JAN 1 8 2019

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 Hawai'i is one of the
- 2 most geographically isolated locations in the world. Hawai'i 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 Hawai'i to
- 7 support the needs of the State's population.
- 8 The legislature further finds that large conventional
- 9 farming operations use pesticides that damage the State's
- 10 fragile ecosystem. The pesticides enter the water and land
- 11 resources of the State and find their way into the ocean.
- 12 The legislature additionally finds that the State must
- 13 explore more effective and environmentally responsible ways to
- 14 increase food production to feed its residents. Agricultural
- 15 technology, or ag-tech, should be at the forefront of the effort
- 16 to revitalize the agricultural sector of the State and develop

- 1 that industry's potential to be a major contributor to state
- 2 revenues.
- 3 The legislature also finds that vertical farming, the use
- 4 of indoor farming techniques in a closed and controlled
- 5 environment to grow produce in vertically stacked layers,
- 6 reduces the need for space, pesticides, and water to grow food.
- 7 AeroFarms in New Jersey, with its sixty-nine thousand
- 8 square foot facility, has demonstrated the potential of vertical
- 9 farming to grow healthy fruits and vegetables and to spur
- 10 economic activity at the same time. According to Cornell
- 11 University and the University of California, "Every year,
- 12 AeroFarms has the potential to produce up to thirty harvests and
- 13 yield two million pounds of greens. In comparison, a
- 14 traditional outdoor farm in New York state produces about three
- 15 lettuce harvests in a good year".
- 16 Hawai'i must entertain alternatives to its current
- 17 agricultural operations by bringing in new ideas for the use of
- 18 land and practicing responsible land stewardship. New
- 19 agricultural production methods, such as vertical farming, have
- 20 enormous potential to increase crop yields in limited land
- 21 space. Several other developed countries, such as Singapore,



- 1 have successfully implemented vertical farming operations that
- 2 balance urban development and food production.
- 3 The purpose of this Act is to:
- 4 (1) Require the department of agriculture to conduct a
- 5 study on the feasibility of authorizing the department
- 6 to establish and designate ag-tech zones within the
- 7 city and county of Honolulu, specifically the Kalihi-
- Palama, Kaka'ako, and Moanalua areas; and
- 9 (2) Appropriate funds for the feasibility study.
- 10 SECTION 2. The department of agriculture shall conduct a
- 11 study on the feasibility of authorizing the department to
- 12 establish and designate ag-tech zones within the city and county
- 13 of Honolulu, specifically the Kalihi-Palama, Kaka'ako, and
- 14 Moanalua areas, wherein technological innovation in agriculture
- 15 will be used to increase food production in a more effective and
- 16 environmentally responsible way that also contributes to state
- 17 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	i	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 the
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	SECT	ION 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 statewide 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; department of business,	
8	economic development, and tourism; Hawaii community development	
9	authority; and city and county of Honolulu. Those agencies	
10	shall cooperate and provide necessary resources as requested by	
11	the department of agriculture.	
12	SECTION 6. The department of agriculture shall submit its	
13	feasibility study with a report of its findings and	
14	recommendations, including any proposed legislation, to the	
15	legislature no later than twenty days prior to the convening of	
16	the regular session of 2020.	

- 17 SECTION 7. There is appropriated out of the general
- 18 revenues of the State of Hawaii the sum of \$ or so
- 19 much thereof as may be necessary for fiscal year 2019-2020 for
- 20 the department of agriculture to conduct a feasibility study as
- 21 required by this Act.

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- 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, 2019.

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INTRODUCED BY:

Report Title:

Department of Agriculture; Feasibility Study; Ag-tech Zones; Appropriation

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.

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