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# 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 their importation to the State. Further, almost  
6 all food items consumed in-state must be shipped to Hawaii to  
7 support the needs of the State's population.

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

16           The State must explore more effective and environmentally  
17 responsible ways to increase food production to feed its



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

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

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

18 Hawaii must entertain alternatives to its current  
19 agricultural operations by bringing in new ideas for the use of  
20 land and practicing responsible land stewardship. New  
21 agricultural production methods, such as vertical farming, have



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

5 The purpose of this Act is to:

- 6 (1) Require the department of agriculture to conduct a  
7 study on the feasibility of authorizing the department  
8 to establish and designate ag-tech zones in  
9 residential and commercial areas within the city and  
10 county of Honolulu's urban core; and  
11 (2) Appropriate funds for the feasibility study.

12 SECTION 2. The department of agriculture shall conduct a  
13 study on the feasibility of authorizing the department to  
14 establish and designate ag-tech zones, wherein technological  
15 innovation in agriculture is used to increase food production in  
16 a more effective and environmentally responsible way that also  
17 contributes to state revenues.

18 SECTION 3. In conducting the study on the feasibility of  
19 ag-tech zones, the department of agriculture shall be guided by  
20 the following goals and objectives:



- 1       (1)   Protect and expand Hawaii's agricultural production  
2           for in-state consumption and export;
- 3       (2)   Create a new industry that recognizes and responds to  
4           the challenges of the future of food production in  
5           context of population growth;
- 6       (3)   Recruit and train Hawaii's youth for the new  
7           agricultural economy; and
- 8       (4)   Promote farming techniques that reduce the use of  
9           water and pesticides.

10       SECTION 4.   The feasibility study shall include:

- 11       (1)   Research into ag-tech zoning currently used in other  
12           jurisdictions and best practices relating thereto;
- 13       (2)   Identification of areas within the city and county of  
14           Honolulu suitable for ag-tech zoning;
- 15       (3)   Determination of funding and staffing requirements for  
16           a statewide ag-tech program and any other  
17           implementation concerns;
- 18       (4)   Recommendations for necessary legislation at the state  
19           and county level to implement a statewide ag-tech  
20           program; and



1 (5) Production of an economic impact report based upon the  
2 successful implementation of a state-wide ag-tech  
3 program.

4 SECTION 5. In conducting the feasibility study required by  
5 this Act, the department of agriculture shall request, as  
6 appropriate, the assistance of the department of land and  
7 natural resources; University of Hawaii; and department of  
8 business, economic development, and tourism. Those agencies  
9 shall cooperate and provide necessary resources as requested by  
10 the department of agriculture.

11 SECTION 6. The department of agriculture shall submit its  
12 feasibility study, as required by this Act, together with its  
13 findings and recommendations, including proposed legislation, to  
14 the legislature no later than twenty days prior to the convening  
15 of the regular session of 2019.

16 SECTION 7. There is appropriated out of the general  
17 revenues of the State of Hawaii the sum of \$ or so much  
18 thereof as may be necessary for fiscal year 2018-2019 for the  
19 department of agriculture to conduct a feasibility study as  
20 required by this Act.



1           The sum appropriated shall be expended by the department of  
2 agriculture for the purposes of this Act.

3           SECTION 8. This Act shall take effect on July 1, 2150.



**Report Title:**

Feasibility Study; Ag-Tech Zones; Department of Agriculture

**Description:**

Requires the Department of Agriculture to conduct a feasibility study on the establishment of ag-tech zones within the City and County of Honolulu. Appropriates funds for conducting the feasibility study. (HB2099 HD1)

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

