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Lack of Infrastructure or Logistic Systems in Place

Preliminary Data (n=21)



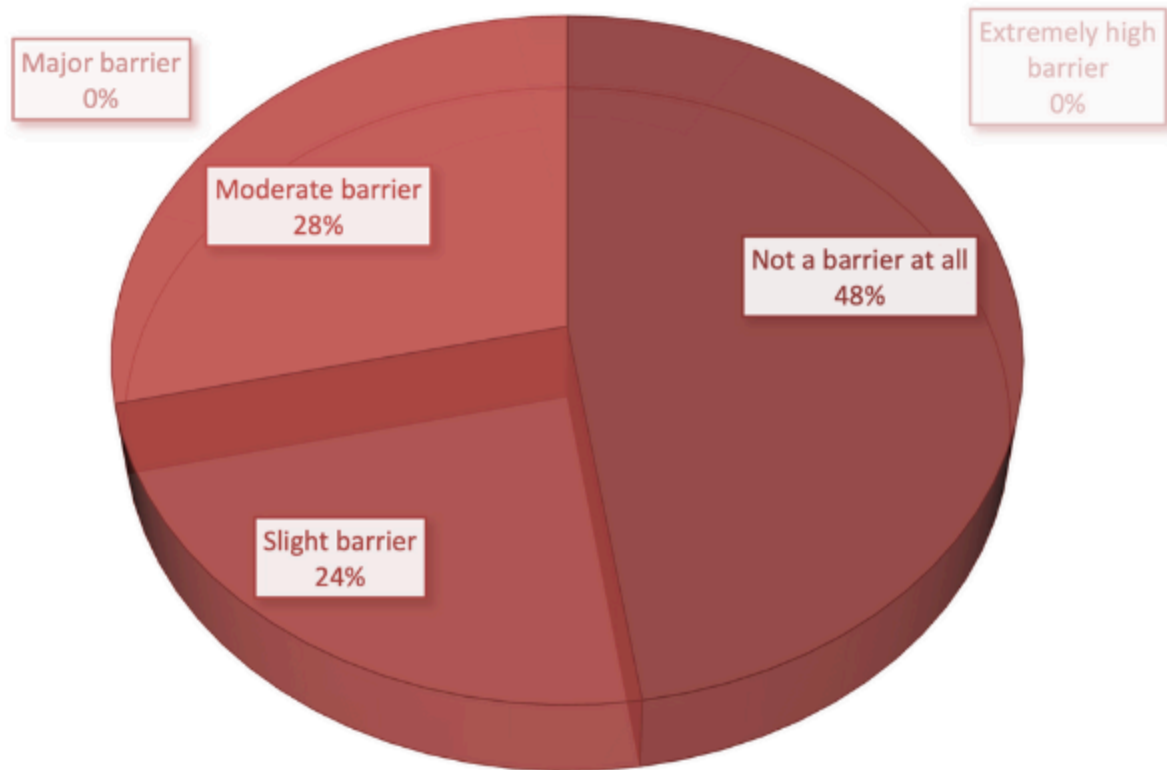
Lack of Infrastructure or Logistic Systems in Place

Preliminary Conclusions

- Over half of respondents (55%) perceive the lack of infrastructure as a non-issue or only a slight barrier.
 - But 45% categorize it as a moderate to extremely high barrier.
 - A significant portion of businesses may benefit from improved infrastructure and support for enhanced logistics.
-

Lack of Relationships with Local Seafood Producers or Distributors

Preliminary Data (n=21)



Lack of Relationships with Local Seafood Producers or Distributors

Preliminary Conclusions

- The majority (72%) consider lack of relationships as either a non-issue or only a slight barrier.
- Still, 28% categorize it as a moderate barrier.
- This minority may benefit from better networking infrastructure to link them with local seafood suppliers.

Seafood *Ecolabels* Explained

Ecolabels appear on packaging to imply that a product meets specific environmental standards. They are meant to guide consumers who want to buy more sustainable or environmentally-friendly products. Ecolabels may indicate a specific certification or a labeling endorsement.

Certifications are considered to give a product greater credibility and trustworthiness. They are awarded by third parties with defined standards, thorough evaluations, and regular audits. **Labeling endorsements**, on the other hand, may be specific to an industry sector or retailer. They are more focused on particular qualities or practices and might not always need third-party verification. This means that they can be implemented more quickly than certifications, but they might also have more variable credibility.

The following tables detail the ecolabels that our recent retail market research has identified as the most prevalent in Hawai'i.

Sustainable Seafood Certifications

Logo	Certification	Usage	Criteria
	ASC Certified (Aquaculture Stewardship Council)	Aquaculture: Certification for responsible aquaculture production	Adherence to strict environmental and social standards in aquaculture.
	Best Aquaculture Practices (BAP)	Aquaculture: Comprehensive aquaculture production certification	Ensures responsibility in environmental, animal welfare, food safety, & social aspects along the supply chain.
	Friend of the Sea	Wild-caught & Aquaculture: Global certification for sustainable seafood	Certifies products from sustainable fisheries & aquaculture farms w/ a focus on habitat protection & bycatch reduction.
	NFI Crab Council Certified	Wild-caught: Crab products w/ focus on sustainability	Promotes & certifies sustainable crab harvesting & management.
	Sustainable Seafood MSC (Marine Stewardship Council) Certified	Wild-caught: Widely recognized for various seafood products	Sustainable fish populations, minimal environmental impact, effective fisheries management.

Sustainable Seafood Labeling Endorsements

Logo	Label	Usage	Indicates
	Alaska Seafood	Wild-caught: Promotional branding for Alaskan seafood products	Promotes & highlights the qualities of Alaska seafood, including its wild, natural, and sustainable characteristics.
	Albertson's Responsible Choice	Wild-caught & Aquaculture: Ethical & sustainable sourcing indication	Indicates a commitment to sustainable seafood sourcing practices.
	Trusted Catch	Wild-caught & Aquaculture: Indicates responsible seafood sourcing	Marks seafood sourced in an ecologically sound and responsible manner.
	Whole Foods Market Responsibly Farmed	Certification for responsibly farmed products including aquaculture	Ensures aquaculture is performed in an environmentally and socially responsible manner.
	Dolphin Safe	Wild-caught Tuna: Various eco-label endorsements for tuna products	These labels indicate that there was no intentional harm to dolphins during fishing operations.

Voice of the Sea Episode: Nomilo (Nōmilu) Loko i'a

Voice of the Sea is a half-hour TV series produced by the University of Hawai'i Sea Grant Center for Marine Science Education

Sit back, relax, and [click here](#) to virtually visit an inspiring 20-acre saltwater fishpond. Kauai'i Sea Farm, a Hawaiian family business, specializes in oysters, limu, clams, sea cucumbers, and Akulikuli (*Sesuvium portulacastrum*). Watch as they work to maintain the pristine condition of Nomilo fishpond and its coastline while sustainably producing shellfish and seafood.



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