

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

**TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEE ON COMMERCE AND CONSUMER
PROTECTION**

**FEBRUARY 23, 2021
9:30 A.M.
VIA VIDEO CONFERENCE**

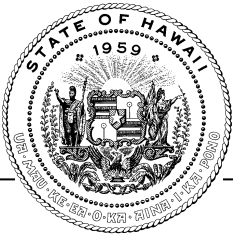
**SENATE BILL NO. 489
RELATING TO AGRICULTURAL BUILDINGS**

Chairperson Baker and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 489. This measure amends Section 46-88, HRS by increasing the maximum area from 20,000 square feet to 60,000 square feet for each agricultural shade cloth structure, cold frame, and greenhouse that could qualify the structure for exemption from building permits and building code requirements. The Department of Agriculture supports this measure as it appears to be clearly limited to agricultural structures meant for agricultural production and not to other buildings that may be used for purposes not related to agricultural activities.

Thank you for the opportunity to testify on this measure.





OFFICE OF PLANNING STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

MARY ALICE EVANS
DIRECTOR
OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: <http://planning.hawaii.gov/>

Statement of
MARY ALICE EVANS
Director, Office of Planning
before the
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION
Tuesday, February 23, 2021
9:30 AM
Via Videoconference

in consideration of
SB 489
RELATING TO AGRICULTURAL BUILDINGS.

Chair Baker, Vice Chair Chang, and Members of the Senate Committee on Commerce and Consumer Protection,

The Office of Planning **supports** SB 489 which would amend Hawaii Revised Statutes (HRS) § 46-88 (a) to increase the maximum area for each agricultural shade cloth structure, cold frame, and greenhouse exemptions from building permit and building code requirements from 20,000 to 60,000 square feet in size.

This measure is needed to promote the expansion and continued growth of various agricultural uses and activities on agricultural lots.

Thank you for the opportunity to testify.



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Commerce and Consumer Protection
Tuesday, February 23, 2021 at 9:30 a.m.

By
Nicholas Comerford, Dean
College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

SB 489 – RELATING TO AGRICULTURAL BUILDINGS

Chair Baker, Vice Chair Chang, and members of the Senate Committee on Commerce and Consumer Protection:

Thank you for the opportunity to provide testimony in strong support of SB 489. Our testimony relates to Section 1 (a) (3), (4) and (7) that apply to controlled environment agricultural (CEA) structures and other farm structures. This is similar testimony to that provided for HB 96.

CEAs need to be an important component of agriculture in Hawai'i's future. The advantages of CEAs include:

- protection from insects and, hence, plant disease vectors;
- protection from invasive plants as pests;
- more efficient use of water resources (particularly where hydroponics is used within the structures);
- more efficient use, and hence less use, of pesticides required to control insect and plant pests;
- higher production per square foot of ground;
- higher quality of product allowing a better price and more income for the operator; and,
- easier and more efficient manner of meeting food safety requirements.

As an example of the advantage of a shade house CEA based on research from the College of Tropical Agriculture and Human Resources, a CEA resulted in:

- a 50% reduction in insecticide use, and
- up to a 7-fold increase in marketable yields of cucumber, kale and zucchini.

This bill expands the opportunity and ease of increasing the CEA structures in Hawai'i. Given the known advantage of such structures, this bill has the potential to have a significantly large effect on Hawai'i agriculture.

Aquaculture/hydroponics can also be seen as a CEA structure. Approximately 63% of our seafood is imported (<https://hdoa.hawaii.gov/ai/aquaculture-and-livestock-support-services-branch/aquaculture-in-hawaii/>). Aquaculture/aquaponics can be a growth industry in Hawai'i. This bill provides for a greater efficiency and ease of increasing the aquaculture/aquaponics industry.

We strongly support the concept of increasing the permissible size of these structures that are exempt from building permits and building code requirements. We understand that this is an important move to improving Hawai'i agriculture. However, we defer to the proper engineering/permitting authorities as to the details of such a bill.



P.O. Box 253, Kunia, Hawai'i 96759
Phone: (808) 848-2074; Fax: (808) 848-1921
e-mail info@hfbf.org; www.hfbf.org

February 23, 2021

HEARING BEFORE THE
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

TESTIMONY ON SB 489
RELATING TO AGRICULTURAL BUILDINGS

Conference Room 229
9:30 AM

Aloha Chair Baker, Vice Chair Chang, and Members of the Committee:

I am Brian Miyamoto, Executive Director of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,800 farm family members statewide and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic, and educational interests of our diverse agricultural community.

The Hawaii Farm Bureau supports SB 489, that would allow certain larger agricultural shade cloth structures, cold frames, or greenhouses to qualify for an exemption from building permit and building code requirements.

The agricultural building permit exemption statute was developed over years of intense discussion between legislators and stakeholder groups including diversified crop farmers, ranchers, aquaculturists, firefighters, county planning departments, and many others. The purpose of this effort was to help Hawaii's agricultural producers become more efficient and grow, in order to further the State's goal of doubling food production and becoming more self-sufficient.

The foremost consideration when considering exemptions is to ensure the safety of building occupants, neighbors, and the general public. Importantly, the proposed amendment is strictly limited to only certain low-risk agricultural structures. Allowing these larger structures is appropriate and necessary, as modern agriculture evolves towards using bigger and more cost-effective protective structures to shelter crops from pest infestation, from extreme temperatures, excessive rains, or long droughts, and hungry feral animals.

Although the entire chapter is not copied within the bill, please note that these larger structures must still comply with all applicable state and county zoning codes. In addition, no electrical power or plumbing systems can be connected to the structure without first obtaining the appropriate county permits, and any wastewater disposal must comply with State department of health regulations.

Thank you for your continued support for Hawaii farmers and ranchers.



Email: communications@ulupono.com

SENATE COMMITTEE ON COMMERCE & CONSUMER PROTECTION
Tuesday, February 23, 2021 — 9:30 a.m.

Ulupono Initiative supports SB 489, Relating to Agricultural Buildings.

Dear Chair Baker and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

Ulupono supports SB 489, which increases the maximum area of agricultural shade cloth structures, cold frames, and greenhouses that qualify for an exemption from building permit and building code requirements.

As Hawai'i's local food issues become increasingly complex and challenging, local producers will need additional resources and support to address and overcome them. Ulupono supports efforts to increase local food production here in the state, while also decreasing and eliminating the hurdles that exist for those looking to invest in new opportunities for Hawai'i agricultural production. Section 46-88, Hawai'i Revised Statutes, allows local food production operations to bypass an unnecessarily lengthy and costly permitting process.

We believe that opening the door to new investments in agricultural infrastructure will directly support more local food production and an economically robust homegrown agriculture industry, which strengthens our community with fresh, healthy food.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

Investing in a Sustainable Hawai'i



Hawaii Cattlemen's Council, Inc.

COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

Senator Rosalyn H. Baker, Chair

Senator Stanley Chang, Vice Chair

SB489

Relating to Agricultural Buildings

Tuesday, February 23, 2021 9:30 am

Via Video Conference

Chair Baker, Vice Chair Chang, and Members of the Committee,

The Hawaii Cattlemen's Council **supports SB489**, which would that would allow certain larger agricultural shade cloth structures, cold frames, or greenhouses to qualify for an exemption from building permit and building code requirements.

The agricultural building permit exemption statute helps Hawaii's agricultural producers become more efficient and grow, in order to further the State's goal of doubling food production and becoming more self-sufficient. The foremost consideration when considering exemptions is to ensure the safety of building occupants, neighbors, and the general public. Importantly, the proposed amendment is strictly limited to only certain low-risk agricultural structures. Allowing these larger structures is appropriate and necessary, as modern agriculture evolves towards using bigger and more cost-effective protective structures to shelter crops from pest infestation, from extreme temperatures, excessive rains, or long droughts, and hungry feral animals.

Nicole Galase
Hawaii Cattlemen's Council
Managing Director



SB-489

Submitted on: 2/22/2021 9:15:52 AM

Testimony for CPN on 2/23/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
John Seward	Testifying for Hawaii Farming LLC	Support	No

Comments:

Dear Senators of the Senate Commerce and Consumer Protection Committee

We respectfully submit this testimony in support of SB489.

I am a co-owner/managing member of Hawaii Farming LLC, a large scale commercial greenhouse farming operation on the Big Island growing local food safety certified vegetables which are distributed to consumers across the State of Hawaii. We have 60 employees based on 50 acres in the agriculture dedicated zone of Lalamilo in Waimea, and our products include several varieties of cucumbers (the Keiki Cukes and Kamuela Cucumbers brands) and tomatoes.

Hawaii Farming LLC fully supports SB489 for the following reasons:

1) - this bill is an important step to support sustainable local food safety certified agriculture production in Hawaii by strengthening the ability of farmers to successfully deploy modern farming technology in greenhouses on a larger scale.

- a Hawaii building code/building permit exemption already exists for agricultural shade cloth, cold frame and greenhouse structures. The bill simply increases the maximum area from 20,000SF to 60,000SF for each such agricultural structure that could qualify for this existing exemption. The bill is limited only to agriculture structures for agricultural production, and not for other building types.

- larger square footage commercial greenhouses wrapped in fire resistant polycarbonate panels have become market standard worldwide enabling farmers to best achieve larger scale crop production while conserving natural resources and effectuating best in class pest containment.

- our further expansion and diversification plans in modern greenhouses and associated technologies have been slowed partially due to the current language and processes (including complex 'exemption' processes requiring various approvals under a declaration of compliance form) relating to greenhouses in the State and County legislation/codes. SB489 under State legislation would be an efficient and effective step to benefit local farmers to progress the above goals. It is an important factor allowing us

to expedite additional local farming investment which maximizes the use of our limited ag land while complying with important safety principles.

- this bill will further foster sustainable increased local food production aligned with the Hawaii goal of food self-sufficiency. Equally important is the progress this bill will enable in strengthening consumer protection and trust across Hawaii with a greater supply of local fresh vegetables grown in modern sealed greenhouses with best-in-class containment mechanisms to protect against pests and diseases. This bill will also benefit the local community with additional high-tech farming jobs.

Thank you for your consideration of SB489 - we are grateful for the opportunity to provide this testimony.

February 22, 2021

Respectfully

John Seward

Co-Owner/Managing Member

HAWAII FARMING LLC

Phone: [\(808\) 260-0789](tel:8082600789)

E-mail: john@hawaiifarming.com

66-1247 Lalamilo Farm Rd

Kamuela, HI 96743

SB-489

Submitted on: 2/22/2021 9:37:59 AM

Testimony for CPN on 2/23/2021 9:30:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Nancy Jones	Testifying for Hydroponics Alternatives LLC	Support	No

Comments:

Testimony Supporting SB489 (companion to HB96) With Proposed Changes

Aloha Senator Baker, Senator Chang, and Committee Members:

We submit this testimony in STRONG SUPPORT of SB489 relating to Agricultural Buildings as we are hydroponics greenhouse farmers. We returned home to Wai`anae to farm in 2012 after teaching greenhouse construction and hydroponics practices to farmers around the world on various USAID and UN projects for over 15 years. Hawaii's lack of food security was and remains a grave concern for us. So, once we acquired a farm lot, we anticipated constructing a greenhouse(s) to maximize production on our rocky, hillside farm lot along with a packing house. However, we NEVER dreamed that it would take us from approximately 2016 until now to obtain a permit from the City and County of Honolulu for our 20,400 square foot greenhouse. We purposely chose a greenhouse/packing house manufacturer from South Florida, that engineers structures to withstand hurricane wind-loads. This Florida company, a member of the American Society of Steel Fabricators, provided Structural Calculations certifying our structures could withstand – a minimum of 110 MPH. Yet, the Florida and U.S. certification was not sufficient for Hawaii and we had to pay a HAWAII plan-reviewer/architect to restamp our plans AND the structural calculations at a cost of \$10,000 before submitting everything to the City (and the Hawaii Dept. of Agriculture) where we have incurred thousands of dollars in costs for numerous re-drawings, re-printings, AND resubmittals – sometimes for simple things like misspelled words. Yet, we STILL – to this day – have received NO approval from the City of Honolulu so we can complete the electrical installation on our greenhouse structure, install the roof structure, AND actually produce a crop of tomatoes to replace those Honolulu wholesalers import from Mexico or California! Meanwhile, BILLIONAIRE Larry Ellison seems to have had ZERO problems with Maui County in erecting his structures and producing crops on Lana`i. In addition, the interest on our loan is now astronomical! “Frustrated” does not even begin to describe our feelings about trying to farm within the stranglehold of the City of Honolulu’s Permit Office.

To make language clearer regarding structural requirements, we believe that any confusing language should be omitted with reference to “no more than one thousand

square feet in floor area” for Section 1 (a) AND in Section 1(a)(3) “Notwithstanding the one thousand square foot area restriction...” Any agricultural related structure that falls within the sixty thousand (60,000) square foot requirement should remain exempt.

We also recommend inserting language that specifies a 90-day time limit for certification of any agricultural-related County or State permits.

Also – why have a State law that can be superseded by County zoning codes? If this is the case, then as happened before to us, the County of Honolulu can simply say they “know nothing about this State law.” If framed structures are for agricultural production only, as long as they are manufactured in compliance with United States steel fabricators or other nationally-recognized standards, Hawai`i’s farmers should be allowed to construct these on any lands zoned as “AG” – for agriculture. THIS should be the only State or County zoning restriction apart from windloads (see below).

Farmers should also NOT be required to follow “plumbing codes” or “water engineering requirements” other than the mandatory annual passing of a backflow preventer operational test. Any irrigation installed on AG land, should be exempt from County zoning requirements. Farmers change irrigation methods every time they change a crop – in some cases. Agreed, however, there should be a separation and regulation about water supplies versus fertigation systems.

FINALLY – for any agricultural structures, we recommend that language be inserted in your bill that such enclosed greenhouse structures (i.e. plastic, corrugated polycarbonate, fiberglass, et al.) should be designed to withstand a minimum of 110 mile-per-hour windloads. Any and all structural documents should conform to a United States National Standard and not just a Hawai`i standard – since Hawai`i’s experience with greenhouse is quite limited when compared to states like Florida.

For all of the above reasons, we respectfully urge your committee to support SB489 and please pass this out of your Committee with the proposed language changes to allow all Hawai`i farmers to increase their production using protected agricultural structures. This will effectively improve food security for all Hawai`i residents. Mahalo for this opportunity to present testimony.

Nancy Jones, Manager - Hydroponics Alternatives Farms LLC

Site: PO Box 1472, Wai`anae, HI 96792

SB-489

Submitted on: 2/22/2021 9:45:16 AM

Testimony for CPN on 2/23/2021 9:30:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Zeb Jones	Individual	Support	No

Comments:

Testimony Supporting SB489 (companion to HB96) With Proposed Changes

Aloha Senator Baker, Senator Chang, and Committee Members:

I am submitting this testimony to STRONGLY SUPPORT SB489 relating to Agricultural Buildings as a longtime hydroponics greenhouse farmer. In 2012, I returned home to Wai`anae to farm with my family after teaching greenhouse construction and hydroponics practices to farmers around the world on various USAID and UN projects for over 15 years. Hawaii's lack of food security was and remains a grave concern for us. So, once we acquired a farm lot, we anticipated constructing a greenhouse(s) to maximize production on our rocky, hillside farm lot along with a packing house. However, we NEVER dreamed that it would take us from approximately 2016 until now to obtain a permit from the City and County of Honolulu for our 20,400 square foot greenhouse. We purposely chose a greenhouse/packing house manufacturer from South Florida, that engineers structures to withstand hurricane wind-loads. This Florida company, a member of the American Society of Steel Fabricators, provided Structural Calculations certifying our structures could withstand – a minimum of 110 MPH. Yet, the Florida and U.S. certification was not sufficient for Hawaii and we had to pay a HAWAII plan-reviewer/architect to restamp our plans AND the structural calculations at a cost of \$10,000 before submitting everything to the City where we have incurred costs for numerous re-drawings, re-printings, AND resubmittals – sometimes for simple things like misspelled words. Yet, we STILL – to this day – have received NO approval from the City of Honolulu so we can complete the electrical installation on our greenhouse structure, install the roof structure, AND actually produce a crop of tomatoes to replace those Honolulu wholesalers import from Mexico or California! Meanwhile, BILLIONAIRE Larry Ellison seems to have had ZERO problems with Maui County in erecting his structures and producing crops on Lana`i. In addition, the interest on our loan is now astronomical! “Frustrated” does not even begin to describe our feelings about trying to farm within the stranglehold of the City of Honolulu’s Permit Office.

To make language clearer regarding structural requirements, any confusing language should be omitted with reference to “no more than one thousand square feet in floor area” for Section 1 (a) AND in Section 1(a)(3) “Notwithstanding the one thousand square foot area restriction...” Any agricultural related structure that falls within the sixty thousand (60,000) square foot requirement should remain exempt.

I also recommend inserting language that specifies a 90-day time limit for certification of any agricultural-related County or State permits.

Farmers should also NOT be required to follow “plumbing codes” or “water engineering requirements” other than the mandatory annual passing of a backflow preventer operational test. Any irrigation installed on AG land, should be exempt from County zoning requirements. Farmers change irrigation methods every time they change a crop – in some cases. Agreed, however, there should be a separation and regulation about water supplies versus fertigation systems.

In addition – why have a State law that can be superseded by County zoning codes? If this is the case, then as happened before to us, the County of Honolulu can simply say they “know nothing about this State law.” If framed structures are for agricultural production only, as long as they are manufactured in compliance with United States steel fabricators or other nationally-recognized standards, Hawai`i’s farmers should be allowed to construct these on any lands zoned as “AG” – for agriculture. THIS should be the only State or County zoning restriction apart from windloads (see below).

FINALLY – for any agricultural structures, I recommend that language be inserted in your bill that such enclosed greenhouse structures (i.e. plastic, corrugated polycarbonate, fiberglass, et al.) should be designed to withstand a minimum of 110 mile-per-hour windloads. Any and all structural documents should conform to a United States National Standard and not just a Hawai`i standard – since Hawai`i’s experience with greenhouse is quite limited when compared to states like Florida.

For all of the above reasons, I respectfully urge your committee to support SB489 and please pass this out of your Committee with the proposed language changes to allow all Hawai`i farmers to increase their production using protected agricultural structures. This will effectively improve food security for all Hawai`i residents. Mahalo for this opportunity to present testimony.

LATE

SB-489

Submitted on: 2/23/2021 12:04:26 AM
Testimony for CPN on 2/23/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Amy Brinker	Individual	Support	No

Comments:

Support