



Food and Agriculture
Organization of the
United Nations



MILAN
URBAN
FOOD
POLICY
PACT



THE MILAN URBAN FOOD POLICY PACT MONITORING FRAMEWORK



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Food in an urbanizing world

Today, approximately 55 percent of the world's population lives in urban areas, a proportion that is expected to increase to 68 percent by 2050¹. Most urban growth will be in Africa and Southeast Asia and with 70 percent all food produced already destined for consumption in cities² processes of urbanization are creating both challenges and opportunities to create healthy, fair, economically and environmentally sustainable food systems.

Poverty and food insecurity are being “urbanized”³. Urban food insecurity is strongly associated to inequitable distribution of resources⁴.

In addition, the number of **overweight** and obese people is growing everywhere but especially in urban areas⁵ (in 2017, over 38 million children under five were overweight, and 672 million adults were obese⁶). One of the underlying causes of this rise - in addition to a reduction in physical activity - has been a shift in dietary patterns towards a diet rich in highly processed foods (high in salt, sugar and fat) to the detriment of a nutritional regime including whole grains, root crops, legumes and fresh fruits and vegetables^{7,5}. Poor dietary patterns are among the leading risk factors for the global burden of disease⁸ and related rising health expenditure⁹.

Climate change is similarly a challenge; food systems emit 30 percent of planet Earth's greenhouse gas (GHG) of which food (including food loss and waste) is among the top five largest contributors.¹⁰ As urban food markets represent 70 percent of global food supply, cities are critical hotspots for experiencing the shocks and stresses of climate change¹¹.

On the positive side, the fastest growing urban centers, especially in Africa and Asia, will be small- and medium-size cities where 34 percent of the world's population already lives¹ creating significant opportunities for sustainable food systems policy and planning, plus employment for improved nutrition within the rural-urban spectrum¹². Indeed, 60 percent of the area expected to be urban by 2030 is yet to be built and this creates opportunities to build resilience and sustainable urban food systems¹¹.

The key role that cities and local actors play in addressing these interlinked food systems challenges has been recognized by national players and the international community^{i,ii}.

i The New Urban Agenda was adopted at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) in Quito, Ecuador, on 20 October 2016. It was endorsed by the United Nations General Assembly at its sixty-eighth plenary meeting of the seventy-first session on 23 December 2016. The New Urban Agenda places food security and nutrition at the center of urban sustainable development <http://habitat3.org/wp-content/uploads/NUA-English.pdf>

ii On 7 March 2019, the Food and Agriculture Organization of the UN (FAO) launched The FAO Framework for the Urban Food Agenda. It serves as a corporate strategy to address emerging calls from countries, responding to demands for a multi-stakeholder and multi-level approach to food insecurity and malnutrition across the rural-urban continuum. <http://www.fao.org/3/ca3151en/CA3151EN.pdf>

Vertical collaborations (where organizations share their responsibilities, resources, and performance information to serve similar ends) among national and local governments, in partnership with the private sector as well as civil society, is of paramount importance to effectively respond to people's demands for nutritious and accessible food, climate action and social equity in line with the objectives of the 2030 Agenda.



Milan Urban Food Policy Pact Monitoring Framework

In October 2015, during EXPO 2015, held in Milan and dedicated to the theme “Feeding the Planet, Energy for Life”, over one hundred cities from every continent signed the Milan Urban Food Policy Pact (MUFPP), a non-binding agreement on urban food policies “designed by cities for cities” <http://www.milanurbanfoodpolicypact.org>.

City mayors committed to develop sustainable and resilient food systems, to accord nutritious and accessible food to all, protect biodiversity and fight against food waste. The attention demonstrated by municipalities to this initiative revealed the need to deepen the attention given to pressing issues on a cooperative basis and underlined the urgency of defining models for an integrated approach to urban food systems.

In 2019, the MUFPP united 199 cities, illustrating how an ever-increasing number of cities are working to bring together civil society organizations (CSOs), the private sector and policy makers to deliver broader developmental objectives through food systems.

The Pact consists of an explanatory narrative that illustrates the role of cities in contributing towards the transformation of urban food systems towards sustainability and a Framework of Action articulated in a set of 37 recommended actions organized around six categories:

	Governance
	Sustainable diets and nutrition
	Social and economic equity
	Food production (including urban-rural linkages)
	Food supply and distribution
	Food waste

Despite the growing number of urban food initiatives in many cities, a key challenge expressed by MUFPP signatory cities is measuring the impact of these policy processes and initiatives.

Since 2016, FAOⁱⁱⁱ and the MUFPP Secretariat, with the support of the RUAF^{iv}, have collaborated to develop an innovative and comprehensive set of indicators and methodological guidelines to monitor the MUFPP recommended actions in line with cities' demands, capabilities and administrative obligations.

Through a **consultative process** that involved more than 40 cities, a first draft list of Indicators was presented in October 2017 in Valencia at the 3rd MUFPP Annual Gathering.

A group of 16 cities actively participated, through a series of webinars, in the finalization of the Milan Pact Monitoring Framework^v. This draft list of Indicators was selected based on:

- At least one indicator for each recommended action/outcome of the MUFPP
- Relevance and data availability
- High relevance but no data availability
- Methodological considerations (feasibility).

The final list of Indicators – along with methodological guidelines – was presented at the MUFFP Annual Gathering in Tel Aviv in 2018. The Monitoring Framework provides an overview of indicators that, taken together, can be part of a sustainable food system approach – a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised¹³.

iii The FAO inter-divisional team who contributed to the Monitoring Framework was composed by: Anne Kepple, Michela Carucci, Guido Santini, Thierry Giordano, Erdgin Mane, Mark McGuire, Jorge Fonseca, Vito Cistulli and Cristian Morales Opazo. The team was coordinated by José Rosero Moncayo, Director of the Statistics Division at FAO <http://www.milanurbanfoodpolicycompact.org/wp-content/uploads/2017/12/FAO-Team-working-on-indicators.pdf>

iv The RUAF is a Global Partnership on Sustainable Urban Agriculture and Food Systems. The Partnership is formed by strategically selected expert institutions with a significant track record in urban farming or work on urban food system solutions, and consists of cities, research institutes and NGOs <https://www.ruaf.org/about-ruaf>. The RUAF team who contributed to the Monitoring Framework was composed by Marielle Dubbelling, Joy Carey and Brian Cook.

v Antananarivo, Austin, Birmingham, Copenhagen, Curitiba, Ede, Milan, Nairobi, Quito, São Paulo, Tirana, Toronto, Vancouver, Washington, West Sacramento, Windhoek



Nature and scope of Monitoring Framework

The purpose of the Monitoring Framework is to serve as an instrument for cities and urban food stakeholders to identify food-related policy and programme priorities. The Framework also serves to illustrate to what extent “desired changes” are happening and/or how impactful such changes are. If measured periodically, the Framework can be used to evaluate gaps in policy advancement and resource mobilization as well as reveal overall urban food systems improvement.

- **The Framework has been designed to support cities and sub-national officers responsible** for designing food systems policies, projects and investments in selecting appropriate indicators to monitor actions and their impact (positive or negative), on various food-related developmental objectives.
- **The Framework does not represent official FAO recommendations** for specific indicators or methodologies. It does not provide detailed guidance on how to collect a given indicator, but the methodological guidelines for each indicator suggest “approaches” and point to relevant guidance materials. The Framework is intended only to provide information on the indicators, methodologies, application and constructs that may be relevant to consider in the monitoring and evaluation of urban food systems policies, programs and investments.
- **It is not envisaged** that a single city and/or public or private partner should collect data on all the indicators presented in the Framework. The type of policy and developmental priorities will inform the selection, as well as the feasibility of data collection in view of available resources and other constraints.
- **The Framework has not been designed** to compare cities and establish global ranking systems. However, it can be a useful tool for cities and urban practitioners to identify a common narrative against which experiences and progress can be compared and which highlights the increasing role of cities in making food systems more sustainable.
- **Cities and food actors can use the Framework** to start more collaborative and synergistic approaches between municipal departments, wider stakeholder groups and the national government to address food system challenges systemically.

Target audience

The target audience for the Framework is primarily municipal governments, development professionals and food practitioners working on urban food-related projects and programmes. Although the indicators have been drafted as a tool to monitor the progress of MUFPP recommended actions, they serve as a tool for all cities, development professionals, private organizations, research institutions and CSOs working on urban food systems and rural-urban linkages.

Structure of the Framework

The Monitoring Framework is organized along the six categories of the Milan Pact and includes:

- A set of **Outcome areas** or “desired direction of travel”
- A set of **Recommend actions** to achieve intended outcomes (linked to Outcome Areas)
- **Indicators** to be used to monitor improvement in the achievements of cities’ expected outcomes.

Methodological Guidelines for each indicators can be downloaded from the Indicators matrix (p. 18ff.), or for all 44 indicators grouped at <http://www.fao.org/3/CB4036EN/CB4036EN.pdf>

At least one indicator for each of the 37 recommended actions has been identified, for a total of 44 indicators formulated or adapted from existing indicator frameworks^{vi}. (see Figure 1, p. 9) (the full list of 44 indicators can be found on pages 19).

Outcome areas

Outcome areas (or “desired direction of travel”) are the changes that cities want to see in the future: i.e. changes that characterize a more resilient and sustainable food system.

Outcomes correspond to benefits that cities should be able to achieve by applying specific policies and programmes in partnership with a broader range of stakeholders (from universities and public agencies to the private sector and CSOs). However, as there are many factors that contribute to the achievement of policy outcomes, each single action cannot be linked to the achievement of long-term outcomes. Moreover, the results of policy-making process and multi-stakeholder collaborations are often only visible in the medium- to long-term.

Taken together, the Outcome areas contribute towards four broader impact areas and development objectives (see Figure 2, p. 9):

- (Improved) Citizen engagement and accountability in policy making
- (Improved) Health, Nutrition and Food Security
- (Reduced) Poverty and (Improved) Economic Growth and Equity
- (Reduced) Environmental Impact and Footprint

^{vi} The City Region Food Systems (CRFS) Indicator Framework served as a key resource tool for the development of the MUFPP Monitoring Framework
<http://www.fao.org/in-action/food-for-cities-programme/toolkit/crfs-assessment/indicator-framework/en>

Recommended actions

Recommended Actions serve as an example of options that cities and food actors possess in order to meet the desired outcomes. These Actions build upon the direct experience of cities and consider relevant commitments and goals by the Milan Pact. While the options have been organized into thematic clusters, they should be viewed as “entry points” towards achieving the common goal of sustainable food systems.

Most initiatives (such as school meals or community gardens) may fall under the jurisdiction of more than one municipal agency or department but will have an impact on a range of Sustainable Development Goals.

Indicators

Indicators provide information about the way a process is functioning and provide a basis for further improvements. The purpose of the Indicators is to help measure the extent to which “desired changes” are happening. The Indicators also act as pointers to changes needed in strategies or intervention directions especially when monitored or tracked over a period. Indicators can also be used to establish a baseline from which to measure on-going progress or change.

Indicators are measurable variables that capture some non-measurable concepts. They are used to measure outcomes and/or outputs that are linked to achieving a goal.

The Indicators are either directly linked to specific outputs that may be the result of specific interventions and/or projects that are linked to medium- to long-term outcomes that are invariably the result of different connected actions.

For example, when assessing improvement in the social and economic equity policy dimension, some Indicators focus around short-term outputs indicators such as #19 Percentage of people supported by food and/or social assistance programmes; #20 Percentage of children and youth (under 18 years) benefitting from school feeding programmes or #24 Number of opportunities for food-related learning and skill development in food and nutrition literacy, employment training and leadership. An indicator such as #18 Percentage of food insecure households based on the Food Insecurity Experience Scale (FIES) is meant to be used to monitor medium- to long-term changes that are often the results of interlinked policies and action.

The 44 indicators can be organized into two main groups:

- **Self-assessment binary indicators** that look at the presence (or absence) of a specific item and/or policy. Some examples are #2 Presence of an active multi-stakeholder food policy and planning structure; #6 Existence of a food supply emergency/food resilience management plan for the municipality based on vulnerability assessment; #16 Presence of programmes/policies that promote the availability of nutritious and diversified foods in public facilities; #39 Presence of food safety legislation and implementation and enforcement procedures. This typology of indicators is often complemented by a set of qualifiers that help understand progress over time.

- **Quantitative Indicators** useful for measuring percentages, absolute numbers and/or rates that address progress against specific baselines. Some examples are #9 Cost of a nutritious food basket at city/community level; #10 Individual average daily consumption of meat; #18 Percentage of food insecure households based on the Food Insecurity Experience Scale (FIES); #29 Proportion of agricultural land in the municipal area under sustainable agriculture; #38 Proportion of food procurement expenditure by public institutions on food from sustainable, ethical sources and shorter supply chains; #44 Total annual volume of surplus food recovered and redistributed for human consumption.

The implementation of indicators will require different levels of disaggregation (classification/analysis) according to specific needs (see methodological guidelines).

NB: Terms such as “food desert”, which is common idiom in North America, may need to be adapted to local contexts - cities in Africa or Asia, for example

FIGURE 1

Relationship between the 44 indicators and the 6 work streams of the Milan Pact

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FOOD POLICY PACT**
Adapted from BCFN,
2019 Food and Cities

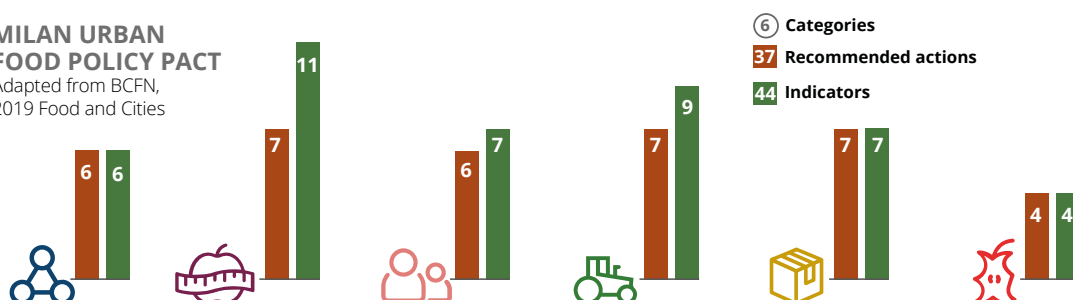
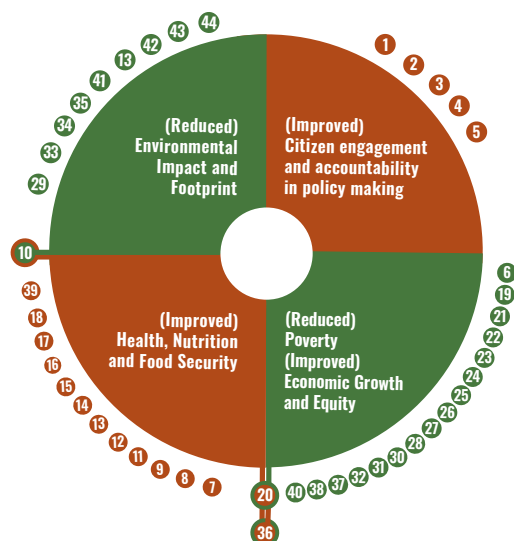


FIGURE 2

Simplified relationship between the 4 impact areas and the 44 indicators



A tool to help achieve the 2030 Agenda

In 2015, the United Nations General Assembly adopted the 17 Sustainable Development Goals (SDGs). (Figure 3)

Municipalities - with their close connections to residents, local businesses and civil society organizations - are key to the implementation of most SDGs, and not only SDG 11: *Make cities and human settlements inclusive, safe, resilient and sustainable*.

Considering that most underlying policies and investments necessary to achieve the SDGs are a shared responsibility across all levels of all governments, the 2030 Agenda needs a proper engagement and coordination with local and regional governments. The role of cities in promoting urban food policies is crucial not only to make food systems sustainable but to successfully meet the SDGs.

The MUFPP Monitoring Framework has been conceived to serve as a key tool to complement the implementation of the SDGs at local level. In practical terms, the Framework can serve as an instrument to experiment with innovative solutions and collaborations among cities and national governments on data gathering, management and dissemination, which can be scaled up in all territories. It can also contribute to help design inclusive and resilient national food policies that make our cities and connected rural-areas places of “good and equitable living.”

FIGURE 3

Sustainable Development Goals



TABLE 1 Relationship among the 6 work streams of the Milan Pact, the 44 indicators and SDG targets

MUFPP Category	INDICATOR	SDG TARGETS
Governance	1	
	2	16.6 - 17.7
	3	
	4	16.10
	5	16.10
	6	
Sustainable Diets & Nutrition	7	2.1
	8	2.2
	9	1.4
	10	2.c
	11	12.8 - 2.4
	12	2.2 - 3.4
	13	2.2 - 3.4
	14	2.2 - 3.4
	15	2.2
	16	2.2
	17	2.2
Social and Economic Equity	18	6.1
	19	2.2
	20	2.2
	21	2.3 - 8.3
	22	2.1
	23	1.3 - 1.b - 2.1 - 2.2 - 12.3
	24	4.7
Food Production	25	11.a
	26	11.a
	27	11.a - 15.5 - 15.9
	28	2.3 - 15.5 - 15.9
	29	11.a - 2.4 - 15.5 - 15.9
	30	2.4
	31	11.a
	32	11.a
	33	12.5
	34	13.2
Food Supply & Distribution	35	11.b
	36	2.2
	37	2.2
	38	12.7
	39	
	40	
Food Waste	41	4.7 - 12.3
	42	4.7 - 12.3
	43	12.3
	44	12.3

Adapted from BCFN, 2019 Food & Cities.

How to use the Monitoring Framework

The Monitoring Framework sets-out the six MUFPP workstreams (first column).

For each workstream category, the Framework then sets-out the related Outcome Areas (desired change); Recommended Actions (to achieve Outcomes) and, finally, the Indicators that relate to both the Outcome Areas and Recommended Actions.

Cities using the Framework must consider the following questions:

- What are my local food systems priorities in relation to each of the six MUFPP categories?
- What do I want to achieve in the next 2-5 years?
- What actions do I need to take to achieve those outcomes?
- Which indicators are most useful for setting a base line and monitoring ongoing progress in relation to the selected priority work areas?

An handbook, providing practical guidance for any cities wishing to adopt and implement a monitoring framework tailored to their own context is available at

<http://www.fao.org/documents/card/en/c/CB4181en/>

Indicator guidelines

To facilitate the use of Indicators, a set of Methodological Guidelines has been developed for each indicator.

Each guideline contains information on:

- the rationale for selecting this indicator
- how the indicator is constructed
- a glossary to clarify technical terms
- explanations on the types of data required
- how data can be collected
- the expertise and resources needed
- examples of how some cities have already collected and analyzed data and used this indicator.

Each guideline also highlights the connections with the SDGs and related targets.

Cities can select, adapt and group options into guidelines as necessary to suit their situations.

Links to related information material and samples of best practices are available as a complementary set of guidance materials.

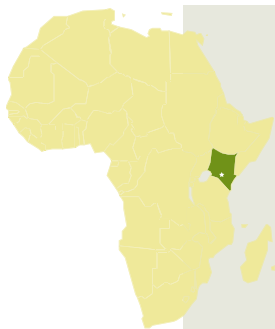
These guidelines can be downloaded, for each indicator, from the Indicators matrix (p. 18 ff.), or for all 44 indicators grouped at <http://www.fao.org/3/CB4036EN/CB4036EN.pdf>

Application of Monitoring Framework: insight from pilot cities

Through much of 2019 the cities of Antananarivo (Madagascar); Quito (Ecuador) and Nairobi (Kenya) have been participating in a pilot project to start working with the Monitoring Framework locally and to share their learning with other cities.

Each city selected several indicators that relate to key strategic priorities. Each city explored ways to identify relevant data, methods of collection and analysis to make best use of data findings. The pilot project is a 'springboard' for developing further work priorities. The Insights that follow here are related to the process of working with the Monitoring Framework rather than recommendations relating to specific indicators (this will follow – in late 2019).





Nairobi, Kenya

“The MUFPP Monitoring Framework pilot project in Nairobi has been a catalyst for bringing together different sectors within Nairobi City County (NCC) along with other key organizations. This has occurred at two key levels; firstly, the Cross-Sectoral Consultative Group (CCG) within NCC - which brings together Education, Health, Environment, Water, Planning and Trade, to engage with the Food and Agriculture Sector on the indicators and food generally - finding linkages between the indicators framework and the draft Nairobi Food System Strategy” explains Dr Karugu, Acting Head of Nairobi’s Food Systems Directorate.

The pilot project has also been a catalyst for the work of a smaller MUFPP Indicators Working Group to manage data collection and analysis that includes NCC staff, C40 (the network of megacities committed to addressing climate change), FAO and the Mazingira Institute.

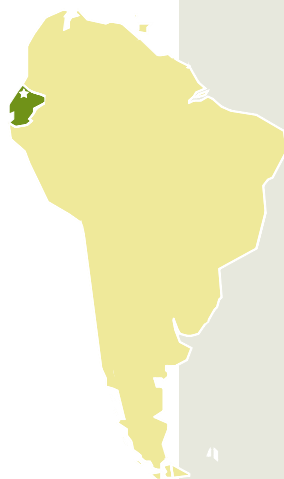
The need for data to inform the framework indicators revealed bottlenecks and obstacles in the way data is collected, shared and stored across NCC. The inter-sectoral collaboration helped to inspire solutions to improve data collection and analysis.

The indicators also helped stakeholders identify the connectivity with the food system like, for example, how market outlet indicator #36 potentially relates to health indicators #11 and #12.

“Previous work on food system assessment did not have a monitoring perspective but the MUFPP indicators now provide a basis for research/knowledge generation to contribute to measuring progress towards achieving sustainable food systems” says Rebecca Wanjiru, from the FAO Office, Nairobi.

“The MUFPP Indicators Framework helps frame C40’s future work on the food system and climate change resilience including work on linkages between waste and food – stopping waste from reaching the dump” states Stephen Otieno, Nairobi Food Advisor, C40 Cities Climate Leadership Group.

The indicator results allow stakeholders gain insights about priority food system actions and interventions which makes work purposeful and meaningful” says Winfred Katumo, Project Lead, Nairobi City County. “It’s an eye-opener, creates synergy and enables us to bring together a range of different perspectives to solve problems with new solutions” adds Katumo. “It has brought excitement among members of the Secretariat because it’s self-assessment - something new and interesting” adds Diana Lee-Smith of the Mazingira Institute.



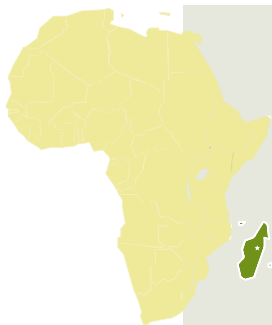
Quito, Ecuador

"Quito's participation in the MUFPP pilot indicator implementation project has allowed the city to raise awareness of and increase the commitment to change and thus empower municipal bodies" writes Alexandra Rodríguez Dueñas, Project Lead, AGRUPAR Participatory Urban Agriculture Project Manager Conquito. "The framework has helped promote the idea that everyone can be agents for change, proposing innovative themes for municipal planning to local policy makers (government, sustainable diet, reduction of food loss and waste), generating evidence of how things are, while at the same time establishing new collaborations such as the data collection process which required us to seek out other food system actors, especially those pursuing similar goals of sustainability and resilience. Participation in the pilot has also strengthened the multisectoral process that the *Quito Pacto Agroalimentario* (PAQ)^{vii} has promoted since 2017."

"Generation of knowledge has promoted significant change in practices. The process has given Quito the opportunity to reflect carefully on the experiences of those least served by the current food system in the city. For example, greater familiarity with residents' daily struggles for survival as well as their knowledge, priorities and beliefs around creating a healthier and more sustainable world. We have also reflected in greater depth on the approaches to developing transformation processes and what this means for the design of our own data collection, analysis and interventions."

"The process has clarified many specific gaps in Quito's food system monitoring such as the lack of ways of systematizing experiences, the absence of reliable data and lack of measurement of actions. We have encountered a lack of interest among some city officials and the absence of public policy related to many important food system issues. In Quito this process has been important, and we are trying to focus on and value the diversity of knowledge and experiences that coexist in each social process and in each of the interventions that are analyzed" concludes Ms Rodríguez Dueñas."

vii <http://gobiernoabierto.quito.gob.ec/wp-content/uploads/documentos/sistemaagro/index.html>



Antananarivo, Madagascar

The Commune Urbaine d'Antananarivo (CUA), the city's governing body, began defining its strategic vision - identifying priorities and contributing to a food policy action plan in 2017. A team was established within the 1st Deputy Mayor's office, to facilitate the coordination of the different CUA departments involved in food policy actions (social development, education and nutrition, urban planning and finance).

The lead officer worked closely with key stakeholders (public and private actors, CSOs, NGOs, research and academic institutions) to develop joint strategies and coordinate the data collection process to identify food policy impacts. This action led to the decision to implement the MUFPP Monitoring Framework to organize existing food system data within the CUA's internal database and the data being generated by CUA partners.

The MUFPP pilot process is helping to determine the level of priority that food has within the municipality's agenda.

As an outcome of the project, CUA received an enthusiastic response from all stakeholders, willing to participate in the further consolidation of a multi-sectorial approach through the creation of the first Antananarivo Food Policy Committee.

The data collection process has significantly contributed to a participatory decision-making process, through sharing of data, and the evaluation of priorities to be included in future action plans led by external actors and by the CUA initiatives.

Stakeholders have understood that the municipality is eager to support them and facilitate the development of a common action plan oriented to improve the city's food chain. The collected data will be shaped into a single document, which will relate to the six MUFPP working areas - and for each working area a set of indicators adapted to the local context will be determined for future monitoring. In addition, a set of Guidelines and recommended actions will be proposed to accompany the Food Policy Committee's vision.

"This whole process has been possible thanks to FAO-RUAF technical support, which has provided us with concrete tools on how to measure existing actions and results, an exercise which has shown to be cost-effective and sustainable for the future of the policy implementation" states Tokiana Rakotonirainy, Food Policy Officer, Cabinet of the Mayor, Urban Commune of Antananarivo.

The city of Milan itself has begun work on the Monitoring Framework to include new metrics in the monitoring and evaluation system of the city. Italy's most populous metropolis is presently conducting pilot baseline assessment in collaboration with public-private stakeholders on food waste and public procurement in line with the proposed MUFFP indicators.

As per the Milan Food Policy priorities, voted in 2015 by the City Council^{viii}, the Municipality of Milan has clear goals for the city food system^{ix}- and these are:

- Guaranteeing healthy food for everybody
- Promoting the sustainability of the food system
- Providing food culture and nutrition education
- Fighting waste
- Supporting and promoting scientific research in the agri-food sector

The MUFFP Monitoring Framework is therefore becoming the preferred tool to track Food Policy actions and advancements, as well as the instrument to contribute to achieving the SDGs in the city.

In 2019, Milan was in the process of evaluating the Indicators before implementation and the work consists of selecting relevant Indicators for specific contexts, mapping the availability of data and developing a management system to update information. While having a systemic Food Policy has been an undoubted advantage (and guided the process thoroughly), the Municipality is attempting to minimize the number of Indicators, in order to implement the most significant ones.

viii <http://www.foodpolicymilano.org/wp-content/uploads/2019/03/DGC-25-2015.pdf>

ix <http://www.foodpolicymilano.org/>

Indicators matrix

MUFFP WORK STREAM	OUTCOME AREA	RECOMMENDED ACTION ^x
Governance (enabling effective action)	Participatory food governance structures exist and are cross-jurisdictional, cross-sectorial and multi-stakeholder.	1. Facilitate collaboration across city agencies and departments and seek alignment of policies and programmes that impact the food system across multiple sectors and administrative levels.
	Participatory food governance structures enhance transparency, ownership, collaboration and co-investment among multiple stakeholders.	2. Enhance stakeholder participation at the city level through political dialogue, as well as through education and awareness raising.
	Urban food system policies, legislation, and strategies exist and are integrated into other policies, planning processes and programmes.	4. Develop or revise urban food policies and plans and ensure allocation of appropriate resources within the city administration.
	Knowledge sharing mechanisms are developed and used for food policy development and accountability by enhancing the availability, quality, quantity, coverage and management and exchange of data related to urban food systems (including both formal data collection and data generated by civil society and other partners).	3. Identify, map and evaluate local initiatives and civil society food movements in order to transform best practices into relevant programmes and policies.
		5. Develop or improve multisectoral information systems for policy development and accountability.
	The food system is being included in city disaster and resilience assessments and response plans.	6. Develop a disaster risk reduction strategy to enhance the resilience of urban food systems.

X. The numbering of the recommended actions respects the MUFFP declaration.

INDICATOR ^{xi}

1. Presence of an active municipal interdepartmental government body for advisory and decision-making of food policies and programmes (e.g. interdepartmental food working group, food policy office, food team).

This allows for (self)assessment of the presence, multi-stakeholder representation and integration, functioning and effectiveness of an interdepartmental/sectoral food coordination body or mechanism. Furthermore, it helps identify areas for improvement.

2. Presence of an active multi-stakeholder food policy and planning structure (e.g. food policy councils, food partnerships, food coalitions...).

This enables (self)assessment of the presence, multi-stakeholder representation and functioning and effectiveness of a multi-stakeholder body or mechanism for urban food policy and planning. Furthermore, it helps identify areas for improvement.

3. Presence of a municipal urban food policy or strategy and/or action plans.

This enables (self)assessment of the presence and level of implementation of a municipal urban food strategy/ policy and/or action plan. If desired, critical assessment of the actual strategy/policy and/or action plan itself may be implemented. Both exercises help define areas for improvement.

4. Presence of an inventory of local food initiatives and practices to guide development and expansion of municipal urban food policy and programmes.

This enables (self)assessment of the presence and use of an inventory of local food initiatives and practices to guide development and expansion of municipal urban food policy and programmes. It may spur new development or “actualization” of such inventory and define recommendations for better use.

5. Presence of a monitoring/evaluation mechanism for assembling and analyzing urban food system data to inform municipal policy making on urban food policies.

Allows for (self)assessment of the presence and use of a monitoring/evaluation mechanism for assembling and analyzing urban food system data. Actual monitoring/evaluation will enable reflection on the experiences gained with urban food policies, impacts achieved and will inform and improve further municipal food policy making and reporting.

6. Existence of a food supply emergency/ food resilience management plan for the municipality (in response to disasters; vulnerabilities in food production, transport, access; socio economic shocks etc.) based on vulnerability assessment.

Allows for (self)assessment of the presence and level of implementation of a food supply emergency/ food resilience management plan. If desired, critical assessment of the actual plan may be implemented. Both exercises help define areas for improvement.

xi. Based on city feedback, revisions from FAO and RUAF in 2019 and 2021, and development of the methodological guidelines

MUFFP WORK STREAM	OUTCOME AREA	RECOMMENDED ACTION
Sustainable diets and nutrition	Urban residents have access to affordable, sufficient, nutritious, safe, adequate, and diversified food that contribute to healthy diets and meet dietary needs.	7. Promote sustainable and healthy diets.
	Decrease in prevalence of non-communicable diseases and improved diet-related health outcomes in specific communities.	8. Address non-communicable diseases associated with poor diets and obesity.
	Food, health and educational policies address and improve sustainable diets and nutrition and coordinates action between health, environment and food sectors.	9. Develop sustainable dietary guidelines.
		11. Explore regulatory and voluntary instruments to promote sustainable diets. 12. Encourage joint action by health and food sectors.
		10a. Adapt standards and regulations to make sustainable diets accessible in public and private sector facilities.
	All residents have access to safe drinking water and sanitation.	10b. Adapt standards and regulations to make safe drinking water accessible in public and private sector facilities. 13. Invest in and commit to achieving universal access to safe drinking water

INDICATOR

7. Minimum dietary diversity for women of reproductive age.

Assess dietary quality at individual level, specifically looking at women of reproductive age. It is a proxy for the probability of micronutrient adequacy of women's diets.

8. Number of households living in "food deserts."

Measures the geospatial distribution of the food retail establishments and of socioeconomic population groups to analyze number (or percentage) of households living at a certain distance from food markets.

9. Costs of a nutritious food basket at city/community level.

Measures the medium cost of a diet meeting the minimum requirements of macro- and micronutrients or food based dietary guidelines e.g. a weighted food price index.

10. Individual average daily consumption of meat.

NB: This is not a normative indicator on recommended daily intake of meat; it measures meat consumption in order to address sustainable and healthy diets from an environmental perspective.

11. Numbers of adults with Type 2 diabetes.

Measures number (percentage) of adults with Type 2 diabetes.

12. Prevalence of stunting for children under five years of age.

Measures prevalence of stunting (poor linear growth) among children under five.

13. Prevalence of overweight or obesity among adults, youth and children

Measures prevalence of overweight or obesity among adults, youth and children (it involves body weight and height measurements for different age and gender groups to determine the percentage of populations that are overweight or obese).

14. Number of city-led or supported activities to promote sustainable diets

Measures the number of city-led or supported activities to promote sustainable diets (data may be disaggregated by type of activity and target audience).

15. Existence of policies/programmes that address sugar, salt and fat consumption in relation to specific target groups (e.g. general public, in hospitals and schools).

Measures the existence of laws/regulations/ policies/ programmes that address sugar, salt and fat consumption in relation to specific target groups (general public, in hospitals and schools).

16. Presence of programmes/policies that promote the availability of nutritious and diversified foods in public facilities.

Monitors presence of programmes/policies that promote the availability of nutritious and diversified foods in public facilities.

17. Percentage of population with access to safe drinking water and adequate sanitation.

Measures the percentage of population with access to safe drinking water and adequate sanitation. By disaggregating the data spatially and by different socioeconomic strata, it is possible to identify which parts of the population are being left behind.

MUFFP WORK STREAM	OUTCOME AREA	RECOMMENDED ACTION
Social and economic equity	Increase in level of food security for specific vulnerable groups.	<p>14. Use cash and food transfers, and other forms of social protection systems to provide vulnerable populations with access to healthy food.</p>
		<p>15. Re-orientate school feeding programmes and other institutional food services to provide healthy and local/regional food.</p>
	Fair and decent (formal and informal) jobs and income opportunities exist for small-scale producers, workers (including youth and women) and businesses throughout the food system.	<p>16. Promote decent employment for all, within the food and agriculture sector, with the full inclusion of women.</p> <p>17. Encourage and support social and solidarity economy activities, that support sustainable livelihoods in the food chain and facilitate access to safe and healthy foods.</p>
	Food policies address and improve social inclusion.	<p>18. Promote networks and support grassroots activities that create social inclusion and provide food to marginalized individuals.</p>
	Local communities are equipped with knowledge, skills and expertise to develop local food system activities.	<p>19. Promote participatory education, training and research in strengthening local food system action.</p>

INDICATOR

18. Percentage of food insecure households based on the Food Insecurity Experience Scale (FIES).

Measures severity of food insecurity experience based on the FIES (an indicator of food access, not diet quality).

19. Percentage of people supported by food and/or social assistance programmes.

Measures the take-up (or usage) of food and/or social assistance support through programmes that target vulnerable groups that are struggling to feed themselves. Over time, this indicator should show how take-up is increasing or decreasing.

20. Percentage of children and youth (under 18 years of age) benefitting from school feeding programmes.

Measures the proportion of children and youth (everyone under 18 years old) attending school who benefit from a school feeding programme.

21. Number of formal jobs related to the urban food system that pay at least the national minimum or living wage.

Measures the total number of formal paid jobs that the urban food system provides at (and above) the level of a nationally accepted minimum or living wage.

NB: If it is NOT possible to quantify jobs paid at least the national minimum or living wage, the focus should be to quantify the total number of formal paid jobs in the food system.

22. Number of community-based food assets in the city.

Measures the number of community-based food assets in the city, such as community kitchens, community gardens, community shops, cafes, food hubs...

23. Presence of food-related policies and targets with a specific focus on socially vulnerably groups

Allows for (self)assessment of the presence, and the level of implementation of food-related municipal policies and targets, that either directly target vulnerable groups or do so indirectly by supporting and enabling the grass-root activities of community-based networks to increase social inclusion and provide food to marginalized individuals.

24. Number of (types of) opportunities for food-related learning and skill development in food and nutrition literacy, employment training and leadership.

Number of opportunities (courses, classes, etc.) for food system-related learning and skill development in three different categories: food and nutrition literacy; employment training and leadership. This indicator will support gathering baseline data on which to base analysis of gaps, needs, opportunities, and to develop further action.

MUFFP WORK STREAM	OUTCOME AREA	RECOMMENDED ACTION
Food production	Urban and peri-urban food production and processing capacity is optimized and lessen dependence on distant food supply sources.	20. Promote and strengthen urban and peri-urban food production and processing.
	Urban planners protect the local agricultural resource base and use in land use and city development plans.	23. Protect and enable secure access and tenure to land for sustainable food production in urban and peri-urban areas. 22. Apply an ecosystem approach to guide holistic and integrated land use planning and management.
	Producers have the required knowledge, skills and expertise.	24. Help provide services to food producers in and around cities.
	Efficient and diverse agricultural supply and value chains connect the city with food producers in the peri-urban and surrounding rural area providing access to a wide range of market opportunities.	21. Seek coherence between the city and nearby rural food production, processing and distribution. 25. Support short food chains, producer organizations, producer-to-consumer networks and platforms.
	Strengthen connection between urban and rural areas through recycling and re-use of organic waste, water and energy.	26. Improve (waste) water management and re-use in agriculture and food production.

INDICATOR

25. Number of city residents within the municipal boundary with access to an urban (agricultural) garden.

Measures the accessibility of city residents (and specific target groups) to urban agricultural gardens/land. In order to account for geographic, economic and social differences across cities in access to gardens, the indicator will only reflect impact accurately if data is filtered by geospatial location, population density, income levels etc.

26. Presence of municipal policies and regulations that permit and promote agriculture production and processing within the municipal area.

Assesses the presence of supportive municipal policies and regulation that permit and promote urban agriculture production and processing. It will help define gaps or areas for improvement by revising/ formulating new policies and regulations.

27. Surface area of (potential) agricultural spaces within the municipal boundary.

Monitors the surface area of land within the municipal boundary used for agriculture, zoned/destined for agriculture (although possibly not used at this moment) as well as open vacant and built up spaces that could potentially be used for agriculture.

28. Proportion of total agricultural population –within the municipal boundaries - with ownership or secure rights over agricultural land for food production, by gender.

Monitors ownership and rights over agricultural land by specifically promoting data disaggregation by gender.

29. Proportion of agricultural land in the municipal area under sustainable agriculture.

Measures the total agricultural area in the municipality (also referred to as urban and peri-urban agriculture) under sustainable agriculture (as per the total are of agricultural land in the municipal area).

30. Number of food producers that benefited from technical training and assistance in the past 12 months.

Tracks the number of food producers (horticultural growers, smallholders and farmers) in and close to the city who have received technical training and assistance over a given time period (e.g. last twelve months).

31. Number of municipal food processing and distribution infrastructures available to food producers in the municipal area.

Monitors the number (and type of) municipal infrastructure for storage, processing and distribution of food located in the municipal area, including storage buildings, processing plants, transport facilities and (wholesale and consumer) markets.

32. Proportion of local/regional food producers that sell their products to public markets in the city.

Monitors the share of local/regional food producers that sell (part of) their products to one or more public market outlets in the city

33. Annual proportion of urban organic waste collected that is re-used in agricultural production taking place within municipal boundaries.

Measures the percentage of urban organic waste collected and recycled that is re-used in urban and peri-urban agriculture production.

MUFFP WORK STREAM	OUTCOME AREA	RECOMMENDED ACTION
Food supply and distribution	Food flow assessment is done and increases understanding of possible impacts resulting from targeted improvements in the food chain.	27. Assess the flows of food to and through cities.
	Local food processing, storage and distribution capacity is improved and optimized.	28. Support improved food storage, processing, transport and distribution technologies and infrastructure linking peri-urban and near rural areas.
	Food market functioning and infrastructure is improved and optimized.	31. Provide policy and programme support for municipal public food markets. 32. Improve and expand support for infrastructure related to food market systems.
	Public procurement and trade policies facilitate local and sustainable food supply and distribution.	30. Review public procurement and trade policy aimed at facilitating food supply from short chains.
	Food processing, retail and catering sectors comply with sanitation and food safety regulations.	29. Assess, review and/or strengthen food control systems.
	Inclusion of the informal sector	33. Acknowledge the informal sector's contribution to urban food systems

INDICATOR

34. Existence of policies/programmes that address the reduction of GHG emissions in different parts of the food supply chain (e.g. processing, storage, transport, packaging, retail, cooking, waste disposal etc.).

Assesses the existence of policies/programmes that address the reduction of GHG emissions in different parts of the food supply chain (e.g. processing, storage, transport, packaging, retail, cooking, waste disposal etc.).

35. Presence of a development plan to strengthen resilience and efficiency of local food supply chains logistics.

Allows for (self)assessment of the presence, functioning and effectiveness of a development plan to strengthen resilience and efficiency of local food supply chains logistics. It also helps to define areas for improvement.

36. Number of fresh fruit and vegetable outlets per 1000 inhabitants (markets and shops) supported by the municipality.

Measures the number of food markets or retail outlets providing fresh fruit and vegetables per 1000 inhabitants that are directly supported by the municipality in some way.

37. Annual municipal investment in food markets or retail outlets providing fresh food to city residents, as a proportion of total (investment) budget.

Measures annual municipal investment in food markets or retail outlets providing fresh food to city residents, as a proportion of total investment budget (or whichever budget is appropriate for city).

38. Proportion of food procurement expenditure by public institutions on food from sustainable, ethical sources and shorter (local/regional) supply chains.

Measures the proportion of food procurement expenditure by public institutions on food from sustainable, ethical sources and shorter (local/regional) supply chains. Indicator also measures presence of a set of criteria to drive an increase in the proportion of food procurement expenditure by public institutions on food from sustainable, ethical sources and shorter (local/regional) supply chains.

39. Presence of food safety legislation and implementation and enforcement procedures

Allows for (self)assessment of the presence, implementation and enforcement procedures for food safety legislation.

40. Existence of support services for the informal food sector providing business planning, finance, development advice.

Assesses the existence of support services for the informal food sector providing business planning, finance and development advice. The focus here is primarily in relation to sanitation and food safety regulations, but it is important to look at wider support needs and provision – e.g. infrastructure, skills etc.

MUFFP WORK STREAM	OUTCOME AREA	RECOMMENDED ACTION
Food waste	Food loss and waste is reduced (or re-used) throughout the food system.	<p>34. Convene food system actors to assess and monitor food loss and waste reduction at all stages of the city region food supply chain.</p> <p>35. Raise awareness of food loss and waste through targeted events and campaigns.</p>
	Food loss and waste policies and regulations are developed and supported by a broad range of stakeholders.	36. Collaborate with the private sector along with research, educational and community-based organizations to develop and review, municipal policies and regulations to prevent waste or safely recover food.
	Increase in the volume of safe food recovered and distributed for human consumption.	37. Save food by facilitating recovery and redistribution for human consumption.

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INDICATOR

41. Total annual volume of food losses and waste

Measures (decrease in) total annual volume of food losses and waste.

42. Annual number of events and campaigns aimed at decreasing food loss and waste.

Collects information on the types of activities (events, campaigns, research studies), targeted sectors (households, business, food service, manufacturing, production etc.) and - if applicable - the actual impact on food waste reduction.

43. Presence of policies or regulations that address food waste prevention, recovery and redistribution.

Measures presence of policies or regulations that address food waste prevention, reduction, recovery and redistribution of safe and nutritious food for direct human consumption.

44. Total annual volume of surplus food recovered and redistributed for direct human consumption.

Measures the totality of available food recovered and redistributed for direct human consumption along the entire urban food supply chain, occurring from the time at which availability is recorded (in urban and peri-urban areas) until it reaches and is used by the final urban consumer as food.

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