
A BILL FOR AN ACT

RELATING TO AGRICULTURE.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that Hawaii is one of the
2 most geographically isolated locations in the world. Hawaii is
3 inordinately susceptible to price fluctuations for food and
4 goods because prices of both are affected by the price of oil
5 needed to fuel the importation of food and goods to the State.
6 Further, almost all food items consumed in-state must be shipped
7 to Hawaii to support the needs of the State's population.

8 The legislature further finds that, generally, large
9 conventional farming operations use pesticides that damage the
10 State's fragile ecosystem. The pesticides enter the water and
11 land resources of the State and find their way into the ocean.
12 The State's food security is also compromised by other factors,
13 such as the rat lungworm, a disease-causing nematode, that may
14 cause long-term disability and consequently diminish an affected
15 person's ability to earn a living.

16 The legislature additionally finds that the State must
17 explore more effective and environmentally responsible ways to



1 increase food production to feed its residents. Agricultural
2 technology, or ag-tech, should be at the forefront of the effort
3 to revitalize the agricultural sector of the State and develop
4 that industry's potential to be a major contributor to state
5 revenue.

6 The legislature also finds that vertical farming, the use
7 of indoor farming techniques in a closed and controlled
8 environment to grow produce in vertically stacked layers,
9 reduces the need for space, pesticides, and water to grow food.

10 AeroFarms in New Jersey, with its sixty-nine thousand
11 square foot facility, has demonstrated the potential of vertical
12 farming to grow healthy fruits and vegetables, and to spur
13 economic activity at the same time. According to Cornell
14 University and the University of California, "Every year,
15 AeroFarms has the potential to produce up to thirty harvests and
16 yield two million pounds of greens. In comparison, a
17 traditional outdoor farm in New York state produces about three
18 lettuce harvests in a good year."

19 Hawaii must entertain alternatives to its current
20 agricultural operations by bringing in new ideas for the use of
21 land and practicing responsible land stewardship. New



1 agricultural production methods, such as vertical farming, have
2 enormous potential to increase crop yields in limited land
3 space. Several other developed countries, such as Singapore,
4 have successfully implemented vertical farming operations that
5 balance urban development and food production.

6 The purpose of this Act is to:

- 7 (1) Require the department of agriculture to conduct a
8 study on the feasibility of authorizing the department
9 to establish and designate agricultural technology
10 zones, or ag-tech zones, within the city and county of
11 Honolulu, specifically the Kalihi-Palama, Kakaako,
12 Moanalua, and Waianae coast areas; and
13 (2) Appropriate funds for the feasibility study.

14 SECTION 2. (a) The department of agriculture shall
15 conduct a study on the feasibility of authorizing the department
16 to establish and designate agricultural technology zones, or ag-
17 tech zones, within the city and county of Honolulu, specifically
18 the Kalihi-Palama, Kakaako, Moanalua, and Waianae coast areas,
19 in which technological innovation in agriculture shall be used
20 to increase food production in a more effective and



1 environmentally responsible way that also contributes to state
2 revenues.

3 (b) In conducting the feasibility study, the department of
4 agriculture shall consider the following goals and objectives:

5 (1) Protecting and expanding Hawaii's agricultural
6 production for in-state consumption and export;

7 (2) Creating a new industry that recognizes and responds
8 to the challenges of the future of food production in
9 the context of population growth;

10 (3) Recruiting and training Hawaii's youth for the new
11 agricultural economy; and

12 (4) Promoting farming techniques that reduce the use of
13 water and pesticides.

14 (c) The feasibility study shall include:

15 (1) Research into agricultural technology zoning currently
16 used in other jurisdictions and best practices
17 relating thereto;

18 (2) Identification of areas within the city and county of
19 Honolulu suitable for agricultural technology zoning;



1 (3) Determination of funding and staffing requirements for
2 a statewide agricultural technology program and any
3 other implementation concerns;

4 (4) Recommendations for state and county legislation
5 necessary to implement a statewide agricultural
6 technology program; and

7 (5) Production of an economic impact report based upon the
8 successful implementation of a statewide agricultural
9 technology program.

10 (d) In conducting the feasibility study, the department of
11 agriculture shall request, as appropriate, the assistance of the
12 department of land and natural resources; University of Hawaii;
13 department of business, economic development, and tourism;
14 Hawaii community development authority; and city and county of
15 Honolulu. Those agencies shall cooperate and provide necessary
16 resources as requested by the department of agriculture.

17 (e) The department of agriculture shall submit a report of
18 the findings and recommendations of its feasibility study,
19 including any proposed legislation, to the legislature no later
20 than twenty days prior to the convening of the regular session
21 of 2020.



1 SECTION 3. There is appropriated out of the general
2 revenues of the State of Hawaii the sum of \$ or so much
3 thereof as may be necessary for fiscal year 2019-2020 and the
4 same sum or so much thereof as may be necessary for fiscal year
5 2020-2021 for the department of agriculture to conduct a
6 feasibility study as required by this Act.

7 The sums appropriated shall be expended by the department
8 of agriculture for the purposes of this Act.

9 SECTION 4. This Act shall take effect on July 1, 2150.



Report Title:

HDOA; Feasibility Study; Ag-tech Zones; Appropriation

Description:

Requires the Department of Agriculture to conduct a feasibility study on the establishment of agricultural technology zones, or ag-tech zones, within the City and County of Honolulu. Appropriates funds to conduct the feasibility study. (SB1436 HD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

