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Food Policy in New York City: An Overview of the Last Decade

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In the last decade, New York City has created innovative food policies designed to improve nutritional health, reduce food insecurity, increase access to healthy affordable food and protect the environment. The city's food policies also illustrate the complexity and challenges of using the resources and mandates of municipal government to influence the intersectoral determinants of equitable and sustainable urban food environments. This chapter reviews the food policies implemented in New York City since 2008 and assesses their impact on health, poverty and the environment. It recognizes the increased salience of food policy on the city's policy agenda and the variety of government, civil society and business actors who now participate in shaping food policy. The chapter acknowledges the difficulty New York City faces in achieving significant improvements in diet-related health in the face of influences operating at state, national and global levels. It concludes with several recommendations for strengthening New York City's capacity to promote more equitable food policies and environments.

For more than a century, New York City has demonstrated to other cities in the United States that the authority and resources of municipal government can be used to make healthy food, that most basic of human needs, more available, affordable and safer for all city residents. This chapter is based on a recent report assessing changes in food policy in New York City from 2008 to 2018,⁸³ a period during which food policy attracted significant new attention from city government and civil society. Our goal is to provide evidence that can inform more equitable solutions to urban food problems in New York City and elsewhere.

Our analysis identified the strengths and weaknesses of the cumulative recommendations for food policy that New York City and State officials have made over the last decade and assesses the contributions of the Food Metrics Reports,⁸⁴ a food policy monitoring system established by the New York City Council in 2011. We included policy decisions of the state government in our review since the state has jurisdiction over several municipal food policy domains including regulation of food retail outlets, administration of some public food benefits, and farmland protection.⁸⁵ We also analyze changes in key health and social outcomes related to food.

To situate New York City's food policy achievements in a wider context, we then compare the city's portfolio of food policy initiatives to the food policy goals articulated in the United Nations Sustainable Development Goals (SDGs)⁸⁶ (listed in Appendix A) and the Milano Urban Food Policy Pact (MUFPP)⁸⁷ goals (Listed in Appendix B).⁸⁸ Finally, we suggest five directions for food policy in New York City for the coming decade.

To map the scope of food policy recommendations in New York City we reviewed 20 reports on food and food policy prepared by New York City and State public officials or agencies between 2008 and 2017, all the major public reports produced in this period. These reports contained 420 specific policy recommendations, which we classified into six broad categories

based on their primary goals. These recommendations proposed city and state policies to: (1) improve nutritional well-being; (2) promote food security; (3) create food systems that support economic and community development; (4) ensure sustainable food systems; (5) support food workers; and (6) strengthen food governance and food democracy.

We found that three goals -- creating food systems that support economic and community development, ensure sustainable food systems, and improving nutritional well-being --each attracted about a quarter of the recommendations from city and state public officials, accounting for 79% of the 420 recommendations. These goals fit well within the scope and responsibilities of municipal government and enjoyed broad political support. However, nutrition policies that required changes in the practices of food businesses (e.g., taxing or limiting portion size of sugary beverages or calorie labeling) often elicited opposition, in some cases leading to defeat of such policy proposals.

Goals that could benefit from greater policy attention and more involvement of diverse constituencies include reducing food insecurity, improving pay and working conditions of food workers and strengthening food governance and food democracy. Collectively, these three goals attracted only 21% of the New York City food policy recommendations between 2008-2017.

To assess the role of the Food Metrics reporting system, we reviewed the annual Food Metrics Reports produced by the Mayor's Office of Food Policy between 2012 and 2017.² These reports were mandated by a 2011 City Council law that aimed to increase transparency about the food system and help policymakers and advocates track progress in meeting different goals. The six Annual Food Metrics Reports show measurable progress on 51% of the 37 indicators and sub-indicators that are monitored, providing some assurance that about half of the food initiatives that the City Council selected for monitoring are

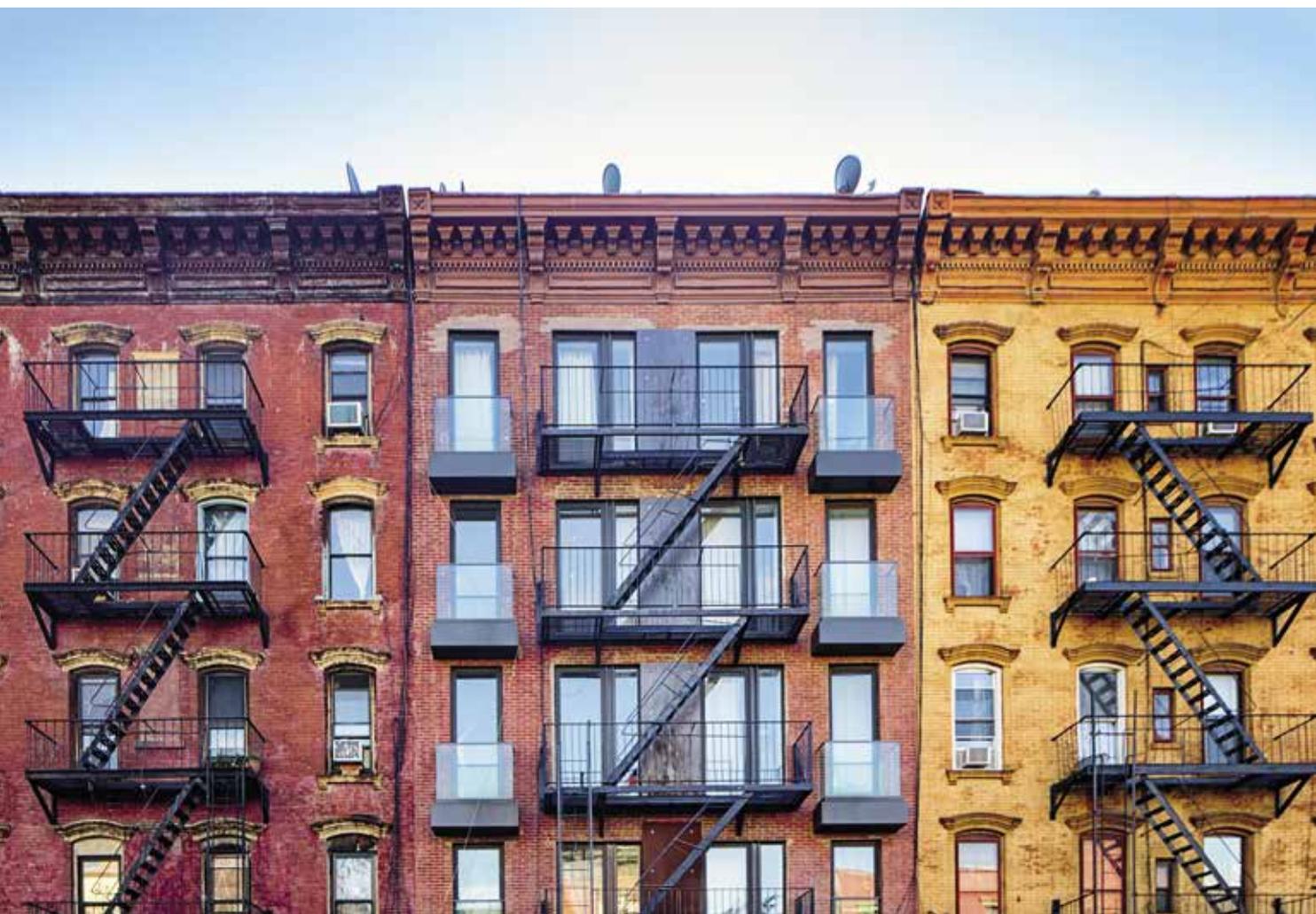
moving in the right direction.

However, these reports could be more useful to the food planning process by including more data, presented in ways that more clearly show progress or setbacks; disaggregating data geographically to enable communities to identify local problems; and made available in forms that facilitate further analysis by other public agencies, academics and advocates. Finally, most of the metrics chosen are outputs, not outcomes, limiting their value in determining whether monitored policies and programs are making a difference.⁸⁹

Since 2008, New York City has implemented dozens of new food policies and improving access to healthy food has moved higher on the agenda of New York City Mayors, the City Council and the many civil society groups active on food issues. But effective food policy must ultimately lead to measurable im-

provement in nutritional well-being of the population and the creation of a more sustainable and equitable food system. To assess progress in these goals, we reviewed public data on five key health and social outcomes to analyze changes in New York City in these indicators over the last decade: fruit and vegetable consumption, sugary beverage and soda consumption, rates of obesity and overweight, diagnoses of diabetes, and the number of individuals meeting the United States Department of Agriculture definition for food insecurity.⁹⁰ Our analysis sought to determine time trends in these indicators rather than to attribute observed changes to any specific policy.

The results showed only small increases in daily fruit and vegetable consumption over the decade, modest reductions in sugary beverage consumption, persistently high rates of adult obesity and overweight with stable or widening inequitable



distribution by race and ethnicity, modest increases in the proportion of New Yorkers ever diagnosed with diabetes and modest recent declines in the number and percentages of New Yorkers experiencing food insecurity. These findings suggest that if New York City is to achieve meaningful improvements in food-related outcomes in the next decade, it will need to consider new and more ambitious policies.

Each of our methods and sources of data has strengths and weaknesses. We acknowledge the limitations of assessing food policy by counting the number of policies and are further hampered by the paucity of rigorous evaluations of the impact of these policies, either separately or in synergy with related policies. But by using multiple sources of data, we offer a comprehensive overview of food policy change in New York in

the last decade and illuminate possible direction for the next decade.

How do New York food policies fit SDGs and MUFPP recommended actions?

To assess how New York City's various food policies of the last decade fit within the two global frameworks for food policy, SDGs and the MUFPP, we used these two sets of indicators to identify 67 city and state food policies that had been implemented in the last decade (although some had been approved a few years earlier). Each policy was assigned to one of the 17 SDG (See Appendix A) goals and, separately, to one of the 37 MUFPP (See Appendix B) recommended actions. Figure 1 shows that New York City and State have acted on 16 of the 17 SDG goals through local food policies, except for SDG5, which focuses on

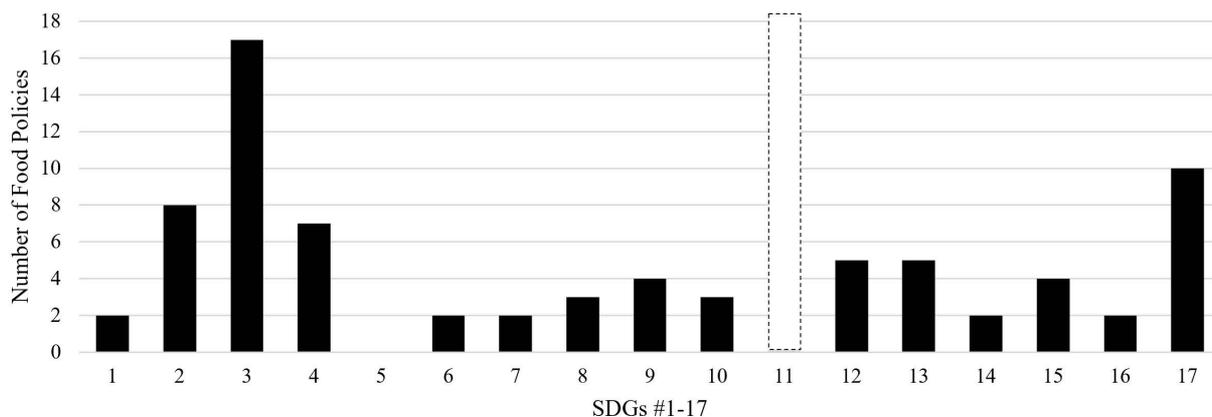


Figure 1. NYC Food Policies per SDG. Sources: Elaboration based on Freudenberg et al. (2018). Note: All local food policies examined have bearing on SDG 11 and contribute to the pursuit of more inclusive, resilient, safe, and sustainable cities.

empowering all women and girls and pursuing greater gender equality. However, some new city initiatives designed to improve women's economic roles, if effectively connected to food system goals, could contribute to SDG5.⁹¹ are two initiatives that can aid progress in this direction.). Four goals, SDGs 2, 3, 4 and 17 – focusing on eliminating hunger, ensuring healthy lives and well-being for all, promoting inclusive and equitable quality education for all, and strengthening the means of implementation for the SDGs – have the highest number of policies implemented (overlapping

with more than half of the policies examined) and six have two or fewer policies implemented.

For the MUFPP Recommended Actions (See Appendix B) , three recommended actions MRA 7, 8, and 20 – focusing on the promotion of sustainable diets, reduction of non-communicable diseases by reducing the intake of harmful ingredients, and expansion of urban and peri-urban food production – had five or more New York City or State policies implemented in the last decade and 20--more than half--had one or no policies implemented.

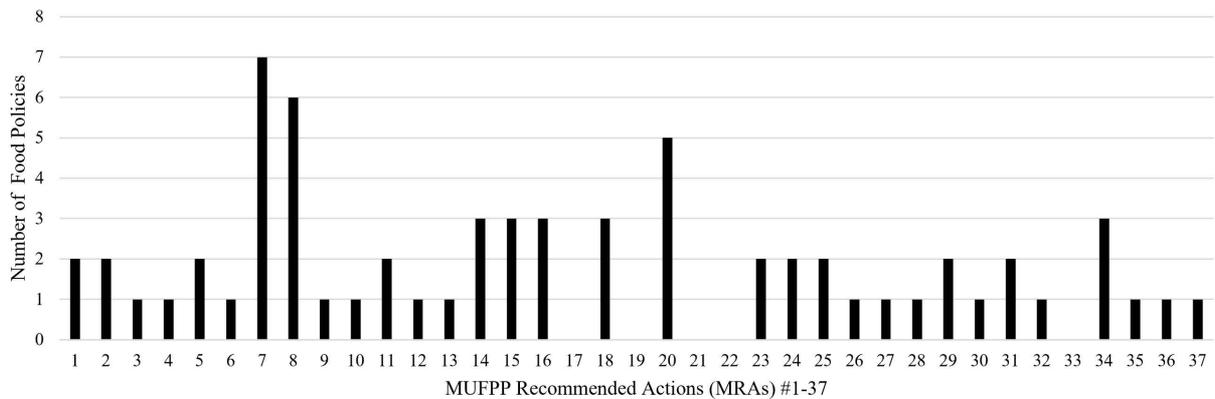


Figure 2. NYC Food Policies per Recommended Action by the Milan Urban Food Policy Pact. Source: The Authors based on the MUFPP, Freudenberg et al. (2018), and publicly available data.

As noted above, the focus of New York City’s food policies has been to improve performance on its nutrition and public health goals (SDG3, MRA7-13), which have also served as the main framing used to incorporate food part of the mayoral agenda for more than a decade.

Among the city policies that contributed to this goal, some implemented even before 2008, are the city mandate chain restaurants include calorie labeling in their menus, a policy that later contributed to its adoption by the federal government in the Affordable Care Act. This precedent-setting policy was followed by a ban on artificial trans-fatty acids from restaurant foods, the adoption of city-wide nutritional food standards for publicly purchased meals and a related Good Choice Initiative designed to help city agencies and distributors to meet the food standards, and a mandatory warning menu labels for high levels of sodium in foods sold at chain restaurant. More recently, in Spring 2018, a new resolution for banning processed meats (SDG3, SDG12, MRA7) in public schools was introduced in New York City Council and is now under review.

While mainly advanced through the New York City Department of Health and Mental Hygiene (DOHMH), healthy food purchasing (SDG3, MRA7, MRA14) programs such as Health Bucks – which offers \$2 coupons for every \$5 of government benefits spent on

farmers markets, Fruit and Vegetable Prescriptions at hospitals, and Pharmacy to Farm Prescriptions – have simultaneously allowed the city foster local economies (SDG8, MRA25) and support farmers in the New York City foodshed who sell at farmers markets (SDG2, SDG14). In fact, linking goals focused on food insecurity (SDG2, MRA14), healthy nutrition (SDG3, MRA7-13), local economies (SDG8, MRAs 17, 18, 24, 25), and farmland preservation (SDG14) has enabled the city to substantially scale up its farmers markets infrastructure (SDG9, MRA31) over the past decade to more than 140 operating farmers markets, and to locate more than half of these markets in high poverty neighborhoods (SDG1 and 2). These actions demonstrate the untapped potential of food policy to serve as a lever for advancing health and food equity.

The juxtaposition of New York City’s food policy landscape with the SDGs and the MRAs also reveals important opportunities for food and sustainability policy action. Among these are the role of urban food policy in promoting participatory education, training and research (MRA19), better integration between city and regional food production (MRA21), integrated land use planning and management (MRA22), gender equity (SDG5) and expanding opportunities for community-based, participatory food system planning and governance (SDG17, MRA2). New York City does not have a formal food



policy council to engage different stakeholders in food planning, or a food plan developed with public input, but a robust civil society sector in New York has ensured that diverse voices have participated in policy development and oversight.

Each of these recommendations incorporates several of the SDG and MUFPP objectives. Realizing these

goals will require enlisting new constituencies in the food policy process; better integrating food policy with policies in other sectors such as housing, economic development, environmental protection and education; and creating ongoing mobilizations that persuade policy makers and that elites that benefit from a dysfunctional food system that the risks of not acting are greater than those of action.

Recommendations

To achieve further progress in advancing healthier, more equitable and sustainable food policies in New York City over the next decade, our review of food policy since 2008 suggests several directions:

1. Building on the accomplishments of the six Food Metrics Report produced since 2012, New York City should revise the process to include clearer health and food environments outcomes and should more fully engage a wider variety of constituencies in interpreting Food Metrics findings.
2. New York City should develop a multiyear food plan that sets targets for achieving specific health and food system outcomes. Reducing inequitable access to healthy affordable food should be a high priority for the plan.
3. New York City should continue to strengthen and develop its public sector in food, defined as institutional food, food benefits and other public programs that increase access to healthy affordable food.
4. As New York City charts its plans for economic development, it should consider the impact of zoning, housing and employment policies on municipal food environments.
5. As the federal government acts or consider acting to reduce regulation of food industry and cut back food benefits programs, New York City and State should develop plans to protect New Yorkers from the adverse consequences of such policies.

NOTES

⁸³ Freudenberg N, Cohen N, Poppendieck J, Willingham C. (2018). *Food Policy in New York City Since 2008: Lessons for the Next Decade*. New York: CUNY Graduate School of Public Health and Health Policy, 2018.

⁸⁴ New York City Mayor's Office of Food Policy (2016). *Food Metrics Report*; The City of New York: New York, NY, USA.

⁸⁵ Willingham C, Rafalow A, Lindstrom L, Freudenberg N. (2017). *The CUNY Institute of Urban Food Policy Guide to Food Governance in New York City*. CUNY Graduate School of Public Health and Healthy Policy.

⁸⁶ United Nations. Sustainable Development Goals. 2015, <https://sustainabledevelopment.un.org/?menu=1300>

⁸⁷ Milano Urban Food Policy Pact. Monitoring Framework, 2017. Available at <http://www.milanurbanfoodpolicypact.org/monitoring-framework/>

⁸⁸ Ilieva, R. T. (2017). Urban Food Systems Strategies: A Promising Tool for Implementing the SDGs in Practice. *Sustainability*. 9(10), 1707.

⁸⁹ Freudenberg N, Cohen N, Willingham C. The Role of Metrics in Food Policy: Lessons from a Decade of Experience in New York City. *Journal of Agriculture, Food Systems, and Community Development* 2018 (in press, will be out in next month)

⁹⁰ United States Department of Agriculture. Definitions of Food Security. Last updated September 18, 2018. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>

⁹¹ Office of the Mayor. Press Release. Mayor de Blasio Announces Bold New Vision for the City's M/WBE Program. September 28, 2016. <https://www1.nyc.gov/office-of-the-mayor/news/775-16/mayor-de-blasio-bold-new-vision-the-city-s-m-wbe-program#/0>



Appendix A

Table 1. The SDGs and NYC & State food policies, programs, and initiatives

Sustainable Development Goal (SDG)		NYC & NYS Food Policy, Program, or Initiative
SDG1	End Poverty in All Its Forms Everywhere	<ol style="list-style-type: none"> 1. NYS increased the minimum wage (2015) 2. Protected employees in large grocery stores from immediately losing their jobs after an ownership transition (Local Law 11 of 2016)
SDG2	End Hunger, <i>Improve Nutrition</i> (*), and <i>Promote Sustainable Agriculture</i> (**) (*) <i>see</i> SDG3 (**) <i>see</i> SDGs 13,15	<ol style="list-style-type: none"> 3. Launched Food Stamp Paperless Office System (2007) 4. NY State expanded SNAP eligibility and extended recertification (2008-2016) 5. Implemented online application for NYC public school meal programs (2008) 6. Began rollout to expand the Breakfast in the Classroom program in NYC public schools (2015) 7. Implemented universal free school lunch in most New York City middle schools (2014; 2017) 8. Established the NYC Council School Food Pantry Initiative (2016; 2017) to provide students in 16 schools with access to food, basic personal items and feminine hygiene products.
SDG3	Healthy Lives and Well-Being for All at All Ages	<ol style="list-style-type: none"> 9. NYC DOHMH ran several media campaigns to discourage consumption of unhealthy food (2009-2017) 10. Limited sugary drinks in child care centers (amendment to NYC Health Code Article 47) (2007; 2012) 11. Banned artificial trans-fat in NYC restaurants (amendment to NYC Health Code Article 81) (2007) 12. Required chain restaurants to post calorie information on menus/menu boards (amendment to NYC Health Code Article 81) (2008; 2015) 13. Established National Salt Reduction Initiative, a voluntary partnership initiated by NYC DOHMH (2009) 14. Required sodium warning labels on chain restaurant menus (2015; 2016) 15. Launched Health Bucks Program (2005; 2012; 2016) 16. Launched Healthy Bodegas/Shop Healthy NYC! Program (2006; 2007; 2012) 17. Launched a Pilot Plant-Based Lifestyle Medicine Program at public hospitals and clinics in New York City (2017) 18. Launched the Good Choice Initiative (2014) – The Good Choice nutrition criteria apply to 25 food and beverage categories, including prepackaged snacks, sliced bread, and salad dressing. 19. Introduced Agency Meals and Food Standards (Mayoral Executive Order 122 of 2008) 20. Launched Fruit and Vegetable Prescription Pilot program at city hospitals (2013; 2016) 21. Launched the Food Retail Expansion to Support Health (FRESH) program (2009) 22. Required City restaurants to post letter-grade cards (A, B, C) reflecting sanitary inspection results (2010), by amending section 81.51 of the New York City Health Code. 23. Adopted Local Law 108 of 2017 which requires the NYC Department of Health and Mental Hygiene to extend the A-B-C grading program to mobile food vending units. 24. Expanded number of salad bars in NYC public schools (2005; 2012) 25. Piloted Garden to Café program in 20 New York City public schools (2008) 26. Launched Grow to Learn NYC initiative (2011)

SDG4	Inclusive and Equitable Quality Education and Lifelong Learning Opportunities for All	<ul style="list-style-type: none"> ● <i>Expanded number of salad bars in NYC public schools (2005; 2012)</i>⁹² ● <i>Piloted Garden to Café program in 20 New York City public schools (2008)</i> ● <i>Launched Grow to Learn NYC initiative (2011)</i> ● <i>Implemented online application for NYC public school meal programs (2008)</i> ● <i>Began rollout to expand the Breakfast in the Classroom program in NYC public schools (2015)</i> ● <i>Implemented universal free school lunch in most New York City middle schools (2014; 2017)</i> ● <i>Established the NYC Council School Food Pantry Initiative (2016; 2017) to provide students in 16 schools with access to food, basic personal items and feminine hygiene products.</i>
SDG5	Gender Equality and Empowerment of All Women and Girls	27. [Launched the Mayor’s Crowdfunding Program for NYC Women Start Ups (2018) * <i>Not focusing explicitly on food businesses</i>]
SDG6	Availability and Sustainable Management of Water and Sanitation for All	<p>28. Installed water jets in many NYC public schools (2008)</p> <p>29. Renovated the City wastewater treatment plant in Newtown Creek (Brooklyn, NY) increasing capacity by 50% and ensuring compliance with the US Clean Water Act (2009; 2014). The plant uses eight anaerobic digester eggs; the produced gas will heat 2,500 homes.</p>
SDG7	Access to Affordable, Reliable, Sustainable and Modern Energy for All	<p>30. Required heating oil sold or used by the City to contain a percentage of biodiesel (Local Law 119 of 2016)</p> <ul style="list-style-type: none"> ● <i>Renovated the City wastewater treatment plant in Newtown Creek (Brooklyn, NY) increasing capacity by 50% and ensuring compliance with the US Clean Water Act (2009; 2014). The plant uses eight anaerobic digester eggs; the produced gas will heat 2,500 homes.</i>
SDG8	Inclusive and Sustainable Economic Growth and Decent Work for All	<p>31. Protected fast food workers from unpredictable scheduling and payment (the Fair Work Week legislative package: Local Laws 98, 99, 100, 106, 107) (2016-2017)</p> <p>32. Introduced Local Food Procurement Guidelines for NYC Agencies (Local Law 50 of 2011)</p> <p>33. NYS launched the Farmers Market Grant Program (2009)</p>

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⁹² *Note:* Text in *italics* denotes NYC or NYS policies, programs, or initiatives already mentioned in relation to another SDG.

SDG9	Resilient Infrastructure, Inclusive Industrialization, and Innovation	<p>34. Invested \$150 million to revitalize the Hunts Point Terminal Produce Market</p> <p>35. NYS invested \$15 million in the development of Greenmarket Regional Food Hub at Hunts Point (2016)</p> <p>36. NYEDC aided the restoring the La Marqueta public market in East Harlem (2009; 2014) and supported the development of a commercial kitchen incubator</p> <p>37. Established 1,000 permits for Green Carts (Local Law 9) (2008; 2010)</p>
SDG10	Reduce Inequality within and among Countries	<ul style="list-style-type: none"> ● <i>NYS increased the minimum wage (2015) The new law requires that any person working at a Fast Food Establishment must be paid the Minimum Wage for Fast Food Workers. After four annual increases started in 2015, the wage will be \$15/hour in 2018.</i> ● <i>Implemented universal free school lunch in most New York City middle schools (2014; 2017)</i> ● <i>NY State expanded SNAP eligibility and extended recertification (2008-2016)</i>
SDG11	Inclusive, Safe, Resilient, and Sustainable Cities	*See the city and state policies and initiatives pertinent to all other SDGs
SDG12	Sustainable Consumption and Production	<p>38. Adopted a Zero Waste target by 2030 through the OneNYC Plan (2015) and committed to eliminating waste going to landfills, by prioritizing recovery, reuse, and recycling.</p> <p>39. Launched the Food Waste Challenge (2013)</p> <p>40. Launched the NYC Mayor's Zero Waste Challenge (2016)</p> <p>41. Established a compost pilot program for curbside collection of organic waste (Local Law 77 of 2013); expanded 2017</p> <p>42. Introduced Packaging Reduction Guidelines (Local Law 51 of 2011)</p>
SDG13	Combat Climate Change and Its Impacts	<p>43. Commissioned New York City Food Distribution & Resiliency Study (2016) *No comprehensive disaster reduction plan or strategy has been devised to date.</p> <p>44. Extended the license agreement for city community gardens (2011)</p> <p>45. Launched New York City Housing Authority's first large-scale urban farm (2013; 2016)</p> <p>46. Adopted the NYC Zone Green Amendment (2012) to reduce height and size restrictions for rooftop greenhouses atop commercial buildings;</p> <p>47. Launched NYS Community Growers Grant Program (2018)</p>

SDG14	Sustainable Life below Water	<p>48. Instituted the Green Infrastructure Grant Program (2011)</p> <p>49. Supported protection of drinking water quality in the New York City watershed through the Watershed Agricultural Program.</p>
SDG15	Sustainable Life on Land, No Land Degradation and Biodiversity Loss	<p>50. Established New York State Grown & Certified Program (2016)</p> <p>51. Launched New York Thursdays Program - 50% of Thursday lunch menu at DOE schools from within New York State (2015)</p> <p>52. Launched New York Grown for New York Kids: “No Student Goes Hungry” Program - quadruples state reimbursement for school meals (\$0.25/meal) for K-12 schools that purchase 30% of their lunch ingredients from New York farms.</p> <p>53. Established GreenThumb community gardening program (1978) which currently aids (e.g., through technical, workshops, programming, materials) over 550 gardens throughout the city</p>
SDG16	Access to Justice for All, Peaceful and Inclusive Societies	<p>54. Instituted a Garden Review Process (2010) through the addition of a new chapter in the City Rules (Title 56: Department of Parks and Recreation, Section 6–05).</p> <ul style="list-style-type: none"> ● <i>Protected employees in large grocery stores from immediately losing their jobs after an ownership transition (Local Law 11 of 2016)</i>
SDG17	Stronger Means of Implementation and Partnership for the Goals	<p>55. Established New York State Food Policy Council in 2007, renewed in 2016 as NYS Council on Hunger and Food Policy</p> <p>56. Established first Food Policy Coordinator position in Mayor’s Office in 2008, Office of the Director of Food Policy (2014)</p> <p>57. Developed a task force and consulted with hundreds of NYC residents to develop FoodWorks Report (2010)</p> <p>58. Established the NYC Food Assistance Collaborative (2014)</p> <p>59. Launched an Urban Agriculture website summarizing information about New York City programs and regulations pertaining to agricultural production and sales (2018)</p> <p>60. Developed over 20 food policy reports (2008-2017) and 420 recommendations *No comprehensive food system plan has been devised to date.</p> <p>61. Required annual Food Metrics Reports (Local Law 52 of 2011) and 37 indicators.</p> <p>62. As part of the Five Borough Food Flow food system distribution and resiliency study, developed a primary dataset and analytical tools for the City (2016)</p> <p>63. Launched the NYC Food Assistance Collaborative (2014)</p> <p>64. Joined the Urban School Food Alliance (2015)</p>

Appendix B

Table 1. MUFPP Recommended Actions and NYC & State food policies, programs, and initiatives

MUFPP Goal	MUFPP Recommended Action (MRA)		NYC & NYS Food Policy, Program, or Initiative
(1) ENSURING AN ENABLING ENVIRONMENT FOR EFFECTIVE ACTION, GOVERNANCE	MRA1	Facilitate collaboration across city agencies and departments	<ol style="list-style-type: none"> 1. Established New York State Food Policy Council in 2007, renewed in 2016 as NYS Council on Hunger and Food Policy 2. Established first Food Policy Coordinator position in Mayor's Office in 2008, Office of the Director of Food Policy (2014)
	MRA2	Enhance stakeholder participation	<ol style="list-style-type: none"> 3. Developed a task force and consulted with hundreds of NYC residents to develop FoodWorks Report (2010) 4. Established the NYC Food Assistance Collaborative (2014)
	MRA3	Identify, map and evaluate local initiatives	<ol style="list-style-type: none"> 5. Launched an Urban Agriculture website summarizing information about New York City programs and regulations pertaining to agricultural production and sales (2018)
	MRA4	Develop or revise urban food policies and plans	<ol style="list-style-type: none"> 6. Developed over 20 food policy reports (2008-2017) and 420 recommendations <i>*No comprehensive food system plan has been devised to date.</i>
	MRA5	Develop or improve multisectoral information systems	<ol style="list-style-type: none"> 7. Required annual Food Metrics Reports (Local Law 52 of 2011) and 37 indicators. 8. As part of the Five Borough Food Flow food system distribution and resiliency study, developed a primary dataset and complex analytical tools for the City (2016)
	MRA6	Develop a disaster risk reduction strategy	<ol style="list-style-type: none"> 9. Commissioned New York City Food Distribution & Resiliency Study (2016) <i>*No comprehensive disaster reduction plan or strategy has been devised to date.</i>

(2) SUSTAINABLE DIETS AND NUTRITION	MRA7	Promote sustainable diets (<i>education & communication</i>)	<ul style="list-style-type: none"> 10. Launched Healthy Bodegas/Shop Healthy NYC! Program (2006; 2007; 2012) 11. NYC DOHMH ran several media campaigns to discourage consumption of unhealthy food (2009-2017) 12. Expanded number of salad bars in NYC public schools (2005; 2012) 13. Piloted Garden to Café program in 20 New York City public schools (2008) 14. Established 1,000 permits for Green Carts (Local Law 9) (2008; 2010) 15. Launched Grow to Learn NYC initiative (2011) 16. NYC DOHMH ran several media campaigns to discourage consumption of unhealthy food (2009-2017)
	MRA8	Address non-communicable diseases associated with poor diets and obesity (<i>reducing intake of harmful ingredients</i>)	<ul style="list-style-type: none"> 17. Limited sugary drinks in child care centers (amendment to NYC Health Code Article 47) (2007; 2012) 18. Banned artificial trans-fat in NYC restaurants (amendment to NYC Health Code Article 81) (2007) 19. Required chain restaurants to post calorie information on menus/menu boards (amendment to NYC Health Code Article 81) (2008; 2015) 20. Established National Salt Reduction Initiative, a voluntary partnership initiated by NYC DOHMH (2009) 21. Required sodium warning labels on chain restaurant menus (2015; 2016) 22. Launched a Pilot Plant-Based Lifestyle Medicine Program at public hospitals and clinics in New York City (2017)
	MRA9	Develop sustainable dietary guidelines	<ul style="list-style-type: none"> 23. Launched the Good Choice Initiative (2014) – The Good Choice nutrition criteria apply to 25 food and beverage categories, including prepackaged snacks, sliced bread, and salad dressing.
	MRA10	Adapt standards and regulations to make sustainable diets and safe drinking water accessible	<ul style="list-style-type: none"> 24. Agency Meals and Food Standards (Mayoral Executive Order 122 of 2008)
	MRA11	Explore regulatory and voluntary instruments	<ul style="list-style-type: none"> 25. Launched Fruit and Vegetable Prescription Pilot program at city hospitals (2013; 2016) 26. Launched Pharmacy to Farm Prescription Program (2017)
	MRA12	Encourage joint action by health and food sectors	<ul style="list-style-type: none"> 27. Launched the Food Retail Expansion to Support Health (FRESH) program (2009)
	MRA13	Invest in and commit to achieving universal access to safe drinking water and adequate sanitation	<ul style="list-style-type: none"> 28. Installed water jets in many NYC public schools (2008)

(3) SOCIAL AND ECONOMIC EQUITY	MRA14	Use cash and food transfers	<p>29. Launched Health Bucks Program (2005; 2012; 2016)</p> <p>30. Launched Food Stamp Paperless Office System (2007)</p> <p>31. NY State expanded SNAP eligibility and extended recertification (2008-2016)</p>
	MRA15	Reorient school feeding programmes	<p>32. Implemented online application for NYC public school meal programs (2008)</p> <p>33. Began rollout to expand the Breakfast in the Classroom program in NYC public schools (2015)</p> <p>34. Implemented universal free school lunch in most New York City middle schools (2014; 2017)</p>
	MRA16	Promote decent employment for all	<p>35. NYS Increased the minimum wage (2015)</p> <p>36. Protected employees in large grocery stores from immediately losing their jobs after an ownership transition (Local Law 11 of 2016)</p> <p>37. Protected fast food workers from unpredictable scheduling and payment (the Fair Work Week legislative package: Local Laws 98, 99, 100, 106, 107) (2016-2017)</p>
	MRA17	Encourage and support social and solidarity economy activities	<p>38. Launched the Mayor's Crowdfunding Program for NYC Women Start Ups (2018) <i>*Not focusing explicitly on food businesses</i></p>
	MRA18	Promote networks and support grassroots activities	<p>39. Established the NYC Council School Food Pantry Initiative (2016; 2017) to provide students in 16 schools with access to food, basic personal items and feminine hygiene products.</p> <p>40. Launched the NYC Food Assistance Collaborative (2014)</p> <p>41. Joined the Urban School Food Alliance (2015)</p>
	MRA19	Promote participatory education, training and research	

(4) FOOD PRODUCTION	MRA20	Promote and strengthen urban and peri-urban food production	<p>42. Extended the license agreement for city community gardens (2011)</p> <p>43. Launched New York City Housing Authority's first large-scale urban farm (2013; 2016)</p> <p>44. Green Infrastructure Grant Program (2011)</p> <p>45. Adopted the NYC Zone Green Amendment (2012) to reduce height and size restrictions for rooftop greenhouses atop commercial buildings;</p> <p>46. Launched NYS Community Growers Grant Program (2018)</p>
	MRA21	Seek coherence between the city and nearby rural food production	
	MRA22	Apply an ecosystem approach to guide holistic and integrated land use planning and management	
	MRA23	Protect and enable secure access and tenure to land	<p>47. Supported preservation of farms in New York City watershed through the Watershed Agricultural Program</p> <p>48. Instituted a Garden Review Process (2010) through the addition of a new chapter in the City Rules (Title 56: Department of Parks and Recreation, Section 6-05).</p>
	MRA24	Help provide services to food producers in and around cities	<p>49. Established GreenThumb community gardening program (1978) which currently aids (e.g., through technical, workshops, programming, materials) over 550 gardens</p> <p>50. New York State Grown & Certified Program (2016)</p>
	MRA25	Support short food chains	<p>51. Launched New York Thursdays Program - 50% of Thursday lunch menu at DOE schools from within New York State (2015)</p> <p>52. Launched New York Grown for New York Kids: "No Student Goes Hungry" Program - quadruples state reimbursement for school meals (\$0.25/meal) for K-12 schools that purchase 30% of their lunch ingredients from New York farms.</p>
	MRA26	Improve (waste) water management and reuse	<p>53. Renovated the City wastewater treatment plant in Newtown Creek (Brooklyn, NY) increasing capacity by 50% and ensuring compliance with the US Clean Water Act (2009; 2014). The plant uses eight anaerobic digester eggs; the produced gas will heat 2,500 homes.</p>

(5) FOOD SUPPLY AND DISTRIBUTION	MRA27	Assess the flows of food to and through cities	54. Commissioned New York City Food Distribution & Resiliency Study (2016) Five Borough Food Flow
	MRA28	Support improved food storage, processing, transport and distribution	55. Invested \$150 million to revitalize the Hunts Point Terminal Produce Market
	MRA29	Assess, review and/or strengthen food control systems	56. Required City restaurants to post letter-grade cards (A, B, C) reflecting sanitary inspection results (2010), by amending section 81.51 of the New York City Health Code. 57. Adopted Local Law 108 of 2017 which requires the NYC Department of Health and Mental Hygiene to extend the A-B-C grading program to mobile food vending units.
	MRA30	Review public procurement and trade policy	58. Local Food Procurement Guidelines for NYC Agencies (Local Law 50 of 2011)
	MRA31	Provide policy and programme support for municipal public markets	59. NYS launched the Farmers Market Grant Program (2009) 60. NYEDC aided the restoring the La Marqueta public market in East Harlem (2009; 2014) and supported the development of a commercial kitchen incubator
	MRA32	Improve and expand support for infrastructure	61. NYS invested \$15 million in the development of Greenmarket Regional Food Hub at Hunts Point (2016)
	MRA33	Acknowledge the informal sector's contribution	
(6) FOOD WASTE	MRA34	Convene food system actors to assess and monitor food loss and waste reduction	62. Established a compost pilot program for curbside collection of organic waste (Local Law 77 of 2013); expanded 2017 63. Required heating oil sold or used by the City to contain a percentage of biodiesel (Local Law 119 of 2016) 64. Packaging Reduction Guidelines (Local Law 51 of 2011)
	MRA35	Raise awareness of food loss and waste	65. Launched the NYC Mayor's Zero Waste Challenge (2016)
	MRA36	Collaborate with the private sector along with research, educational and community-based organisations	66. Launched the Food Waste Challenge (2013)
	MRA37	Save food by facilitating recovery and redistribution for human consumption of safe and nutritious foods	67. Adopted a Zero Waste target by 2030 through the OneNYC Plan (2015) and committed to eliminating waste going to landfills, by prioritizing recovery, reuse, and recycling.