**Indicator 5:** Presence of a mechanism for assembling and analysing urban food system data to monitor/evaluate and inform municipal policy making on urban food policies.

**MUFPP framework of actions’ category: Governance**

The indicator allows for (self) assessment of the presence and use of a monitoring/evaluation mechanisms for assembling and analysing 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.

**Overview table**

<table>
<thead>
<tr>
<th>MUFPP Work stream</th>
<th>Governance: Ensuring an enabling environment for effective action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUFPP actions</strong></td>
<td>Develop or improve multi-sectoral information systems for policy development and accountability by enhancing the availability, quality, quantity, coverage and management and exchange of data related to urban food systems, including both primary data collection, and secondary data generated by civil society and other partners.</td>
</tr>
<tr>
<td><strong>What the indicator measures</strong></td>
<td>The indicator allows for (self) assessment of the presence and use of a monitoring/evaluation mechanisms for assembling and analysing 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.</td>
</tr>
<tr>
<td><strong>Which variables need to be measured / what data are needed</strong></td>
<td>Presence of a monitoring/evaluation mechanism (yes/no); Form and use of the monitoring/evaluation mechanism (with use of a scoring sheet).</td>
</tr>
</tbody>
</table>
| **Unit of measurement** (i.e. Percentages, averages, number of people, etc.) | Metrics used:  
- Type of data and information collected;  
- Use there-off;  
- Type and level of data disaggregation;  
- Stakeholders responsible for data collection;  
- Data accessibility. |
Note that for actual data collection and analysis on the urban food system/policy, the entire set of indicators provided under the Milan Urban Food Policy Pact Monitoring Framework can be used.

**Unit(s) of Analysis (i.e people under 5 years old, etc.)**
In terms of users of the information, different user groups and stakeholders can be distinguished.

**Possible sources of information of such data**
Self-assessment among stakeholders involved in urban food policies/strategies/action plans (including those participating in an interdepartmental coordinating or multi-stakeholder food body). Possibly validated by assessment of external actors.

**Possible methods/tools for data-collection**
- Group discussion for self-assessment, most likely the cheapest approach
- Key informants interviews
- User surveys

Note: For actual data collection and analysis a large variety of secondary and primary research tools can be applied.

**Expertise required**
Experience with process and impact monitoring is required for actual urban food system assessment, data collection and analysis.

**Resources required/estimated costs**
The (self) assessment will not require a large amount of funding. It can for example be implemented during a meeting of an interdepartmental coordinating or multi-stakeholder food policy and planning body if these exist. Note that implementation of actual urban food system monitoring, data collection and analysis requires high amounts of staff time and resources. Development of a comprehensive food system assessment may costs from USD 50,000-150,000 depending on existing data availability and the set scope of the assessment and evaluation.

**Specific observations**
The Municipality of Curitiba, Brazil has a Municipal Plan of Food and Nutrition Security (http://multimidia.curitiba.pr.gov.br/2017/00188887.pdf or http://www.curitiba.pr.gov.br/conteudo/1-plano-municipal-de-seguranca-alimentar-e-nutricional/2809) which includes goals and indicators for various actions related to food and nutritional security. Separate work and monitoring sheets (derived from the Municipal Plan for Food and Nutrition Security) are designed for each of the involved municipal organs or programmes that interface with food and nutritional security. Data collected are also discussed in the Municipal Council for Food and Nutrition Security for monitoring and decision making.

**Examples of application**
The Municipality of Curitiba, Brazil has a Municipal Plan of Food and Nutrition Security (http://multimidia.curitiba.pr.gov.br/2017/00188887.pdf or http://www.curitiba.pr.gov.br/conteudo/1-plano-municipal-de-seguranca-alimentar-e-nutricional/2809) which includes goals and indicators for various actions related to food and nutritional security. Separate work and monitoring sheets (derived from the Municipal Plan for Food and Nutrition Security) are designed for each of the involved municipal organs or programmes that interface with food and nutritional security. Data collected are also discussed in the Municipal Council for Food and Nutrition Security for monitoring and decision making.

**Rationale/evidence**
Any food policy development process should be based on a thorough assessment of the current urban food system in the city and ongoing trends. This requires collection of food system data (e.g. on food consumption, production, employment in the food system, nutrition, food supply sources etc.) and analysis of these data to **design food-related policy and programmes**. Such assessment will provide appropriate information to the various stakeholders to enter into dialogue, facilitate joint goal setting and strategic action planning and establish baseline data and indicators for monitoring and evaluation. Assessments of the urban food system can be undertaken in various ways (e.g. rapid mainly qualitative appraisal versus more systematic data gathering including statistically representative quantitative data), using a variety of methods (e.g. review of available research data and available statistics, GIS mapping, key informants, focus group interviews, community food mapping, and use of surveys)1.

Policy monitoring/evaluation also requires the setting of measurable goals and targets to allow for **policy revision and reporting**. A large number of food policies or programmes reviewed by Baker and

de Zeeuw (2015) do not contain measurable goals, which makes it difficult to monitor to what extent the expected changes in the urban food system are realised.

It is acknowledged that impact monitoring is a complex and costly task (e.g., How to filter out other influences on the urban food system?). Costs and relevance of impact monitoring should therefore be balanced with process and progress monitoring. For example, if we know that education and training are key to both lowering GHG emissions and improving health outcomes, it may make more sense to monitor a number of activities, resources, partners etc. engaged in education and training, instead of actually monitoring GHG emissions which is a quite difficult and costly process.

Any monitoring should therefore ideally encompass both food policy formulation and implementation process (approach/methods applied, inter-institutional cooperation, civic participation, etc.), progress (activities implemented and outputs realised), as well as the (social, environmental, economic) impacts obtained: the degree of realisation of the desired changes in the urban food system as a result of the interventions, as well as unintended impacts.

Following such reasoning, the City of Milan established in 2017 a set of Food Policy Guidelines that identify the need to develop a monitoring system for the food policy itself, as well for the impacts of the food policy on the food system. The Toronto Food Strategy developed a monitoring matrix for Food Policy Analysis: it analysed each project and presented overlapping themes for food systems change. So far key impact indicators on poverty, health, etc. are not used as this diverts too much energy and resources from other projects. In specific cases, monitoring is done at project specific level.

Ideally, data collected will be disaggregated for different income groups and spatial levels (different areas in the city; urban/rural areas). Spatial location of data for example will allow to geographically link specific indicator data to specific areas in the city as a basis for further planning. It is important to note that data collected might be local government data, but could also include information and data collected by community organisations, NGOs or academic institutions that pertain to the city overall. To get a more objective view on the effects of the actions undertaken in the context of the implementation of an urban food policy/strategy, it may be even necessary to ask an independent research institute to periodically assess the changes in the urban food system applying the targets and indicators set in the policy or strategy. That means that it is important to distinguish "city as geography" and "city as government". Both are relevant here.

Finally, data collected should be made available to the public domain, for reasons of accountability. Multi-stakeholder participation in data analysis and policy design and review will enhance inclusiveness and efficiency gains (see further Indicator 2 Presence of an active multi-stakeholder food policy and planning structure).

Glossary/concepts/definitions used

Cities use different food monitoring/evaluation mechanisms:

- Ede Municipality (the Netherlands) for example reports on the individual food programme objectives via a dashboard. Dashboards provide at-a-glance views of data and indicators. The dashboard is often displayed on a web page which is linked to a database that allows the report to be constantly updated.
- As indicated, the Municipality of Curitiba uses a set of monitoring sheets.

---

• RUAF and FAO developed a City Region Food System Indicator Framework. The City Region Food System indicator framework is a practical assessment and planning tool designed to help cities to (1) Assess the current status and performance of a city region food system following a whole-system approach; (2) Identify priority areas for action with clear desired outcomes and ways of measuring change; (3) Help with planning strategy and action to achieving the desired outcomes; and (4) Establish baselines and monitor changes resulting from (future) policy and programme implementation.

• The UK Sustainable Cities Network developed a monitoring toolbox that has two main purposes. The first is to provide local authorities and policy makers in the UK with a clear, robust and comprehensive collation of relevant evidence and indicators of success of a place-based approach to food. The second is to help both existing and interested ‘practitioners’ to plan, implement, monitor and evaluate the impact of their Sustainable Food Cities programmes. For this purpose, a common framework and approach that is sufficiently flexible to account for differing local circumstances and priorities was developed.

• This methodological guideline is part of the Milan Urban Food Policy Pact Indicator Framework that can be applied by cities to monitor implementation and outcomes related to the Milan Pact Voluntary Framework of Action.

Preparations
For the self-assessment:

1. In case a monitoring/evaluation mechanism exists: organisation of a meeting with different stakeholders involved in collection and analysis of urban food system data. The monitoring guidelines can be shared with all involved prior to the meeting.

2. In case such monitoring/evaluation mechanism does not exist: the indicator can be reported on by the contact person in the city for urban food policies and the Milan Pact. The exercise may contribute to a (future) reflection and planning process on the importance, role and set up of such mechanism.

3. The (self) assessment can be validated with selected external stakeholders, specifically to get their views on use and accessibility of information. Alternatively or in addition a user survey could be implemented to get information on type of users, frequency of use, what the information was used for and how use of the information supported project or policy design and review.

In case other evaluations methods are selected (key informant interviews, user survey) respective preparations should be taken.

Sampling
Preferably all –as many as possible- stakeholders involved in urban food system data collection, analysis, monitoring and evaluation should participate in the monitoring exercise.

---

3 This City Region Food System Indicator Framework is part of the City Region Food Systems (CRFS) toolkit to assess and plan sustainable city region food systems. The toolkit has been developed by FAO, RUAF Foundation and Wilfrid Laurier University.

In addition, a randomly sampled number of external stakeholders and/or of potential users of the inventory could be asked if they are aware of the existence of such monitoring/evaluation mechanisms and if they have ever accessed/used it.

**Data collection and data disaggregation**

During a monitoring/review meeting the following table can be discussed and filled. Specific observations made during the meeting can be added in the final column. Also recommendations for improvement can be added here.

**Scoring sheet**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Scoring</th>
<th>Total score</th>
<th>Disaggregation of information</th>
<th>Observations/Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of a monitoring/evaluation mechanism for assembling and analysing urban food system data to inform municipal policy making on urban food policies.</td>
<td>Yes= 1 point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No= 0 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The monitoring/evaluation mechanism monitors the food policy formulation and implementation process (approach/methods applied, inter-institutional cooperation, civic participation, etc.)</td>
<td>Yes in a comprehensive way= 2 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partially = 1 point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No = 0 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The monitoring/evaluation mechanism monitors the food policy formulation and implementation progress (activities implemented and outputs realised)</td>
<td>Yes in a comprehensive way= 2 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partially = 1 point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No = 0 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The monitoring/evaluation mechanism monitors the (social, environmental, economic) impacts obtained as a result of food interventions</td>
<td>Yes in a comprehensive way= 2 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partially = 1 point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No = 0 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information and data collected are disaggregated</td>
<td>Yes, for all data and variables= 2 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partially = 1 point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No = 0 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use is made of data and information collected by different stakeholders (government, NGOs, research, private sector)</td>
<td>Yes, full use of information by several stakeholders =2 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partial use or only a limited number of stakeholders = 1 point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No = 0 points</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Describe the mechanism and what it is used for (e.g. design of policies, monitoring and revision of policies and programmes, reporting, resource negotiations).

Type of data collected and tools used.

Type of data collected and tools used.

Type of data collected and tools used.

Type and level of data disaggregation.

What stakeholders are using which data and in what way?
### Category Governance - Indicator 5

<table>
<thead>
<tr>
<th>Monitoring/evaluation data are freely accessible in the public domain</th>
<th>Yes for all data and all stakeholders = 2 points</th>
<th>Partially = 1 point</th>
<th>No = 0 points</th>
<th>Analysis of what data are accessible, where /how, at what costs and to whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring/evaluation data are fed back into multi-stakeholder policy planning and review</td>
<td>Yes, fully = 2 points</td>
<td>Partially = 1 point</td>
<td>No = 0 points</td>
<td>Describe what data are used, how and how this impacts policy planning and review</td>
</tr>
</tbody>
</table>

**Total score:**

---

**Data analysis/calculation of the indicator**

Based on the scoring and further (disaggregated) information provided, recommendations for strengthening or improving mechanism for assembling and analysing urban food system data. Preferably, such action plan would be developed in the same or a following meeting of stakeholders involved, during which each of the members confirm their commitments and agree on concrete actions. The self-assessment exercise can be repeated once a year to monitor uptake of agreed improvements/changes.

Results of actual assessments and monitoring/evaluation can be used by the local government as well as other stakeholders engaged in the urban food system to design, review and improve their policies and programmes. Making data available to decision-makers and budget-holders will support lobbying and negotiations for resource allocations.