DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

Testimony of SUZANNE D. CASE Chairperson

Before the House Committee on AGRICULTURE

Friday, January 31, 2020 9:00 AM State Capitol, Conference Room 312

In consideration of HOUSE BILL 2129 RELATING TO THE ENVIRONMENT

House Bill 2129 proposes to authorize using the Agricultural Development and Food Security Special Fund to award grants to individuals proposing to engage in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. Requires the department of agriculture to submit a listing of grants and amounts granted to persons who engaged in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. The Department of Land and Natural Resources (Department) supports the intent of this bill and defers to the Department of Agriculture (DOA) with comments.

The State of Hawaii's commitment to uphold the Paris Climate Accord and progressive move towards zero emissions clean economy by 2045 requires that we actively invest in reducing our emissions and mitigate greenhouse gases (primarily carbon dioxide - CO2). Agriculture, Forests and other Land Uses (AFLOU) are currently the State's only carbon sink. Investing in carbon positive actions such as afforestation, reforestation, soil carbon sequestration, or local organic plant food production is one of the most effective ways to start mitigating our carbon footprint. The Department recognizes that this program is administered by DOA and defers to them for comment.

The Department notes that carbon positive actions are not limited to afforestation, reforestation, soil carbon sequestration, or local organic plant food production and suggests that the Green House Gas Sequestration Task Force be consulted in identifying priority projects reducing emissions and increasing sequestration carbon positive on natural and working lands. The Department also finds that increasing the funding amount of the agricultural development and

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES

BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

food security special fund in tandem with expanding the program by increasing the percent of Hawai'i's Environmental Response, Energy, and Food Security Tax DOA receives could be used to cover program maintenance costs and serve as a revenue stream to accelerate the number of carbon positive projects funded. The Department suggests integrating these costs when contemplating the establishment of this program.

Thank you for the opportunity to comment on this measure.

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 HOUSE COMMITTEE ON AGRICULTURE

JANUARY 31, 2020 9:00 A.M. CONFERENCE ROOM 312

HOUSE BILL NO. 2129 RELATING TO THE ENVIRONMENT

Chairperson Creagan and Members of the Committee:

Thank you for the opportunity to testify on House Bill 2129. This measure authorizes the Agricultural Development and Food Security Special Fund to be used by the Department of Agriculture to award grants up to an unspecified maximum amount to individuals proposing to engage in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. It also requires the Department of Agriculture to submit a listing of the grants and amounts granted to persons undertaking the qualified activities. The Department of Agriculture has strong concerns and offers comments.

The Agricultural Development and Food Security Special Fund (Section 141-10) is fully committed to the nine purposes for which the Special Fund may be expended. These purposes directly target agricultural production and processing such as agricultural resources, agricultural research, agricultural equipment, plant quarantine, promotion and marketing of agricultural products, water testing, and other activities "...intended to increase agricultural production or processing that may lead to reduced importation of food, fodder, or feed from outside the State."

This measure proposes to add four specific activities – afforestation, reforestation, soil carbon sequestration, and organic food production – that may be awarded grants from the Special Fund. It also establishes a not-to-exceed cap on the grant to the existing purposes. The Department respectfully submits that afforestation, reforestation, and soil carbon sequestration do not align with the agricultural production



Page 2

and processing focus of the Special Fund. We also believe the proposed grant to organic food producers is unnecessary since qualified organic food producers already have access to a tax credit for qualified expenses incurred to produce organic agriculture product (Section 235-110.94). The laudable conservation efforts associated with afforestation, reforestation, and soil carbon sequestration should be funded by other more appropriate sources which have been established for such purposes.

The Department also notes that grant-making authority may be defective because it must include standards by which the grants shall be made. We believe that the measure does not provide sufficient guidance to meet that requirement.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE GOVERNOR

SCOTT J. GLENN CHIEF FENERGY OFFICER

(808) 587-3807

Testimony of SCOTT J. GLENN, Chief Energy Officer

before the HOUSE COMMITTEE ON AGRCIULTURE

Friday, January 31, 2020 9:00 AM State Capitol, Conference Room 312

Comments in consideration of HB 2129
RELATING TO THE ENVIRONMENT.

Chair Creagan, Vice Chair DeCoite, and members of the Committee. The Hawaii State Energy Office (HSEO) offers comments on HB 2129, which authorizes the agricultural development and food security special fund to be used to award grants to individuals proposing to engage in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State; and requires the Department of Agriculture to submit a listing of grants and amounts granted to persons who engaged in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. The HSEO supports the intent of this bill and defers to the Department of Agriculture with comments.

The State of Hawaii has committed to a decarbonized future. A critical path to achieving the zero emissions clean economy target is to sequester greenhouse gases to offset emissions within the State of Hawaii. Based on the Greenhouse Gas Inventory published by the State Department of Health, the inventory sector called "Agriculture, Forests and other Land Uses" (AFLOU) is currently the State's only carbon sink. Investing in actions such as afforestation, reforestation, soil carbon sequestration, or local organic plant food production is one of the most effective ways to offset Hawaii's emissions and promote innovative economic development.

Thank you for the opportunity to testify on this measure.

Submitted on: 1/30/2020 6:31:18 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Climate Protectors Coalition	Support	No

Comments:

Dear Chair Wakai, Vice Chair Taniguchi, and members:

i»¿The Climate Protectors Coalition strongly supports HB2129!

We are a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible, including by encouraging the planting of trees, regenerative agricultural practices and production of local organic plant food in Hawaii.

In order to reverse the climate crisis, we must remove vast amounts of carbon from the atmosphere. Cutting emissions is clearly no longer sufficient.

Planting trees can be a valuable tool in reversing the Climate Crisis by drawing carbon down from the atmosphere and back into the ground. Trees cost less, absorb carbon anywhere they grow, are simple to plant, require minimal maintenance, and last many decades. At a time when forests are burning in the Amazon, Australia, California and elsewhere, we in Hawaii can help a little by planting trees. Afforestation and reforestation should be encouraged wherever possible.

Regenerative agricultural practices are another valuable tool. These include:

- no tillage,
- diverse cover crops,
- in-farm fertility (no external nutrients),
- no pesticides or synthetic fertilizers, and
- multiple crop rotations.
- Together, these practices increase carbon-rich soil organic matter. The result: vital microbes proliferate, roots go deeper, nutrient uptake improves, water retention increases, plants are more pest resistant,

and soil fertility compounds. Farms are seeing soil carbon levels rise from a baseline of 1 to 2 percent up to 5 to 8 percent over ten or more years, which can add up to 25 to 60 tons of carbon per acre.

It is estimated that at least 50 percent of the carbon in the earth's soils has been released into the atmosphere over the past centuries. Bringing that carbon back home through regenerative agriculture is one of the greatest opportunities to address human and climate health, along with the financial well-being of farmers.

Local organic plant food production:

Hawaii needs more local food for food security and to reduce fossil fuel use in transporting food to Hawaii. Organic plant foods (vegetables and fruits) should be prioritized because they have a much smaller carbon footprint than animal products.

Please pass this bill to help reverse the climate crisis! Mahalo!

HB-2129 Submitted on: 1/30/2020 10:23:36 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	We Are One, Inc www.WeAreOne.cc - WAO	Support	No

Comments:

www.WeAreOne.cc



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The House Committee on Agriculture From: Brodie Lockard, Founder, 350Hawaii.org

Date: Friday, January 31, 2020, 9:00 am

In strong support of HB 2129

Dear Chair Creagan, Vice Chair DeCoite, and members:

350Hawaii strongly supports HB 2129.

Trees bring a plethora of good: animal habitat, beauty, erosion abatement, urban cooling, shade.

They are also a tremendous good in the Climate Crisis fight that is killing everything that lives on our planet.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Last year, 3,500 square miles of forest burned in Brazil. 19,000 square miles of brush burned in Australia. These trees must be replaced. We in Hawaii can help a little.

Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

HB 2129 will help a little. Please pass it.

Brodie Lockard Founder, 350Hawaii.org

<u>HB-2129</u> Submitted on: 1/29/2020 9:30:44 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Individual	Support	No

Submitted on: 1/29/2020 4:15:33 PM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Andrea Quinn	Individual	Support	No	

Comments:

Dear Honorable Committee Members:

Please support HB2129. Grants for carbon sequestration will help mitigate climate change, which is already occurring.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei

Submitted on: 1/30/2020 1:59:04 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
J Ashman	Individual	Comments	No

Comments:

Why would this grant opportunity be limited to only "organic" plant food production and not all food production? I'm not opposed to organic, but organic does not mean it's safer to eat, healthier, or more environmentally friendly. Let's support all of agriculture in Hawaii. Thank you.

Submitted on: 1/30/2020 5:03:24 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

Hello,

My name is Nanea Lo and I'm a lifelong resident of Hawai'i on O'ahu. I'm writing in full support of this bill. We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Me ke aloha 'Ä• ina,

Nanea Lo

Submitted on: 1/30/2020 6:43:51 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Kunitake	Individual	Support	No

Comments:

Aloha Chair Creagan and Members of the Commitee on Agriculture,

I am writing in support of HB 2129.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Please support this bill.

Mahalo,

Caroline Kunitake

Submitted on: 1/30/2020 7:17:52 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Zoe Malia Ozoa Loos	Individual	Support	No

Comments:

To: The House Committee on Agriculture

From: Zoë Malia Ozoa Loos

Date: 1/30/2020

In strong support of HB 2129

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I strongly support HB 2129.

Trees bring a plethora of good: animal habitat, beauty, erosion abatement, urban cooling, shade.

They are also a tremendous good in the Climate Crisis fight that is killing everything that lives on our planet.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Last year, 3,500 square miles of forest burned in Brazil. 19,000 square miles of brush burned in Australia. These trees must be replaced. We in Hawaii can help a little.

Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

HB 2129 will help a little. Please pass it.

Zoë Malia Ozoa Loos

Submitted on: 1/30/2020 7:42:11 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
helen raine	Individual	Support	No

Comments:

To: The House Committee on Agriculture

From: Helen Raine

Date: Friday, January 30, 2020, 8:00 am

In strong support of HB 2129

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I strongly support HB 2129.

Trees bring a plethora of good: animal habitat, beauty, erosion abatement, urban cooling, shade. They are also a tremendous good in the Climate Crisis fight that is killing everything that lives on our planet.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Last year, 3,500 square miles of forest burned in Brazil. 19,000 square miles of brush burned in Australia. These trees must be replaced. We in Hawaii can help a little.

Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

HB 2129 will help a little. In fact we should be doing much more. Please pass it.

THanks and regards

Helen Raine

Submitted on: 1/30/2020 7:51:09 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Linda Morgan	Individual	Support	No

Comments:

In strong support of HB2129

Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

HB 2129 will help a little. We are already experiencing the effects of climate change, with king tides flooding our coastal roads and highways, closing beaches, and causing erosion. Every action to reduce climate change must be taken.

Please pass HB2129

<u>HB-2129</u> Submitted on: 1/30/2020 8:31:49 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joy Silver	Individual	Support	No

Submitted on: 1/30/2020 8:41:55 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Nandoskar	Individual	Support	No

Comments:

Please support this bill! We are in a climate emergency and on the front lines here in Hawaii. I've seen visible sea level rise in my backyard of Waikikithese past few years which is unprecedented. We need to omit fossil fuels from our energy suite AND sequester carbon as strategically and quickly as possible. This bill supports sequestration through soil remediation and afforestation practices. Incentives will help grow these solutions and improve our communities with local organic food and jobs.

mahalo for your consideration.

<u>HB-2129</u> Submitted on: 1/30/2020 10:23:12 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Greg Koch	Individual	Support	No

Submitted on: 1/30/2020 10:28:48 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kelly King	Individual	Support	No

Comments:

It is very important that we increase participation in regenerative agriculture as much as possible, whether through exisiting companie, new businesses, non-profit organizations or individual family farming entities. Regenerative agriculture is gaining increasing support as a key component in combatting the climate crisis we now face. As Chair of the first county council Climate Action & Resilience Committee (Maui), I urge you to support this bill, make sure the granting agency has the tools to maximixe its due diligence, and get these grants out in the hands of local farmers as soon as possible. Mahalo nui loa,

Kelly Takaya King

<u>HB-2129</u> Submitted on: 1/30/2020 10:29:40 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
David Dinner	Individual	Support	No

<u>HB-2129</u> Submitted on: 1/30/2020 10:44:55 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Keith Ranney	Individual	Support	No

<u>HB-2129</u> Submitted on: 1/30/2020 11:25:48 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Laurel Quarton	Individual	Support	No

<u>HB-2129</u> Submitted on: 1/30/2020 11:46:14 AM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

<u>HB-2129</u> Submitted on: 1/30/2020 12:00:29 PM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Harriet Witt	Individual	Support	No

Comments:

We need this bill to become food sustainable, just as we need this bill to sequester carbons that don't belong in our atmosphere.

<u>HB-2129</u> Submitted on: 1/30/2020 12:16:08 PM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Mary Lacques	Individual	Support	No

Submitted on: 1/30/2020 12:30:35 PM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Drew Wilkinson	Growing Together, LLC	Support	No	

Comments:

I strongly support bill HB2129. Additional funding is needed to help with reforestation projects, soil carbon sequestration, and organic food production in the state of Hawaii. It is extremely challenging for farmers to finance these operations. Any grants made available will be very helpful.

Aloha,

Drew Wilkinson

<u>HB-2129</u> Submitted on: 1/30/2020 2:35:36 PM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
autumn ness	Beyond Pesticides	Support	No

Submitted on: 1/30/2020 3:05:56 PM

Testimony for AGR on 1/31/2020 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Matthew Geyer	Individual	Support	Yes

Comments:

Thank you for supporting these bills to help us fight climate change from all angles. We need to approach the climate crisis from multiple angles: reducing fossil fuel use, planting more trees, investing conscientiously, live less wastefully, and more. All of us need to work harder to make 2020 the year we begin to treat Hawai'i and the world with the respect it deserves.

<u>HB-2129</u> Submitted on: 1/30/2020 3:16:18 PM

Testimony for AGR on 1/31/2020 9:00:00 AM



Submitted By	Organization	l estifier Position	Present at Hearing
Megan Blazak	Individual	Support	No

Submitted on: 1/30/2020 6:29:26 PM

Testimony for AGR on 1/31/2020 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Noel Morin	Individual	Support	No

Comments:

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I strongly support HB 2129. This bill will enable action that is urgent and critical for our mitigation of the climate crisis. It will allow for restoration of our natural environment, allow us to contribute to much needed carbon sequestration, and enable food security.

The carbon sequestration is especially critical - it will be important for all communities to contribute to the removal of carbon from the atmosphere. This is in addition to cutting down on carbon pollution. Planting trees and restoring solils will enable cost-effective sequestration. Afforestation and reforestation should be enabled across our state.

HB 2129 will allow us to contribute more to the healing of our environment. Please pass it.

Sincerely,

Noel Morin

Hilo

<u>HB-2129</u> Submitted on: 1/30/2020 7:22:54 PM

Testimony for AGR on 1/31/2020 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Barbara Barry	Individual	Support	No

Comments:

Please support this. It's very important. Mahalo,

<u>HB-2129</u> Submitted on: 1/30/2020 9:02:11 PM

Testimony for AGR on 1/31/2020 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Dr. Jana Bogs	Individual	Support	No

<u>HB-2129</u> Submitted on: 1/31/2020 12:09:44 AM

Testimony for AGR on 1/31/2020 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Paul Marshall	Individual	Support	No

HB-2129 Submitted on: 1/31/2020 10:16:35 AM

Testimony for AGR on 1/31/2020 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Dennis F Lokmer	Individual	Support	No

Submitted on: 1/31/2020 12:49:15 PM

Testimony for AGR on 1/31/2020 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Meg "Sunshine" Roberts	Individual	Support	No

Comments:

I urge state support on this Bill. I am a farmer, a graduate of the Kohala Center's Beginner Farmer Rancher Development Program, a food hub manager, the HIP Agriculture F2S coordinator of the Kohala Farm to School Pilot, and have FSMA Grower Training and Train-the-Trainer certificates. I can attest that greater accessibility to grants for afforestation, reforestation, soil carbon sequestration, or local organic plant food production will empower the agricultural and environmental communities to expand our efforts in service of statewide food security, food sovereignty, climate change preparedness, and overall public health and wellness.