

**REPORT TO THE TWENTY-SEVENTH LEGISLATURE
2015 REGULAR SESSION
STATE OF HAWAII**

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

ACT 73, SLH 2010

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HAWAII DEPARTMENT OF AGRICULTURE

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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, 2015.

SECTION II

Description of Funded Projects and Activities in FY13

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. Grants to farmers for agricultural production or processing activity

The Sponsorship and Product Promotion grant has the primary goal of enhancing competitiveness of local agricultural products and their industries, including, but not limited to, agritourism, aquaponics, dairy, eggs, fish, floriculture, livestock, organic, specialty crops, and value-added. This year the program awarded grants to 12 agriculturalists statewide covering a range of products and industries from coffee to livestock to cut flowers to organic. Some of the notable projects included: support for 100% local pasture raised ground beef, promotion of new cut flower varieties, and bringing increased recognition to Ka'u coffee.

Workshops were held in all of the counties with the sole purpose of increasing farmer and producer participation in applications for grants that would help further their growth and success. At the workshops, participants were walked through the aspects of a successful application and also made aware of the opportunities available at the state and federal level. One result of this outreach effort was a marked increase in the number of proposals received for the Specialty Crop Block Grant program with a more than 50% increase in the number of applications when compared to the previous year.

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 provided additional irrigation maintenance workers and operating funds while keeping water prices affordable for agricultural users.

Recently, the Department, through the Agribusiness Development Corporation (ADC), has come in to possession of 1,200 acres of agricultural lands from the Galbraith Trust Estates. ADC is working diligently to prepare the lands for active agricultural use. Land preparation includes clearing of

underbrush and liming the soil in preparation for agricultural use. Additionally, funds were used for pumps and piping to allow for access to water for those future farmers on the Galbraith lands.

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

Aquaponics is a growing industry in Hawaii that can potentially provide another source of protein and fresh commodities for our local markets and increase our food security. However, aquaponics is considered a hobby or backyard level operation. To be considered a sustainable segment of agriculture, the economic viability of commercial scale aquaponics needs to be demonstrated. Towards this goal, HDOA has provided funding for research in to the viability of commercial grade aquaponics facilities in Hawaii and whether the market is able to sustain a profitable aquaponics industry. The project scope is 1 acre of aquaponics (fish/plants) under greenhouse where all inputs, throughput and output expenses and revenues will be tracked. The greenhouse will address biosecurity and food safety issues. The project is wrapping up the first year of the two year project and is expected to ramp up and begin commercial scale production in its second year.

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 in order to increase agricultural production. Funds from the special fund have gone towards hiring commodities inspectors and 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 in creating greater economic opportunities for our local farmers to sell their products and remain economically viable. The Agricultural Development Division has initiated a number of projects aimed at increasing demand for Hawaii agricultural products both here and internationally.

The Buy local, It Matters, EAT LOCAL campaign was promoted over Oceanic Time Warner Cable (OTWC) channels via :30 second spots that were shown during University of Hawaii and local High School sports telecasts as well as during OTWC programs. The University of Hawaii awarded this project "An Effective Action Plan to Promote 'Buy Local, It Matters' Via Multi-Facet Measures with a Message on Health and Value". The Buy Local, It Matters program was further enhanced by a targeted effort to increase outreach and participation by companies in Maui County and Kauai County. New farmers were featured in rack cards from Maui, Lanai, Molokai, and Kauai, promoting their locally grown product.

The EAT LOCAL campaign was further expanded to include education and outreach to schools to raise awareness of the importance of buying locally sourced agricultural commodities. A contract was created with the Honolulu Theatre for Youth to produce "GRINDS: The Story of Food in Hawaii". This production was targeted statewide with performances in all of the counties and is expected to reach over 8,000 students with the message to buy local.

Multiple projects were initiated to increase market access for agricultural products in to the international markets of Japan and Australia. For the Japan market, funding enabled the sponsorship of 3 booth spaces at the FOODEX 2014 trade show in Japan that attracted over 75,766 visitors. As a result of the sponsorship, participating Hawaii companies made 700 new buyer contacts and projected sales of \$390,000 within the 6 months following the trade show. Funding was also used to further develop the export market of Rainbow Papaya to Japan by bringing qualified foodservice and retail industry buyers from Japan to Hawaii for workshops on how best to prepare and market Rainbow Papaya to Japanese consumers. For Australia, Hawaii companies were matched with Australian companies interested in sourcing Hawaiian products in Australia. Contact was made with over 200 companies culminating in a walk through of the Fine Food Australia Trade Show.

The Seal of Quality Program (SOQ) continues to highlight local products so that consumers are more readily able to identify them in markets and make conscious decisions to buy local. Rack cards that feature local Hawaii growers and producers were continued and included 12 new SOQ members. Further advertising of the SOQ program was achieved through a contract that placed prominent advertisements of SOQ member products in the Hana Hou Magazine (Hawaiian Airline's inflight magazine) in both the English and Japanese versions.

To increase the opportunities for local farmers and producers, speakers were brought in to let the local agricultural industry know about new market opportunities available to them. The Halal and Kosher markets are two of the world's largest food markets. Producers able to understand and follow the requirements of entrance in to these markets could see a drastic rise in sales and profitability. Four workshops were held across the state to provide information to growers about these markets and resulted in some companies taking the first steps of applying for Kosher and Halal Certification. These workshops were featured in Pacific Business News and through local media outlets.

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.

With the passage of the Food Safety Modernization Act, the states are encouraged to establish intra-state criteria for safe production, distribution, and handling of food. Buyers of agricultural commodities are also requiring their suppliers to follow good agricultural practice guidelines. Funds from the special fund provided specialists in the Department to oversee food safety activities such as food safety training and audits. Funds have also been used by the University of Hawaii - College

of Tropical Agriculture and Human Resources to conduct research on food safety coaching and education.

Biosecurity issues can have far reaching and often devastating effects on local agriculture. Fireweed is one example of an agricultural pest; a weed that if ingested by a cow can cause severe sickness and death. Other examples include the banana aphid and coffee berry borer. The Plant Pest Control Branch uses funding from the Agricultural Development and Food Security Special fund to insure that any outbreaks of agricultural pests are controlled and eradicated if possible. Extensive research is conducted to find new and more effective ways to control agricultural pests including identifying new biocontrol methods. One such success was the identification and release of the secusio moth in collaboration with local ranchers on Hawaii and Maui for the control of fireweed.

The use of agricultural waste products as another source of revenue to farmers is another initiative that is being explored. Research done through the Daniel K. Inouye, Pacific Basin Research Center have yielded promising results that certain oil producing fungi have the ability to convert papaya waste into biofuel. Another byproduct of the process is also being looked in to as a possible source of livestock feed. This effort would then create another source of revenue for the farmer as well as create a source for local livestock feed to help wean us off expensive inputs from the mainland and abroad.

Understanding the soils of Hawaii can help farmers optimize what they grow to pinpoint what crops would work best in a given area. Research was funded through the University of Hawaii, College of Tropical Agriculture and Human Resources to develop soil fertility assessments and maps to determine optimum growth areas for particular crops including: coffee, macadamia nut, tea, cacao, and banana. A greater understanding of the capabilities of the land will lead to greater yields for farmers and ultimately greater success and

SECTION III

Proposed Projects and Activities for FY14

- 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.

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

Act 56 of the 2014 legislative session created a pilot program to investigate industrial hemp as a new agricultural crop for Hawaii. In partnership with the University of Hawaii, College of Tropical Agriculture and Human Resources, the Department is moving forward on this initiative to test the viability of industrial hemp as a new agricultural product for Hawaii.

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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

It has become increasingly apparent that the average consumer is losing touch with the origins of their food and with the local farmers and ranchers that are growing their food. This disconnect manifests itself in media statements and controversial debates that often denigrate farmers. The department is looking to reverse this negative image by reconnecting the public with their local farmers through an education and outreach campaign through multiple media platforms to more clearly highlight the role that farmers play in our community and the vital part they play within our state.

The "Buy Local, It Matters" (BLIM) campaign to feature farmers and their crops/products in posters and rack cards will have completed the promotion for all counties with the 2014 project for Kauai and Maui Counties. Criteria for selecting the farmers was that the product be available to consumers statewide. A papaya project will be part of the BLIM campaign to encourage local consumers to choose papayas instead of imported fruits.

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.

Access to a certified slaughterhouse facility is often a limiting factor for our local livestock producers, particularly those situated in rural communities. However, the cost of building a certified slaughter facility can be cost prohibitive to any single rancher or livestock producer. HDOA is looking to mobile slaughterhouses as a potential low-cost solution to this problem. Mobile slaughterhouses would have the added advantage of being able to move to the areas where a slaughter facility is needed and further increase the ability for livestock producers to move their product to market. In addition to slaughter facilities, livestock feed is an increasingly expensive input for ranchers. The need to import feed from the mainland adds to the expenses that a rancher faces and moves them away from profitability. The department proposes to work with the industry to identify policies to best move the industry forward and to find ways to reduce the costs of necessary inputs. Finally, livestock health is a vital component to a successful ranching operation. The Department intends to support a healthy livestock industry by building a livestock inspection facility on Hawaii Island where ranchers could take their livestock for inspection and also that could serve as the operational center to monitor for any potential outbreaks of communicable diseases that could cause significant economic damage to the industry.

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 to provide support for this industry.

Conservation plans are needed by farmers to best allow them to grade and grub their land in preparation for planting. It also insures that farmers are using best management practices in the proper stewardship of the land. The Hawaii Association of Conservation Districts (HACD) helps farmers to create the conservation plans they need in order to farm. Funding from the Department has helped maintain staff at HACD so that they can continue to provide this service to farmers.

Biosecurity issues can have far reaching and often devastating effects on local agriculture. The little fire ant (LFA) is one such pest that can cause problems for our agricultural industry. As the ant is an arboreal species that can live in trees, our coffee, macadamia nut and fruit tree industries are particularly concerned for the health and wellness of their employees who need to be in the field picking commodities in places where the ant could fall on them and cause painful welts. As such, the Department is providing funding to the Hawaii Ant Lab for the purpose of research, control, and

mitigation of LFA. They have a successful track record of creating new and innovative ways of controlling LFA and are leading the charge in this effort.

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. The goal of this effort is to reverse the trend of our aging agricultural workforce and revitalize the industry to insure continued success in to the future.

SECTION IV

Expenditures from the Agricultural Development and Food Security Special Fund

AGRICULTURAL DEVELOPMENT AND FOOD SECURITY SPECIAL FUND

	Actual	Projected			
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
BEGINNING FUND BALANCE	4,634,245	5,304,658	4,111,481	3,912,304	3,713,127
REVENUES					
1. Environmental Response, Energy, and Food Security Tax	3,719,218	3,700,000	3,700,000	3,700,000	3,700,000
2. Investment Pool Interest	8,552	10,000	10,000	10,000	10,000
TOTAL REVENUES	3,727,770	3,710,000	3,710,000	3,710,000	3,710,000
EXPENDITURES					
AGR 122 PLANT PEST AND DISEASE CONTROL					
Biosecurity Projects			500,000	500,000	500,000
Pest Control Projects		180,000			
Supplies for Taxonomy Lab	3,000				
Survey Supplies for Bicontrol	3,000				
Restock Plant Pathology Containment Area	10,000				
Greenhouse Glass Replacement	60,000				
Replace Cages for Plant Propagation	20,000				
EA Writer for Gall Wasp Control & Maile Pilau Beetle	20,000				
Taxonomy Training, Bark Beetle Academy	5,000				
Response and Control for New Pest Species	65,000				
DNA Barcoding (Bishop Museum)	160,000				
PBARC (Anthuriums)	275,000				
AGR 132 ANIMAL DISEASE CONTROL					
Livestock Inspection Facility		200,000			
AGR 141 AGRICULTURAL RESOURCE MANAGEMENT					
Irrigation Personnel and Program Operations	364,732	800,000	875,000	875,000	875,000

AGR 151 QUALITY AND PRICE ASSURANCE

Commodities Inspectors/Food Safety Coordinator		169,859	175,859	175,859	175,859
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AGR 153 AQUACULTURAL DEVELOPMENT

Aquaponics	621,000	304,000			
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AGR 161 AGRIBUSINESS DEVELOPMENT

Irrigation/Land Projects		500,000	500,000	500,000	500,000
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Whitmore Agricultural Hub		150,000			
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Galbraith Water Transmission	500,000				
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AGR 171 AGRICULTURAL DEVELOPMENT

Market Development Projects		150,000	400,000	400,000	400,000
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Eat Local in Schools	20,000				
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Speakers form Euromonitor, Blue Ocean and on Halal Food	50,000				
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"Buy Local it Matters" Material for Kauai and Maui	30,000				
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RFP/Grant Info Sessions in all Counties	5,000				
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Support for Papaya Projects to Japan/China/Korea	30,000				
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Seal of Quality Ad Campaign/Materials	65,000				
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Import Replacement "Plate Lunch" campaign	50,000				
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Support Various Commodity Groups w/ Product Promotion	100,000				
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"Buy Local it Matters" Campaign	100,000				
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FOODEX (Japan)	50,000				
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AGR 192 GENERAL ADMINISTRATION FOR AGRICULTURE

Planner/Neighbor Island Support	310,318	310,318	310,318	310,318	310,318
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Research/ Studies (Sustainability, Organics, Land/Water Issues etc)		1,474,000	452,000	452,000	452,000
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Department Support (Deputy AG)		120,000	120,000	120,000	120,000
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Hawaii Association of Conservation Districts		210,000	210,000	210,000	210,000
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Kulani Agricultural Complex	115,000				
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AGR 812 MEASUREMENT STANDARDS

Measurement Standards Inspectors/Branch Mgr	25,307	335,000	366,000	366,000	366,000
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TOTAL EXPENDITURES	3,057,357	4,903,177	3,909,177	3,909,177	3,909,177
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BALANCE	5,304,658	4,111,481	3,912,304	3,713,127	3,513,950
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