

**REPORT TO THE TWENTY-NINTH LEGISLATURE
2018 REGULAR SESSION
STATE OF HAWAII**

**ANNUAL REPORT ON THE
AGRICULTURAL DEVELOPMENT AND FOOD SECURITY SPECIAL FUND**

ACT 73, SLH 2010

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TABLE OF CONTENTS

I. Background

- A. Act 73, 2010 Session Laws of Hawaii
- B. Agricultural Development and Food Security Special Fund
- C. Role of the Hawaii Department of Agriculture

II. Description of Funded Projects and Activities

- A. Awarding of funds to increase demand in the local, domestic and international markets and increase the production of locally grown foods statewide for consumption or as ingredients for value-added products.
- B. The improvement of real property, dams, reservoirs, irrigation systems, and transportation networks necessary to promote agricultural production or processing activity, including investigative studies to identify and assess necessary improvements to dams, reservoirs, irrigations systems, and transportation networks.
- C. The conduct of research on and testing of agricultural products and markets.
- D. The funding of agricultural inspector positions within the department of agriculture.
- E. The promotion and marketing of agricultural products grown or raised in the State
- F. Other activity intended to increase agricultural production or processing that may lead to reduced importation of food, fodder, or feed from outside the State.

III. Proposed Projects and Activities

- A. The improvement of real property, dams, reservoirs, irrigation systems, and transportation networks necessary to promote agricultural production or processing activity, including investigative studies to identify and assess necessary improvements to dams, reservoirs, irrigations systems, and transportation networks.
- B. The conduct of research on and testing of agricultural products and markets.
- C. The funding of agricultural inspector positions within the department of agriculture.
- D. The promotion and marketing of agricultural products grown or raised in the State
- E. Other activity intended to increase agricultural production or processing that may lead to reduced importation of food, fodder, or feed from outside the State.

IV. Expenditures from the Agricultural Development and Food Security Special Fund

SECTION I

Background

A. Act 73, 2010 Session Laws of Hawaii

In an effort to address Hawaii's over reliance on imported food and energy and the vulnerability that this creates in energy and food security, as well as negative impacts on biosecurity and our economy, the Hawaii State Legislature approved HB 2421, H.D. 2, S.D. 2, C.D. 1, which was enacted as Act 73, 2010 SLH. Act 73 provided for the creation of an energy and food security tax in the amount of \$1.05 which is to be levied "on each barrel or fractional part of a barrel of imported petroleum product sold by a distributor to a retailer or end user". Fifteen cents of the tax is to be deposited into a new Agriculture Development and Food Security special fund; fifteen cents is to be deposited into the new Energy Security special fund; ten cents is to be deposited into the new Energy Systems Development special fund; five cents is to be deposited into the existing Environmental Response revolving fund; and sixty cents is to be deposited into the general fund. In addition to the establishment of the new special funds, Act 73 also created the Hawaii Economic Development Task Force whose purpose is to "facilitate the accelerated adoption and completion of renewable-energy projects, energy-efficiency programs, agricultural infrastructure and development, and other measures to meet the purposes of this Act".

B. Agricultural Development and Food Security Special Fund

Part IV, Section 7 describes the Agricultural Development and Food Security Special Fund and the responsibilities of the Hawaii Department of Agriculture (HDOA).

"§141- Agricultural development and food security special fund; establishment. (a) there is established within the state treasury the agricultural development and food security special fund.

(b) The following moneys shall be deposited into the special fund:

(1) The portion of the environmental response, energy, and food security tax specified under section 243-3.5;

(2) Any appropriation by the legislature into the special fund;

(3) Any grant or donation made to the special fund; and

(4) Any interest earned on the balance of the special fund.

(c) Subject to legislative appropriation, moneys in the special fund may be expended for the following purposes:

(1) The awarding of grants to farmers for agricultural production or processing activity;

(2) The acquisition of real property for agricultural production or processing activity;

(3) The improvement of real property, irrigation systems, and transportation networks necessary to promote agricultural production or processing activity;

(4) The purchase of equipment necessary for agricultural production or processing activity;

(5) The conduct of research on and testing of agricultural products and markets;

(6) The funding of agricultural inspector positions within the department of agriculture;

(7) The promotion and marketing of agricultural products grown or raised in the state; and

(8) Any other activity intended to increase agricultural production or processing that may lead to reduced importation of food, fodder, or feed from outside the state.

C. Role of the Hawaii Department of Agriculture

(d) The department of agriculture shall submit a report to the legislature no later than twenty days prior to the convening of each regular session on the status and progress of existing programs and activities and the status of new programs and activities funded under the agricultural development and food security special fund. The report shall also include:

- (1) The spending plan of the agricultural development and food security special fund;
- (2) All expenditures of agricultural development and food security special fund moneys;
- (3) The targeted markets of the expenditures, including the reason for selecting those markets;
- (4) The persons to be served using the expenditures; and
- (5) The specific objectives of the expenditures, including measurable outcomes.

This report includes a description of the status and progress made in implementing Act 73 as of November 30, 2011 and a plan for new programs and activities proposed through the period ending June 30, 2016.

SECTION II

Description of Funded Projects and Activities in FY17

Section II contains descriptions of projects and activities. The suggestions are organized under the allowable uses found in HRS Chapter 141 establishing the agricultural development and food security special fund. They are not prioritized.

A. Awarding of funds to increase demand in the local, domestic and international markets and increase the production of locally grown foods statewide for consumption or as ingredients for value-added products.

EAT LOCAL promotions -- Year 5

EAT LOCAL Social Media – This project was awarded to Kanu Hawaii with deliverables that include 1 million people engaged on social media, 100 information placements, 100 informational placements, 10,000 bits of user generated content, 2,500 new commitments to eat local, 6 offline events and to conduct the "EAT LOCAL" Challenge.

EAT LOCAL Television – This project was awarded to Oceanic Time Warner Cable/Spectrum -- a sixth "Buy Local, It Matters" commercial was produced with the FY17 funds that featured Leonard and Priscilla, two GoFarm graduates to highlight farmers with an estimated 20,000 spots of all six commercials shown since June 2017.

Seal of Quality (SOQ) Promotion

This project was awarded to KHON2 to produce and air 52 segments shown on Living808 on Fridays featuring SOQ members and their products.

B. The improvement of real property, dams, reservoirs, irrigation systems, and transportation networks necessary to promote agricultural production or processing activity, including investigative studies to identify and assess necessary improvements to dams, reservoirs, irrigations systems, and transportation networks.

Water is the lifeblood of agriculture. Efficient and reliable irrigation systems transport this resource to where it can be effectively used best. These systems are called upon to provide billions of gallons of agricultural water every year. Many of these systems were originally constructed at the turn of the twentieth century by sugarcane plantations. The decline of the plantations has led to the rapid deterioration of the systems and in order for them to remain effective, they must be maintained daily. This is a time and labor intensive process that does not have automated alternatives. The funds from the Agricultural Development and Food Security Special Fund provide additional irrigation maintenance workers and operating funds while keeping water prices affordable for agricultural users. Additional funds were used for emergency repairs including Waimanalo Reservoir Emergency Stabilization and base yard improvements and Kahuku Irrigation System improvements.

The Department, through the Agribusiness Development Corporation (ADC), has purchased 1,200 acres of agricultural lands from the Galbraith Trust Estates. ADC is working diligently to prepare the lands for active agricultural use with small farm irrigation system. Irrigation infrastructure is vital to this important production land.

As a result of erosion, diversions, and blockages, frequent flooding of the Waipio valley's streams and river on Hawaii Island threaten taro lo'i, farm improvements, and valley residents, jeopardizing the agricultural tradition and production in the Waipio River. The Department of Agriculture funded a project to address the river maintenance and management and flooding issues affecting farmers and residents in Waipio Valley, and promote Hawaii's agricultural industry, environment, economy, and community health.

C. The conduct of research on and testing of agricultural products and markets.

The cost of feed is incredibly high because it must be imported as no local commercial feed mills are currently in existence. Hawaii is in critical need of a local source of feed production in order to encourage growth and halt the gradual extinction of its livestock and aquaculture industries. Without developing means of turning local resources into feed at a commercial level, Hawaii's dependence upon imported food will only grow as livestock production becomes increasingly difficult and unprofitable. Hawaii's livestock and aquaculture productions are in dire need of commercial scale production of local sources into nutritious feeds. The Department of Agriculture funded a project with the Oceanic Institute of Hawaii Pacific University to develop a commercial scale feed research and production project for Hawaii.

New Zealand, an island country about the size of the State of Colorado, is one of the top worldwide producers of sheep, wool, kiwi fruit, and milk. For one person in New Zealand, approximately seven sheep are raised. The climate is conducive to growing temperate and subtropical fruits and there has been a rapid

increase in grape growing, especially to produce wine. Advancements in technology allow New Zealand to maximize the production of crops, livestock, and value-added products. Opportunities exist for Hawaii's agricultural industry to collaborate with New Zealand farmers and producers to research best practices, new technologies, and strategies for new product development. It is in Hawaii's best interest to exchange information, build a relationship, and develop a strategic alliance with New Zealand's agricultural farmers and producers. The Department of Agriculture funded a project to develop a strategic alliance between Hawaii and New Zealand.

The 2016 Legislature identified categories for research on and testing of products. The Hawaii Department of Agriculture is moving forward with risk assessments to identify pest pathways into the State. Additionally, funds are being used to develop and research with commodity organizations the germplasm necessary to replace high risk flowers and produce. Finally, research is being done on Kauai to find a way to decrease the amount of Nene Goose crop degradation occurring to local Taro farmers in the Garden Isle. These projects are ongoing with results likely to be seen in 2018.

D. The funding of agricultural inspector positions within the department of agriculture.

Inspector positions are key in protecting our local agricultural community and also providing support to those who are trying to get their products to market. The lack of key support staff have meant that remaining staff have had to take on more responsibilities in addition to their own daily tasks. This means that inspectors and field staff are sometimes forced to do requisite paperwork that is taking them away from their other required duties. Hiring more inspectors and freeing up key staff by hiring needed support personnel is vital towards increasing agricultural production. Funds from the special fund have gone towards hiring commodities inspectors, key planners and support staff.

E. The promotion and marketing of agricultural products grown or raised in the State

Increasing access to markets both locally and abroad is vital for creating greater economic opportunities for our local farmers to sell their products and remain economically viable. The Agricultural Development Division has initiated many projects aimed at increasing demand for Hawaii agricultural products both here and internationally.

The Buy local, It Matters, EAT LOCAL campaign was promoted at the retail level via 26 EAT LOCAL TUESDAY e-NEWSLETTERS to Foodland's email subscribers and promoted through media via Oceanic Time Warner Cable.

During the 26 issues of the Eat Local e-Newsletter retail campaign, sales of local products increased during the period September 27, 2016 to September 12, 2017:

09/27/2016 to 9/12/2017

DEPTNAME – LOCAL ITEMS	SALES %CHG
1 GROCERY	0.38%

2 PRODUCE	15.37%
3 MEAT	*-2.47%
4 LIQUOR	33.90%
5 GENERAL MERCHANDISE	20.48%
6 SERVICE DELI	19.70%
7 BAKERY	10.24%
8 SEAFOOD	7.59%
9 NATURAL AND GOURMET	44.23%
11 R. FIELD WINE CO.	29.92%
13 FLORAL	13.07%
TOTAL LOCAL ITEM INCREASE	10.94%

*Competition with non-local beef offered at better price point during same period. Non-local beef was \$.50 cheaper than local.

The Buy Local, It Matters, EAT LOCAL media campaign was promoted in :30 second public service ads through 38,000 showings on Oceanic Time Warner Cable during telecasts of UH Sports, High School Sports, Monday Night Football and during regular programming in the following counties and frequencies for the period August 2016 to May 2017:

- | | | | |
|-----------------|---------------------------------|----------------|-------|
| • Hawaii County | 14,640 | • Kauai County | 9,461 |
| | <i>Hilo 7,170 // Kona 7,470</i> | | |
| • Maui County | 6,361 | • Oahu | 5,101 |
| • HSPZ | 2,380 | | |
| | <i>Additional statewide</i> | | |

F. Other activity intended to increase agricultural production or processing that may lead to reduced importation of food, fodder, or feed from outside the State.

Diversified agriculture and increased marketing/processing opportunities are important when discussing Hawaii’s agricultural future. The Department has provided funds to both the University of Hawaii and the National Tropical Botanical Garden (NTBG) in Kauai to develop a ‘Ulu opportunities for the State. Breadfruit (*Artocarpus altilis*) or ‘ulu in Hawaiian, a member of the fig family, has been an important staple crop and component of traditional agroforestry systems in the Pacific for several millennia. Breadfruit has a high nutrient value, high cultural value in Polynesia, and high potential to play a critical role in sustainable agriculture and food security in Hawaii as one of the few traditional staples that grow as a tree. Furthermore,

over the past 10 years considerable growth in knowledge and technology regarding breadfruit has occurred. Despite the many values associated with breadfruit, the development of commercial value from the crop has been limited. To support the potential for a sustainable breadfruit industry, and to support a cooperative organization that can absorb and benefit new farmers, the University of Hawaii established, with multiple partnerships, a facility that can serve as a core location for breadfruit processing and processing research. The NTBG developed a demonstration project at their flagship garden (the McBryde Garden on Kauai) that serves as a prototype for regenerative agroforestry and a place that farmers can come to learn how to grow breadfruit in a manner that will make them eligible to provide fruit for the food industry's value-added consumer products.

The organic sector of agriculture is a burgeoning industry that has seen significant growth over the past few years. While still a small part of the overall picture of agriculture, the demand for organically grown agricultural commodities can mean that those farmers able to produce organically can command premium prices in the marketplace. As a result, the department plans to partner with the University of Hawaii to further promote the growth of the organics industry and continue to provide support for this industry.

The recent 2012 Agricultural Census highlighted the "graying" of our agricultural workforce as a problem facing agriculture nationwide. This issue is especially significant in Hawaii where we saw an increase in the average age of our farmers to above 63 years old. Without new, younger farmers willing to join the industry, agriculture is facing a difficult road. The Department is partnering with the University of Hawaii to fund an effort to increase opportunities for new farmers to gain the needed education and experience to begin a successful career in agriculture. This includes funding for the 4-H Livestock Program and the GoFarm Hawaii Program. The goal of these efforts is to reverse the trend of our aging agricultural workforce and revitalize the industry to ensure continued success in to the future.

Hawaii's agricultural future is now in flux with the transition of lands from plantation-style production and the aging of the current agricultural workforce. It has also been widely stated that Hawaii needs to increase its agricultural production to provide for the State's food security needs and to boost its economy. Consequently, HDOA found it imperative to again support an all-agricultural conference in Hawaii as a place in which all agricultural industry leaders, government officials, decision makers, teachers, skilled practitioners, stakeholders, and producers, etc., can gather for the exchange of information and effective coordination of efforts to efficiently increase agriculture in Hawaii. The Agricultural Leadership Foundation of Hawaii received funding from HDOA to put on this event.

The farm to school program is aimed at creating a program to increase nutrition education in schools, greater understanding and appreciation of local agriculture in students, and to increase the procurement of local agricultural commodities into schools and governmental agencies. A 2012 report to the Legislature examining the Federal 2008 Farm Bill Amendment to the Richard B. Russell National School Lunch Act found that 17.3% of school-age children are overweight. The report also found that farm to school initiatives can expose students to the agricultural industry in Hawaii and influence their eating habits. For farmers, a farm to school program can increase the amount of locally grown produce that is being procured by governmental

agencies. As per Act 218 Session Laws of Hawaii 2015, HDOA has hired a new Farm to School Coordinator under the Office of the Chair to create a Farm to School Program within the Hawaii Department of Agriculture.

Agricultural theft and agricultural vandalism are a constant worry for farmers and ranchers. Given the broad acreage that many farming operations encompass in Hawaii, it is often difficult for farmers to police their entire operations at all times. Furthermore, vigilance at night after work hours may be challenging because not all farmers and ranchers are able to live on or near the fields where they work. Current police department staffing does not permit a full-time officer to investigate agriculture-related crimes. All of these factors make agricultural operations easy prey for theft or vandalism and increases the cost of production and makes it more difficult for farming operations to be successful. HDOA funded a pilot program with the County of Hawaii that has the capability to increase the safety and sustainability of the island's farming and agricultural industry by allowing farmers to focus less on the security of their crops and more on high-quality products and safe farming techniques. By having a committed investigator when crime, vandalism, or contamination of agricultural products occur, the County will be able to act swiftly and decisively to tackle the issues.

SECTION III

Proposed Projects and Activities for FY17

- A. The improvement of real property, dams, reservoirs, irrigation systems, and transportation networks necessary to promote agricultural production or processing activity, including investigative studies to identify and assess necessary improvements to dams, reservoirs, irrigations systems, and transportation networks.**

Water is the lifeblood of agriculture. Efficient and reliable irrigation systems transport this resource to where it can be effectively used best. These systems are called upon to provide billions of gallons of agricultural water every year. Many of these systems were originally constructed at the turn of the twentieth century by sugarcane plantations. The decline of the plantations has led to the rapid deterioration of the systems and in order for them to remain effective, they must be maintained daily. This is a time and labor-intensive process that does not have automated alternatives. The funds from the Agricultural Development and Food Security Special Fund will provide for additional irrigation maintenance workers and operating funds while keeping water prices affordable for agricultural users.

The Department of Agriculture is working with East Maui Taro farmers in hopes of addressing water infrastructure needs. The legislature appropriated general obligations bond funding in order to address the concerns of these farmers, however the funds were not released due to fiscal restrictions on public purpose. In turn, the Department will look to provide initial funding to aid taro farmers in East Maui for the meantime while additional resources are secured during the next legislative session.

The Department of Agriculture is working with the County of Kauai in order to provide critical irrigation infrastructure needs for the Kilauea Agricultural Park. This project provides the State with a great opportunity to develop necessary infrastructure to increase agricultural production for Hawaii.

B. The conduct of research on and testing of agricultural products and markets.

The 2016 Legislature identified categories for research on and testing of products. The Hawaii Department of Agriculture is moving forward with risk assessments to identify pest pathways into the State. Additionally, funds are being used to develop and research with commodity organizations the germplasm necessary to replace high risk flowers and produce. Finally, research is being done on Kauai to find a way to decrease the amount of Nene Goose crop degradation occurring to local Taro farmers in the Garden Isle. These projects are ongoing with results likely to be seen in 2018.

C. The funding of agricultural inspector positions within the department of agriculture.

Inspector positions are vital in helping those in the agricultural community who are trying to get their products to market. Support staff allow inspectors to stay focus on their required duties. This means that inspectors and field staff are free from doing requisite paperwork that would take them away from their other required duties. Hiring more inspectors and freeing up key staff by hiring needed support personnel is vital in order to increase agricultural production. Funds from the special fund will go towards hiring commodities inspectors and key planners and support staff.

Inspectors are not only charged with overseeing agricultural commodities, but they are also tasked with ensuring that all scales of measurement statewide are calibrated correctly. The Measurement Standards Branch is charged with the express purpose of maintaining state measurement standards and governing the use and application of measurement standards, measuring devices, and equitable transactions. Without the accuracy of measurement devices, inefficiencies would occur that would potentially decrease the processing and production of agricultural commodities. The Measurement Standards Branch would use funds from the special fund to ensure they can carry out their mandated duties.

D. The promotion and marketing of agricultural products grown or raised in the State

Promotion and marketing of Hawaii agricultural products to local, domestic and international markets creates greater economic opportunities for local farmers to maintain their current market share and to increase sales to new markets. The Agricultural Development Division has many projects in 2017 aimed at increasing demand for Hawaii agricultural products both in Hawaii and globally.

The Buy local, It Matters, EAT LOCAL message will be promoted at the retail level and via a media campaign. The Seal of Quality Program (SOQ) that identifies genuine Hawaii-grown and Hawaii-made products will be promoted via a media campaign.

E. Other activity intended to increase agricultural production or processing that may lead to reduced importation of food, fodder, or feed from outside the State.

The organic sector of agriculture is a burgeoning industry that has seen significant growth over the past few years. While still a small part of the overall picture of agriculture, the demand for organically grown agricultural commodities can mean that those farmers able to produce organically can command premium

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Training new agricultural leaders is an essential component to Hawaii’s food security goals. HDOA is tasked with promoting and protecting the agriculture industry in Hawaii and continues to find ways to increase the number of qualified new farmers. HDOA will work with the Agricultural Leadership Foundation of Hawaii (ALFH) to train new farmers to become our future agricultural leaders. ALFH offers specialized training and education from renowned industry representatives to prepare for a career as effective leaders for agriculture in each perspective business, industry, and community.

Through a partnership with the HTDC, the Department of Agriculture will support the AGathon in 2018. This project's purpose is to spark innovation and advancement within the Hawaii agricultural industry through the creativity and talents in Hawaii’s growing startup, technology, and developer community. New applications and systems will be developed to spark innovative technologies for the local agricultural industry.

The North Shore of Oahu is full of diverse, small farmers who have gained momentum to address varying issues that exist for Hawaii’s farmers and ranchers. With the potential of food hubs and groups interested in opportunities to address food safety, this region serves as a perfect demonstration project with statewide significance. Group GAP certification was identified as a predecessor to the area’s Food Hub that will remove barriers to the sale of locally grown produce from small farms to large, institutional buyers that require food safety certification/FSMA compliance. The Department of Agriculture will partner with the North Shore Economic Vitality Partnership to develop a Group GAP training and curriculum to serve statewide efforts in addressing food safety issues.

SECTION IV

Expenditures from the Agricultural Development and Food Security Special Fund

AGRICULTURAL DEVELOPMENT AND FOOD SECURITY SPECIAL FUND					
	Actual	Projected			
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
BEGINNING FUND BALANCE	5,802,131	4,773,167	4,346,167	3,832,139	3,818,112
REVENUES					
1. Environmental Response, Energy, and Food Security Tax	3,800,692	3,750,000	3,750,000	3,750,000	3,750,000
2. Investment Pool Interest	35,589	35,000	35,000	35,000	35,000
3. Other	50,000	25,000			
TOTAL REVENUES	3,886,281	3,810,000	3,785,000	3,785,000	3,785,000
EXPENDITURES					
AGR 122 PLANT PEST AND DISEASE CONTROL					
Pest Control/Biosecurity Projects	763,645	618,000	418,000	318,000	318,000
AGR 141 AGRICULTURAL RESOURCE MANAGEMENT					
Irrigation Personnel and Program Operations	929,585	600,000	1,001,575	1,001,574	1,001,574
AGR 151 QUALITY AND PRICE ASSURANCE					
Commodities Inspectors/Food Safety Coordinator	158,373	60,000	194,453	194,453	194,453
AGR 161 AGRIBUSINESS DEVELOPMENT					
Irrigation/Land Projects	442,265	500,000	500,000	300,000	300,000
AGR 171 AGRICULTURAL DEVELOPMENT					
Market Development Projects	1,335,939	900,000	400,000	300,000	300,000
AGR 192 GENERAL ADMINISTRATION FOR AGRICULTURE					

Planner/Neighbor Island Support	383,123	420,000	420,000	420,000	420,000
Farm to School Program	147,485	150,000	150,000	150,000	150,000
Department Support (Deputy AG)	120,000	120,000	120,000	120,000	120,000
Hawaii Association of Conservation Districts	210,000	210,000	210,000	210,000	210,000
Research/ Studies	332,070	434,000	434,000	334,000	334,000
AGR 812 MEASUREMENT STANDARDS					
Measurement Standards Inspectors/Branch Mgr	92,760	225,000	451,000	451,000	451,000
TOTAL EXPENDITURES	4,915,245	4,237,000	4,299,028	3,799,027	3,799,027
BALANCE	4,773,167	4,346,167	3,832,139	3,818,112	3,804,085