

JOSH GREEN, M.D.  
Governor

SYLVIA LUKE  
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER  
Chairperson, Board of Agriculture

MORRIS M. ATTA  
Deputy to the Chairperson

State of Hawai'i  
DEPARTMENT OF AGRICULTURE  
KA 'OIHANA MAHI'AI  
1428 South King Street  
Honolulu, Hawaii 96814-2512  
Phone: (808) 973-9600 FAX: (808) 973-9613

December 21, 2022

The Honorable Ronald D. Kouchi,  
President and Members of the Senate  
Thirty-Second State Legislature  
State Capitol, Room 409  
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki, Speaker  
and Members of the House of  
Representatives  
Thirty-Second State Legislature  
State Capitol, Room 431  
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Department of Agriculture Annual Report as required by Act 100, SLH 1999. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at <https://hdoa.hawaii.gov/meetings-reports/legislative-reports/>.

Sincerely,

Phyllis Shimabukuro-Geiser  
Chairperson, Board of Agriculture

Enclosures





**REPORT TO THE THIRTY-SECOND LEGISLATURE  
2023 REGULAR SESSION**

**DEPARTMENT OF AGRICULTURE ANNUAL REPORT**

**PURSUANT TO ACT 100, SLH 1999**

**Prepared by:**

**Department of Agriculture  
State of Hawaii**

**December 2022**



ACT 100, SLH 1999  
Department Overview  
Fiscal Year 2023 Update

**Mission Statement**

To further expand the role of Hawaii's agricultural industry to benefit the well-being of our island society by diversifying the economy, protecting resources important for agricultural production, and gaining greater self-sufficiency in food production.

**Department Goals**

To conserve and develop essential agricultural resources and infrastructure; to gain access to and develop local, domestic, and international markets for Hawaii's agricultural products; to conserve and protect suitable agricultural lands and water; to promote Hawaii's food self-sufficiency; to raise awareness of the importance of agriculture to the State's economy, environment, and as a profession; to implement programs to safeguard Hawaii's farmers, consumers, and natural resources; to prevent the introduction and establishment of plants, animals and diseases that are detrimental to Hawaii's agriculture and environment.

**Significant Measures of Effectiveness**

- Total Farm Sales Value of agriculture in Hawaii (In thousands of dollars).

<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY2023</u>
559,493	522,663	593,191	670,306	730,633

**Major Functions**

- Carries out programs to conserve, develop, and utilize the agricultural resources and infrastructure of the State and facilitates the transition of former plantation agricultural production assets to diversified farming.
- Enforces laws, and formulates and enforces rules and regulations to manage these resources.
- Promotes agriculture and provides opportunities to access new markets.
- Reviews, develops, and implements agricultural goals and objectives to expand and diversify Hawaii's agriculture.
- Prevents the introduction of plant pests and diseases, provides certification services to facilitate the export of certain plant materials, and controls and eradicates insects and noxious weeds and controls the distribution and usage of pesticides.

- Administers the aquaculture development, state animal health, and agricultural and aquacultural loan programs.
- Maintains official State primary measurement standards; ensures accuracy of commercial measuring devices.
- Establishes and enforces grade standards for agricultural commodities producers in the State in cooperation with the industry, and administers the State's Milk Control Act.
- Collects and disseminates statistical data on agricultural production and markets, and supports funding for research on various agricultural commodities.

### **DIVISION ACTION PLANS**

Division/Branch:    Administrative Services Division

**Purpose:**                    To enhance the effectiveness and efficiency of the department by providing staff support services, other administrative services, and responding to the needs of the public.

**Goal 1:**                    Fill all position vacancies to enable the department to fully achieve the missions of all programs.

**Objective:**                Be creative, thinking outside-of-the-box to effectively implement recruitment and retention strategies.    Completion date: Ongoing

1. Streamline internal recruitment workflows to maximize effectiveness.
2. Work closely with DHRD to schedule job announcements and issuance of certified lists of eligibles.
3. Work closely with DHRD to ensure minimum qualification requirements are still relevant.
4. Attend targeted job fairs and hiring events to highlight careers and job opportunities with HDOA.
5. Collaborate with UHM CTAHR to create pathways for students and alumni (internships and career opportunities).
6. Better advertise HDOA careers and job postings using social media and via relevant trade associations and organizations.
7. Fully utilize the various DHRD flexible salary programs to incent applicants.

8. Improve on-boarding activities to create smooth transition to HDOA employment.
9. Provide opportunities for advancement and professional development to improve employee retention.

Goal 2: To minimize energy, fuel and water consumption and implement resource-efficient operations and management measures.

Objective: Implement the department's Energy Action Plan, subject to the availability of funding. Completion date: Ongoing.

1. Initiate lighting, window tinting, retro-commissioning, alternative energy, and other energy efficiency CIP projects.
2. Work with employees to practice energy and water conservation measures, and monitor usage/savings.
3. Replace petroleum powered vehicles with EVs.

Goal 3: To provide a safe and healthy working environment for employees by ensuring that the department's facilities are in compliance with local, state and federal requirements.

Objective: To address the repair and maintenance and capital improvement needs of the department's facilities. Completion date: Ongoing.

1. Continue to address various routine repair and maintenance issues to ensure that departmental facilities support efficient day-to-day operations.
2. Initiate various capital improvement projects with assistance of the DAGS Public Works and Central Services Divisions.
3. Prepare budget requests for additional capital improvement work as additional work is identified.

Objective: To provide a safe working environment for department employees by complying with Occupational Safety and Health Administration (OSHA) requirements. Completion date: Ongoing.

1. Establish a safety committee comprised of employees from various divisions.
2. Develop a department-wide safety plan.
3. Install signage to properly mark exit routes, hazardous materials and locations of fire extinguishers.

4. Initiate necessary repair and maintenance work or capital improvement projects to correct facility deficiencies.
5. Install burglar alarm systems in facilities where necessary, based on risk assessment, and as funding allows. Create alarm procedures to deal with intrusion alerts.

Goal 4: To provide reasonable and meaningful access to limited English proficient individuals or organizations accessing, participating or benefiting from services, programs and activities by the department.

Objective: To meet the requirements of Act 290, SLH 2006, codified into Part II of Chapter 371, HRS, and Presidential Order 13166. Completion date: Ongoing.

1. Continually update the listing of departmental employees who are skilled in a non-English language and are willing to volunteer to provide interpreter services.
2. Compile and disseminate listing of interpreters/translators and their costs for program personnel to use in providing services to their LEP customers.

Goal 5: Improve procedures and processes for maximum efficiency.

Objective: To streamline processes to maintain essential staff support services provided to the department programs. Completion date: Ongoing

1. Review fiscal and human resources processes, revise processes and procedures as needed to increase efficiencies and reduce redundancy.
2. Review all administrative services functions including copy/fax machine operations, telecom coordination, janitorial and grounds keeping contract administration, vehicle fuel and repair invoice processing, etc., to increase efficiencies.

Division/Branch: Agricultural Resource Management Division

Purpose: To develop and manage the State's agricultural resources by ensuring affordable and reliable irrigation water and infrastructure, productive farmland, and efficient and cost-effective processing, livestock slaughter and agricultural research facilities.

Goal 1: Continue collaborative efforts with DLNR for transfer and review of Non-Agricultural Park leases to DOA to increase availability of land resources required for agriculture.

Objective: Continue identification and transfer of Act 90 leases from DLNR Land Division which meet DOA's agricultural suitability criteria.



1. Review list for vacant land transfer.
2. Continue working efforts with DLNR Land Division to bring conditional leases into compliance or cancel the lease for breach and transfer to DOA for disposition.
3. Identify challenges and potential remedies necessary to facilitate process of fulfilling purposes of Act 90.
4. Respectfully request BOA to place emphasis on expediting transfer of those unconditional parcels and conditional parcels with issues which may be easily resolved. Awaiting BLNR approval and E.O.s.
5. Revisit non-acceptable parcels list of Act 90 parcels from DLNR to determine if lands are now suitable for transfer.

Goal 2: Continue the implementation of Capital Improvement Projects that improve the efficiencies of the irrigation systems.

Objective: Increase overall efficiencies in the irrigation systems to ensure the maximum amount of water collected is available for distribution.

1. Secure adequate funding to continue the construction of the proposed improvements to the irrigation systems.
2. Review day to day operations to identify opportunities to refocus maintenance activities to take advantage of system improvements.
3. Connect with farmers to identify "joint" projects that allow the farmers to develop a sense of "joint ownership" for the systems.

Goal 3: Begin construction of the Royal Kunia Agricultural Park

Objective: Obtain phase I construction funding for Kunia Agricultural Park.

1. Complete easement negotiations for offsite utilities to the Royal Kunia Ag Park.
2. Complete design and discussions with adjacent developer to set timeline to provide necessary offsite utilities.
3. Complete design, open construction bids, and begin construction for phase I.
4. Obtain water reservation for the parcels.

Division/Branch: Agricultural Development Division

The Agricultural Development Division promotes the economic viability of commercial agriculture in Hawaii by sponsoring joint-marketing programs for agricultural products with high-revenue growth potential, facilitating the development and expansion of marketing opportunities for targeted agricultural and processed products, and providing timely, accurate and useful statistics.

Goal 1: Seek alternate non-state funds (federal or private grants) whenever feasible/opportunity arises to complement state general funds to fulfill the division's agricultural development, marketing, and statistics functions.

Objective: Coordinate the search, proposal development, submission, and administration of federal and private (NGO) funding opportunities in collaboration with external partners.

1. Continue to train staff and develop efficiencies to administer grants awarded, to be familiar with the state procurement system and administrative rules.
2. Continue to engage in networking activities relating to grant funding sources and partners.

Goal 2: Provide equitable, efficient, effective, and accountable administration of contracted awards/programs from state, federal, and other funding sources.

Objective: Maintain a systematic and fair procedure to provide notice, RFPs, selection, disbursement, monitoring, and timely reimbursements, of various grant awards/programs as funding allows.

1. Maintain a work plan for each award/program with project duration, identified tasks, and timeline to illustrate the process.
2. Maintain a database system to monitor the various awards/grant programs to ensure that reporting and invoicing requirements are submitted in a timely manner.
3. Maintain appropriate trained staff members to administer the contracted programs. They will serve as liaisons to the AG's Office, the State Procurement Office, and the Department's Fiscal Office.

Objective: Administer grant awards/programs according to the terms and conditions and guidelines specific to the award/program.

1. Keep current on changes to federal grant awards/programs, for example, updates to the Uniform Administrative Requirements for Federal Grants as published in 2 CFR 200.
2. Keep current on changes to State Procurement Rules, for example, changes to the Hawaii Revised Statutes and Hawaii Administrative Rules for state funded programs.
3. Attend training programs to stay current on federal and state regulations for the grant awards/programs that support the operations of the division that are offered by public and private organizations.
4. Keep current on changes resulting from post COVID-19 impacts and note Comptroller Memorandums describing new procedures.

Goal 3: Provide appropriate quality deliverables, justification such as business/economic impacts, contributions to state GDP, and social or environment benefits to commercial agriculture in Hawaii on award/grant activities pursued.

Objective: Provide relevant reports, analyses, financial transactions, and other pertinent information upon request to document progress and proper execution of the various grant awards.

1. Prepare summarized progress reports upon request to support grantor, legislative, departmental, and collaborator inquiries.
2. Submit interim and final reports due upon completion of the awards' established requirements and upon request.
3. Engage awardee and/or sub-awardees in the reporting process with regular communications regarding progress towards achieving stated goals, targeted milestone achievements, preferred format for progress, interim and final activity/financial reports.
4. Continue to provide and maintain possible services as required by grant awards/programs requirements.

#### Market Development Branch

Goal 1: Utilize state and federal funds to increase food security and food self-sufficiency for Hawaii.

Objective: To support Market Expansion that includes actions that: 1) Stabilize Existing Markets; 2) Develop New Export Markets; 3) Farm to School; 4) Increase Local Share of the Market; 5) Import Replacement; and 6) Export Certification.

1. Stabilize Existing Markets
  - a. Engage with commodity organizations/associations to stay current and conduct outreach.
  - b. Offer programs and activities to help organizations/associations meet the goals they deem important to their members.
  - c. Work with other public and private agencies to determine metrics to gauge market conditions.
  - d. Administer projects awarded to, but not limited to, animal proteins, avocado, apiary, awa, banana, basil, beef, breadfruit, cacao, coffee, floriculture, forestry, ginger, legumes, macadamia nuts, moringa, papaya, taro, tea, tropical fruits, turmeric, and vegetables for both conventional, organic, innovative farming methods, and food hubs in future.
  
2. Develop New Export Markets
  - a. Plan trade activities for Australia, ASEAN, Canada, China/Hong Kong, Europe, Japan, Korea, Taiwan, and domestic markets for Hawaii companies to seek opportunities for Hawaii products in markets that have air routes to/from the state; activities will be conducted based on potential for participation and will be impacted by trade tariffs implemented.
  - b. Serve as Project Managers for WUSATA Legacy Trade Shows to become familiar with signature regional agriculture events to seek opportunities for Hawaii companies and products.
  - c. Monitor progress of deregulation of papayas into China as well as avocados to Japan and other Hawaii-grown fresh products.
  - d. Develop activities for markets that align with new nonstop air service with the intent to introduce products for export.
  - e. Manage Hawaii booths at two trade shows in Japan, one in the Middle East to continue to increase exports to Hawaii's top agricultural export market and seek to expand in a new market.
  - f. Promote the new and improved Hawaii Agriculture & Food Products website that launched August 2017 that connects Hawaii companies and products to buyers worldwide.
  - g. Provide information on Halal labeling to enhance potential for export and sales to Muslim peoples that comprise 25% of the global population.
  
3. Farm to State

- a. Support the Farm to State Program efforts to promote agriculture education including, but not limited to the Hawaii FFA and 4-H programs.
  - b. Develop creative activities to support food security and food self-sufficiency at the private and public schools, hospitals, and prisons in the state.
  - c. Seek paths to collaboration between commodity groups, farmers, ranchers and schools, prisons, hospitals to increase purchase of locally grown produce.
  - d. Assist Hawaii Department of Education Farm to School staff through collaboration and partnerships in support of state and federal programs.
4. Increase local share of the Market
- a. Promote “Buy Local, It Matters” campaign with action to “EAT LOCAL” through television, radio, and social media promotions.
  - b. Collaborate with industry and public and private stakeholders to support the development of a facility that adds value to agricultural products that includes production, processing, and sales with the intent of introducing a new revenue source for local producers.
  - c. Promote the Hawaii Seal of Quality program, the Made in Hawaii with Aloha and Grown in Hawaii with Aloha logos, and the Island Fresh logo through Instagram and other social media.
  - d. Administer the Micro-grants for Food Security Program (MGFSP) that provides funding to increase the quantity and quality of locally produced food in food insecure communities.
5. Import Replacement
- a. Create programs and activities targeting consumers to increase consumption of locally grown and produced foods and for farmers to increase production of food crops and for ranchers to increase numbers and processing of livestock to meet local demand.
  - b. Administer the Micro-grants for Food Security Program that provides funding to increase the quantity and quality of locally produced food in food insecure communities that import a large amount of the food consumed.
  - c. Work with CTAHR and other agriculture organizations to promote commodities that can be grown in the tropic zone – and provide the tools to move to commercial production.
  - d. Support the distribution of germplasm to the farmers, ranchers, and producers to minimize the risk of trialing a new crop; this is intended to increase food production in the state.
6. Export Certification

- a. Conduct or participate in training/informational sessions on Kosher and Halal Certification in preparation for visitors whose faith and traditions require special food preparations.
- b. Conduct training/informational sessions with USDA, Department of Commerce and State agencies presenting guidelines and taking part in Q & A with Hawaii agricultural producers.
- c. Conduct outreach to farmers and producers to learn what crops can be exported with postharvest treatment and assist with the development of the protocols, including, but not limited to floriculture and tropical fruit commodities.

Goal 2: Promote, develop, and expand market opportunities for Hawaii agricultural and value-added producers in local, domestic, and international markets in fiscal year 2023 by aligning the Branch's activities with the needs of the various components of the state agricultural industry, and with the addition of virtual activities due to the impact of the pandemic to global trade.

Objective: Identify potential markets for local agricultural products.

1. Conduct market research using the following channels to classify potential markets.
  - a. Hawaii agricultural statistics provided by available sources (e.g., NASS).
  - b. Trade Publications (print/online).
  - c. Internet - to monitor local, national, and international trends.
  - d. Local associations – initiate and maintain close contact with local trade groups to understand where the local markets are moving.
  - e. Trade Shows – attend trade shows to assess their potential for Hawaii company attendance and to conduct market research.
  - f. Monitor additional airline service into the state to assess new routes for potential as a new market for Hawaii agricultural products.
  - g. Use social media as a reference tool, mining for feedback, comments to uncover trends and gauge public opinion regarding agriculture.
2. Summarize and prioritize potential markets and products by developing a system for activities that accounts for local production, expansion barriers, and growth potential.
3. Recommend two to four agricultural markets for priority joint marketing initiatives.
4. Update and monitor list on an annual basis.

Objective: Engage with the agricultural commodity groups and associations and support the goals of their members.

1. Initiate and maintain contact with industry associations, informal groups, and industry leaders.
2. Assess each group's goals and suggest activities to achieve them.
3. Prioritize emerging agricultural industries/crops and products through communication with farmers and producers and develop activities that promote their availability, with the purpose of increasing awareness for increased production.
4. Integrate target market priority list to match possible markets to agricultural industries with potential.
5. Seek new agricultural products with export potential created by the post-treatment option of irradiation that was operational in 2014 and collaborate on promotional activities in targeted markets.
6. Update and distribute the "Hawaii Agriculture Industry Associations" listing annually.
7. Update and distribute the "Grant and Loan Opportunities" listing annually.

Objective: Based on market intelligence, market research and industry feedback, conduct sales generating activities in selected target or niche markets with the highest demand for selected agricultural products and value-added processed products in local, domestic, and international markets.

1. Coordinate or participate with producers in at least two local trade shows, consumer fairs, sales promotions with retailers or other events. These may include the Made in Hawaii Festival, and the County Farm Fairs, Hawaii Coffee Association Conference, Kau Coffee Fest, the Hawaii Tropical Fruit Growers Association Annual Meeting, and the Landscape Industry Council of Hawaii, among others, noting that participation may be virtual as determined by post-COVID recovery issues.
2. Coordinate or participate with producers in at least two Mainland trade shows and retail store promotions. These may include the Global Produce & Floral Show; the National Restaurant Association American Food Show, Natural Products Expo West, and SIAL America. Provide option to facilitate freight consolidation to lower trade show material freight costs and

improve logistic control. Note that participation may be virtual as determined by post-COVID recovery issues.

3. Coordinate or participate with producers in at least four foreign trade activities (including trade missions and reverse trade missions) to and from selected markets. Participation in the trade show and market activities are expected to be impacted by the trade and post-COVID recovery issues and may be via virtual participation. Provide possible options to facilitate freight consolidation to lower trade show material freight costs and improve logistics control or assist with in-country costs.
4. Promote and update the Hawaii Agriculture & Food Products website at local, domestic, and international activities to connect Hawaii vendors and products to buyers worldwide.
5. When possible, recruit bi-lingual, tri-lingual staff to facilitate marketing Hawaii agricultural products to global consumers.

Objective: Offer a Sponsorship and Product Promotion (SPP) request for proposal (RFP) process to attract a larger pool of applicants and to ensure greater effectiveness, transparency, and accountability.

1. Consider proposals from targeted agriculture trade associations with clear goals, feasible objectives, well-defined deliverables, and measurable performances.
2. Meet with potential participants to keep them updated on program changes and to conduct outreach activities on an ongoing basis. The outreach target for fiscal year 2023 is 10 trade associations or community groups. Note that communication may be virtual as determined by post-COVID recovery issues.
3. Request that proposals include "Buy Local, It Matters" campaign and "EAT LOCAL" message to support Goal 1 to move Hawaii toward food security and food self-sufficiency.

Goal 3: Facilitate development and expansion of marketing opportunities for select agricultural and processed products as a "tie-in" with the tourism industry.

Objective: Review current status of laws governing ag-tourism and facilitate the industry as a complementary activity to farming.

1. Maintain partnership in ag-tourism and encourage the continuing participation of Hawaii's culinary chefs as liaisons between the agricultural and tourism industries via our website, media initiatives and ag-related special events including festivals, fairs, trade shows, and conferences.



2. Support growth of the statewide ag-tourism association (HATA) which continues to develop standards and legal framework for business operations. Topics for clarification will include zoning, public safety, signage, impact of Title VI, ADA access, and post COVID-19 related rules.

Goal 4: Maintain marketing campaigns that educate the public about local agriculture producers and products and promote high-quality producers.

Objective: Maintain the Seals of Quality program to protect Hawaii's brand cachet in local, domestic, and international markets.

1. Maintain the functional marketing plan with defined marketing activities to promote awareness and increase sales of program products in local, domestic, and international markets.
2. Maintain coordination with the Quality Assurance Division (QAD) to provide initial quality checks for potential participants and ongoing quality control of existing program members.
3. Recruit and maintain at least 75 participants statewide by June 30, 2023.
4. Maintain ongoing collaborations with the QAD, other government agencies (the HTA, DBEDT and the Governor's tourism liaison), and other non-government entities in developing and executing joint marketing activities for the Seals of Quality products in established tourism markets.
5. Continue to pursue sole ownership of the Seal of Quality logo from the Hawaii Tourism Authority that has changed their logo and font to a new, streamlined canoe look.

Objective: Support the Manufacturing Sector by identifying products that are manufactured, assembled, fabricated, or produced within the State and that have had at least fifty-one per cent of its wholesale value added by manufacture, assembly, fabrication, or production within the State via the "Made in Hawaii with Aloha" (MIHA) logo.

1. Administer the Limited License Agreement where the Licensee agrees to use the MIHA logo on products that comply with HRS 486-119. Continue to update the agreement to include provisions for new products such as derived from hemp.
2. Continue and expand collaboration with agencies whose members would benefit from the program such as the Hawaii Food Manufacturers Association (HFMA), High Technology

Development Center (HTDC), Chamber of Commerce of Hawaii (CCH) and DBEDT, among others.

3. Create activities to promote the MIHA and logo.

Objective: Support the Fresh Products sector by identifying products that are grown or raised in Hawaii via the "Island Fresh" and "Grown in Hawaii with Aloha" logo.

1. Create a Limited License Agreement where the Licensee agrees to use the Island Fresh logo on products that comply with the state labeling laws. Continue to update the agreement to include provisions for new products.
2. Create and administer the Limited License Agreement where the Licensee agrees to use the "Grown in Hawaii with Aloha" (GIHA) logo on products that comply with HRS 486-119.
3. Continue and expand collaboration with agencies whose members would benefit from the program such as the Hawaii Farm Bureau Federation, Hawaii Farmers Union United, the Independent Farmers United and commodity groups such as the Hawaii Tropical Fruit Growers.
4. Create activities to promote the Island Fresh and GIHA logos and its versions that are island and county specific.

Objective: Maintain select marketing programs with partners to emphasize the concept of buying local agricultural products.

1. Continue partnership effort on public education of Hawaii consumers as to what is produced in Hawaii and the importance of buying locally grown and locally produced products, which not only support our local farmers, but also supports businesses within our state.
2. Maintain participation in the buy local marketing campaign by Hawaii farmers.
3. Extend participation in the buy local concept with partners to local retailers to utilize point-of-purchase displays to educate consumers about buying local.
4. Increase purchase of promotional collaterals for wider distribution at schools, community events, supermarkets, to increase awareness of the "Buy Local, It Matters" call-to-action campaign.
5. Continue to support activities and groups where students are

engaged in agriculture with the intent to continue in the industry. These groups could include the Hawaii FFA, 4H Program, School Garden Network, Farm to State, and other programs.

6. Continue to evaluate current marketing strategies, explore new marketing opportunities, and develop performance measures.
7. Continue collaboration with non-profits and philanthropists to maintain programs such as Double Bucks for SNAP participants that provide a subsidy for the purchase of locally grown products.

#### Market Analysis & News Branch

Goal 1: Provide timely, accurate and useful statistics of Hawaii's agriculture to support production, market development, policy, planning, and research functions.

Objective: Maintain the Department's core capacity to gather, analyze and disseminate information and statistics on Hawaii agriculture for use by local producers, planners, industry leaders, policy makers, and legislators to better manage uncertainties and elevated risks in the prevailing business climate.

1. Fill Branch Supervisor and any vacant positions, and further train staff to facilitate organizing, gathering, processing, estimating, and publishing of Hawaii-specific agricultural statistics.
2. Determine the type, scope, format, complexity, frequency and priority of reports and studies that are program fundamentals.
3. Determine economic impact analysis tools, equipment, technology adoption (such as General System Modeling, I-O Modeling, GIS mapping), other assets, and workforce development needed to fulfill core program requirements.
4. Compile and maintain producer listing and contact information of specific commodities identified and related variables for relevant surveys (periodic and special).
5. Seek state funding to continue surveys that are not part of the NASS national program. These include, but are not limited to vegetables & melons, tropical fruits, eggs, horticulture, and seeds.

Objective: Undertake basic agricultural statistics reports, outlook studies, logistic analyses, and other pertinent data to support relevant agricultural activities in the state.

1. Establish feasible sampling list frames of select crops and/or livestock in Hawaii.
2. Draft, pretest, and field relevant survey instruments of established crops and/or livestock.
3. Identify changing information and data needs and modify methods of data collection and published report formats when needed
4. Compile, analyze and construct appropriate and statistically relevant presentations to hold a general audience.
5. Draft and publish findings of survey results in statistical reports or related outlook study reports in a timely manner.
6. Maintain relevancy and defensibility of generally accepted procedures in providing official estimates on agricultural statistics.
7. Survey, capture and evaluate data from alternate sources to verify or support survey results.
8. Engage in dialog and build rapport with data users, providers, and commodity groups by attending industry meetings, conferences, and other agricultural meetings to improve responses to data collection and surveys.
9. Seek user feedback on agricultural statistics products developed and released to the public.
10. Fulfill appropriate requests for published information and statistical reports.
11. Continue to develop survey tools, networks of data sources and providers, diligently seek cooperation from agricultural producers, wholesalers/distributors, grocers, shippers, local/federal agencies, and other pertinent entities to develop informational resources and relational database system that will benefit decision makers, agricultural producers, and the overall agriculture industry.
12. Restoring the Department's data gathering and information dissemination service (which has been absent for many years) will contribute to increasing local food self-sufficiency, food security, and doubling local food production goals.

Objective: Ensure data users have online access to published reports and agriculture statistics.

1. Post statistical and other local agricultural relevant reports online to the MANB website.
2. Maintain ease of access for data users to obtain published reports in a timely manner online.
3. Continue to improve website design and layout to attract data users.
4. Update the website with newly published reports as they are released.

Division/Branch: Agricultural Loan Division

**Purpose:** The objective of the State Agricultural Loan Division is to foster economic development in the state by stimulating, facilitating, and granting loans to farmers and aquaculturists.

**Goal 1:** To increase the overall number of loans and dollar amount loaned over time and provide assistance to the farming and aquaculture communities.

**Objectives:** Approve 25-30 loans annually with a dollar amount of \$5,000,000 or as much as is available in State funds. The Division will continue to focus on making loans and increasing servicing and collection efforts. The Division will conduct outreach to increase awareness of the program.

1. Work with staff to ensure that loan applications are completed on a timely basis. Ensure that emergency loans for COVID pandemic recovery are expedited to provide timely assistance
2. Monitor loan funds to ensure sufficient funds are available for approved loans. The program will prioritize participation loans and cooperating loans with other agricultural lenders to stretch limited loan funds.
3. Close loans and disburse loan funds on a timely basis.

**Objective:** To expand and preserve the agricultural and aquacultural industries. The target includes the creation or preservation of 100 agricultural/aquacultural jobs, expand or preserve 250 acres of agricultural lands annually and generate \$3,000,000 in annual farm income from new borrowers. The Division's focus will be to expand the agriculture industry to increase exports or reduce imports thereby helping the State's economy and increasing food self-sufficiency. Although the Division has creation or retention of jobs, agricultural acreage and annual income as targets these will not be factors in determining which loans will be funded or submitted for approval.

1. Retain/create agricultural jobs through direct loans or loans made in cooperation with commercial lenders.
2. Preserve or expand use of agricultural lands through direct loans or loans made in cooperation with other lenders.
3. Increase farm income through direct loans or loans made in cooperation with other lenders.
4. Conduct regular field visits to verify growth in acreage or increase in number of farm employees after loan funds are disbursed.
5. Tabulate and monitor acreage and employment data collected from borrowers.
6. Provide additional counseling services to farm operations affected by the downturn in the economy due to the COVID pandemic. Provide emergency loans to serve as a safety net to help ensure that farms and ranches survive and are preserved through the ongoing economic recovery.

Goal 2: To operate the agricultural loan program by maintaining a quality loan portfolio with a reasonable level of delinquencies while supporting the agriculture and aquaculture industries.

Objective: Step up collection efforts on delinquent accounts and increase monitoring of current accounts. Collection efforts are important to ensure adequate funding for future loans. The Division will continue monitoring current accounts and work with delinquent borrowers to ensure timely repayment of their loans. The program is a lender of last resort and collection efforts need to be balanced with the need to assist the industry.

1. Keep delinquencies under 20% of the total loan volume.
2. Continue to monitor available fund balances, delinquent accounts and the overall health of the portfolio and status of the agriculture and aquaculture industries.
3. Ensure adequate monitoring of the Division's accounts, a target of 750 servicing contacts with borrowers will be maintained.
4. Continue to focus on development of individual repayment plans for delinquent borrowers to establish regular loan payments. Loan officers will closely monitor delinquent accounts and conduct periodic reviews of the borrower's performance and financial condition. Special attention will be made for operations affected by the COVID economic downturn and borrowers will be provided payment relief to assist in their survival and recovery.

5. Refer severely delinquent accounts to the Board of Agriculture on a timely basis and forward to the Office of the Attorney General for assistance in collections.

Division/Branch: Animal Industry Division

Branch - Animal Disease Control and Veterinary Laboratory

**Purpose:** To protect livestock, poultry, and public health by preventing the entry of animal diseases into the State, and diagnosing, monitoring, controlling, and eradicating livestock and poultry diseases of economic and public health concern.

**Goal 1:** Safeguard against the entry of Foreign Animal Diseases (FADs)

**Objective:** Strengthen measures in place to mitigate and detect the occurrence of FADs in Hawaii.

1. Continue application for and utilization of United States Department of Agriculture (USDA) funds to train veterinary medical officers as foreign animal disease diagnosticians.
2. Continue to provide enforcement activities to assist USDA with ensuring garbage feeding swine operations statewide are compliant with laws and rules in place to prevent the introduction of FADs.
3. Continue to obtain poultry and other birds to collect samples for avian influenza virus testing.
4. Rapidly investigate disease outbreaks in animals to rule-out foreign animal diseases.

**Goal 2:** Enlarge and improve the Airport Animal Quarantine Holding Facility (AAQHF) at HNL.

**Objective:** Improve: safety for customers and employees; biosecurity; and operational flow through the facility.

1. Begin and complete the project design phase FY 2021 (completed).
2. Secure additional funding if necessary, from designs FY 2022.
3. Start construction FY 2023.

- Goal 3: Update plans to control and contain bovine tuberculosis (bTB) on Molokai.
- Objective: Contain and control bTB in livestock on Molokai.
1. Implement a second round of herd tests on Molokai in FY 2023 after infected herds were depopulated in FY 2022.
  2. Work with USDA to fund bTB testing of cattle and wildlife on Molokai.
  3. Work with USDA to conduct research on Molokai to determine the population size of the major wildlife species, determine the prevalence of bTB in those species, and implement demonstration programs to reduce the risk of transmission of bTB from wildlife to livestock.
  4. Continue annual testing of all cattle herds on Molokai.
  5. Enforcement Quarantine Order 158 which restricts the movement of ungulates on and off of Molokai to prevent the spread of bTB from Molokai.
- Goal 4: Develop carcass disposal plans for disease outbreaks in poultry, aquaculture, and livestock.
- Objective: Develop plans for the disposal of animal carcasses resulting from natural causes, disease outbreaks, and planned disease control depopulations.
1. Examine methods of carcass disposal with respect to government regulations and animal disease control methodologies from USDA.
  2. Utilize a Geographic Information System (GIS) to locate carcass disposal locations statewide.
  3. Develop protocols for the transportation of carcasses, disposal/burial methods, cleaning, and disinfecting after disposal.
- Goal 5: Align the list of notifiable diseases with those of high consequence that may impact movement and disease response in Hawaii
- Objective: Strategically examine the methods of response to animal diseases of high consequence to ensure alignment with response methodologies from the USDA.



1. Examine, and edit when applicable, animal disease preparedness plans to align with current response plans provided by the USDA.
2. Engage Hawaii's veterinary professional community to maintain vigilance in monitoring for the occurrence of reportable diseases in animals.

Goal 6: Amend animal disease control administrative rules to strengthen disease control prevention and control measures.

Objective: Update and strengthen animal disease control Administrative Rules.

1. Strengthen garbage feeding regulations to strengthen the State's ability to prevent the introduction of FADs.

Goal 7: Continue the development of animal disease traceability processes used during an animal disease outbreak to reduce the magnitude of associated adverse economic impacts.

Objective: Utilize Federal cooperative agreement funds to enhance intrastate and interstate animal disease traceability by encouraging premises registration and mitigating bottlenecks in animal disease investigations.

1. Seek funding from the USDA-Veterinary Services for equipment to facilitate animal disease investigations in FY 2023.
2. Continue animal disease traceability activities through FY 2023.
3. Update technical equipment that supports electronic identification in the production of animal species such as cattle, hogs, and small ruminants in FY 2023.

Goal 8: Improve laboratory support for animal disease surveillance and control programs to mitigate potential negative economic impacts on the animal industry and public health.

Objective: Develop a new Veterinary Laboratory and services

1. Complete re-design for existing lab facility improvements in FY 2021 (completed).
2. Secure funding to initiate construction FY 2023.
3. Implement molecular diagnostics after lab improvements.

- Objective: Ensure timely laboratory testing in support of the Division and livestock, poultry and aquaculture industries.
1. Cross-train laboratory personnel to ensure that timely and high-quality laboratory diagnostic support is maintained.
  2. Implement new methodology and equipment for disease testing and diagnosis.
  3. Apply for Federal cooperative agreement funds, if applicable, to support laboratory activities in FY 2023.
  4. Conduct surveillance testing for high impact disease agents that affect domestic animals by performing pathology examinations and collecting appropriate samples for laboratory testing.

Goal 9: Continue pseudorabies and swine brucellosis surveillance and control measures agreed upon with USDA.

- Objective: Control the spread of pseudorabies and swine brucellosis from infected feral swine to domestic swine herds.
1. Test 25% of domestic swine herds in the State annually.
  2. Herds designated as high risk because of previous exposure or potential exposure to feral swine will be tested annually.
  3. Continue testing of all sows and boars over six (6) months of age at slaughter.

Branch: Animal Industries / Aquaculture and Livestock Support Services

Purpose: To develop sustainable and profitable commercial aquaculture and livestock industries by encouraging a diversity of products, improving management practices and technologies, assisting with procurement of production related infrastructure and resources, and providing direct assistance with regulations, disease prevention, marketing, and new business development.

Overall Industry Goal: Boost farm incomes for all livestock, which includes aquaculture, operations in Hawaii by:

- increasing the total number of livestock on large and small farms;
- improving the efficiency of livestock operations;
- developing new marketing locally and abroad;
- facilitating new production systems.

Industry Advocacy and Development

- Goal 1: At the government level, increase the visibility of the aquaculture and livestock industries and their role in reaching Hawaii's sustainability goals.
- Objectives:
1. Act as the lead coordinator for statewide aquaculture and livestock program activities for County, State and Federal entities.
  2. Work closely with State and County lawmakers to develop and adopt pro-aquaculture and pro-livestock legislation.
- Goal 2: Increase local and export awareness and demand for aquaculture and livestock products.
- Objectives:
1. Develop and implement an industry marketing program with a goal to educate consumers regarding aquaculture and livestock as sustainable food solutions. Web marketing will be developed with print channels utilized as the budget permits.
  2. Work with selected industry segments to develop generic promotional materials (e.g., photography and brochures).
  3. Establish an economic foundation for the livestock industry through the development of institutional food programs.
  4. Work with industry associations, university, local processors, the culinary industry, and the Market Development Branch to develop new products and local markets for those products including (high quality grass finished beef, fresh local pork, locally unique added value products and locally influenced high quality ready to cook meals for local and potential export markets).
- Goal 3: Develop and implement aquaculture and livestock plans and policies by providing review and input into aquaculture governance propositions and representing the State at the Federal and international levels.
- Objectives:
1. Facilitate expansion of Federal/State sponsored offshore aquaculture development on species, systems, environmental impacts and economic benefits and potential leases as the Federal Offshore Aquaculture Policy is developed.
  2. Collaborate with national aquaculture organizations, such as the National Association of State Aquaculture Coordinators (NASAC) and the National Aquaculture Society (NAA), to provide feedback on developing aquaculture policies.
  3. Represent the Hawaii aquaculture industry at aquaculture conferences such as Aquaculture America.

4. Represent the Hawaii livestock industries at national livestock development organizations such as the National Institute for Animal Agriculture (NIAA)

Goal 4: Develop resources and infrastructure to support local aquaculture and livestock production

- Objectives
1. Work with other departments and divisions to secure resources including leaseholds, water, processing facilities, etc. required to maintain and promote the local production of aquaculture and livestock.
  2. Work with Federal agencies and other divisions to secure CIP funds for the development and redevelopment of infrastructure critical to the survival and expansion of the aquaculture and livestock industries.
  3. Work with other divisions to amend rules to allow the aquaculture and livestock industries to obtain leases, water, and other resources at rates which these industries can bear. Assist in developing financing options that would allow the industries to develop and operate competitively and in a long-term sustainable manner.

Goal 5: Coordinate applied research to provide tools or resources for the aquaculture and livestock industries to improve production and productivity.

- Objectives
1. Undertake research for alternative sources of feed ingredients for aquaculture use.

Branch: Animal Industry/Rabies Quarantine Branch

Purpose: To protect animal and public health by reducing the likelihood that rabies virus will be introduced into the State and monitoring animal entries for alien pests that may carry human or animal diseases.

Goal 1: Transition away from current paper-centric procedures to digital documents and processing for the importation of animals into the state.

Objective: Revise Airport Animal Quarantine Holding Facility (AAQHF) animal receiving intake application "APP" to include mobile capability along with check-in enhancements.

Objective: Enhance Animal Information System (AIS) Front Office, Finance and Accounting functions in the AIS system to simplify entry applications, notifications, refunds, identify outstanding balance accounts, etc.

Objective: Enhance the Veterinary Dispensary AIS system module to accommodate digital document processing and review to eliminate or significantly reduce paper handling.

Objective: Improve interoperability between the Hawaii Pet Owner Portal (HIPOP), Neighbor Island Inspection Pet Entry Tracker (NIIPET), and AIS back office to seamlessly process applications, payments, document review, receive confirmations, pet qualification, and issue permits.

For all Objectives:

1. Develop and design solutions FY 22. (In process)
2. Solicit Vendor late FY 23 as funds permit.
3. Commence build and deploy during FY 24-25 as funds permit.

Goal 2: Improve the processing of customers arriving at the AAQHF.

Objective: Provide improved check-in queue (completed FY 21)

Goal 3: Improve Existing Facility.

Objective: Repair some of the existing kennel structures.

1. Request construction CIP in FY 20 budget. (completed)
2. Select a Vendor mid FY 2022 and begin renovations as funds permit (project to be significantly scaled down, design phase construction costs exceed available funding. Subsequent Department of Accounting and General Services (DAGS) solicitation resulted in no bids initially and bids exceeding budget in the subsequent solicitation). DAGS assisting with project.

Objective: Upgrade sewage pretreatment plant per Department of Health (DOH) Clean Water Branch Notice of Violation and Order.

1. Commence upgrades as funds allow CY 2020-22 (DAGS project started 2<sup>nd</sup> Quarter FY 21, construction still in progress,).
2. Complete upgrades in FY 23. (projects still under construction)

Goal 4: Plan and move the existing Animal Quarantine Station (AQS) facility to accommodate planned Oahu Community Corrections Center Relocation to AQS Property.

Objective: Plan, design and build new AQS to accommodate program activities.

1. Commence design phase of relocation FY 21 -22. (fit study for the alternative site completed)
2. Commence project as funds allow FY 2023-24.

Goal 5: Continually apply new information on rabies virus and public policy to analyze the quarantine program and respond to fund performance, needs of users, and the general public.

Objective: Review rules and regulations on an ongoing basis to be consistent with new rabies scientific research findings and other anticipated initiatives.

1. Continue to evaluate the effects of 2018 HAR amendments through FY 22 and propose further amendments, if warranted in FY 2023-24.

Division/Branch: Plant Industry Division

Purpose: To protect Hawaii's agricultural industries, natural resources, and public health from the adverse impacts of invasive pests and diseases, and illegal non-domestic animals by preventing their introduction and establishment in Hawaii; to conduct effective plant pest control activities; to enhance agricultural productivity and agribusiness development by facilitating export shipments of agricultural and horticultural materials and products; to ensure the effective, efficient, and safe use of pesticides and to minimize their possible adverse effects to humans and the environment while considering the benefits of their use.

Goal 1: To protect Hawaii's agricultural industries, natural resources, and the public health from the entry and establishment of harmful insects, diseases, illegal non-domestic animals, and other injurious pests.

Objective: To reduce the entry of invasive species by conducting pre-entry and at border inspections and other prevention activities at various ports-of-entry and eradication efforts, post-entry, where possible.

1. Stabilize the existing level of state funding for Plant Quarantine Branch (PQB) inspectors and programs and aggressively seek additional federal funding support to address these needs. The PQB has been consistently awarded US Department of the Interior grants to fund the Hawaii Detector Dog Program (HDDP) and Brown Tree Snake (BTS) Interdiction program. Completion Date: Ongoing.

2. Establish Biosecurity Inspection Facilities at airports and seaports statewide for the inspection of agricultural products and other regulated commodities by appropriate Quarantine Programs (State Quarantine, United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ), and Homeland Security, Customs and Border Protection). Completion date: Ongoing. Five transitional facilities are currently in operation.
3. Increase the resources necessary to effectively mitigate increased pest pressure from global trade by collaborating with federal and state agencies and encouraging public-private partnerships. Ongoing examples include the Rapid Ohia Death (ROD) Working Group, quarterly training with USDA National Detector Dog Training Center staff for Canine Handlers for BTS and other regulated plant materials, and active participation in the Hawaii Risk Assessment Committee, Hawaii Invasive Species Counsel and Coordinating Group on Alien Pest Species. Continue to work with Amazon Compliance to restrict the importation and sale of various microbial products, biocontrol agents and restricted plants into Hawaii. Bi-monthly meetings with Federal inspection agencies to share intelligence; Quarterly meetings with Australia and New Zealand to discuss invasive ants and biological control projects. Participation in the Pacific Ecological Security Conference in Palau to address issues related to Coconut Rhinoceros Beetle, Invasive ants, and biological control from a regional perspective. Completion date: On-going.
4. Expand the existing nursery certification program by developing a compliance program for interisland movement of nursery stock and by entering into new compliance agreements with other states and/or countries to reduce risk of pest movement between islands, states, and foreign countries on nursery stock. Renewal of Master Permit QC 650 that maintains the exemption of orchid plants from root sampling and no changes from the prior permit for shipping to California. Continued implementation of a Nursery Stock Certificate program that allows participants to self-certify shipments moving inter-island as well as to select U.S. mainland destinations. Additional on-going examples include the joint development and continued collaboration with the Oregon Department of Agriculture and the Washington Department of Agriculture to utilize and maintain best management practices with Christmas tree growers and shippers and maintaining the compliance program for ROD to allow the shipping of potted plants in soil as a planting media. Completion Date: On-going.
5. Expand the electronic transporter manifest system and electronic importer manifest system in order to more efficiently schedule inspections and be able to prioritize and inspect high- and moderate-risk commodities. Create a web-based data entry system to facilitate the standardization of data and information that is submitted

electronically. Pacific Point Inc. has developed the new database, named "Kupono", and has made more user-friendlier and efficiency enhancements. PQB is working with select importers to ensure web-based electronic manifest system is compatible with user needs. Completion date: Completed.

Goal 2: To conduct effective plant pest control programs as a post-entry initiative.

Objective: To contain, control and/or eradicate plant pests that enter the state by using chemical and mechanical means and/or biocontrol strategies to mitigate risks to agriculture and the natural resources of the state.

1. Prevent distribution of noxious weed seeds by examining seed shipments originating from foreign and domestic seed sources for exotic seeds, such as fireweed Cogon and Jubata grasses. Completion date: On-going.
2. Conduct statewide pest detection and monitoring to delineate infestations of regulated pests for control or eradication. Determine statewide distribution of noxious weeds (e.g., fireweed and fountain grass), plant diseases (e.g., coffee rust, Fusarium wilt, brown root rot), insect pests (e.g., little fire ant) and coqui frogs. Utilize GIS technology to map results for use in planning and communication with decision makers such as USDA APHIS Cooperative Agricultural Pest Survey program (CAPS) and other surveys conducted by Plant Pest Control staff for plant pests. The PQB also uses GIS technology for BTS trapping and other rapid response efforts. The PQB staffs and responds to the statewide pest hotline, conducts pest detection in urban areas, and monitors pests within certified nurseries statewide. Completion date: On-going.
3. Increase invasive species monitoring, detection, and diagnostic activities to detect, identify, delineate, and eradicate incipient infestations of invasive alien species, such as the red imported fire ant, Africanized honeybee, coconut rhinoceros beetle, Brown Tree Snake and many other serious pests not yet found in Hawaii or very limited in distribution. Seek extension of present federal funding support and new funding to increase personnel, equipment, and supplies necessary to implement this action. PQB has received federal funding to monitor and detect BTS utilizing the HDDP, spotlighting of fence lines around military bases, and utilize long standing snake traps in select areas on military bases. Completion date: On-going.
4. Seek federal funding such as CAPS and private sector funding to supplement operating funds to conduct foreign explorations to search for and introduce potential biocontrol agents of targeted weeds and plant pests, such as fountain grass, coffee berry borer, fire weed, and hala scale. Plant Pest Control Branch has



established broader partnerships to identify opportunities to cost-share biocontrol projects. Ongoing communication is occurring with Australia, New Zealand, South Africa, and other states for projects such as fireweed, fountain grass, Albizia, devil weed, gorse, and Christmas berry. In partnership with US Forest Service and Queensland, Australia, HDOA is participating in a collaboration to control *Chromolaena odorata*. The Plant Pest Control Branch has detected the fortuitous introduction of a biological control agent, a fungal disease known as winter rust, which attacks the weed *Parthenium hysterophorus*. The Plant Pest Control Branch is also partnering with the Forest Service to release biological control agents for *Miconia calvescens* and *Tibouchina herbacea* after learning of concerns from Australia about a thrips biocontrol agent for Christmas berry. HDOA and Forest Service have performed a re-assessment and will be restarting this project to seek permission to import this agent into Hawaii. Completion date: On-going.

5. Participate in an Insect Diagnostic Identification Network for Hawaii and the American Pacific among the land grant universities and departments of agriculture in Hawaii, Guam, American Samoa, Commonwealth of the Northern Mariana Islands (CNMI), and Federated States of Micronesia (FSM). Funding will be sought from Research, Education and Extension Service (UH-CREES). USDA via the University of Hawaii, Cooperative, PIDDIRS – Pacific Island Distance Diagnostics and Recommendation System. The PIDDIRS has been folded into the Western Plant Diagnostic Network in terms of infrastructure with the UH researcher, receiving primary funding for NPDN. Completion Date: On-going.
6. Duties of the apiary staff were re-written to focus on biosecurity. Extension and education activities have been transitioned to the University of Hawaii although recent departures have left the Assistant Researcher position vacant. Support to Hawaii's queen bee rearing industry through inspection and certification remains in place. The number of queen bee producers has increased to twelve statewide with most being located on Hawaii Island. Plant Pest Control Branch staff is working directly with US Department of Agriculture, the Apiary Inspectors of America, and the Canadian Food Inspection Agency to insure the flow of honeybee queens to North America. Hawaii remains the source of approximately 50% of all honeybee queens supplied to North America. An outstanding issue identified by Hawaii is the lack of a definitive, molecular based identification of Africanized honeybees for regulatory purposes on a national level. Plant Pest Control Branch is working with the Apiary Inspectors of America to resolve this issue. Completion Date: On-going.
7. Upgrade biocontrol facilities and/or investigate the potential for building new modernized facilities to increase the biocontrol program's capabilities to respond to new emerging and established pests. Budget requests for planning and design appropriations were

submitted and approved by the Legislature. Initiated assessments of existing facilities in other states and countries, establishing collaborative relationships with their program managers and investigating options for improving the Department's biocontrol facilities. Plant Pest Control Branch has begun investigating modular prefabricated facilities to eliminate cost-over runs and ensure facilities can operate as expected. Plant Pest Control Branch continues to meet with partner agencies to discuss facility needs to move forward. Completion date: On-going.

The Coffee Berry Borer (CBB) Pesticides Subsidy Program was established during the 2014 Legislative Session Act 105 (HB 1514) to assist Hawaii coffee farmers with the cost of pesticides containing *Beauveria bassiana* for CBB control. The program launched in 2016 for reimbursements to coffee farmers who purchased *Beauveria bassiana* during July 1, 2016, through June 30, 2018. The 2017 Legislative Session, Act 065 (HB 186) extended the program until June 30, 2021. Session Laws of Hawaii 2021, Act 138, expanded to include the new coffee pest, the coffee leaf rust, *Hemileia vastatrix*. The subsidy program has been extended to 6/30/2023. The amount of \$300,000 to the subsidy program was supported with general funds from the Office of the Chair, for a subsidy total of \$1,010,000 since its inception.

Goal 3: To enhance agricultural productivity and agribusiness development by facilitating export shipments of agricultural and horticultural materials and products.

Objective: To provide opportunities for Hawaii's fresh fruits and vegetables and nursery products to access new markets.

1. Assist in accessing new markets for Hawaii grown fresh agricultural products, including, initiatives to have post-harvest quarantine treatment facilities in Hawaii available for use by all growers wishing to move products to export markets currently restricted as a result of state and/or federal quarantine prohibitions; and collaborate with federal agencies to expedite the export of new products. The ban on exporting avocados from Hawaii to the continental US by the USDA-APHIS was lifted in 2013. Local growers are transitioning to the Sharwil, the only variety allowed for export to certain states. In 2016, 1,000 avocados were shipped from Hawaii to Minnesota. Implementation of a new administrative rule effective May 15, 2020 restricts the introduction of Myrtaceae into the State. Working with local florists and industry growers to meet current needs.  
Completion Date: Ongoing.

Goal 4: To support the appropriate and legal use of pesticides and minimize their possible adverse effects on humans and the environment.

Objective: To prevent injury from pesticides by working to reduce the total number of pesticidal poisoning incidences by the end of FY 2022.

1. Conduct at least twenty (20) fumigation use inspections annually to assure the use of fumigants by commercial pest control operators in Hawaii meets all health and safety requirements and directions for use mandated by the U.S. Environmental Protection Agency (EPA).

Increasing emphasis has been placed on responding to pesticide odor/drift complaint investigations, agriculture use inspections and Market Place Surveillance (MSI) inspections. The Pesticides Branch is focusing on conducting fumigation inspections with partially staffed enforcement inspectors in all counties. Filling current vacancies are the Branch's highest administrative priority. Completion Date: On-going.

2. Conduct at least forty (40) inspections of agricultural employers to ensure employer compliance with the EPA Worker Protection Standard (WPS). Emphasis has been placed on farms using restricted-use pesticides (RUPs), farms with a past enforcement action (either a warning notice or civil penalty), crops requiring worker entry soon after pesticides have been applied such as cut flowers, pineapples, and seed corn. Included in the inspections are all uses of pesticides that have WPS requirements. While emphasis has been placed on RUPs, the number of farms and nurseries, going forward, will include those using any pesticides with WPS requirements. A neutral inspection scheme has been developed and is being implemented for enforcement and consultative; the list considers RUP use, prior violations, previous inspection results, etc. Completion Date: On-going.

Due to changes in the WPS effective in 2017, more emphasis is being placed on conducting WPS Tier I inspections. There is one enforcement position currently vacant on the island of Maui, one vacancy on Oahu, and two vacancies on the island of Kauai. All other enforcement positions have been filled.

3. Conduct at least twenty (20) education and outreach consultative visits to provide services to farmers who are regulated under FIFRA and WPS.

Education staff are assigned weekly calls to both certified and non-certified farmers and applicators of pesticides. Calls and information provided to applicators assist with compliance using the same neutral inspection scheme developed for the Enforcement section. Completion date: On-going.

4. Conduct at least twenty (20) Marketplace Surveillance Inspections (MSIs) and consultative visits to ensure all products available to

the public at retail marketplaces are federally registered and licensed in the State.

Due to the COVID-19 pandemic, the Pesticides Branch has seen a spike in unregistered and unlicensed products available for retail sale with inaccurate claims. The enforcement staff complete inventory checks on retail establishments for any product that is considered a pesticide. Education staff assist retailers with rule application and interpretation pre- and post- inspection. Ensuring the health and safety of a purchasable pesticide product is of high priority for the Pesticides Branch. Completion date: On-going

5. Develop a pesticide case database to track compliance rate, repeat violators, and costs per enforcement action.

INFOR Public Sector database has been developed and is currently being deployed for enforcement, education, and licensing efforts by the Pesticides Branch. Reporting of Restricted Use Pesticides are submitted annually to HDOA and put into a database maintained by the Pesticides Branch. Summarized RUP application data is posted on the HDOA website in the Pesticides Branch section for public perusal. Completion date: On-going.

While the INFOR database was completed in 2017, there are still issues that need to be updated and maintained to ensure efficient use of staff time. The main task is the generation of emails to pesticide registrants notifying them when it is time to renew product licenses. This will continue to be a focus of the Pesticides Branch. The Branch continues to use INFOR as its main database a new Registration 2.0 system is being developed to increase the efficiency of registering new and already registered products. Development of the new Registration System is expected to be completed sometime in 2023. Completion date: On-going.

6. Increase pesticide education outreach to applicators of pesticides to reduce the potential for pesticide misuse affecting human health and the environment.

As of October 1, 2022, the Education Section currently has vacancies on the islands of Kauai, Hawaii, and Oahu. Neighbor Island counties each have an education staff position, while Oahu has 2 staff plus a supervisor. The department is actively recruiting to fill vacancies. Currently, the supervisor of the Education Section assists Kauai stakeholders by flying up to Kauai at least once a month to proctor exams and provide outreach services. The Branch has staff assisting Hawaii county with temporary assignments. Environmental Health Specialist (EHS) education/certification staff continue to conduct workshops and one-on-one consultations to target groups including farmers, nurserymen, landscapers, pest control operators and state

agencies (Department of Transportation; highways and harbor staff and Department of Education; head custodians and cafeteria managers, and County agencies; roadside spray crews and managers).

Workshop topics include pesticide safety, label comprehension, Worker Protection Standard (WPS) training and compliance, concepts of Integrated Pest Management (IPM) and the use of proper personal protection equipment. Completion date: On-going.

With the establishment of Act 45, outreach contains provisions for educating certified applicators with a requirement that all RUPs used shall be reported to the Pesticides Branch by the end of the reporting period, reports are due to the Pesticides Branch on January 30 of each year. Most RUP use reports are submitted to the Pesticides Branch. Warning notices were sent to certified applicators who failed to submit reports. The Branch finalized a spreadsheet that was used for keeping track of Act 45s RUP reporting requirements. The spreadsheet was distributed widely during outreach events and posted online for RUP applicator's use. Additionally, the Branch has created a RUP application for both iOS and Android platforms to assist RUP applicators with reporting submissions. Outreach is ongoing for RUP Report Application support. Completion date: March 31, 2023.

Additional outreach continues for the regulated community and the community at large with respect to 100 feet buffer zones around schools. It is prohibited to spray a RUP product within the 100-foot buffer zone Monday through Friday, from 7:00 am to 4:30 pm. GIS maps were developed, and analysis was completed to determine where there may be issues with compliance of Act 45. Staff will continue to complete outreach towards those Tax Map Keys (TMKs) to ensure compliance and knowledge of Act 45 provisions. One staff is dedicated to conduct outreach regarding all Act 045 provisions. There is still one staff vacancy for Act 45 outreach. Completion date: On-going.

Informational consultative visits with disinfectant applicators have been and will continue to be a priority for the education staff due to the COVID-19 pandemic. Proper use of disinfectants ensures claims made by manufacturers are effective and keeps the public at large healthier. Staff have also reached out to "new" cleaning companies and disinfection services to inform them of FIFRA and Hawaii State rules and regulations. Completion date: On-going

Objective: To support Hawaii agriculture and conservation initiatives through issuing Experimental Use Permits (EUPs), Special Local Needs (SLNs), and Emergency Exemptions (EE).

1. EUPs are processed at the State level and allow for off-label use of products with restrictions placed on the applicator by the Pesticides Branch. EUPs provide a legal avenue to determine efficacy of a product that may be used to combat pests in specific locations which are not identified on a product's label. EUPs are generally conducted by research personnel and cannot be used for any profit by the researcher. The data gathered must be reported to the Pesticides Branch after the experiment is completed. The data is usually used to apply for a SLN to support larger scale use of the products. Completion date: On-going
  
2. Provide a regulatory review of product labels and establish exemptions for local producers of diversified agricultural products. SLNs provide applicators with an avenue to use products outside of the label requirements. Requests are reviewed by registration staff to ensure human health and environmental concerns are met. The requests are then sent to the U.S. E.P.A. for final approval. Completion date: On-going
  
3. If a crop or pest is identified to have an emergency adverse effect an Emergency Exemption (EE or Section 18) may be requested by an individual, group, or entity. EE's go through a similar review process as SLNs but with higher importance placed on processing expediently. Completion date: On-going

Objective: To manage pesticides use to minimize environmental effects and maintain important pesticides uses. To have no increase in the number of drinking water sources having a pesticide residue level in excess of 10% of a regulatory limit.

1. Fund research to enable informed decision-making on pesticides potential to leach into the water supply.

The Department is partnering with University of Hawaii Water Resources Research Center (WRRC) to conduct groundwater reviews for active ingredients new to the state of Hawaii and existing products that may pose potential groundwater leaching hazard. Groundwater reviews involve evaluation of groundwater data developed by the registrant and determining leachability in Hawaii-specific soils, utilizing GIS-based leaching model. Periodically, field studies are conducted, in collaboration with WRRC, to evaluate leachability of selected compounds as affected by soil and hydrologic conditions. Completion Date: On-going.

Objective: To enhance the pesticide regulatory program through effective program management and data collection.

1. To achieve a 90% compliance rate with pesticide distribution and use requirements.

All sales of Restricted Use Pesticides (RUPs) are reported to the Pesticides Branch monthly by pesticide dealers. Inspectors conduct various inspection types with applicators/distributors of pesticides to determine compliance with label directions or registration/licensing protocol. Completion date: On-going.

The establishment of a RUP reporting requirement is an important factor for ensuring the RUP use does not exceed label requirements and restrictions. Completion date: On-going, reports due January 30 of each year.

2. To identify activity areas not achieving 90% compliance, identify reason for non-compliance and determine actions recommended to attain better compliance rates.

Areas identified for non-compliance include improper site of application, crop not on label, insufficient personal protective equipment worn, improper dilution rate of application, Worker Protection Standards violations, and off target drift. Inspections also identify other suspected violations with pesticide labels or violations of registration/licensing protocols. Enforcement actions include issuance of advisory citations, warning notices, and notice of violations resulting in civil penalties. Activities conducted to attain better compliance rates include, follow up inspection to previously issued enforcement action (compliance verification) and outreach by the education/certification staff to provide guidance or additional training to violators. Completion Date: On-going.

Staffing and priority hiring of Environmental Health Specialists in the Education Section on the islands of Kauai and Hawaii will fill knowledge and experience gaps in the stakeholder communities. Pesticide Enforcement Specialist vacancies are actively being recruited and filled for Hawaii Island, Kauai, and Oahu. Completion date: Done.

3. Maintain a database of Restricted Use Pesticide (RUP) sales, to better inform the general public of RUPs sold in the State of Hawaii.

Restricted Use Pesticide sales records are regularly submitted by RUP dealers on a monthly basis to the Pesticides Branch for entry into a database. The Department is in the process of developing an updated system to house this data and summarize the data more quickly and efficiently. This new database will have the capability to generate reports based on multiple parameters, such as date range, company, certified applicator, and product. Data accessible to the public will be limited to that which is releasable under Chapter 92F, Hawaii Revised Statutes.

The HAR 4:66 requirement to report all annual RUP use will further enhance the ability of the State to determine where RUP pesticides are applied and how much RUP pesticides are applied in a given area. The RUP use data compiled will further provide information that is accessible by the public either through a Uniform Information Practices Act or Freedom of Information Act request. Completion date: Reports are due January 30 of each year.

4. Annual reporting of all Restricted Use Pesticides used Statewide.

Act 45 was passed during the 2018 Legislature. This law requires that all RUPs used by all facets of the regulated community will be reported to the Department no later than January 30 following the reporting year. The first reporting year for this law was 2020. RUP reports by certified applicator will be required to submit to the Pesticides Branch by January 30, 2023. All certified applicators in the State have been notified, in writing, of this requirement. RUP dealers have been notified of Act 45 requirements so that they understand what role that they have in this process, if any. Data that is collected will be compiled, by County, for Departmental use. Data from previous years indicates a substantial decrease in warning notices and violations of failure to report RUP use from 2020 to 2021. Completion date: March 30, 2021.

5. Elimination of the use of all forms of Chlorpyrifos insecticide.

Act 45 requires the ultimate banning of any insecticides with chlorpyrifos as an active ingredient by December 31, 2022. All uses of the product until that time will be by permit only. The Branch has developed a permit process that is available on the Department's website. Permits are reviewed by an EHS prior to approval. The Branch has also established that all products that contain chlorpyrifos as an active ingredient are now a State RUP and will require a RUP license to purchase and use. All permitted users have been consulted and informed that as of January 01, 2023, all use will be prohibited. Completion date: Done. Permits processed as needed. Outreach completed in mid-2022.

6. Pesticide Drift Monitoring Study

The plan for a pesticide drift monitoring study project was completed and submitted to the Department in 2022. Estimates for costs of the project are approximately \$1.5M and cover 5 years. Completion Date: On-going.



Division/Branch: Quality Assurance Division

Purpose: To ensure food safety and quality in agricultural products, measurement accuracy and fairness in the marketplace.

Goal 1: Stabilize workforce and improve efficiency within the Division.

Objective: Restore positions lost due to attrition and fulfill legislative mandates.  
Anticipated completion date: On-going

1. Create and fill additional positions to restore Division personnel count.
2. Rewrite job descriptions to provide statewide coverage.
3. Develop training program for new inspectors.

Goal 2: Improve focus on delivering quality assurance services.

Objective: Look after the interests of the consumers and businesses; assuring accuracy of measurement, packaging, labeling, and pricing of commercial goods to prevent unfair practices. Completion date: On-going.

1. Provide technical assistance and traceability of measurement standards.
2. Conduct tests to determine accuracy of measuring devices and packaged goods, and compliance with labeling and pricing requirements.
3. Licensing of dealers and assure proof of ownership of agricultural commodities to deter agricultural theft.
4. Registration of measuring devices to ensure conformance with laws regulating measuring devices.
5. Conduct certification of agricultural commodities for genetic purity, quality, condition, and origin.
6. Conduct audits to assure producers are following good agricultural and good handling practices.
7. Provide assistance for agricultural producers in meeting requirements of the U.S. Food and Drug Administration's Food Safety Modernization Act Produce Safety Rule.

