House Committee on Finance
Friday, March 29, 2019 at 2:00 p.m.
By
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And
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Testimony Presented Before the

SB 1436 SD2 HD1 – RELATING TO AGRICULTURE

Chair Luke, Vice Chair Cullen and members of the House Committee on Finance:

Thank you for the opportunity to testify on SB 1436 SD2 HD1 relating to agriculture that requires the Department of Agriculture (DOA) to conduct a feasibility study on the establishment of agricultural technology zones, or ag-tech zones, within the City and County of Honolulu and appropriates funds to conduct the feasibility study. The University of Hawai'i at Mānoa, College of Tropical Agriculture and Human Resources (CTAHR) supports the intent of this bill and we respectfully provide the following information to substantiate our position.

CTAHR is in agreement with the legislature that protected agriculture should be a strong future vision for Hawai'i. Some of the benefits of growing food under controlled conditions include the following:

- increased biosecurity and reduced danger from diseases and insects result in a reduced need for pesticides, but understand that it does not remove the need for pesticides;
- reduced use of water;
- increased production per square foot of land as there are examples of vertical farming that produce as much as 400 times more than a square foot of farm land;
- the ability to control the entire agroecosystem;
- the ability to reduce labor, yet increase the skill of those working in these operations with the need for degree programs that plan for this eventuality; and,
- increased ease of meeting both Good Agricultural Practices certification and the U.S. Department of Agriculture Food Safety Modernization Act laws.

However, there are difficulties that will have to be overcome:

- the high cost of land/rent in Hawai'i;
- the high cost of energy;
- the necessary capital investment; and,
- knowing the appropriate scale and break-even point to generate a profit.

A feasibility study is the most appropriate approach at this time, particularly due to the challenges mentioned above. CTAHR would be one of those University of Hawai'i units that could possibly be involved by providing input to DOA on pest management and horticultural inputs.

Such a study is needed to better understand the current status of individual food imports, which at this time is only an estimate. This will be necessary since a feasibility study would want to understand what crops are to be grown; as this affects the cost of inputs.

It also needs to be recognized that such a study, when done right, can be expensive as it requires significant labor and expertise.

Thank you for the opportunity to submit testimony in <u>support</u> of SB 1436 SD2 HD1. However, we defer to the testimony of DOA as to the feasibility of this bill relative to their manpower and proposed funding to accomplish the task.