

BUILDING FOOD AND NUTRITION RESILIENCE IN QUEZON CITY

A CASE STUDY ON
INTEGRATED FOOD SYSTEMS



EAT

unicef 

ACKNOWLEDGEMENTS

Project coordinator: Emily Norford

Lead author: Andrea Oyuela

This publication benefitted from the inputs of a wide range of experts. Thanks are due to Stefania Amato (C40 Cities), Jens Aerts (UNICEF), Jo Jewell (UNICEF), Alice Nkoroi (UNICEF Philippines), and Rene Gerard Galera (UNICEF Philippines) for providing helpful guidance and comments on earlier drafts of this publication.

A special recognition is extended to the Quezon City Government: Emmanuel Velasco, Vanessa Claire Bretaña, Andrea Villamorán, Francis Ian Agatep, Christina Perez, and Maria Jesusa Legua for their inputs and patient, tireless support throughout the development of this publication.

Funding for this work was provided by the Swedish Postcode Foundation, through a grant to EAT to support city-level action for transforming urban food systems. Contributions from UNICEF, including design and layout, were covered by funding from a partnership with Novo Nordisk on the prevention of childhood overweight and obesity.

Design: Nona Reuter (UNICEF)

Photo credits: pages 4, 8, 11, 15, 17: © Quezon City Government; pages 18, 21, 23: © Quezon City-Food Security Task Force; page 13: © UNICEF/UNI45440/Pirozzi.

CONTENTS

EXECUTIVE SUMMARY	4
1. INTRODUCTION	7
2. PLACING FOOD SYSTEMS ON THE URBAN AGENDA	10
2.1. The Joy of Urban Farming	12
2.2. Farmer to Consumer Programme	14
2.3. The Sustainable Diner Project	14
3. BUILDING RESILIENCE THROUGH INTEGRATED FOOD SYSTEMS	16
3.1. Urban food system disruptions in the context of COVID-19	16
3.2 The Quezon City Food Security Task Force	17
4. FOUR COMPONENTS OF URBAN INNOVATION TOWARDS A HEALTHY AND SUSTAINABLE FOOD SYSTEM	22
4.1. Leadership, at all levels	20
4.2. Integrated programming to address complexity	24
4.3. Entering in novel partnerships for implementation	24
4.4 Strong narrative on equitable and sustainable food systems	26
5. CONCLUSION: A WINDOW OF OPPORTUNITY FOR CHANGE	27
ANNEX 1. PLANNED ACTIONS TO DELIVER ON THE GOOD FOOD CITIES DECLARATION	28
ENDNOTES	29



EXECUTIVE SUMMARY

Recent trends in food security and nutrition in Quezon City are at odds with its economic growth. Located at the heart of an agricultural economy, the city benefits from a steady food supply. Yet, poverty and inequity continue to drive widespread hunger and malnutrition in this urban area.

Quezon City houses the largest share of urban poor in the Philippines. The population faces significant challenges in terms of access to diets that are nutritious, affordable, and sustainable. More recently, the COVID-19 pandemic exacerbated the fragilities and inequalities of the urban food

system, as lockdown measures and limited mobility further restricted people's access to nutritious and sustainable foods.

Quezon City is at a paradox where some communities suffer from hunger while others are eating too much of the wrong foods. Increasing evidence of the triple burden of malnutrition—undernutrition, micronutrient deficiencies and overweight/obesity—points to the urgent need for innovative approaches to re-shape urban food environments. Rising overweight, obesity, and hidden hunger—particularly among school-



age children and adolescents—has become a top nutrition concern for local authorities and households. As in many other cities around the world, this phenomenon may be attributed to the shift towards unhealthy food and built environments, a lack of affordability for nutritious foods, fast-paced urban lifestyles, and sedentary behaviours.

Despite these challenges, Quezon City has a window of opportunity to set the course towards a healthy and sustainable food system transformation.

This case study delves into examples that focus on building food and nutrition security and resilience through integrated, food- and nutrition-sensitive programming. The goal is to inspire city leaders and other stakeholders to take action by illustrating best

practices and demonstrating the inherent relationship between inherent relationships between food and urban systems.

Over the last 10 years, the city has been developing a series of policies and programmes to improve food security and mitigate the environmental impacts of the food supply chain. From urban agriculture programmes at the household level to pop-up markets that bridge the gap between farmers and consumers, the city has established building blocks to initiate and scale up food systems action. The issuance of the Anti-Junk Food and Sugary Drinks Ordinance, banning the marketing and trade of unhealthy food around schools, casts a spotlight on the need to secure healthy food environments for children.

By the end of 2019, these initiatives generated the political momentum needed for Quezon City to become a signatory of the Good Food Cities Declaration, alongside 13 other cities across the globe.

The city's response to the COVID-19 pandemic over the course of 2020 also set an important precedent for making progress towards health and sustainability goals. This case study takes an in-depth look at the actions of the Quezon City Food Security Task Force—a multi-stakeholder, interdepartmental team working under the Office of the City Mayor. Driven by the need to mitigate hunger and assist those in COVID-19 high risk groups, the task force rallied community leaders and other local actors to establish food aid delivery networks city-wide. In the medium term, the task force will be working to formulate and implement a food security and resilience plan for the longer-term recovery phase that will follow.

Within this framework, urban agriculture will serve as an important entry point to build a diverse, resilient food system and to reconnect people with food. The city works to re-purpose idle land, provide agricultural inputs to communities, and build capacity among households to adopt urban farming practices. While helping to improve food and nutrition security in the immediate term, integrated urban agriculture can ultimately add value along the food value chain, for instance, by creating employment opportunities in production, transport, and processing.

The diversity of initiatives featured in this case study showcase the potential for utilising various entry points to transform the urban food system in a way that results in co-benefits across the SDG agenda. Four recurring themes stand out among Quezon City's efforts to improve its food system:

1. **Leadership—at all levels.** In this case study, leadership refers to decision-makers within the local government as well as political engagement by other stakeholders. Two specific instances of leadership have stood out: strong political will at the highest level, from the Office of the City Mayor, and community leaders to ensure the effective implementation of programmes at the local level. While the former featured more prominently in this case study, it is important to recall that place-based and community leadership is crucial to building public will.
2. **Integrated programming to address complexity.** Quezon City recognises the importance of cross-sectoral collaboration to achieve a systems approach within each initiative. Often a result of clear commitments, strong leadership, and a shared vision, this coordination is most evident in the establishment of interdepartmental working groups, i.e., task forces, comprising the departments of health, urban planning, environmental protection and waste management, and public service employment, among others. While their scope may seem broad, well-defined mandates make it possible to distribute roles and responsibilities.
3. **Entering in novel partnerships for implementation.** Quezon City often works beyond government departments, extending its outreach to community leaders, volunteer groups, business representatives, and farmers' associations to gather the right knowledge and capacities needed to take action. This engagement has been further highlighted by the city's response to COVID-19 where, for instance, furloughed workers and civil society organisations were mobilised to create an assistance network.

4. **Strong narrative on equitable and sustainable food systems.** Transforming urban food systems is a strong and effective narrative that can bring together local authorities, practitioners, businesses, and civil society. Integrated food systems action considers climate and equity as core issues while creating new opportunities that can take the shape of policies, strategies, or concrete interventions. Most notably, the COVID-19 pandemic has enabled the city to utilise this highly relatable food-centric narrative to galvanize support in the community for new initiatives that touch upon all aspects of its mandate.

Quezon City is an emerging champion of the global food systems agenda. The case study draws attention to active stakeholders, thematic entry points, and the political will needed to kickstart the path to change. Played right, these promising practices may help the city to accelerate action towards achieving the SDGs, while working to lessen the social and economic effects of COVID-19.

1.

INTRODUCTION

Quezon City, the most populous city in the Philippines, stands at the forefront of urban food systems action. With a population of over 2.9 million people (2015) and as one of the 16 cities that make up the Metro Manila region, the city is a rapidly growing centre for commerce and culture (*see Box 1*). Over recent years, the city has made significant strides to establish integrated initiatives that address complex urban development issues such as social housing, air quality, and more recently, food to achieve more sustainable development.^{1,2} Some of these achievements have been made possible through local and international support networks.

Quezon City joined the C40 Cities Climate Leadership Group in 2015 in order to address the challenges set forth by rapid urbanization and climate change and to engage in reducing greenhouse gas emissions and climate risks while increasing the health, wellbeing, and economic opportunities of its citizens. Through political leadership and peer-to-peer support models provided by the C40 network, the city has implemented a number of clean energy and solid waste management initiatives in line with the Paris Agreement.^{3, 4}

Yet, the pace and scale of urban growth continue to present challenges for achieving an equitable and sustainable food system in Quezon City. Aside

from being one of the most urbanized areas in the Philippines, Quezon City houses one of the country's largest populations of urban poor.⁵ Lack of basic services, settlements in at-risk areas, and climate-related shocks to the food supply chain are just some of the contributing factors to an increasingly food insecure population.⁶ An estimated 20 percent of the city's households are moderately food insecure, while 15 percent suffer from severe food insecurity.⁷

For the city's nearly 1.1 million children (2015), the pace of urbanization brings new barriers to realising their rights.^{8, 9} Undernutrition—particularly underweight, stunting, and wasting—lingers among the city's children, with a 29.9 percent prevalence in stunting among pre-school children, particularly in poorer households, followed by underweight (17.4 percent) and wasting (6.7 percent). At the same time, overweight and obesity have emerged as a growing concern, affecting 19.9 percent of school-age children and 15 percent of adolescents, and surpassing the national average of 11.6 percent for both age groups.¹⁰

This evidence of the triple burden of malnutrition—the coexistence of undernutrition, micronutrient deficiencies, and overnutrition—in the city casts a spotlight on the urgency to shape better food



MOA Signing and Launching of Urban Agriculture Program for Quezon City



environments. While nutritious foods are available in Quezon City, affordability and food knowledge and skills are considered major barriers for uptake in households.

In early 2020, the arrival of the COVID-19 pandemic set additional pressures on the city, particularly in respect to the urban food system: lockdown measures restricted people's access to food, and at a wider scale, disrupted the influx of food products from outside the urban area. As a response, Mayor Belmonte established an inter-departmental task force to strengthen the city's food security efforts. The Quezon City Food Security Task Force (QC-FSTF) works to provide emergency response to the city's constituents and to formulate a food security plan for the longer term. The main goal will be to enhance the city's ability to produce its own food, creating a resilient urban food system that is able to respond to public health and climate shocks while sustainably feeding a growing urban population.¹¹

This case study delves into examples of how Quezon City is increasingly working to leverage food-sensitive programmes and develop integrated food system approaches to achieve its health and sustainability objectives. The goal of the case study is to inform and inspire stakeholders to take action by showcasing best practices and by illustrating the inherent relationship between food systems and urban settings. While the conditions of urban food systems vary from city to city, this case study is meant to illustrate entry points, provide guidance, and showcase leadership, demonstrating why and how food systems need to be part of the sustainable urban development agenda.

Section 2 of the study provides a succinct overview of plans and actions developed by the city to achieve its vision of food system transformation, spanning from urban agriculture projects to food waste reduction measures among the restaurant industry. Section 3 takes an in-depth look at the

city's response to COVID-19, including short-term measures to respond to citizens' immediate needs and a long-term recovery plan that uses food as a means to build back better post-pandemic. Section 4 then examines key success factors and common characteristics among these initiatives, which have enabled significant progress within Quezon City. In

conclusion, Section 5 provides a brief commentary for city leaders and other stakeholders who wish to take these lessons forward in support of the global food system transformation.

BOX 1

QUEZON CITY PROFILE

Located in the northeast district of Metro Manila, Quezon City was officially established as an urban centre in 1939. For 27 years (1948–1976), Quezon City was the capital of the Philippines. Although it is no longer the nation's capital, the City has maintained its position as a steadily growing economic and population hub and continues to be one of the most urbanized cities in the Philippines.

Quezon City houses the Philippines' government centre, as well as approximately one-quarter of Metro Manila's population. From the period 2000–2010, the City registered an annual population growth rate of 2.42 percent, surpassing the national growth rate of 2.04 percent.¹² Today, Quezon City's population stands at 2.93 million, which is expected to increase to 3.29 million by the year 2025.¹³

The city is administratively divided into 142 *barangays* (district or ward), all classified as urban areas within the Philippines Standard Geographic Code.¹⁴ With an area of 16,112.58 hectares, Quezon City is also the largest among the 16 cities that compose Metro Manila, accounting for nearly one-fourth of Metro Manila's size.¹⁵

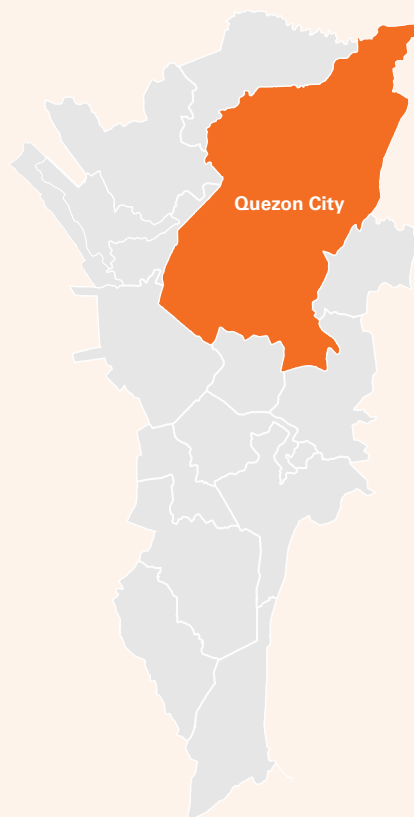
Its central location, as well as its status as a governmental, educational, and tourism centre in the Philippines, have attracted the manufacturing, ICT, and retail industries that now dominate the city's economy. Data from the Philippine Economic Zone Authority (PEZA) point to 33 ICT-parks in the urban area.¹⁶

To achieve the city's vision of a "green city," the Quezon City government has issued a number of ordinances and established programmes to advance its sustainability efforts. In 2009, the city issued the Green Building Ordinance, requiring

the design and retrofitting of buildings to meet minimum requirements of green infrastructure.

The Plastic Bag Reduction Ordinance, issued in 2012, encourages citizens to make use of reusable bags. Similarly, the Green Fund supports enterprises that aim to reduce the use of plastic and that work to protect the environment.

Metro Manila region



2.

PLACING FOOD SYSTEMS ON THE URBAN AGENDA

The Quezon City Government envisions itself to be a model for effective governance and leadership, working together with its constituents to build a quality community.¹⁷ Along these lines, the city has taken multiple efforts to improve its urban food system.

Under 2019-elected mayor, Ma. Josefina “Joy” Belmonte, Quezon City established its Sustainable Development Affairs Unit through Executive Order no. 35. The Unit, working under the Office of the City Mayor, is responsible for leading and organising the timely implementation of high-impact, multi-stakeholder programmes that help achieve the Sustainable Development Goals (SDGs). Through this function, the city has been able to coordinate public health, urban gardening, and livelihood programmes, among others, and has also expanded existing initiatives. In addition, the Unit acts as liaison between local and international partners, raising the visibility of Quezon City in global policy dialogues.

Towards the end of 2019, Quezon City signed the C40 Good Food Cities Declaration together with 13 other global cities.¹⁸ The declaration calls upon political leadership and tangible goals to achieve a Planetary Health Diet for all by 2030, with balanced and nutritious food, reflective

of the culture, geography, and demography of citizens.^{19,20} The commitments to the declaration include aligning food procurement practices to the Planetary Health Diet, as recommended by the EAT-Lancet Commission on Food, Planet, Health; supporting an overall increase of healthy plant-based food consumption; halving food loss and waste; and working with citizens, businesses and public institutions to develop a joint strategy for achieving these goals.²¹ One area identified as a starting point towards achieving these commitments in Quezon City is encouraging a shift towards sustainable consumption through different means, including via enhancing urban agriculture—highlighted in the city’s planned actions to deliver the Good Food Cities Declaration (*see Annex 1*).

These recent food commitments follow years of experience; Quezon City’s food system efforts span over a decade. Programmes in urban farming, nutrition, and farm-to-table dining have been implemented together with national and subnational governments as well as with civil society. Quezon City also became a member of the C40 Food Systems Network in 2016, participating in and contributing to peer-to-peer models of knowledge exchange and support along with other megacities from around the



BOX 2

ABOUT THE FOOD SYSTEMS NETWORK

The C40 Food Systems Network, delivered in partnership with EAT, supports citywide efforts to create and implement integrated food policies that reduce greenhouse gas (GHG) emissions, increase resilience, and deliver health outcomes. Building on the work of the Milan Urban Food Policy Pact, and launched at the 2016 EAT Stockholm Food Forum, the Network comprises 57 member cities worldwide as of October 2020.

C40 research has determined that 13 percent of C40 cities' total GHG emissions are associated with food consumption, with consumption of animal-sourced food representing nearly 75 percent of those food emissions.²² Nearly half of the world's food is consumed in cities, a number which is projected to increase to 80 percent by 2050.²³ Cities and local governments are uniquely positioned to guide a global food system transformation, where all cities drastically reduce malnutrition, halve food loss and waste, and support the transition to a climate-friendly food system.

The Network develops targeted assistance trainings, regionally focused activities, and communication materials to accelerate actions and raise the urban food systems agenda at both the local and international level. It emphasises cross-sectoral, multi-level action and inclusive stakeholder participation.

The C40 Good Food Cities Declaration is used as a mechanism to guide city leaders to take impactful

and measurable actions. The Network is focused on supporting cities in achieving elements of the declaration and their priorities along five workstreams:

- **Food procurement:** using food procurement for public facilities (school canteens, hospitals, elderly homes, civic buildings, etc.) to foster more sustainable and healthy diets.
- **Food environment:** transforming the social and physical environment that affect the types of food available within neighbourhoods, the affordability of food, and the nutrition information that people are exposed to, including food marketing, to allow better consumers' choices.
- **Food waste:** raising awareness of and addressing food loss and waste reduction, including by facilitating recovery and redistribution for people in need (food banks) and implementing food waste valorisation.
- **Regenerative agriculture:** promoting regenerative urban agriculture to decrease production emissions and close yield gaps.
- **Governance:** supporting cities in developing food strategies; including food as part of their climate action plans; and creating food boards and councils for inter-departmental and external coordination.

world (see Box 2). Combined, these actions have contributed to building the political momentum towards becoming a signatory of the Good Food Cities Declaration. The following subsections describe a selection of integrated best practices taken by the city to enhance the local food system in a way that contributes both to human health and climate action.

2.1. The Joy of Urban Farming

Driven by the need to mitigate hunger in the city, then-Vice Mayor Belmonte established the *Joy of Urban Farming* in 2010, with the goal of supporting low-income households grow nutritious food that can reduce their household expenses or serve as a source of livelihood. The programme, now in its 10th year, is designed to demonstrate how city dwellers can farm through vertical gardening, container farming, and other techniques—even in small urban spaces.

Three demonstration farms, located in the Quezon Memorial Circle, have been instrumental for urban agriculture education and to support interested individuals and organisations to adopt these practices. Through partnerships with the national Department of Agriculture (DA), the Agricultural Training Institute, and the Bureau of Plant Industry, the programme trains more than 6,000 people annually by providing lessons on backyard farming and eco-waste management, nurturing the spread of urban farms all over the city.^{24, 25}

The programme is also linked to environmental campaigns promoting a healthy habitat and environment for Quezon City residents. The Joy of Urban Farming aims to bring nature back into the city by increasing green coverage in a high-density urban area. At the same time, the programme works to integrate circularity principles in the urban system by using urban agriculture as a means to convert organic waste into fertiliser. Each Quezon City resident produces an estimated 0.88kg of solid waste per day, of which 54 percent is biodegradable.²⁶ Together, these actions can help protect the city's idle land and enhance its productivity.

Beginning with a 750-square meter plot in 2010, the demonstration farms have now been expanded to cover a 1,500 square meter area. In addition, the city hosts more than 160 urban farms spread across different *barangays*, including in day-care centres, parishes, and communal areas, and maintained by various non-governmental organisations.

The programme has also been replicated in public schools through a collaboration with the national Department of Education, i.e., the *Gulayan sa Paaralan* (school vegetable garden) initiative. The goal is to raise awareness about health and nutrition among students through growing organic vegetables in available spaces within the schools; the programme also acts as a supplement to school feeding programmes. As of 2020, the Joy of Urban Farming delivered 860 orientations in different schools and universities, providing learning materials and educating students and teachers on how to build their own farms at home or at school. In the long term, the programme aims to equip students with the necessary skills to become self-reliant in addressing nutritional deficiencies and to learn to refrain from consuming unhealthy foods and items with chemicals derived from pesticides.

More broadly, the programme ultimately intends to serve as a vehicle to promote eco-friendly and inexpensive food options in the city in an inclusive manner. In the future, Quezon City aims to institutionalise urban agriculture through ordinances and support programmes to spread this initiative across all *barangays* in the city, including in more public schools.



BOX 3

SUPPORTING HEALTHIER EATING AMONG SCHOOL-AGED CHILDREN

In 2017, Quezon City issued the Anti-Junk Food and Sugary Drinks Ordinance, which bans selling junk foods inside and within a 100-meter radius from any school premises. The ordinance classifies unhealthy products as “foods that are not made of indigenous, natural, and/or fortified food products,” focusing on food items high in fat, sugar, and salt such as instant noodles, candy, sodas, sports drinks, and some kinds of street food, among others. The ordinance also prohibits advertisements and the promotion of junk food and sugary drink products within the same radius.

Quezon City’s efforts to curb sugar-sweetened beverage (SSB) consumption emerged in 2017 as the Philippines’ Department of Education issued the Policy and Guidelines on Healthy Food and Beverage Choices in Schools and in DepEd Offices. The policy provides guidance on food marketing, categorisation, and evaluation, in order to encourage healthy eating habits among students and school employees nationwide. These efforts were later reinforced in the same year as the national government raised taxes on SSBs under the Tax Reform for Acceleration and Inclusion (TRAIN) law to promote a healthier citizenry.

Developed under this policy framework, Quezon City’s Anti-

Junk Food and Sugary Drinks Ordinance aims to improve the diets, health, and welfare of children and youth, as well as of their communities. The rates of overweight and obesity in the city’s school-age children (5-10 years old) outweigh the national average at 19.9 percent and 11.6 percent, respectively. In recent years, increased exposure to unhealthy food and built environments have led to a surge in overweight and obesity, becoming a top nutrition concern for authorities in Metro Manila in addition to other forms of malnutrition.^{27, 28}

A special task force, spearheaded by the city’s Health Department, is responsible for implementing the ordinance and monitoring its effectiveness. The task force comprises representatives from the city’s Department of Public Order and Safety, Department of Market Development and Administration, and the Division of City Schools, as well as by the Chairperson of the Health Committee of every *barangay* and the Chairperson of the Quezon City Council.

While the ordinance was approved in June 2017, the implementing rules and regulations were finalised in the six months that followed. To raise public awareness, Quezon City conducted a three-day orientation at the *barangay* level, targeting *barangay* officials and

representatives from both public and private schools tasked with the implementation of the ordinance in their communities. Day-to-day operations within school canteens are supervised by a focal person appointed by the school principal, ensuring implementation of the ordinance’s guidelines on food preparation.

The Anti-Junk Food and Sugary Drinks Ordinance is also part of Quezon City’s commitment to the Partnership for Healthy Cities, a global network of cities supported by Bloomberg Philanthropies that works to prevent the spread of non-communicable disease and injuries.²⁹

To date, the city has identified certain elements that can further drive a reduction in SSB consumption among school children, such as the provision of free potable drinking water in all classrooms given that this is the drink most students bring from home. Yet, baseline data generated through knowledge, attitude, and practice (KAP) surveys of students regarding SSB consumption is needed. In addition, ongoing awareness-raising and monitoring the ordinance’s implementation will be needed to stimulate healthier eating habits in school children.

2.2. Farmer to Consumer Programme

The Farmer to Consumer Programme (F2C) endeavours to better link producers and communities by opening new marketing platforms. The programme was launched by Quezon City in 2014 in partnership with the Philippine Chamber of Commerce and Industry (PCCI) and the Nueva Vizcaya Provincial Government. Twice a month, farmers from Nueva Vizcaya travel to Quezon City to sell rice, fruits, vegetables, and homemade goods at a pop-up market located at City Hall. The goal is to empower local producers by giving them direct access to urban markets that can potentially increase their income, and in turn, benefit city residents by enabling access to mark-up-free products.

To kickstart the programme, Quezon City issued special permits and licenses for the farmers to operate in the city, without cost, while a series of trainings supported them in establishing and sustaining their own agricultural enterprises.³⁰ At the same time, the PCCI advertised and promoted the programme through extensive media coverage and campaigns to raise the public's awareness on the importance of supporting local producers. Through the F2C programme, city residents are now able to buy and support local products without having to travel to other provinces.

As of 2020, the city organised over 70 product exhibitions since its inception in 2014, and with the participation of two major agricultural provinces, Nueva Vizcaya and Ilocos Norte. Given the programme's success, the Nueva Vizcaya Farmers Marketing Association began expanding the programme to other urban areas in the Philippines, while the number of participants in Quezon City grew to 21 farmers' organisations.³¹

Under the framework of the Good Food Cities Declaration, the Quezon City will work to expand the F2C programme in collaboration with various provincial governments in an effort to further increase market support towards local farmers (see Annex 1).

2.3. The Sustainable Diner Project

The Sustainable Diner Project encourages sustainable consumption and production in the Philippines, using the food service industry (addressing independent restaurants, hotels, and caterers in the tourism sector) as a starting point (*see Box 4*). Launched in 2017 by WWF-Philippines with support from the German Federal Ministry of Environment, Nature Conservation, Building and Nuclear Safety, the three-year project equips the dining public with tips and guides on how to support sustainably produced food.

The project has partnered with Quezon City, Tagaytay City, and Cebu City, as well as with individual restaurants and national government units, to develop schemes for food waste reduction in the local hospitality and tourism industries. Through consultations and focus group discussions, participants have shared their suggestions on how to make the food service industry more environmentally friendly. Capacity building programmes have also made it possible to adopt global standards for eco-labelling of food products, improve food safety measures, and provide strategic planning to food service establishments.³²

At a high level, the project works to integrate Sustainable Consumption and Production (SCP) Principles into national and local policies and business practices, with the goal of stimulating economic growth in a way that protects the environment. Quezon City's departments of tourism, planning, health, and environmental protection and waste management have been working with the project to formulate actions for integrating SCP Principles into local policies and plans. A policy planning workshop helped identify relevant stakeholders from the food service industry, academia, and civil society to engage with, as well as specific roles to be activated within the city government.³³ Meanwhile, the media series *Savour Planet* served as a tool to help city residents better understand the impacts of their food consumption choices on the local food system.³⁴

The outcomes of The Sustainable Diner Project have been integrated into Quezon City's planned actions to deliver on the Good Food Cities Declaration (see Annex 1). Through a continuous partnership with WWF-Philippines, the city will work towards the

adoption of SCP Principles into its food procurement practices and will also support restaurants in providing healthier and more environmentally friendly food options for citizens.



BOX 4

ENCOURAGING SUSTAINABLE CONSUMPTION AMONG DINERS

Food loss and waste are one of the biggest contributors to food insecurity in the Philippines, along with climate-related disasters. Just in Metro Manila alone, an estimated 2,175 tons of food are wasted on a daily basis while many go hungry. This demonstrates the gap between supply and consumption, widened by conventional production processes embedded in the nation's economy.^{35, 36}

The food service industry can be a good starting point for encouraging a shift towards more sustainable and healthier consumption habits that help reduce food waste and increasing the demand for responsibly produced food items. As

higher disposable incomes and fast-paced urban lifestyles in the Philippines have steered citizens towards dining out and using home delivery services, the food service sector has become a key contributor to the country's growing tourism sector, now worth USD 4.3 million.³⁷ Given that the nutritional quality of meals eaten out of home can vary significantly and can be a major contributor to excess dietary intake (e.g. of calories, sugar, salt), it would be important for initiatives such as the Sustainable Diner Project to also consider the nutritional composition of foods within the scope of sustainable foods.

3.

BUILDING RESILIENCE THROUGH INTEGRATED FOOD SYSTEMS

3.1. Urban food system disruptions in the context of COVID-19

In January 2020, the arrival of COVID-19 sparked a number of challenges for Quezon City as food systems across the Philippines became disrupted. Physical distancing and lockdown measures restricted people's access to fresh food. Along the food supply chain, agricultural produce was being wasted as movement restrictions and safety concerns regarding the transport of goods prevented farmers and suppliers from reaching consumers. With one of the largest populations of urban poor and vulnerable in the country, the city had to meet most essential needs for the majority of its residents.

Beginning in March and for the 60 days that followed, Quezon City was under one of the strictest lockdowns in the world. As a response, the city took measures to support those at risk, including senior citizens, informal workers, and many low- and middle-income households who lost jobs or took pay cuts. The first measure enacted focused on providing food relief to the most vulnerable, including in *barangays* with high rates of infection and under strict quarantine conditions. The city hired furloughed workers to pack and deliver food.³⁸ By May 2020, the city had distributed over 4.1 million

food packages, which contained basic staples such as rice and canned goods.

Two initiatives were established to maintain the food value chain from farmer to market, and from market to consumer. The Community Mart app, a mobile platform developed in partnership with the Office of the Vice President, helped households purchase nutrient-rich fresh produce from the city's wet markets and hired displaced transport employees as delivery crew. Quezon City residents largely depend on five major wet markets located in the municipality's periphery. The app, therefore, made it easier for people to stay at home during the pandemic while helping bridge the gap between producers and consumers.

In parallel, the Fresh Market on Wheels programme, driven by the City's Small Business Cooperative Development and Promotions Office (SBCDPO), created itinerant markets to help small farmers bring food into the city, specifically into *barangays* that were left without access to the larger wet markets. Shortly after, these efforts were complemented by the Kadiwa on Wheels initiative, implemented in partnership with the DA and local non-profits. The itinerant markets, resulted in a shortened value chain that helped reduce food loss during the crisis in

addition to helping address food access challenges.³⁹ To support these initiatives, the city requested the Secretary for Agriculture to issue “food passes” to those transporting food into the city, securing a steady influx of supplies.

While these examples, along with other measures, helped with the immediate response to COVID-19, Quezon City also started to scale up existing initiatives to enhance food system resilience in the medium-to-long term. Through the Joy of Urban Farming programme, the city distributed seeds and starter kits to encourage people to start growing their own produce, which could serve as a nutritious supplement to the food aid packages being distributed. By September 2020, 36,000 starter kits had been delivered to faith-based organisations, schools, and other community groups since the start of the pandemic.

The COVID-19 disruptions exposed Quezon City’s vulnerability to food system shocks. The promotion of urban agriculture and strengthening of urban-rural linkages helped generate additional income and ensure food availability in a time of livelihood

loss and crisis. In the near future, the city aims to maintain and scale up these initiatives as a first step towards enhancing food and nutrition security in the long run.

3.2. The Quezon City Food Security Task Force

On May 19, 2020, Mayor Belmonte established Quezon City’s Food Security Task Force (QC-FSTF) under Executive Order No. 32, with the goal of addressing food insecurity, promoting the consumption of nutritious food, complementing and creating livelihoods, and building climate resilience. Led by the Sustainable Development Affairs Unit, the QC-FSTF comprises representatives from the city’s economic, health, environmental and waste management, and planning departments, among others, as well as *barangay* captains to elevate the needs and concerns of the smallest units within the city government to the highest level. Non-governmental actors also take part in the QC-FSTF daily operations, including representatives from the agribusiness sector, farmer associations, and civil society groups.



The goals of the task force are aligned with the SDGs (particularly goals 2, 3, 8 and 13) and touch upon four dimensions of food and nutrition security:⁴⁰



1. **Availability:** To secure a reliable and consistent source of quality food for citizens.



3. **Utilisation:** To provide the knowledge for and create the basic sanitary conditions to prepare, handle, and distribute nutritious food. Here, a stable and quality water supply will be key.



2. **Access:** To ensure that people have sufficient resources to purchase and/or produce food, including by creating and maintaining livelihood opportunities.



4. **Stability:** To guarantee that the above dimensions—availability, access, and utilisation of food—remain stable and sustained over time.

The QC-FSTF has identified access and availability as two of the weakest points in the urban food system given that the urban area depends on its rural hinterland for food provision. Yet, the QC-FSTF sees the vulnerabilities exposed by the pandemic as an opportunity for improvement, to re-think processes, and to create a “new normal” that sets the city on a path towards achieving the SDGs—using the Good Food Cities Declaration as an overarching framework to achieve a more sustainable and equitable food system by 2030.

The QC-FSTF framework for achieving food security

After a mapping of individual programmes and capacities within the local government, the QC-FSTF developed a framework for the different Quezon City departments and partners to move in unison. Two overarching and interconnected pillars will inform a number of initiatives going forward (see Figure 2). The first pillar, urban agriculture for food and input production, focuses on the city’s ability to produce its own food; the second pillar, food trade and processing, will create the enabling environment to review and improve the wider food system.

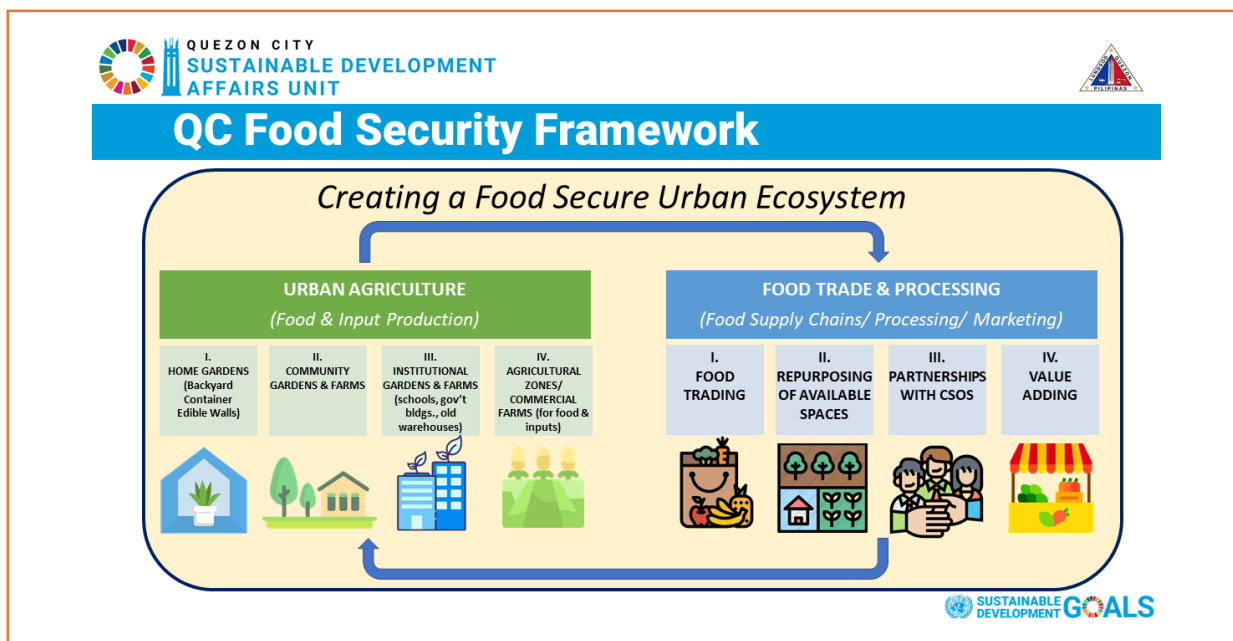


Figure 2. The QC-FSTF framework for achieving food security

A first step towards achieving this vision will be the expansion of already existing programmes for urban agriculture, including the Joy of Urban Farming and F2C programmes. Urban agriculture has been established as a strategy that can contribute to achieving the task force’s objectives. By enabling household food production, Quezon City can empower its constituents to grow nutritious supplements to their household purchases and to food aid packages. The QC-FSTF will, therefore, work on developing four models of urban agriculture in the city:

1. **Household gardens.** Backyard gardening, container farming, vertical gardens, and other forms of small-scale urban agriculture have proven to be an effective approach to address food security amid stay-at-home measures preventing the spread of COVID-19. The QC-FSTF has been providing households with seeds and starter kits—inputs needed to begin a vegetable garden. This effort is in line with the national-level programme Plant Plant Plant,⁴¹ under which Quezon City has entered in a joint partnership with the DA to promote urban agriculture.
2. **Community gardens and farms.** Community farming models will fall under the Joy of Urban Farming programme, which the local government will continue to monitor closely as people’s ability to come together may be affected by physical distancing measures.
3. **Institutional gardens.** This component refers to urban farms that can be administered by a public institution, a business, or industry. School grounds have been identified as the first opportunity to begin establishing institutional gardens that will provide supplemental nutritious produce at the *barangay* level. In addition, the task force will explore repurposing old warehouses and other unused sites in the city into spaces for food production.
4. **Commercial farms.** More of a legislative effort, the QC-FSTF will be working on issuing new ordinances to secure and support land and properties that can be re-assigned as Agri Zones throughout the city. The goal will be to

enable large-scale food production in certain parts of Quezon City through food-sensitive urban development and planning that can complement existing value chains and help bounce back in times of crisis.

The concept of edible landscapes will be used to strengthen linkages across the urban-rural continuum. Considering the geographic complexity of urban food systems, the Food and Agriculture Organisation of the United Nations (FAO) suggests adopting territorial approaches to food security and nutrition policy in developing city-region food systems, in line with the New Urban Agenda and the SDGs.⁴² Along these lines, the QC-FSTF will engage with other provinces and cities in the Philippines to produce edible landscapes at a territorial level.

In order to link urban farmers and consumers, the second pillar of the QC-FSTF framework— food trade and processing—will focus on creating an improved food supply chain. One immediate opportunity identified is the use of e-platforms to facilitate trade, such as the Community Mart app. Another aspect will be to leverage the partnerships established during the COVID-19 response, including with civil society and non-governmental organisations, to create value-adding enterprises in the areas of food production and processing. The QC-FSTF estimates that 20 percent of the city’s workforce will lose their jobs as a result of COVID-19; a strengthened food system can help create and recover livelihood opportunities.

A three-year roadmap towards achieving food resiliency

The Task Force's activities fall under their flagship programme *GrowQC: Kasama ka sa Pag-unlad sa Pagkain, Kabuhayan at Kalusugan* (Including You in Food, Livelihood, and Health Development, in English), created to take on the challenge of increased hunger, deteriorating health and wellness, and loss of livelihood triggered by COVID-19.

Under this umbrella, the QC-FSTF framework will be implemented during the period 2020–2022 and developed over three phases. The first phase, assessment and immediate response, focuses on short-term assistance and the establishment of social protection mechanisms. The provision of seeds and starter kits under the Joy of Urban Farming; the opening of pop-up markets in different *barangays* through the Kadiwa on Wheels initiative; and the hiring of displaced wage earners to deliver food and operate the itinerant markets are just a few examples of actions taken by the Quezon City government to respond to the pandemic.

A focus on the most vulnerable and communities at risk has been key to secure the health and wellbeing of the city's residents. In a second phase, the QC-FSTF framework will cover all areas within the city and will continue to place a specific emphasis on vulnerable and food insecure groups, such as families living in informal settlements, daily wage earners, and senior citizens.

In the second to third phase, the QC-FSTF will work to establish Agri Zones and Food Zones across the urban area. While the Agri Zones will focus on designating food production areas, the Food Zones will create the enabling environment for entrepreneurs and SMEs to establish value-adding enterprises for improving food distribution as well as a healthier and more sustainable food offer. Diagnostic and feasibility studies will be undertaken to determine a viable roadmap for food production and distribution within the city. Quezon City is the food gateway of the Metro Manila area; thus, the combination of Agri Zones and Food Zones could help enhance food and nutrition security and reduce food waste at both the city and city-region scales.

Urban agriculture as an entry point

Urban agriculture, in different shapes and sizes, is a common thread throughout Quezon City's efforts to achieve a more sustainable and equitable urban food system. Since before the start of the pandemic, the city had taken significant strides to integrate urban agriculture into the urban system, including through the 10-year Joy of Urban Farming programme. Going forward, the city intends to use urban agriculture as a viable strategy for attaining food security and a food system that is resilient to health and climate shocks, as demonstrated during the COVID-19 response over the course of 2020.^{43, 44}

Integrated urban agriculture can play a significant role in building a diverse, resilient food system and reconnecting people with nutritious food. Importantly, urban agriculture can contribute to feeding citizens locally by producing quality food distributed via short supply chains, reducing the gap between producers and consumers. Moreover, urban agriculture can play other crucial functions such as the provision of ecosystem services, opening opportunities for improving wellbeing and creating synergies with other sectors, including water, energy, air quality, and waste.^{45, 46}

On its own, however, urban agriculture is unlikely to satisfy urban food needs. Competition for land, its non-suitability to most food types, and its reliance on technological innovation hinder urban agriculture's potential to help a city realise self-sufficiency. Nonetheless, carried out in a regenerative and inclusive way, integrated urban agriculture can help city dwellers understand how and where food is grown—nurturing more responsible consumption by re-kindling an age-old relationship with food. By bringing nature back into the city, urban agriculture can ultimately help improve the social and environmental fabric through citizen engagement and multi-sectoral initiatives.^{47, 48}

Under this context, urban agriculture can serve as a powerful entry point to achieve the QC-FSTF's vision of sustained food security and nutrition by 2022 by re-localising part of the food system. Specifically, this place-based approach can bring Quezon City closer to positioning itself as a food resilient and green hub in the Philippines—helping achieve co-benefits across multiple sectors and the SDG agenda through:



- **Improving food security and nutrition, particularly for the most vulnerable.** Urban agriculture can help achieve the immediate goal of increasing consumption of fresh food among households, and ultimately, contribute to better food security and nutrition for children of these communities and those living in extreme poverty.
- **Increasing productivity and spatial quality of public and private land in the urban area.** The different typologies and locations in which urban agriculture takes place can transform under-utilised and/or unused land into productive areas, which in turn can open opportunities to improve land tenure, access, costs, linkages to markets, and minimise health and environmental risks.
- **Creating livelihood opportunities along the food production and supply chain.** Integrating urban agriculture initiatives into the food system can add value to the food supply chain and open employment opportunities in food production, processing, transportation, and waste management, among other areas.
- **Harnessing nature-based solutions to support biodiversity and reduce the city's ecological footprint.** Creating green corridors, short supply chains, reducing the heat island effect, carbon sequestration, infiltration of water, and composting are just a few examples of the benefits that urban agriculture can provide to the urban environment.
- **Creating spaces that contribute to better human health and well-being.** Vegetable gardens, community farms, urban forests, and other green areas can be designed and managed in a way that contributes to promoting the psychological wellbeing of city dwellers, as contact with nature can bring stress reduction and mental health improvements.

4.

FOUR COMPONENTS OF URBAN INNOVATION TOWARDS A HEALTHY AND SUSTAINABLE FOOD SYSTEM

The diversity of initiatives featured in this case study highlight the potential for utilizing various entry points to transform the urban food system in a way that results in co-benefits for multiple stakeholder groups. This section highlights common characteristics identified within these initiatives, as well as key success factors that have set the foundation for making significant progress towards achieving a healthier and more sustainable food system in Quezon City.

These elements are examined from a governance lens, with the goal of pinpointing process indicators that can be transferred to and adopted in other urban settings, according to the local policy environment. At the end, each sub-section provides a lesson learned for other city leaders and stakeholders who wish to take on or improve similar programmes.

4.1. Leadership, at all levels

Leadership, a determinant factor of good food outcomes, can take many forms and emerge under different circumstances. Leadership is key to building consensus, coordinating common visions and messaging, and developing programming that cuts across governance levels (vertical coordination) and sectors (horizontal coordination). In this case study, leadership refers to decision-makers within

the local government as well as political engagement by other stakeholders. Specifically, two instances of leadership have stood out in Quezon City's approach to improve its food system:

Strong political will at the highest level within the local government, specifically from the Office of the City Mayor. In addition to strong food systems commitment at the Mayoral level, the establishment of a cross-cutting oversight unit for sustainable development has played a decisive role in the creation and scaling of integrated programmes in urban agriculture, nutrition, and sustainable consumption. The institutional arrangements in which these leaders operate (e.g., the release of Executive Order 35) also create the enabling conditions for interdepartmental collaboration and for seeking the cooperation of local, national, and international stakeholders.

Place-based and community leadership to ensure effective implementation of food system interventions at the smallest scale. Community leaders can both open the door to local action by building public will and coordinate data gathering and monitoring progress to ensure results.⁴⁹ The potential of community leaders has been further augmented by the city's response to COVID-19, where members of the business, farming, transport, and faith-based communities came together to gather the necessary resources to assist the most vulnerable.



Strong leadership is a key success factor for implementing effective food systems action. Cities will need to invest in training and building food systems literacy among stakeholders in order to set the foundation for this capacity to emerge.

Fortunately, anyone who has a stake in the food system, whether at the household, community, or city level, can take some sort of leadership role to contribute to this agenda. While political leaders most often play the role of decision-makers, place-based leaders will be crucial to assemble the public will needed to balance the distribution of power.

4.2. Integrated programming to address complexity

Quezon City recognises the importance of cross-sectoral collaboration to achieve a systems approach within each initiative. Urban food systems are complex, made up of overlapping social, ecological, and infrastructural networks. Addressing this complexity requires innovative approaches to programming and coordination that allow for dynamic processes of feedback and interaction between relevant stakeholders and environments over time.⁵⁰

Throughout the examples, integrated programming is most evident in the design phase of programmes, as well as in their implementation. Building on a thematic entry point such as nutrition or food waste reduction, these programmes aim to achieve co-benefits from the onset, resulting in multi-stakeholder mobilisation from concept to implementation centred around a common vision.

Another outstanding feature is the use of an interdepartmental working group model, i.e., task forces, for the execution of these complex programmes. The different task forces are often comprised of representatives from the departments of health, education, urban planning, environmental protection and waste management, and public service employment, among others. Community leaders and other government representatives often take part in each task force. While the scope may seem broad, each member has a clear mandate and responsibilities, bringing a specific set of skills to each programme.

4.3. Entering in novel partnerships for implementation

Quezon City's experiences demonstrate the importance of engaging in novel partnerships to secure well-informed, long-term interventions. The city works with other governments, community leaders, volunteer groups, professional organisations, and farmers' associations to gather the technical and financial capacities needed to shape food-sensitive programmes.

The importance of these engagements has been further highlighted by the city's response to COVID-19 where, for instance, furloughed workers and civil society organisations were mobilised to create a food aid delivery network. Table 1 provides a non-exhaustive list of the types of partnerships being established.

In the future, further formalising these engagements could help set building blocks for a city-wide multi-stakeholder mechanism for food governance, such as food boards or food policy councils. Not only will this help with resource allocation, but this type of governance mechanism can make decision-making processes more inclusive by raising the voices of often underrepresented groups, such as farmers, distributors, vendors, and youth.⁵¹ Similarly, institutionalising these collaborations can also help underscore the accountability of non-state actors over time.

Integrated urban food systems action requires new approaches to programming, governance, and coordination that cut across sectors and levels in order to address complex issues. Cities can explore models of matrix management and multi-stakeholder analysis in programming – all the way from design to monitoring and evaluation – accompanied by the right policy context to clearly determine roles and responsibilities among all actors and stakeholders.

Name of partner institution	Type of stakeholder	Partnership objective
Food and Agriculture Organisation of the United Nations (FAO)	International organisation	To develop a survey on food insecurity during COVID-19 (in collaboration with UNICEF, the World Food Programme, and the University of the Philippines Los Baños)
Department of Agriculture (DA)	National government	To implement the Urban Agriculture Programme of the City (through a long-standing Memorandum of Agreement)
DA-Bureau of Fisheries and Aquatic Resources (BFAR)	National government	To develop the urban aquaculture component of urban agriculture initiatives in the city (under Memorandum of Agreement)
DA-Bureau of Plant Industry (BPI)	National government	To provide assistance with agricultural inputs
DA-Agricultural Training Institute (ATI)	National government	To develop and implement training programmes and knowledge transfer activities
Department of Social Welfare and Development (DSWD)	National government	To implement the Food Share Programme, a food donation scheme for eligible communities with urban agriculture setups
Nueva Vizcaya Provincial Government	Provincial government	To implement the F2C programme linking rural producers to urban markets
University of the Philippines Los Baños (UPLB)	University/academia	To develop the Edible Landscaping project; To support the development of the survey on food insecurity during COVID-19 (led by FAO)
Diocese of Novaliches	Civil society organisation	To develop a Community Model Farm set up with the Catholic Church community
Kilusang Kontra COVID (KilKoVid) Alliance	Multi-stakeholder organisation	To support agricultural programmes in development within the city

Table 1. Examples of partnerships established between the Quezon City Government and other stakeholders

The **cross-cutting nature of urban food systems** requires a concerted effort among different stakeholder groups for resource allocation. Novel partnership models can be of high value to gather the right knowledge, financial, and human resources, particularly in urban contexts where decentralisation processes are still to be met. Cities will have to establish the right mechanisms to be able to engage with new pioneers outside the government, as well to ensure accountability of non-state actors in the long-term.

4.4. Strong narrative on equitable and sustainable food systems

Developing a shared vision and narrative around food security and resilience has been another success factor amid Quezon City's efforts to improve its food system. Consensus-building in decision-making processes is not easy and objectives can easily be lost among competing interests. Finding a unifying theme to gather multiple actors and stakeholders, particularly in times of crisis, thus becomes crucial to guarantee the effective development of programmes.

Globally, there is increasing awareness that the food systems agenda needs to be front and centre in major international and national dialogues. The EAT-Lancet Commission on Food, Planet, Health set the first global scientific targets for healthy diets from sustainable food production, influencing national health guidelines, policies, business strategies, and consumption habits.^{52, 53} Without integrated food systems action, with climate and equity at the core, the world risks failing to achieve the SDGs and the Paris Agreement by 2030.

At the same time, a child rights-based narrative could also prove to be a powerful motivator for action. All children have the right to a healthy diet and sustainable environment. Yet, current food systems do not support the quality of their diets, climate, and natural environment—threatening their prospects.

Along these lines, Quezon City has taken significant strides to build momentum for food systems action in the shape of policies (e.g., Anti-Junk Food and Sugary Drinks Ordinance), strategies (e.g., COVID-19 recovery plans), and concrete interventions (e.g., Joy of Urban Farming programme). More recently, the COVID-19 pandemic exposed the fragility of the urban food system, presenting an opportunity to utilise this highly relatable food-centric narrative to galvanise support in the community for new initiatives that touch upon all aspects of the city's mandate. In the future, adding child rights-based approach to programming could provide opportunities to scale up action.

*Cities can **create demand for improved policies and actions** through strong messages and communications that highlight the links between food systems and human and planetary health, tailored to specific target groups. In this case study, a compelling narrative around food and nutrition security has enabled different entry points to transform the local food system, securing livelihoods, improving the urban environment, and build climate resilience.*

There is increasing consensus that food systems action needs to take part of the sustainable urban development agenda, and more recently, the COVID-19 pandemic has reiterated the urgent need to transform the global food system. Strong political will, integrated programming, and novel partnership models will be needed to build on this momentum and develop shared visions and strategies, together with local constituents, to implement food system interventions that generate benefits across the SDG agenda.

5.

CONCLUSION: A WINDOW OF OPPORTUNITY FOR CHANGE

Local decision-makers and implementing actors in Quezon City are taking a leading role in enhancing food and nutrition security and food production towards achieving a healthier, inclusive, more resilient, and sustainable food system. Key milestones over the years include the issuance of the Anti-Junk Food and Sugary Drinks Ordinance; the expansion of the Joy of Urban Farming programme and the institutionalisation of urban agriculture practices within the city; and becoming a signatory of the Good Food Cities Declaration, raising the visibility of Quezon City in the international policy arena.

While the city's challenges are complex, particularly in the context of COVID-19, Quezon City has a window of opportunity to reshape pathways and shift consumption habits towards a "new normal" in which healthy and sustainable foods are the primary available choice. Building blocks for this shift have been set throughout the examples featured in this case study.

Yet, integrated food and nutrition systems action is not just about generating food security, climate, and economic outcomes. This will require new data, leadership, collaborations, financial schemes, and empirical skills that can, ultimately, bring change to national and subnational food governance mechanisms. A food environments approach will be

required to re-connect people with the food system at this interface and deal with the emerging "wicked" problem of overweight and obesity amidst children – urgently needed in order to secure their future. The experience with the Anti-Junk Food and Sugary Drinks Ordinance sets an important precedent for how to achieve healthier food environments through effective policies and regulation. Partnerships will also need to be strengthened and different actors will need to be engaged – particularly local vendors, SMEs, and community leaders – who can use their place-based leadership to inspire action and create interest among groups that seldom interact. Similarly, the city will have to work on securing the sustainability of these initiatives through the years and across administrations through policy instruments and multi-stakeholder implementation.

With strong leadership and integrated food initiatives in place, the time is ripe for action in Quezon City. The authors of this publication will continue to follow these efforts as they are actively generating valuable data and can provide a learning opportunity for city leaders around the world. As catalysts for food systems transformation, we, together with partners, will help ensure that these collaborative programmes result in actionable insights that can be adopted and tailored by different stakeholders to their specific urban contexts.

ANNEX 1. PLANNED ACTIONS TO DELIVER ON THE GOOD FOOD CITIES DECLARATION

Declaration Commitment	Intended Action or Approach
Aligning our food procurement to the Planetary Health Diet	<ul style="list-style-type: none"> Integrating Sustainable Consumption and Production (SCP) principles for food procurement carried out by the City.
Supporting an overall increase of healthy plant-based food consumption in our cities by shifting away from unsustainable, healthy diets.	<ul style="list-style-type: none"> Implementing the Anti-Junk Food and Sugary Drinks Ordinance of 2017, through which different stores and canteens in primary and secondary schools are mandated to sell nutritious food. Encourage constituents to practice sustainable dining by eating healthy, locally sourced food or by eating out at sustainable food service establishments. Deliver the Environmental Summit for the Food Service Sector on sustainable diets, which includes the sustainable diner initiative of the city. Sustain the Producer-to-Consumer Programme in partnership with various Provincial Governments to help expand the market support to local farmers and manufacturers. Continuous implementation of the Urban Farming Project to contribute to food security and self-sufficiency among the City's constituents.
Reducing food loss and waste by 50 percent from a 2015 baseline	<ul style="list-style-type: none"> Deliver the Environmental Summit for the Food Service Sector, where a comprehensive training on food conservation and food waste reduction will take place. Create schemes for potential food and dining waste reduction, aligned with the Sustainable Diner: A Key Ingredient for Sustainable Tourism Project. Execute one of the targets of the Sustainable Diner Project (in partnership with the City and WWF), i.e., the implementation of a food donation scheme, together with the participating restaurants of the programme, to donate surplus food supplies to institutions in need.
Within two years of endorsing this declaration, working with citizens, businesses, and public institutions and other organisations to develop a joint strategy for implementing these measures and achieving these goals inclusively and equitably, and incorporating this strategy into our Climate Action Plan.	<ul style="list-style-type: none"> To formulate a waste management scheme where the food service sector is integrated into the City's plans for the proper collection and treatment of food and hazardous waste, in order to reduce greenhouse gas emissions and promote sustainable upcycling methods. Continuous partnership between the City and WWF for the city-wide adoption of sustainable consumption and production practices among restaurants and the dining public. Create multi-sectoral awareness on the environmental impact of the food industry and practices to shift to more sustainable approaches.
Other Supportive Actions	
Addressing food insecurity by encouraging citizens to cultivate their own food.	<ul style="list-style-type: none"> Promotion of the "Joy of Urban Farming" by the incumbent Mayor Joy Belmonte.

ENDNOTES

- 1 C40 Cities (2019). "Cities100: In Quezon City, resilient communities are replacing vulnerable, informal settlements." Available at: https://www.c40knowledgehub.org/s/article/Cities100-In-Quezon-City-resilient-communities-are-replacing-vulnerable-informal-settlements?language=en_US (accessed 10 July 2020)
- 2 C40 Cities (2019). "Quezon City: Health benefits of roadside vehicles testing." Available at: https://www.c40knowledgehub.org/s/article/Quezon-City-Health-benefits-of-roadside-vehicles-testing?language=en_US (accessed 10 July 2020)
- 3 C40 Cities (2018). "Clean Energy in Quezon City: A Wasteland turned into a Waste-to-Energy Model." Available at: https://www.c40.org/case_studies/clean-energy-in-quezon-city-a-wasteland-turned-into-a-waste-to-energy-model (accessed 23 June 2020)
- 4 C40 Cities (2018). "Quezon City Regulates Single-Use Plastic through Policy Intervention." Available at: https://www.c40.org/case_studies/quezon-city-regulates-single-use-plastic-through-policy-intervention (accessed 23 June 2020)
- 5 Singh, Gayatri and Gadgil, Gauri. 2017. *Navigating Informality: Perils and Prospects in Metro Manila's Slums*. World Bank. Washington DC. License: Creative Commons Attribution CC BY 3.0 IGO
- 6 FAO (2018). *Asia and the Pacific Regional Overview of Food Security and Nutrition 2018 – Accelerating progress towards the SDGs*. Bangkok. License: CC BY-NC-SA 3.0 IGO.
- 7 The Philippines' Food and Nutrition Research Institute, Department of Science and Technology. *2018 Expanded Nutrition Survey*. Available at: <http://enutrition.fnri.dost.gov.ph/site/presentation.php?year=2018> (accessed 01 September 2020)
- 8 Quezon City Government (2019). QC Profile. Household Population by Sex and Age Group: 2015-2025. Available at: <https://quezoncity.gov.ph/index.php/about-the-city-government/qc-profile> (accessed 02 September 2020)
- 9 The United Nations Convention on the Rights of the Child guarantees that all children have the right to enjoyment of the highest attainable standard of health, including the provision of nutritious food, clean water, and a safe environment to live in, as described in Article 24.
- 10 The Philippines' Food and Nutrition Research Institute, Department of Science and Technology. *2018 Expanded Nutrition Survey*. Available at: <http://enutrition.fnri.dost.gov.ph/site/presentation.php?year=2018> (accessed 01 September 2020)
- 11 Philippine Information Agency (2020). "QC forms Food Security Task Force." Available at: <https://pia.gov.ph/news/articles/1042676> (accessed 23 June 2020).
- 12 2010 estimate by the Philippine Statistics Authority (PSA).
- 13 Quezon City Government (2015). Quezon City Profile, "Actual Population 2015 and Projection 2025." Available at: <https://quezoncity.gov.ph/index.php/about-the-city-government/qc-profile> (accessed 14 July 2020)
- 14 Philippine Statistics Authority (2018). *Philippine Standard Geographic Code (PSGC)*. Available at: <https://web.archive.org/web/20180711063338/http://nap.psa.gov.ph/ActiveStats/PSGC/> (accessed 15 July 2020)
- 15 Quezon City Government (2019). Quezon City Background, "Geography." Available at: <https://quezoncity.gov.ph/index.php/about-the-city-government/background> (accessed 14 July 2020)
- 16 Quezon City Government (2019). "Economy." Available at: <https://quezoncity.gov.ph/index.php/about-the-city-government/economy> (accessed 14 July 2020)
- 17 Quezon City Government (2019). *Vision & Mission*. Available at: <https://quezoncity.gov.ph/index.php/about-the-city-government/vision-mission> (accessed 14 July 2020)
- 18 C40 Cities (2019). Press release, "14 Cities Commit to Sustainable Food Policies That Will Address the Global Climate Emergency." Available at: https://www.c40.org/press_releases/good-food-cities (accessed 14 July 2020)
- 19 Good Food Cities: Achieving a Planetary Health Diet for All. Available at: <https://www.c40.org/other/good-food-cities> (accessed 14 July 2020)
- 20 About the Planetary Health Diet: <https://eatforum.org/learn-and-discover/the-planetary-health-diet/>
- 21 C40 Good Food Cities Declaration: Planned Actions to Deliver Commitments. Available at: <https://www.c40.org/other/good-food-cities> (accessed 10 July 2020)
- 22 C40 Cities (2019) The Future of Urban Consumption in a 1.5o World: https://c40-production-images.s3.amazonaws.com/other_uploads/images/2270_C40_CBE_MainReport_250719.original.pdf?1564075036 (accessed 15 July 2020)

- 23 Ellen Macarthur Foundation (2019). *Cities and the Circular Economy for Food*
- 24 Ancog et al. (2020). "Policy Imperatives to Promote Urban Agriculture in response to the COVID-19 Pandemic among Local Government Units in the Philippines." SEARCA Policy Paper 2020-3. SEARCA, College, Los Baños; Laguna, Philippines.
- 25 Quezon City Government (2019). "Mayor." Available at: <https://quezoncity.gov.ph/index.php/about-the-city-government/mayor> (accessed 15 July 2020)
- 26 Asian Development Bank (2016). *Integrated Solid Waste Management Plan: Quezon City*
- 27 The Philippines' Food and Nutrition Research Institute, Department of Science and Technology. *Nutrition Surveys*. Available at: <http://enutrition.fnri.dost.gov.ph/site/presentation.php?year=2018> (accessed 01 September 2020)
- 28 The Philippines' Food and Nutrition Research Institute (2019). "Overweight and obesity is top nutrition concern in 8 Metro Manila cities-FNRI Survey." Available at: <https://www.fnri.dost.gov.ph/index.php/programmes-and-projects/news-and-announcement/769-overweight-and-obesity-is-top-nutrition-concern-in-8-metro-manila-cities-fnri-survey> (accessed 01 September 2020)
- 29 About the Partnership for Healthy Cities: <https://partnershipforhealthycities.bloomberg.org/>
- 30 NIA Digest. "Vizcaya PLGU embarks in F2C, partners with NVPFIA." Available at: https://www.nia.gov.ph/sites/default/files/newsletter/2014-niadigest_volXXXVII.pdf (accessed 04 August 2020)
- 31 Philippine Information Agency (2019). "NV farmers seek more marketing areas." Available at: <https://pia.gov.ph/news/articles/1019146> (accessed 04 August 2020)
- 32 WWF-Philippines (2020). *Beyond Research: Sustainability in the Food Service Sector - A Resource Material towards a Low-Carbon Industry*. Available at: https://www.wwf.org.ph/wp-content/uploads/2020/03/Resource-Material-Beyond-Research_Sustainability-in-the-Food-Service-Sector_6-March-2020.pdf (accessed 04 August 2020)
- 33 WWF-Philippines (2019). "WWF and PCEPSDI Conduct Policy Planning Workshop with the Quezon City LGU." Available at: <https://www.wwf.org.ph/what-we-do/food/thesustainablediner/scp-policy-planning-2019/> (accessed 04 August 2020)
- 34 WWF- Philippines (2019). "WWF-Philippines kicks off Savour Planet 2019 with a new theme." Available at: <https://www.wwf.org.ph/what-we-do/food/thesustainablediner/savour-planet-2019-new-theme/> (accessed 04 August 2020)
- 35 FAO (2018). *Asia and the Pacific Regional Overview of Food Security and Nutrition 2018 – Accelerating progress towards the SDGs*. Available at: <http://www.fao.org/3/CA0950EN/ca0950en.pdf> (accessed 23 June 2020)
- 36 WWF-Philippines. Sustainable Consumption and Production. Available at: <https://www.wwf.org.ph/what-we-do/food/thesustainablediner/> (accessed 03 August 2020)
- 37 WWF-SCP. "Philippines: Factsheet." Available at: <https://www.wwf-scp.org/philippines/> (accessed 04 August 2020)
- 38 C40 Cities (2020). "Quezon City's COVID-19 Emergency Food Response and Food Security Task Force." Available at: https://www.c40knowledgehub.org/s/article/Quezon-City-s-COVID-19-Emergency-Food-Response-and-Food-Security-Task-Force?language=en_US (accessed 15 July 2020)
- 39 Philippine Information Agency (2020). "DA to rollout more Kadiwa mobile markets in Metro Manila." Available at: <https://pia.gov.ph/news/articles/1037676> (accessed 05 August 2020)
- 40 FAO (2008). *An Introduction to the Basic Concepts of Food Security*. Available at: <http://www.fao.org/3/a-a1936e.pdf> (accessed 25 October 2020)
- 41 Philippines Department of Agriculture (2020). "DA's "Plant, Plant, Plant Programme" to benefit all farmers, fishers, consumers nationwide." Available at: <https://www.da.gov.ph/das-plant-plant-plant-programme-to-benefit-all-farmers-fishers-consumers-nationwide/> (accessed 05 August 2020)
- 42 FAO (2018). *Social network analysis for territorial assessment and mapping of Food Security and Nutrition Systems (FSNS): A methodological approach*. Available at: <http://www.fao.org/3/l8751EN/i8751en.pdf> (accessed 31 July 2020)
- 43 Philippine Daily Inquirer (2020). "Urban poor families set up food gardens to cope with hunger amid pandemic." Available at: <https://newsinfo.inquirer.net/1340874/urban-poor-families-set-up-food-gardens-to-cope-with-hunger-amid-pandemic#ixzz6ZcDjN5LJ> (accessed 29 September 2020)
- 44 International Growth Centre (2020). "Urban agriculture: A viable safety net for the urban poor during times of crisis?" Available at: <https://www.theigc.org/blog/urban-agriculture-a-viable-safety-net-for-the-urban-poor-during-times-of-crisis/> (accessed 25 October 2020)
- 45 RUAF Foundation (2015). *Cities and Agriculture: Developing Resilient Urban Food Systems*. Edited by Henk de Zeeuw and Pay Drechsel.
- 46 The URBES Project (2014). "Factsheet 7. Urban agriculture: landscapes connecting people, food and

biodiversity." Available at: https://www.iucn.org/sites/dev/files/import/downloads/urbes_factsheet_07_web.pdf (accessed 24 August 2020)

- 47 Ellen Macarthur Foundation (2019). *Cities and the Circular Economy for Food*
- 48 The Veolia Institute (2019). The Veolia Institute Review Facts Reports. *Urban Agriculture: Another Way to Feed Cities*.
- 49 UN-Habitat & WHO (2020). *Integrating health in urban and territorial planning: a sourcebook*. Geneva: UN-HABITAT and World Health Organisation, 2020. Licence: CC BY-NC-SA 3.0 IGO.
- 50 Gatzweiler et al. (2017). *Advancing Health and Wellbeing in the Changing Urban Environment: Implementing a Systems Approach*. Springer, Singapore.
- 51 RUAF (2019). Urban Agriculture Magazine, No. 36. Food Policy Councils. Available at: <https://ruaf.org/assets/2019/11/Urban-Agriculture-Magazine-no.-36-Food-Policy-Councils.pdf> (accessed 25 October 2020)
- 52 About the EAT-Lancet Commission: <https://eatforum.org/eat-lancet-commission/>
- 53 EAT (2020). "Can a Scientific Commission Change the World?" Available at: <https://eatforum.org/learn-and-discover/can-a-scientific-commission-change-the-world/> (accessed 25 October 2020)

