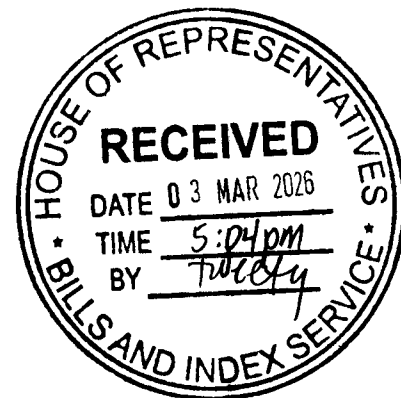




Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City, Metro Manila

TWENTIETH CONGRESS
First Regular Session



HOUSE BILL NO. 8258

Introduced by Representative Howard A. Guintu

EXPLANATORY NOTE

The 1987 Constitution, particularly Section 5 of Article XIII provides that the State shall provide support to agriculture through appropriate technology and research, and adequate financial, production, marketing, and other support services.

The agriculture sector has always been a crucial component of the Philippine economy, employing 10.44 million Filipinos as of October 2025, or 21.5 percent of the country's 48.62 million workers. This makes it the second-largest employment sector after services and reflects a modest increase from its 21.2 percent share in October 2024¹. Agriculture also contributes significantly to the country's gross domestic product (GDP), accounting for a substantial share of national output.

Despite its economic importance, the sector remains highly vulnerable to the impacts of climate change. Aside from typhoons, it is particularly exposed to the effects of El Niño, during which crops suffer from drought conditions and soil moisture is significantly reduced.

Given the urgency of the climate crisis, innovative, science-based solutions have been used to bypass these natural hindrances. The Marcos administration has heavily prioritized agriculture and technology to boost food security and advancing the welfare of every Filipino farmer. At the heart of this agenda is the modernization of agriculture, transitioning from a resource-dependent and climate-vulnerable practices to a system driven by science, technology, and innovation. As such, alternatives to traditional agriculture, such as the use of aquaponics, aeroponics, and hydroponics is an innovative method to produce crops and vegetables efficiently, without having to worry about the challenges of poor soil, limited space, and climate change.

These technologies are leading methods of vertical farming that lead the way toward a more sustainable agricultural production. Hydroponics is a method of cultivating plants in a nutrient-enriched water solution without the use of soil. Aeroponics, in contrast, grows plants in an air or fine mist environment, also eliminating the need for soil or any solid growing medium. Aquaponics integrates traditional aquaculture with hydroponics, forming a balanced

¹ Department of Agriculture Press Office. (2025, December 16). *DA chief underscores fragile gains in agricultural jobs, notes need for urgent reforms*. Official Portal of the Department of Agriculture.

ecosystem where the waste produced by aquatic animals supplies essential nutrients to the plants. Through these methods, food production becomes more efficient by maximizing limited spaces, using fewer resources, and minimizing environmental impact.

This measure seeks to promote the adoption of aeroponics, hydroponics, and aquaponics technologies in the production of fish, crops and vegetables to increase agricultural output and help ensure food security. It likewise seeks to integrate these technologies into the academic curriculum for secondary and tertiary level students of both public and private academic institutions, particularly those enrolled in Agriculture, Practical Arts, Home Economics and other agriculture-related courses, to equip them with modern and sustainable farming knowledge and skills.

In view of the foregoing, the immediate passage of this measure is earnestly sought.



HOWARD A. GUINTU
Representative, First District of Capiz



Republic of the Philippines
HOUSE OF REPRESENTATIVES
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HOUSE BILL NO. 8258

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AN ACT
PROMOTING THE USE OF AEROPONICS, HYDROPONICS AND AQUAPONICS
FOR THE PRODUCTION OF HIGH VALUE FISH, CROPS AND VEGETABLES,
AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

SECTION 1. *Short Title.* – This Act shall be known as the “Soilless Agricultural Production Act.”

Sec. 2. *Declaration of Policy.* - It is hereby declared to be the policy of the State to reaffirm the fundamental right of every person to food security. The attainment of self-sufficiency in the field of food production is therefore adopted as a primary State policy. For this purpose, key reforms for the advancement of, and support to agricultural advancement in technology adaptation are hereby promoted in order to ensure the food security of the country.

Furthermore, the State commits itself to the adoption of state-of-the-art technologies and the active development of modern, appropriate and cost-effective, and environmentally safe agricultural technology in order to ensure and provide food security and safety.

Sec. 3. *Definition of Terms.* - For purposes of this Act, the following terms shall mean or be understood as follows:

"Aeroponics" shall refer to the process of growing vegetation in an air or mist environment without the use of soil or an aggregate medium. Aeroponic growing is considered to be safe and ecologically friendly for producing natural and healthy plants and crop.

"Hydroponics" shall refer to the method of growing plants in a water based, nutrient rich solution. The basic premise behind hydroponics is to allow the plant roots to come in direct contact with the nutrient solution, while also having access to oxygen, which is essential for proper growth.

"Aquaponics" shall refer to the integration of aquaculture and hydroponic plant production in a closed-loop water system that simultaneously grows both plants and fish. In a symbiotic relationship, the waste that is produced by fish in water tanks, which could become toxic for the fish if not cleaned, is used directly or converted by bacteria into useful nutrients for plants.

Sec. 4. *Use of Aeroponics, Hydroponics, and Aquaponics Technologies.* – The Department of Agriculture (DA) is hereby mandated to promote the use of aeroponics, hydroponics, and aquaponics technologies as instruments to further improve the production of high value fish, crops and vegetables in the country and address food security concerns.

Idle government lands owned by either national or local governments or available land resources in state universities and colleges shall be considered for fish fanning and growing crops and vegetables using aeroponics, hydroponics, or aquaponics technology, whichever is applicable.

Sec. 5. *Comprehensive Research on Aeroponics, Hydroponics, and Aquaponics Technologies Applied in Agricultural Production.* - For purposes of this Act, the Secretary of the DA is hereby mandated to conduct a comprehensive research and information drive on aeroponics, hydroponics, and aquaponics technologies applied in agricultural production.

The DA is further enjoined to support research activities aimed at expanding the knowledge and understanding of aeroponics, hydroponics, and aquaponics technologies and to invest in advance technology research to promote agricultural production of high value fish, crops and vegetables.

Sec. 6. *Inclusion of Aeroponics, Hydroponics and Aquaponics Technologies in Agricultural Training.* - Aeroponics, Hydroponics, and Aquaponics technologies, as used in agricultural production, shall be integrated in the academic curriculum for secondary and tertiary level students of both public and private academic institutions, who are studying courses on Agriculture, Practical Arts, Home Economics and/or other subjects related to agriculture.

The Department of Education (DepEd), in coordination with the Commission on Higher Education (CHED), shall promulgate the necessary rules and regulations for the implementation of this section within ninety (90) days from the date of effectivity hereof.

Sec. 7. *Implementing Rules and Regulations (IRR).* - Within ninety (90) days from the effectivity of this Act, the DA, in consultation with the Department of Science and Technology (DOST), shall promulgate the necessary implementing rules and regulations to implement the provisions of this Act.

Sec. 8. *Repealing Clause.* - All laws, decrees, orders, rules and regulations or other issuances or parts thereof inconsistent with the provisions of this Act are hereby repealed or modified accordingly.

Sec. 9. *Appropriation.* - The amount necessary to carry out the provisions of this Act shall be included and incorporated in the annual general appropriations of the DA, DepEd, and Commission on Higher Education (CHED).

Sec. 10. *Separability Clause.* - If any portion or provision of this Act is declared unconstitutional, the remainder of this Act or any provision not affected thereby shall remain in force and effect.

Sec. 11. *Effectivity.* - This Act shall take effect fifteen (15) days after its publication in the Official Gazette or in a newspaper of general circulation in the Philippines.

Approved,