Senail Office of the Secretary

# NINETEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES First Regular Session

'22 JUL 12 A11:07

# SENATE

)

)

)

S. No. 350

Introduced by Senator Cynthia A. Villar

AN ACT

# **PROMOTING INTEGRATED URBAN AGRICULTURE IN URBAN AREAS NATIONWIDE TO ADDRESS FOOD SECURITY AND APPROPRIATING FUNDS** THEREFOR

# **EXPLANATORY NOTE**

Section 15, Article II of the 1987 Constitution states that: "The State shall protect and promote the right to health of the people and instill health consciousness among them."

The World Health Organization (WHO) reported that in 2016, an estimated forty-one (41) million children under the age of 5 were overweight or obese worldwide, while over 340 million children and adolescents aged 5-19 were overweight or obese. The prevalence of overweight and obesity among children and adolescents aged 5-19 has risen dramatically from just 4% in 1975 to around 18% in 2016.<sup>1</sup>

In the Philippines, this prevalence has increased from 1.9% (140,000 people) in 1990 to 3% (270,000 people) in 2013 for children between the age 1 to 4. For children between the age 5 to 9, this has increased from 2.9% (240,000) to 5.1% (570.000). For adolescents between the age 10 to 14, this has increased from 3.6% (270.000) to 7.1% (780,000). Finally, for teenagers between 15 to 19, this increased from 3.4% (220,000) to 6.4% (640,000).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight

<sup>&</sup>lt;sup>2</sup> http://vizhub.healthdata.org/obesity/

On the flipside, the Philippines has a prevalence rate of 19.8% of underweight and 30.3% of stunted children under the age of five (5) years.

In both instances, this prevalence, whether underweight or stunted or overweight or obese, may lead to irreversible health impacts if not addressed. Undernourishment leads to vulnerability to certain diseases while obesity increases the risks of developing cancer, cardiovascular diseases, and diabetes, among others.

The pandemic has further exacerbated the longstanding challenge of food insecurity, disrupting access to fresh and nutritious foods at affordable prices for growing urban populations, and in effect has exposed the true fragility of our food system.

According to the Philippine Statistics Authority (PSA), deaths caused by malnutrition increased by almost 40 percent in the January to October 2021 period, the highest on record.

Data showed 4,844 Filipinos died of malnutrition in January to October last year compared to 3,514 in the same period in 2020, or a growth of 37.85 percent in 2021. Local economists believe this reflected on the responce to the health and nutrition needs of Filipinos, not only during the pandemic but also during non-pandemic years.

Urban home, backyard, container and community gardens in open spaces have been working to strengthen food production and on establishing a more reliable food system. For many communities, urban gardens have played a major role in addressing the effects of the pandemic, serving as a space that not only provides access to fresh foods to alleviate food insecurity but also as a source of social support and emotional well-being for community residents and added income during this time of crisis.

As many urban residents struggle with access to fresh fruits and vegetables and continue to face food insecurity, community gardens have been helpful in alleviating these nutritional gaps.

On the other hand, the establishment of vegetable gardens in schools can be an effective tool for hunger mitigation. Since 2007, a program called *Gulayan sa Paaralan*<sup>3</sup> began to encourage public schools to establish vegetable gardens, primarily to serve as a source to supplement feeding programs within the area to help alleviate malnutrition and hunger. Moreover, the practice of establishing "Gulayan sa Paaralan" in schools conveniently serves as effective teaching tool for children to learn the art and science of planting as well as the benefits gained from it.

The bill seeks to replicate such programs through the institutionalization of instructional gardens in elementary and secondary schools, whether private or public, and the promotion of urban/home/open spaces gardens to help alleviate hunger and to serve as a tool to teach the fundamental concepts about nutrition, the cultural and

<sup>&</sup>lt;sup>3</sup> http://www.rappler.com/move-ph/issues/hunger/57789-fighting-malnutrition-vegetable-gardens

historical aspects of our food supply, as well as the rudiments of planting, considered to be a very useful skill for citizens of an agricultural country like the Philippines.

Improving the nutrition of our children is key to the country's goals of investing in people and boosting human capital for a more inclusive pattern of economic growth. To achieve this, we need greater coordination among the local and national government units, as well as participation of the private sector and civil society to address this silent pandemic afflicting many poor and vulnerable families by growing their own food or at least make food easily accessible to all by promoting home or urban gardens.

For the foregoing reasons, the passage of this bill is earnestly recommended.

whi Va

SEN. CYNTHIA A. VILLAR

憲自由任 Biffice of the Deriviting

# NINETEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES First Regular Session

'22 JUL 12 A11 :07

#### SENATE

)

)

)

RECEIVED BY

S. No. 350

#### Introduced by Senator Cynthia A. Villar

# AN ACT

# PROMOTING INTEGRATED URBAN AGRICULTURE IN URBAN AREAS NATIONWIDE TO ADDRESS FOOD SECURITY AND APPROPRIATING FUNDS THEREFOR

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

1 SECTION 1. *Short Title*. This Act shall be known as the 'Integrated Urban 2 Agriculture Act of 2022'.

SEC. 2. Declaration of Policy. The State shall promote and protect the 3 fundamental right of every person to adequate food and freedom from hunger. 4 Recognizing the challenges to food security and ecological balance in urban areas, 5 the State shall optimize the use and productivity of urban land resources and spaces 6 to support sufficient and sustainable food production. Towards this end, the State 7 shall promote the development of modem, cost-effective, space-efficient, and 8 environmentally-safe agriculture technologies in urban areas to contribute in 9 achieving sustainable food production and food security, promoting agroecology, 10 ensuring public and mental health and thus improving the quality of life of urban 11 populations. In doing so, the State shall prioritize the conservation of the country's 12 genetic biodiversity, and endemic and heirloom flora and fauna as a strategy for 13 climate change adaptation, mitigation and resiliency. 14

Accordingly, the State shall ensure the integration of principles, strategies and technologies on urban agriculture in urban planning, and instill a love of farming among urban dwellers most especially the youth.

## 18 SEC. 3. *Definition of Terms*. As used in this Act:

(a) Agro-ecology refers to a scientific discipline and set of practices that studies how
 different components of the agroecosystem interact, and seeks sustainable farming

1 systems that optimize and stabilize yields. It applies ecological concepts and principles

2 to manage interactions among plants, animals, humans and the environment for food

3 security and nutrition;

(b) Community Gardens refer to any piece of land cultivated by group of people using
either individual or shared plots on public or private land with the consent of the
owner, to produce edibles, such as herbs, vegetables, fruits or ornamentals, as a form
of sustainable land use system for economic and societal development, community
gardens may be found in neighborhoods and schools, or connected to institutions such
as hospitals or located on the grounds or roofs of shared housing, such as tenements
and apartment complexes;

(c) Food Forest Gardening refers to multi-layered crop farming or a low maintenance
 and sustainable method of food production that is based on woodland ecosystems,
 incorporating fruit and nut trees, shrubs, herbs, vines, and perennial vegetables which
 yields are directly useful to humans. It also refers to a system of agro-forestry that
 creates diverse, productive, healthy, ecologically-sound and sustainable system of land
 use;

(d) Food security refers to a situation wherein all people have access to sufficient,
 safe, nutritious food, at all times, to maintain a healthy and active life;

(e) Food system refers to a complex web of activities involving the production,
processing, transport, and consumption of food. Issues concerning the food system
include the governance and economics of food production, its sustainability, the
degree to which we waste food, how food production affects the-natural environment
and the impact of food on individual and population health;

(f) Good Agricultural Practices refer to the practices that address environmental,
 economic, and social sustainability for on-farm processes, and which result in safe and
 quality food and non-food agricultural products;

(g) Idle lands refer to non-agricultural lands in urban and urbanizable areas on which
no improvements have been made by the owner, as certified by the city, municipal or
provincial assessor. Idle government lands refer to lands owned by any government
entity that have been idle and have not been used for the purpose for which they have
been reserved for the past ten (10) years;

(h) Indoor farming refers to controlled environment agriculture which aims to optimize
 plant growth to house vertical farming techniques in greenhouses, warehouses,
 abandoned buildings, shipping containers, tunnels, skyscrapers and modern buildings
 using soilless farming techniques such as hydroponics, aquaponics, and aeroponics;

(i) Integrated urban agriculture refers to the development paradigm that encompasses
 principles, management technologies, and the policies relating to the practice and
 application of agricultural and fisheries production of food and goods in urban areas;

(j) Peri-urban areas refer to areas where urban and rural features and processes meet,
 interact and intertwine, usually located between city and countryside. Peri-urban.

areas are semi-dense clusters with a density of at least three hundred (300)
inhabitants per square kilometer and a population of five thousand (5,000) or more,
but are neither contiguous with nor within two (2) kilometers of an urban area;

(k) Protected agriculture refers to the use of technologies that enclose crops to harvest
higher yields, safer, cleaner and of better quality even out of season by modifying the
natural environment and protect crop against the elements which include high
temperature, excessive rainfall, humidity, wind, birds, insects;

8 (I) Social preparation refers to the series of activities designed to prepare the 9 underprivileged and homeless families to cope with the changes brought about by 10 government development projects;

(m) Soilless agriculture refers to the method of growing plants that do not rely on the
 soil as a source of nutrients and water; common methods are hydroponics, aquaponics
 and aeroponics;

(n) Urban areas refer to classification as may be made by the Philippines Statistics
Authority (PSA) which under PSA Resolution No. 01, Series of 2017-098, covers any
of the following: - If a barangay has a population size of five thousand (5,000) or
more; - If a barangay has at least one establishment with a minimum of one hundred
(100) employees; - If a barangay has five (5) or more establishments with a minimum
of zero (0) employee, and five (5) or more facilities within the two (2)-kilometer radius
from the barangay hall;

(o) Urban planning refers to multi-disciplinary art and science of analyzing, specifying,
 clarifying, harmonizing, managing and regulating the use and development of land
 and water resources, in relation to their environs, for the development of sustainable
 communities and ecosystems in urban and urbanizable areas;

(p) Urbanizable areas refer to sites and lands which, considering the present
 characteristics and prevailing conditions, display marked and great potential of
 becoming urban areas within the period of five (5) years; and

(q) Vertical farming refers to the methods or practices of increasing the number of
 plants grown in an area by growing crops in vertically stacked layers; such as generally
 done in greenhouses, warehouses, abandoned buildings, shipping containers, tunnels,
 skyscrapers and modem buildings using soilless farming techniques such as
 hydroponics, aquaponics or aeroponics.

SEC. 4. Coverage. This Act shall cover idle or abandoned government or private 33 lands, buildings, shipping containers, subdivisions or villages, public housing, open 34 spaces in all urban, peri-urban and urbanizable areas in the country; and all available 35 land resources and buildings in schools, state or private universities and colleges, 36 military camps suitable for growing crops and raising poultry, livestock and 37 aquaculture: Provided, That, the utilization of idle lands for urban agriculture purposes 38 shall not be used as grounds for the eviction of informal settler families occupying the 39 lands; Provided further, That, the raising of poultry and livestock shall be limited to 40

urbanizable areas and all livestock raising shall be subject to health and safety
 standards and regulations issued by the Department of Health (DOH), Department of
 Environment and Natural Resources (DENR), Department of Human Settlements and
 Urban Development (DHSUD) and other relevant government agencies.

SEC. 5. Urban Farming. Local government units (LGUs) shall identify and 5 develop idle government and private lands and buildings, without prejudice to the 6 rights of owners of private lands, buildings and open spaces, within their jurisdiction, 7 for full or partial conversion solely to community gardens, food forest gardens, indoor 8 farms and/or vertical farms to support food security and community nutrition; 9 Provided, That, food forest gardens and urban farms adopting agro-ecological 10 principles shall be the priority form of urban agriculture wherever applicable and 11 feasible; Provided further. That, spaces allocated for urban agriculture and 12 aquaculture shall not be prime lots. All LGUs, in coordination with the Department of 13 Agriculture (DA) and the Cooperative Development Authority (CDA), shall capacitate 14 neighborhood associations and people's organizations, and facilitate the organization 15 and registration of community-based cooperatives, to undertake community 16 gardening and establish community farmers' markets. 17

Nothing in this Act shall be construed to limit or extinguish the rights of owners to their private lands and spaces without their consent or without their receipt of just compensation, in case of expropriation.

The Department of Human Settlements and Urban Development (DHSUD) shall ensure that the design and development of subdivision, condominium and public housing projects have provisions for adequate spaces for community gardens, food forest gardens, greenhouse agriculture, roof gardens, indoor farms and vertical farms. Towards this end, the DHSUD, in coordination with the DA, shall capacitate homeowners' associations to undertake community gardening and vertical farming.

The DA shall provide the necessary technical assistance and support services, 27 including the provision of seeds and seedlings and gardening tools, access to loans 28 from government financial institutions, and training workshops that shall capacitate 29 various-stakeholders. It may assist in the design, establishment, promotion and 30 regulation of indoor and vertical farming machineries and facilities to ensure the full 31 productivity of community gardens, school gardens, food forest gardens, greenhouse 32 farms, roof gardens, and indoor and vertical farms. The DA shall ensure that the 33 technical assistance it provides is consistent with Philippine Good Agricultural Practices 34 (PHILGAP) or a set of standards and regulations ensuring food quality and safely, 35 facilitation of market access, establishment of community farmers' markets and 36 reduction in non-compliance with issuances regarding permitted pesticides and other 37 contamination hazards, as provided under Republic Act No. 10611, otherwise known 38 as the "Food Safety Act of 2013", and relevant laws. 39

The DA, in coordination with the Department of Science and Technology (DOST), Department of Environment and Natural Resources (DENR), the Department of Energy (DOE), and the Department of Public Works And Highways (DPWH) shall also undertake the establishment of rainwater harvesting facilities in compliance with
Republic Act No. 6716, entitled, "An Act Providing for the Construction of Water Wells,
Rainwater Collectors, Development of Spring and Rehabilitation of Existing Water
Wells in All Barangays in the Philippines", renewable energy systems and solid waste
management systems, including waste-to-energy facilities, to provide sustainable
supply of water, energy and compost to community gardens, food forest gardens and
urban farms.

SEC. 6. Urban Agriculture and Aquaculture in Urban Planning. The DHSUD, in 8 coordination with the DA, shall ensure the integration of concepts and principles of 9 urban agriculture and its relationship to other processes in the food system in urban 10 planning. Accordingly, the DHSUD and DA shall promote sustainable, smart and 11 organic food production systems that harness the benefits of new technologies and 12 methods in soil, nutrient, water and energy management, such as composting, 13 rainwater harvesting and utilization of renewable energy. The DHSUD shall also ensure 14 the rational use of land resources in urban planning to promote sustainable peri-urban 15 interface, as well as for the spatial requirements of supply chain management and 16 logistics to strengthen urban-rural foodshed linkages. 17

Towards these ends, the DHSUD shall promulgate guidelines for the harmonization of the comprehensive land use plans and zoning ordinances of LGUs with urban agriculture policies, frameworks, strategies and standards.

All LGUs are hereby mandated to incorporate urban agricultural development in their respective Annual Development Plans, Annual Investment Plans, Physical Framework Plans, and Development Master Plans including the hiring of agriculturists and agricultural and biosystems engineers to carry out urban agriculture program.

Likewise, LGUs, with the assistance of the DA, Department of Interior and Local 25 Government (DILG) and the Department of Information and Communications 26 Technology (DICT), shall establish and maintain a digital information system to 27 facilitate the efficient collection, management and analysis of urban food systems, 28 agriculture and nutrition data, as well as the monitoring and evaluation of LGU 29 performance vis-a-vis the food system, agriculture and nutrition targets, to inform 30 local planning, policy-making and programming bodies, and to ensure open public 31 access to data. 32

SEC. 7. Urban Agriculture/Aquaculture Education. The Department of Education 33 (DepEd) and the Commission on Higher Educations (CHED), with the technical 34 assistance of. the DA, shall integrate urban agriculture in the academic curriculum for 35 elementary, secondary and tertiary level students of both public and private academic 36 institutions offering courses in Agriculture, Practical Arts, Home Economics and other 37 subjects related to agriculture. A course curriculum on gardening shall be developed 38 and included in the regular, curriculum of elementary and secondary education. 39 Instructional materials shall likewise be developed utilizing advanced techniques of 40 crop and food animal production, urban agriculture and farming, and cultivating 41

5

awareness and appreciation of genetic biodiversity, heirloom and endemic flora and
 fauna, and agro-ecological principles.

The DepEd, with the assistance of the DA, shall strengthen the implementation of its Gulayan sa Paaralan Program in elementary and secondary schools. The establishment of school gardens shall be encouraged to ensure continuous supply of vegetables for school feeding, in accordance with Republic Act No. 11037, otherwise known as the "*Masustansyang Pagkain Para sa Batang Pilipino Act.*"

8 For universities and colleges, urban agriculture shall form part of the required 9 period of time spent by students in the National Service Training Program.

10 A plan for the utilization or maximization of space occupied by schools shall be 11 formulated specifically for urban agriculture purposes.

SEC. 8. Urban Agriculture Awareness Campaign. The DILG, National Nutrition 12 Council, and LGUs are mandated to formulate policies on urban farming in consonance 13 with the provisions of this Act and be at the forefront of community-based education 14 and awareness campaigns. For this purpose, LGUs shall mobilize existing structures 15 and local bodies such as the provincial, city and municipal agricultural offices, the 16 provincial, city, municipal and barangay agriculture and fishery councils, the provincial, 17 city, municipal, and barangay federation of Sangguniang Kabataan (SK) and the youth 18 sector represented in any local special body under LGUs. 19

The Department of Social Welfare and Development (DSWD) shall integrate urban agriculture and community nutrition in the seminar-workshops and training programs to educate qualified household-beneficiaries of the Pantawid Pamilyang Pilipino Program (4Ps).

SEC. 9. *Research and Development*. The DA and the DOST, as well as relevant state universities, government research and development institutions, and the private sector, shall intensify research on methods and technologies to support urban agriculture, including the development and operation of sustainable demonstration urban community gardens, food forest gardens, greenhouse, indoor, roof and vertical farms.

30 SEC. 10. *Incentives.* Compliance by subdivision and condominium developers 31 and owners with Section 5 ofthis Act may qualify them for incentives provided for 32 under Republic Act No. 10771, otherwise known as the "Philippine Green Jobs Act of 33 2016", subject to the rules and regulations promulgated by the Department of Finance 34 and the DHSUD.

The commitment and performance of LGUs in the implementation of this Act shall be included in the criteria for the awarding of the Seal of Good Local Governance and the provision of incentives, provided for under Republic Act No. 11292, otherwise known as "The Seal of Good Local Governance Act of 2019." Loans extended by government and private banks to participating individuals, corporations and partnerships shall be treated as compliance with Republic Act No. 10000, otherwise known as "The Agri-Agra Reform Credit Act of2009."

4 SEC. 11. *Inter-Agency Coordination*. There is hereby established a National 5 Convergence Program on Urban Agriculture and Aquaculture. The DA is hereby 6 designated as the Lead Implementing Agency and the Secretariat of the Convergence 7 Program. The following agencies shall perform duties and responsibilities in order to 8 develop and sustain concerted action to promote urban agriculture:

a) The DA shall provide technical assistance and support services to LGUs, 9 homeowners' associations, neighborhood cooperatives, community-based 10 associations and people's organizations to ensure the viability and cost-effectiveness 11 of urban agriculture projects and through its Bureau of Agricultural and Fisheries 12 Engineering, shall provide the design, specifications, establishment strategies, 13 promotion, regulation and technical assistance in the fabrication of production models 14 of indoor farming, vertical farming and other urban agriculture machineries, 15 equipment and facilities; 16

b) The DHSUD shall encourage the integration of urban agriculture principles, 17 policies. Strategies, frameworks and standards in the design and development of 18 subdivisions and condominium projects. The DHSUD shall ensure such integration in 19 public housing projects and in the preparation or updating of development and 20 investment plans, CLUPs and zoning ordinances of LGUs. The DHSUD shall also 21 promulgate the necessary rules and monitor compliance therewith. The DHSUD shall 22 help homeowners' associations to strengthen their capacity to undertake urban 23 agriculture or aquaculture projects in their neighborhoods and communities; 24

c) The DILG shall monitor the compliance of LGUs with the provisions of this
 Act in order to determine their qualification for the incentives provided under Republic
 Act No. 11292;

d) The DepEd shall integrate the principles and practice of urban agriculture 28 using advanced crop production techniques like soilless agriculture, indoor farming or 29 vertical farming to include modem methods of irrigation and automated systems into 30 the primary and secondary education curricula, including the establishment of school 31 gardens under the Gulayan sa Paaralan Program. The DepEd shall ensure the 32 adequate capacity building programs such as training-workshop, hands-on training or 33 immersion program of teachers and the development of appropriate instructional 34 materials such as educational video and manual for this purpose; 35

e) The DOST shall conduct research on modern, cost-effective methods and technologies to support urban agricultural production, as well as post-harvest handling of surplus produce from urban agriculture projects;

f) The DTI shall provide technical assistance in processing and packaging of surplus produce from urban agriculture and aquaculture projects and ensure access

of local government units, cooperatives, homeowners' associations, and people's 1 2 organizations to markets;

g) The DOF shall administer the grant of incentives under Section 10 of this Act 3 to qualified persons based on their compliance with Section 5 of this Act; 4

h) The Department of Budget and Management (DBM) shall ensure adequate 5 funding for the functions and programs provided for by under this Act; 6

÷.

i) The CHED shall develop and implement curriculum on capacity building 7 programs such as training-workshop, hands-on training or immersion program and 8 related standards and instructional materials in support of urban agriculture; 9

i) The DPWH in compliance with RA 6716 is mandated to undertake 10 construction of water wells, rainwater collectors, development of springs and 11 rehabilitation of existing water wells in all barangays in the Philippines, taking into 12 consideration the population, hydrologic conditions, costs of project development and 13 operations, financial and economic factors and institutional arrangements. 14

k) The National Nutrition Council and the Food and Nutrition Research Institute 15 shall assist the DepEd in identifying the crops to be cultivated in schools' farms and in 16 preparing nutritious food, pursuant to standardized menus to ensure child nutrition 17 provided for under Republic Act No. 11037, and in developing the modules on 18 nutrition. 19

I) The CDA shall provide guidance and assistance to LGUs in the development 20 of cooperatives within their jurisdiction; 21

m) The Presidential Commission for the Urban Poor shall undertake social 22 preparation activities to encourage participation and empower poor and 23 underprivileged communities from the preparation and planning to implementation 24 and evaluation of urban development projects; 25

n) The Philippine Information Agency shall undertake a nationwide information 26 campaign, utilizing all forms of media, to raise awareness and encourage participation 27 of the public in the implementation of this Act, in close coordination with other cultural 28 agencies such as the National Commission for Culture and Arts (NCAA) and the Film 29 Development Council of the Philippines (FDCP). 30

o) The Council for the Welfare of Children shall integrate urban agriculture in 31 the formulation of programs and measures providing dynamic leadership in ensuring 32 a child-friendly and child sensitive society. 33

p) The National Youth Commission, as the Philippine government's sole policy-34 making body on youth affairs and consistent with its role in coordinating and 35 implementing programs designed to help the youth become more aware of the issues 36 surrounding them, shall include an appreciation of urban agriculture. SEC. 11. 37 Performance Report to Congress. The DA and partner agencies in the National 38

1 Convergence Program on Urban Agriculture and Aquaculture shall submit annual 2 performance reports to Congress.

3 SEC. 12. *Appropriations*. The funds necessary to carry out the initial 4 implementation of this Act shall be charged against the respective budget of concerned 5 agencies for the current year. Thereafter, such sums as may be necessary for the 6 continued implementation of this Act shall be included in the annual General 7 Appropriations Act.

8 SEC. 13. *Implementing Rules and Regulations.* Within ninety days (90) from 9 the effectivity of this Act, the agencies under the National Convergence Program on 10 Urban Agriculture and Aquaculture shall promulgate the necessary implementing rules 11 and regulations to implement the provisions of this Act.

12 SEC. 14. *Separability Clause*. If any part or provision of this Act is held 13 unconstitutional or invalid, other parts or provisions hereof which are not affected shall 14 continue to remain in full force and effect.

15 SEC. 15. *Repealing Clause*. All laws, executive orders, issuances, rules and 16 regulations inconsistent with this Act are hereby amended, repealed or modified 17 accordingly.

18 SEC. 16. *Effectivity*. This Act shall take effect fifteen (15) days after its 19 publication in the Official Gazette or in a newspaper of general circulation.

20 Approved,