



Food and Agriculture
Organization of the
United Nations



Milan Urban Food Policy Pact Monitoring Framework

July 2018 version

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

MUFPP framework of actions' category: Social and economic equity

The indicators measures severity of food insecurity experience based on the Food Insecurity Experience Scale (FIES). This is an indicator of food access, not diet quality.

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	Use cash and food transfers, and other forms of social protection systems to provide vulnerable populations with access to healthy food . This is as a means of increasing the level of food security for specific vulnerable groups.
What the indicator measures	Severity of food insecurity experience based on the Food Insecurity Experience Scale (FIES). This is an indicator of food access, not diet quality.
Which variables need to be measured / what data are needed	The data are collected using the FIES Survey module, composed of 8 yes/no questions asked to an adult respondent. The choice of additional variables to collect in the survey will depend on the objective of the survey, but should include at a minimum basic demographic information.
Unit of measurement (i.e. Percentages, averages, number of people, etc.)	Percentage people or households experiencing moderate or severe food insecurity.
Unit(s) of Analysis (i.e. people under 5 years old, etc.)	Households or individuals
Possible sources of information of such data	The FIES survey module can be included in many types of surveys, such as health and nutrition surveys and household income and expenditure surveys.
Possible methods/tools for data-collection	The FIES survey module (individual or household version)
Expertise required	Survey methodology and statistical analysis
Resources required/ estimated costs	Human and financial resources to include an 8-item survey module in a population survey, collect data in the field and conduct data analysis.

Specific observations	<p>The FIES data has been collected by FAO in over 145 countries since 2014 in the Gallup World Poll. The global data reveal that the FIES results show significant and high correlations in the expected direction with most accepted indicators of development, including child mortality, stunting, poverty measures and the Gini index.</p> <p>The FIES can be used to estimate the prevalence of moderate or severe food insecurity at the municipal level when the FIES survey module is included in a survey that is representative of the municipal population. It depends on the sample design.</p>
Examples of application	<p>National survey data in Brazil in 2004, based on the Brazilian Food Insecurity Scale (a predecessor of the FIES), found significant differences in household food insecurity levels among the five geographical regions of the country¹. Evidence of these stark regional inequalities convinced the Brazilian government to direct resources and public policies toward the more vulnerable regions. Many other examples can be found in Lesson 5 of the FAO e-learning course: SDG Indicator 2.1.2 – Using the Food Insecurity Experience Scale. Available at: http://www.fao.org/elearning/#/elc/en/course/SDG212.</p>

Rationale/evidence

Access to enough nutritionally adequate food was declared a basic human right at the World Food Summit in Rome in 1996.

The United Nations Food and Agriculture Organization (FAO) has undertaken a project called Voices of the Hungry (VoH) to develop and support a survey-based experiential measure of access to food, called the Food Insecurity Experience Scale (FIES). It is an experience-based metric of severity of food insecurity that relies on people's direct responses to a series of questions regarding their access to adequate food.

A growing number of national governments are adopting the FIES. Its ease of application makes it accessible to people at many levels and from diverse fields, although data analysis requires a solid statistical background. Local governments, non-governmental organisations and advocacy groups can also appropriate this relatively simple instrument to monitor food insecurity locally or regionally, engaging diverse stakeholders in the process, and building bridges between people of different backgrounds. This may in fact be where their greatest potential lies to effect change and contribute to guaranteeing the human right to adequate food.

Glossary/concepts/definitions used

Food Security is said to exist when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Preparations

Producing this indicator requires data collection in the field from a representative sample of the population. This implies preparation of the survey questionnaire (print or CAPI), a sampling framework, training of enumerators to collect the data, data collection and analysis.

¹ Brasil/IBGE (2006). Pesquisa Nacional por Amostra de Domicílios-2004, Suplemento de Segurança Alimentar; Rio de Janeiro. Available from http://biblioteca.ibge.gov.br/visualizacao/monografias/GEBIS%20-%20RJ/segalimentar/suguranca_alimentar2004.pdf.

Sampling

The sample design must guarantee representativeness of the sub-populations of interest (e.g. those that are vulnerable to food insecurity, or specific geographic areas of the city).

Data Collection and Analysis

Data collection: 8 question survey module with dichotomous (yes/no) responses

Data analysis: Thresholds can be set on the raw score to classify the food security severity status of respondents, but Rasch analyses and probabilistic assignment are recommended (as described in the e-learning course cited below).

For detailed guides for applying the FIES survey module and analysing the data, see:

the FAO e-learning course: SDG Indicator 2.1.2 – Using the Food Insecurity Experience Scale (FIES).

Available at: <http://www.fao.org/elearning/#/elc/en/course/SDG212>.

Additional important resources can be found at the Voices of the Hungry webpage at: <http://www.fao.org/in-action/voices-of-the-hungry/en/#.WoxNck2ovcs>. See in particular “Using the FIES”: <http://www.fao.org/in-action/voices-of-the-hungry/using-fies/en/>, where translations of the FIES survey module can be found in 170 languages).

The Food Insecurity Experience Scale: Measuring food insecurity through people’s experiences. Available at <http://www.fao.org/3/a-i7835e.pdf>.

The FIES Survey Module

The FIES-SM questions refer to the experiences of the individual respondent or of the respondent’s household as a whole. The questions focus on self-reported food-related behaviours and experiences associated with increasing difficulties in accessing food due to resource constraints.

During the last 12 months, was there a time when, because of lack of money or other resources:

1. You were worried you would not have enough food to eat?
2. You were unable to eat healthy and nutritious food?
3. You ate only a few kinds of foods?
4. You had to skip a meal?
5. You ate less than you thought you should?
6. Your household ran out of food?
7. You were hungry but did not eat?
8. You went without eating for a whole day?

The set of eight questions compose a scale that covers a range of severity of food insecurity:



No single tool can account for the many dimensions of food and nutrition security. The FIES complements the existing set of food and nutrition security indicators. Used in combination with other measures, the FIES has the potential to contribute to a more comprehensive understanding of the causes and consequences of food insecurity and to inform more effective policies and interventions. Because the FIES is easy for professionals and institutions from any sector to use, its inclusion in diverse

types of surveys can help strengthen links between different sectorial perspectives, for example, between agriculture, social protection, health and nutrition.

Results from surveys that include the FIES can also be used to inform decisions regarding priorities for targeting programmes and resources. While it is not appropriate to use the FIES to identify individual beneficiaries for programmes, the information provided by population surveys that include the FIES can serve to identify vulnerable sub-populations or geographic areas that are more affected by food insecurity².

References and links to reports/tools

Ballard, T.J., Kepple, A.W. & Cafiero, C. 2013. The food insecurity experience scale: development of a global standard for monitoring hunger worldwide. Technical Paper. Rome, FAO. Available from <http://www.fao.org/economic/ess/ess-fs/voices/en/>.

Cafiero, C., Viviani, S., & Nord, M. (2018). Food security measurement in a global context: The food insecurity experience scale. *Measurement*, 116, 146-152.

FAO (2016). Methods for estimating comparable prevalence rates of food insecurity experienced by adults throughout the world. Rome, FAO. Available at: <http://www.fao.org/3/a-i4830e.pdf>

FAO (2017). The Food Insecurity Experience Scale: Measuring food insecurity through people's experiences. Available from <http://www.fao.org/3/a-i7835e.pdf>.

FAO (2018) FAO e-learning course: SDG Indicator 2.1.2 – Using the Food Insecurity Experience Scale (FIES). Available at: <http://www.fao.org/elearning/#/elc/en/course/SDG212>

Voices of the Hungry webpage: <http://www.fao.org/in-action/voices-of-the-hungry/en/#.WoxNck2ovcs>

² FAO (2017). The Food Insecurity Experience Scale. Available from <http://www.fao.org/in-action/voices-of-the-hungry/fies/en/>.



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

MUFPP framework of actions' category: Social and economic equity

The indicator 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, or speeding up/slowing down.

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	Use cash and food transfers, and other forms of social protection systems to provide vulnerable populations with access to healthy food. This is as a means of increasing the level of food security for specific vulnerable groups.
What the indicator measures	The indicator 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, or speeding up/slowing down.
Which variables need to be measured / what data are needed	Total city population; figures for different 'vulnerable' groups; audit/numbers of food assistance programmes; types and numbers of social assistance programmes that relate to food security; numbers of people using the assistance programmes (or registered to use them); data in relation to a timeframe - specific length of time that users are encouraged to participate or eligible for assistance (e.g. number of weeks or months).
Unit of measurement (i.e. Percentages, averages, number, etc.)	Percentage of the total city population in receipt of food or social assistance support because they are struggling to feed themselves.
Unit(s) of Analysis (i.e. people under 5 years old, etc.)	Data can be disaggregated by category of vulnerable groups e.g. children, families, young people, indigenous, elderly, disabled, unemployed, etc. Data could also be disaggregated by type of food or social assistance programme and by numbers of people benefiting from the different types. For example, it may be very helpful to have clear and separate data for school feeding programmes

	in order to support specific actions and monitoring ¹ . Social assistance programmes could also include unconditional cash-transfers or cash-transfers conditional to food acquisition/production.
Possible sources of information of such data	<ul style="list-style-type: none"> -National and local government statistics departments and social assistance/benefits departments -Food Security and Public Health Agencies or departments -NGO's and community sector organisations -City partnerships addressing food insecurity/poverty; -Family and Children centres; -Homeless centres; Rough sleeper initiatives -Doctor surgeries and clinics.
Possible methods/tools for data-collection	Use national food insecurity data to estimate city level data if none exists. Audit of all food/social assistance programmes. Existing report and data analysis from above sources. Interviews with key stakeholders to identify existing data or sources of data. Surveys with the above types of organisations to collect data on number of users if no overview of food and social assistance programmes exist or if there are significant gaps.
Expertise required	Data analysis and statistical expertise; interview and survey research design and analysis
Resources required/ estimated costs	
Specific observations	This indicator could become less useful if for example national or local budget cuts reduce government services and thus reduce assistance programmes and services. This could result in lower indicator figures and an incorrect assumption that this means food insecurity is reduced. In an alternative scenario, the indicator could also become less useful if for example high cost of living forces low income families and vulnerable individuals out of the city and thus reduces the demands on food or social assistance programmes.
Examples of application	Many cities collect data in relation to food insecurity: New York City, US; Brighton and Hove, UK; see notes below under References.

Rationale/evidence

Scope: While this indicator is limited in scope both in relation to the complex causes of food insecurity, and in relation to quantifying the degree to which food insecurity is prevalent within a city, it quantifies the uptake of food and or social assistance programmes which are provided to support vulnerable groups, which is probably one of the easiest indicators to measure. The resulting figure should be seen in the context of total population as well as figures for vulnerable groups. The focus should be on assistance programmes that target those most in need of help (i.e. emergency food provision), even though most likely this will represent only the people who are using it as a last resort (rather than the many more living with long-term food insecurity and missed meals).

Sustainable Development Goals (SDG's): The SDG's focus on ending poverty, fighting inequality and tackling climate change. This indicator relates to SDG goals 1 and 2, and specifically to target 1.3. Goal 1 is to 'End poverty in all its forms everywhere'. Goal 2 is to 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture'. Why does this matter? 'Extreme hunger and malnutrition remains a barrier to sustainable development and creates a trap from which people cannot easily escape. Hunger and malnutrition mean less productive individuals, who are more prone to disease and thus often unable to earn more and improve their livelihoods.'² SDG Target 1.3 is to 'Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable'. The SGD indicator for this target is 1.3.1: 'Proportion of population covered by social protection floors/systems, by sex, distinguishing

¹ Note that a separate indicator 20 on school feeding programmes is also proposed.

² UN Sustainable Development Goals <http://www.un.org/sustainabledevelopment/>

children, unemployed persons, older persons, persons with disabilities, pregnant women, new-borns, work-injury victims and the poor and the vulnerable’.

Food and cities: In the case of food, the critical challenge is to increase the level of food security for specific vulnerable groups within local communities through the provision of food assistance programmes or social assistance programmes, thus ensuring that the most vulnerable groups always have access to food. Cities need to understand the extent of food insecurity within their populations and to have appropriate assistance systems in place. They also need to know the number of people in receipt of such assistance, ideally at any given time. This may be easier to do for nationally administered cash transfers (which are more likely to have built in monitoring systems) than for other food assistance programmes.

Glossary/concepts/definitions used

Definition of ‘vulnerable populations’: In general, ‘vulnerability’ is accepted to mean susceptibility to harm or suffering. ‘Vulnerability’ is a regularly used word that means different things in different contexts.

In the context of public health, the World Health Organisation (WHO) states: ‘Vulnerability is the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters. Children, pregnant women, elderly people, malnourished people, and people who are ill or immune-compromised, are particularly vulnerable when a disaster strikes, and take a relatively high share of the disease burden associated with emergencies. Poverty – and its common consequences such as malnutrition, homelessness, poor housing and destitution – is a major contributor to vulnerability.’³

Each nation (or city) will have its own criteria to define vulnerability and identify specific vulnerable groups of people; e.g. income, educational opportunities, health status, etc. People are by definition vulnerable if they depend on food programs or social assistance or both for their wellbeing or even their survival.

Brazil, for example, defines ‘*vulnerability*’ as follows: ‘to be susceptible, to be propitious to a particular problem, due to individual, social and institutional conditions, which may or may not lead to a situation of risk, but not necessarily one is the consequence of the other. As a result of poverty, deprivation (lack of income, precarious or nil access to public services, among others) and, or, weakening of affective relationships - relational and social belonging (age, ethnic, gender or disability discrimination, among others)’. There is also a definition of ‘*risk*’: individuals and families in situations of personal or social risk and violation of rights (victims of physical, psychic and sexual violence, neglect, abandonment, threats, abuse, use of psychoactive substances, compliance with socio-educational measures, street situation, situation child labour, among others).

Clarity about types of assistance: It may be important to separate out ‘food assistance programmes’ and ‘social assistance programmes’, depending on the type of programmes available. Some cities will have clear food assistance programmes. Others will have social assistance programmes that amongst other issues also assist, directly or indirectly, with poverty and food insecurity. However it may be the case that the working or non-working poor who are eligible for some additional income through social assistance still depend on other food programs because social assistance rates are too low to support dietary diversity given the high costs of fixed expenses like rent.

The municipality of Quito, Ecuador, for example does not have a specific program of food assistance (e.g. soup kitchens or specific points of provision of food for those who receive a bonus). They only have their urban agriculture and bio-fairs programmes (distribution of surplus organic produce), and support through childcare centres for young children of 3 years, where a balanced and nutritious diet is guaranteed.

Definition of ‘food assistance programmes’: Not surprisingly definitions are complex. Over the last two decades, terms that relate to the emergency provision of food in humanitarian crisis situations at a global level have evolved. Whereas the term ‘food aid’ was commonly used (giving food directly to the hungry), there has been a shift to ‘food assistance’ in order to include cash, value vouchers or electronic funds to buy nutritious ingredients as well as direct in-kind food distribution. The World Food Programme defines food assistance as involving ‘a more complex understanding of people’s long-term nutritional needs and of the diverse approaches required to meet them [...] recognising that hunger does not occur in a vacuum. It means we must concentrate time, resources and efforts on the most vulnerable in society. It implies not just emergency interventions, but tailored, multi-year support programmes designed to lift a whole nation’s nutritional indicators.’

³ Environmental health in emergencies and disasters: a practical guide,’ WHO, 2002

However, at a global level the definitions remain unclear; for example some food assistance programmes only focus on direct food aid and cash payments while others include wider food system interventions like production or market support. 'Food assistance instruments might include direct food-based transfers (such as general rations, food-for-work, supplementary feeding or vulnerable group feeding and school feeding), food subsidies, cash transfers and vouchers (including school or user fee waivers) and agricultural and livestock support.'⁴

This is useful context for defining 'food assistance' at a city level. A city may define its food assistance programmes as purely emergency food provision for people in crisis (e.g. food banks, soup kitchens, child feeding centres, supplementary feeding programmes for mothers and babies) over a specific length of time (e.g. up to 12 months) or it could include other wider intervention programmes that aim to move people away from food insecurity in the longer term.

The Community Food Centres network in Canada provides an example of wider intervention programmes based in local communities. From the simple beginnings of one food bank in Toronto set up over 30 years ago during the recession, a national network of community food centres now exists. In addition to emergency food provision, the centres offer community kitchens and gardens, healthy drop-in meals, peri-natal support, outdoor bake ovens, affordable food markets, and community action and civic engagement programmes.⁵

In the US, the Department of Agriculture (USDA) Food and Nutrition Service's 'Supplemental Nutrition Assistance Program' (SNAP) offers nutrition assistance to millions of eligible, low-income individuals and families and provides economic benefits to communities. SNAP is the largest programme in the domestic hunger safety net. The Food and Nutrition Service works with State agencies, nutrition educators, and neighbourhood and faith-based organisations to ensure that those eligible for nutrition assistance can make informed decisions about applying for the programme and can access benefits. FNS also works with State partners and the retail community to improve programme administration and ensure program integrity.⁶

Definition of 'social assistance programmes': Social assistance programmes, usually means tested, may not specifically focus on food provision, but may indirectly contribute. The World Bank defines social assistance as follows: 'Social assistance programs are non-contributory transfers in cash or in-kind and are usually targeted at the poor and vulnerable. Some programs are focused on improving chronic poverty or providing equality of opportunity; others more on protecting families from shocks and longstanding losses they can inflict for the unprotected poor. These programmes also known as social safety net programs or social welfare, include cash transfers (conditional and unconditional), in-kind transfers, such as school feeding and targeted food assistance, and near cash benefits such as fee waivers and food vouchers.'⁷

⁴ 'Food aid and food assistance in emergency and transitional contexts: a review of current thinking'; Paul Harvey, Karen Proudlock, Edward Clay, Barry Riley and Susanne Jaspars; June 2010; Humanitarian Policy Group Overseas Development Institute, UK <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6038.pdf>

⁵ Community Food Centres, Canada https://cfccanada.ca/mission_vision

⁶ USDA's SNAP programme <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap>

⁷ ASPIRE: The Atlas of Social Protection - Indicators of Resilience and Equity | Social Assistance | The World Bank <http://datatopics.worldbank.org/aspire/indicator/social-assistance>

Other examples of social assistance programmes include cash for work, cash for education, unconditional social pension, fee waiver for school fees, etc. For reference, see the Social Assistance in Developing Countries database.⁸

Many countries have nationally designed and administered social assistance programmes. Each city will have an understanding of its own relevant social assistance programmes, whether local or national. For example, the SUAS system is a public system that organises Social Assistance services in Brazil in a decentralized way. Established to guarantee protection to the family, maternity, childhood, adolescence and old age, in order to reduce damage and prevent vulnerability and social risk, it organises its actions through 'Basic Social Protection' and 'Special Social Protection'.⁹

Preparations

The team responsible for monitoring this indicator should agree on:

1. Type of data disaggregation and categories that will be used (see further notes below).
2. Data collection method (analysis and projection of existing data or further gathering of new data from stakeholder organisations).
3. If interviews or surveys with stakeholder organisations are to be used to help identify other sources of data, the right questions to ask have to be clarified. Training/briefing of interviewers may be needed.
4. If there are significant data gaps, then further research and investment may be required to help the organisers of community based food and/or social assistance programmes to gather and present appropriate data.

Sampling

In the case that new primary data has to be collected by means of survey of food and/or social assistance programmes, a 25% sample of programmes is minimally needed to be able to present useful figures and extrapolation estimates. In this case, the programmes surveyed could be sampled according to category of vulnerability or geographic area - in relation to clearly defined groups of users and/or in neighbourhoods where food assistance is critical.

Data collection and data disaggregation

An initial audit of existing food assistance and relevant social assistance programmes will be needed from the outset in order to set the context for any further work. The resulting list could also be turned into a directory and used for future monitoring purposes.

If basic programme information is not available, then this should be the starting point. An audit survey with food and relevant social assistance programmes could include questions on types of programme assistance; categories of beneficiaries; length of time during which beneficiaries receive supported; regularity of support provided.

The second step will be to identify all possible existing and relevant data sets that either are part of setting the context or direct numbers of programme users. National data on food insecurity may be available.

⁸ Social Assistance in Developing Countries Database; March 2006; Armando Barrientos and Rebecca Holmes IDS, University of Sussex for the UK Department for International Development (DFID) http://www.chronicpoverty.org/uploads/publication_files/Social_Assistance_Database_Version2_March_2006.pdf

⁹ Brazilian Social Assistance Policy (SUAS) http://www.ipc-undp.org/doc_africa_brazil/5.SNAS.pdf

Data could be disaggregated by category of vulnerable groups, according to the city's own definitions; for example, children, families, young people, elderly, disabled, unemployed, etc. Data could also be disaggregated by type of food or social assistance programme and by numbers of people benefiting from the different types; for example food banks, soup kitchens, community feeding centres, food vouchers, etc.

Data analysis/calculation of the indicator

The indicator is computed by calculating the total number of people receiving food and/or relevant social assistance as a percentage of the total city population. Further useful figures could include more detailed breakdown by neighbourhood to show more nuanced patterns for the city. Similarly there could be more detailed breakdown figures relating to different types of programmes or different categories of vulnerable groups. If possible such data should be made available too as a set of additional indicators.

References and links to reports/tools

Overview report on approaches to the design of emergency food assistance programmes in urban and peri-urban settings

Emergencies in urban settings: a technical review of food-based program options, USDA, August 2008, http://pdf.usaid.gov/pdf_docs/Pnadm940.pdf

Brighton and Hove Food Partnership, UK

The Brighton and Hove Food Poverty Action Plan 2015-18 is a coordinated approach of a city in the South of England to address food insecurity. Food poverty is categorized in two ways: i) crisis level and ii) ongoing food poverty. The overall outcome they want to see in relation to 'crisis level' is a reduction (or slower growth) in the number of people experiencing hunger or seeking emergency assistance.

Their chosen indicators for food poverty at crisis level are:

- Number of food banks in the city; weekly food parcel distribution; yearly change in demand
- Annual number of Local Discretionary Social Fund (LDSF) payments for food and cooking equipment.

For more information see pages 4 & 6

http://bhfood.org.uk/wpcontent/uploads/2017/09/FINAL_Food_Poverty_Action_Plan_2015.pdf

New York City and work on addressing food insecurity

New York City defines food insecurity as 'the lack of access, at times, to enough nutritionally adequate food for an active, healthy life for all members of a household. Food insecure families may worry that food will run out before they have enough money to buy more, eat less than they should, or be unable to afford to eat balanced meals.' Work to address food insecurity in New York is focused around reducing the 'Meal Gap' alongside the food insecurity rate in all boroughs, in addition to prioritizing funding for emergency food that is made available to those who may need it.

The metrics used for this work include: Food insecurity rates for different areas of the city; the 'meal gap' – missing meals per person by neighbourhood; Emergency Food Assistance Program investment; Numbers of supplemental Nutrition Assistance Program (SNAP) program recipients i) by neighbourhood and ii) by specific vulnerable groups; and neighbourhood based practical food distribution achievements.

The Meal Gap, New York City's official measure of food insecurity, represents the meals missing from the homes of families and individuals struggling with (longer-term) food insecurity - that is, when household food budgets fall too short to secure adequate, nutritious food year-round.

For NYC food metrics reports 2012-2017, see <http://www1.nyc.gov/site/foodpolicy/about/food-metrics-report.page>

A new tool to measure food insecurity: The Food Insecurity Experience Scale (FIES) is a new and innovative approach to measuring the prevalence of food insecurity. It is based on direct responses of individuals about their access to food. This promising new tool permits a more disaggregated analysis of food insecurity by place of residence, gender and other factors.¹⁰ (See separate Indicator 18 for how to use FIES.)

¹⁰ Asia and the Pacific: Regional overview of food insecurity, FAO, 2016 <http://www.fao.org/3/a-i6481e.pdf>



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March 2021 version

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

MUFPP framework of actions' category: Social and economic equity

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

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	Reorient school feeding programmes and other institutional food service to provide food that is healthy, local and regionally sourced, seasonal and sustainably produced.
What the indicator measures	The proportion of children and youth (everyone under 18 years old) attending school who benefit from a school feeding programme.
Unit of measurement (i.e. Percentages, averages, number, etc.)	Percentage; in relation to the total number of children and young people (everyone under 18 years old) attending school in the city
Which variables need to be measured / what data are needed	<ul style="list-style-type: none"> -Numbers and percentages of total population under 18 years old attending school and benefiting from a school feeding programme -Number and type of school feeding programmes -Categories of beneficiaries by age, sex or by type of feeding programme or by geographical area (e.g. neighbourhood). Further detail may be needed where within one school some parents pay for school food and others do not.
Unit(s) of Analysis (i.e. people under 5 years old, etc.)	School children. Data can be disaggregated by category of 'school': pre-school/kindergarten; primary school; secondary & high school; other type of school. Data can also be disaggregated by sex and by school age categories (defined as appropriate for each city for children under the age of 18 years). Data can be disaggregated by type of school feeding programme, or by geographical area of the city.
Possible sources of information of such data	<ul style="list-style-type: none"> -National and local population statistics -Organisations and institutions that work with children -School feeding programme providers -Schools and education authorities

	-Children's residential centres; Street children centres; Community-run schools; Free school meal statistics
Possible methods/tools for data-collection	Analysis of city population statistics; audit of number and type of school feeding programmes; analysis of school feeding programme statistics and monitoring; surveys if there is insufficient data
Expertise required	Data and statistical analysis; research, surveying and data collection
Resources required/estimated costs	
Specific observations	There are different aims for school feeding, depending on the country. Countries in the global south (lower income) will typically focus on addressing poverty and malnutrition as well as encouraging school attendance, while countries in the global north (higher income) tend to focus more on addressing obesity and healthy eating (also this is an increasing problem in other regions, like Latin America, as well). Nutrition will be a shared objective, though approaches and standards will vary. However it is important to note that there are increasing food poverty/food insecurity initiatives in the global north that operate within the school context, and in addition to school lunches (e.g. breakfast clubs, after school food, holiday hunger or emergency food programmes in schools). Some cities/countries in both the global north and south do not have school feeding programmes nor provide any kind of school meals. It will be important to note where there is an absence of school feeding programmes, and the reasons for that in context notes.
Examples of application	Community-based school feeding programme and an urban intervention in Lusaka province, Zambia, with a focus on street children. (See more information in References section below.)

Rationale/evidence

Scope: This indicator differs from the previous indicator (Percentage of people supported by food and/or social assistance programmes) in that is specific to children and to all types of school feeding programmes. However there could easily be overlaps with both indicators and it will be important for each city to find ways to clearly distinguish one indicator from the other. For example this indicator could be seen as a sub-indicator to the other.

World Food Programme (WFP) rationale: The WFP says that almost every country in the world for which they have information seeks to feed its school children. In 2013, based on a sample of 169 countries, the WFP estimated that at least 368 million children are fed daily when they are at school.¹ The WFP and partners have invested significantly in school feeding programmes. WFP highlights the crucial role that school feeding programmes play. 'Every day, countless children across the globe turn up for school on an empty stomach, which makes it hard to focus on lessons. Many simply do not go, as their families need them to help in the fields or around the house. For all of them, a daily school meal can mean not only better nutrition and health, but also increased access to and achievement in education. It is also a strong incentive to consistently send children to school.'²

Glossary/concepts/definitions used

Definition of 'child': The United Nations Convention on the Rights of a Child (UNCRC) defines children as 'everyone under 18 years old'.³

Definition of 'school feeding' programme: The World Food Programme defines 'School Feeding' as

¹ The state of school feeding worldwide, 2013, The World Food Programme (see reference section below)

² The World Food Programme; school meals <http://www1.wfp.org/school-meals>

³ UNICEF Summary of the UN Convention on the Rights of the Child <https://www.unicef.org.uk/what-we-do/un-convention-child-rights/>

the provision of food to schoolchildren. This is most commonly done by provision of in-school meals - breakfast, lunch or both; and/or fortified, high-energy biscuits or nutritious snacks. Alternatively, and to enhance school attendance, some programmes provide take home rations (transfer of food resources or cash to entire families conditional upon school enrolment and regular attendance of children). The WFP also encourages a local procurement connection with local farmers and growers, thus combining nutritional and educational benefits with a positive impact on local economies.

Typical types of school feeding programmes in cities: There are many different types of school feeding programmes, some run by government institutions and others run by the private sector or NGO's; some centralised, some decentralised and some specific to localities. There are also many different objectives e.g. education, health and nutrition, agriculture and community development. Some school feeding programmes are explicitly a form of social protection system that provides vulnerable populations (i.e. children) with access to healthy food and others are not. For example, Brazil's school feeding programme was established in 1954 initially as a national strategy to address under-nutrition and low levels of education. It has evolved over the years to the current focus of 'meeting nutritional needs while in the classroom, and by supporting the formation of healthy habits through food and nutrition education [... and] also promotes local family farming.'⁴

School lunches: In some countries, school lunches are provided. Lunches may be paid for by parents; free to low-income families; or free to all, depending on the country or the local education authority policy or the individual school. Government schools may have different arrangements to non-government run schools. It will be important to clarify the particular context of the city and its schools.

School breakfasts and after school meals: In some countries breakfast before school starts, or food after school closes is provided. This may be because families can't afford to feed their children or it could be because parents have to drop children at school very early and it is easier for the child to eat breakfast once they are in school. After school meals could be provided along with other play activities because parents cannot collect their children earlier, or because the children are part of an activity club after school hours. Some families may depend on the school for feeding their children due to low income and others due to demands on the parents' time. It will be important to clarify the particular context of the school and its non-lunch food provision.

Snacks, milk, fresh fruit and vegetables: Many schools around the world provide milk or healthy snacks, even if they do not provide lunches. These may be paid for or free, compulsory or voluntary. These schemes may be independent of school meal provision, and administered by different agencies or organisations. Again the context of this is important to note.

Children's centres (under the age of 5): Data from children centres could be included if this is an important aspect for the city. For example, in Ecuador addressing chronic child nutrition through child centres is a key priority. However this data may already have been used for the indicator 'Percentage of people supported by food and/or social assistance programmes'. Technically this indicator is focussed on school age children, but 'school age' will need to be defined.

Age and school attendance: There may be more complications if school attendees fall outside the definition of 'children' and are over 18 yrs. of age. As noted above, there may also be children under the typical school age that should be counted. The city of Curitiba in Brazil for example has information regarding the national school feeding program (PNAE). All students and children enrolled in the

⁴ The Brazilian school feeding programme: an example of an integrated programme in support of food and nutrition security, 2012; Sidaner, Balaban and Burlandy; NS Public Health Nutrition Journal; http://hgsf-global.org/en/bank/downloads/doc_details/294-the-brazilian-school-feeding-programme-an-example-of-an-integrated-programme-in-support-of-food-and

Municipal Education Network benefit from the program (a total of 132,145 children and students from 3 months to young and old).

See the reports below in 'References' for further information on types, case studies and evidence of impact.

Preparations

The team responsible for monitoring this indicator should agree on:

1. The context: is vulnerability an important aspect and therefore needs more specific data (e.g. focus on types of school feeding programmes that are targeted at vulnerable groups)? Or is the focus on school feeding programmes in general and therefore on all children benefitting in any way – all school children themselves being a 'vulnerable' group?
2. Which types of school feeding programmes should be included?
3. Should children's centre data be included or not, if the focus is on school age children?
4. Type of data disaggregation and categories that will be used (see further below)
5. Data collection method (analysis of existing data or new surveys)
6. If surveys are to be used, survey questions and instrument have to be designed. Training of survey enumerators may be needed.

Sampling

In case new data are collected by means of a school feeding programme survey, a 10% sample (ideally 10% of each different type of school feeding programmes) is minimally needed. Alternatively, the sampling could be done by geographic area of the city (10% of all the programmes in each agreed specific area of the city).

Data collection and data disaggregation

Data can be disaggregated by school stage-related age categories (defined as appropriate for each city for children under the age of 18 years). For example, pre-primary, primary and secondary-school age children. Data can also be disaggregated by type of school: e.g. pre-school/kindergarten; primary school; secondary & high school; other type of school; or by government/non-government school. Data can be disaggregated by type of school feeding programme: e.g. school lunches only; breakfast, lunch and after school meals; snacks only; no feeding programme, etc.

Data can be collected from existing records and registers held centrally (national or local government or independent school feeding programme organisers). If no such records exist, then data should be collected by surveys with schools or school feeding programme organisers. In this case sampling will very likely be needed (as above).

Data analysis/calculation of the indicator

In order to calculate the proportion of school-attending children who are beneficiaries of the national school feeding programme, two figures are needed:

- The total number of school-attending children (under the age of 18) in the city
- The total number of pre-primary-, primary- and secondary-school children who receive some form of school feeding (e.g. a hot meal, biscuit or snack or take-home ration) from the national school feeding programme.

References and links to reports/tools

The state of school feeding worldwide, 2013, World Food Programme: 'An attempt to share and learn what works best in school feeding programmes around the world so that governments may

explore their life-changing potential to nourish young bodies and minds in classrooms everywhere, particularly in the world's poorest and most challenged communities'.

<http://documents.wfp.org/stellent/groups/public/documents/communications/wfp257481.pdf>

Global School Feeding Sourcebook: Lessons from 14 Countries, 2016; Lesley Drake et al.

Case studies from around the world that look at different models and their impacts

<http://hdl.handle.net/10986/24418>

Zambia's Community-based school feeding programme

An urban intervention in Lusaka province, Zambia, with a focus on street children.

(School Feeding programme in Zambia; Kate Vorley, Project Concern International and Mary Corbett, ENN, 2016 <http://www.ennonline.net/fex/25/school>)

School meals in Europe

A report by the Polish Eurydice Unit: Foundation for the Development of the Education System Warsaw 2016. This report provides an overview of contrasting approaches to meal provision and financing in different European countries (provision for children from low income families, p8; milk, fruit and vegetables, p16)

(http://eurydice.org.pl/wp-content/uploads/2016/05/meals_raport_ENG.pdf)



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Milan Urban Food Policy Pact Monitoring Framework

March 2021 version

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

MUFPP framework of actions' category: Social and economic equity

The indicator measures the total number of formal paid jobs that the urban food system provides at or above the nationally accepted minimum or liveable wage. Note: If it is NOT possible to quantify jobs paid at least at the national minimum or living wage, the focus should be to quantify the total number of formal paid jobs in the food system.

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	<ul style="list-style-type: none"> - Promote decent employment for all, including fair economic relations, fair ... - Encourage and support social and solidarity economy activities, paying special ...
What the indicator measures	The indicator measures the total number of formal paid jobs that the food sector provides at or above the nationally accepted minimum or liveable 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 and drink sector.
Which variables need to be measured / what data are needed	<ul style="list-style-type: none"> -Total number of jobs related to the urban food system -Total number of jobs that are paid the minimum/living wage or above. The number of jobs in the food system will need to be compared with other figures, e.g. total number of jobs in the city; or with other employment sectors. There may be seasonal variations in numbers of jobs in the food system so this information could be important to note. Localized typology of the six main business categories will need to be identified prior to data collection or analysis (see notes below).
Unit of measurement (i.e. Percentages, averages, number of people, etc.)	Number of formal jobs paid at least the nationally set minimum or living/liveable wage. This figure could be compared to total job numbers within the city and will be a useful benchmark to help measure change over time. It could also be compared to the total number of jobs provided by the urban food system, including those below the minimum/liveable wage and who are partially employed.
Unit(s) of Analysis	The numbers of jobs will need to be disaggregated by sector within the food system (see definitions below).

<i>(i.e people under 5 years old, etc.)</i>	
Possible sources of information of such data	<ul style="list-style-type: none"> -National or local government employment registers and statistics or census data -Ministry/Department of Labour or Employment or Economic Development -Local Chamber of Commerce -Trade Unions representing food sector workers -Manufacturing Associations -Business or enterprise development agencies -Food sector support agencies
Possible methods/tools for data-collection	<ul style="list-style-type: none"> -Review of existing data -Interviews with holders of key data (most likely by representative bodies within the food system or by any other institution or organisation working with the food system)
Expertise required	Data analysis; research and interviews
Resources required/estimated costs	
Specific observations	If there is no way to get specific figures for this indicator, it would still be worth knowing the total number of jobs in the urban food system, regardless of wage rates. If finding figures for the whole food system is too difficult, part of the food system could be considered (e.g. specific food business categories). This indicator doesn't include the informal food sector, but a similar process could be followed to develop a specific informal food sector indicator.
Examples of application	Vancouver in Canada has looked specifically at the growth of the local food sector. http://www.vancouvereconomic.com/vecs-focus-areas/local-food/ . The methodology can be seen in section 5 of this report. http://www.vancouvereconomic.com/wp-content/uploads/2015/06/vec-local-food-screen1.pdf

Rationale/evidence

The food and drink sector is a significant provider of jobs in every country around the world and there are many different types of jobs that define the food and drink sector. Very often however, the working conditions are poor and jobs are low paid. Any city wishing to address food system change needs to understand both the significance of and the issues facing workers in the food and drink sector.

The International Labour Organisation (ILO, established in 1919 based on a view that lasting peace is closely related to social justice), distinguishes between the 'tobacco, food and drink sector' and 'agriculture, plantations and other rural sectors'. The ILO highlights the significance of employment in the global food and drink sector and draws attention to some of the 'challenges to overcome in order to fulfil decent work in this sector, including low labour productivity and low skills; limited social protection and other benefits; occupational, safety and health issues at the workplace; gaps in working conditions between female and male workers; and the need to strengthen social dialogue.'¹

According to the ILO agriculture alone 'accounted for 31 per cent of global employment in 2013, down from 45 per cent in 1991. While the numbers working in agriculture are expected to continue to decline over time, the sheer scale of the working poor in the sector, and the inherently dangerous and uncertain nature of agricultural work require that the world focus on addressing decent work deficits at all levels.'²

¹ International Labour Organisation website; Food drink and tobacco sector <http://www.ilo.org/global/industries-and-sectors/food-drink-tobacco/lang--en/index.htm>

² ILO Agriculture, plantations and other rural sectors <http://www.ilo.org/global/industries-and-sectors/agriculture-plantations-other-rural-sectors/lang--en/index.htm>

Glossary/concepts/definitions used

The urban food system: Urban food systems will be increasingly called upon to contribute to multiple agendas and goals including job creation, nutrition and health, environmental sustainability and food security. According to the World Bank (2018)³, the food system is a major generator of urban employment and livelihoods in areas of food processing and food distribution (and potentially, recycling and waste management); large and small-scale and formal and informal enterprises benefit from the food system; and it is often a key source of work for women and young people. The food and beverage sector is the only labour-intensive, low-tech industry that sustains value-added and employment growth in manufacturing and service sectors as countries move up to upper-middle and high incomes.

A key task is to decide which businesses and organisations constitute 'the food system or the food and beverage sector' in the city. This apparently simple term is in fact quite complex.

The 'food system' or 'food sector' is often used to mean the 'food and beverage sector'. Use and meaning of 'the food and beverage sector' vary. The term can refer primarily to the food and beverage processing and manufacturing industry alone (companies that source their raw materials from the agricultural sector) or it could include the whole food chain - from agriculture, food and beverage manufacturing, retail, hospitality and logistics. The ILO definitions outlined above, separate food products and related manufacturing from production systems - in relation to areas of employment.

The food and beverage sector encompasses all businesses operating in the production, processing, or retailing of food and beverage products. It may or may not include the hospitality/food service sector. In the US, the 'food and beverages industry' is defined as all companies involved in processing raw food materials, packaging, and distributing them. This includes fresh, prepared foods as well as packaged foods, and alcoholic and non-alcoholic beverages. The two segments within this definition are production and distribution of edible goods. Distribution involves transporting the finished food product into the hands of consumers, but the definition excludes grocery stores and the retail sector.⁴

The Food and Agriculture Organisation (FAO) tends to use the terms 'food sector', 'food systems' and 'food chain' interchangeably, meaning all the stages from on-farm production (including input manufacturing) to the consumer's plate.

Categories of food business: From the perspective of urban food strategy planning, the 'food system' or 'food sector' generally includes the following six key categories of business types:

- Urban and peri-urban food production
- Food processing and manufacturing
- Wholesale & distribution of food
- Food Retail
- Catering, hospitality & food service
- Organic and food waste management/disposal/re-use.

In the interest of clear auditing and accuracy, within each of the above six categories, there are also sub-categories. Business types within these above categories will vary from country to country. Therefore, for each of these six business categories, a list of main business types needs to be developed. For example, within retail a range of types can be distinguished: supermarkets, smaller

³ The World Bank, FAO and RUAF Foundation, 2018. Urban food system diagnostic and metrics framework. Washington, USA

⁴ International Business Center at Michigan State University; globalEDGE™ knowledge web-portal <https://globaleedge.msu.edu/industries/food-and-beverage/memo>

grocery stores, specialist food retailers (e.g. bakers, butchers, and fish sellers), kiosks, market vendors, etc. An adapted and locally relevant food business typology needs to be developed and used to guide data collection and analysis.

Consideration of jobs in urban and peri-urban agriculture: Within a city, the focus is more likely to be on non-land based jobs that take place beyond the farm gate, but there may be populations of agricultural workers who work on the land within the city boundary or who travel out of the city to work in rural areas.

The informal food sector: The informal sector plays an important role. In some cities, this sector is more important than the formal food sector. It provides jobs and reduces unemployment and underemployment, but in many cases the jobs are low-paid and the job security is poor. While this indicator does not include the informal food sector due to the likely absence of data, it is nevertheless important to understand what comprises the informal food system/sector in terms of context. Unfortunately there is no absolute definition - the simplest is whether the business is registered to pay taxes or not. The informal sector includes small manufacturing enterprises and small traders and service providers, legal and illegal activities and a wide array of artisans. The most visible activities relating to the informal food sector are: i) food production (urban and peri-urban); ii) catering and transport; iii) the retail sale of fresh or prepared products (e.g. the stationary or itinerant sale of street food).⁵

Jobs vs employees: A full time job may be split between more than one person; thus there may be more employees than jobs. The full time equivalent (FTE) pay rate for a job may be deemed to be a liveable wage as a total, but if the job is split between more than one person, they may still be paid below the liveable wage. These details will be too complicated to deal with for this indicator but it is worth the researchers being aware of such situations in terms of context and nuance.

Minimum/living/liveable wage: Many countries have national policy that determines minimum or living wage rates. For example in the UK the National Minimum Wage is the minimum pay per hour almost all workers are entitled to. The National Living Wage is higher than the National Minimum Wage - workers get it if they're over 25. These rates are reviewed annually. Under UK law, it doesn't matter how small an employer is, they still have to pay the correct minimum wage.⁶ In South Africa a new National Minimum Wage Bill (R20 per hour) is due to come into effect on May 1st 2018, though it may take another two years for farm, forestry and domestic sectors to be brought up to 100% of the national minimum wage.⁷

Preparations

The team responsible for monitoring this indicator should agree on:

1. Definition of the 'food system' - This need to include a locally appropriate typology of food businesses within the six main categories outlined above. Using the main six categories as a shared framework between all cities will enable a degree of comparison.
2. Definition of the minimum/living/liveable wage as appropriate to the country - If there is no national minimum wage set in policy, there may be a level that is discussed by civil society and thus be one that can be used. If there is a need for interviews, the researchers need to have clear information to share with respondents on the national or minimum wage levels, with any variations noted for different sectors if relevant (for example the lower level for the farming

⁵ The informal food sector: Municipal support policies for operators; 'Food in Cities' collection no. 4; FAO, 2003 <http://www.fao.org/3/a-y4312e.pdf>

⁶ UK National Minimum Wage and National Living Wage <https://www.gov.uk/national-minimum-wage-rates>

⁷ Fin24 online news website, Nov 2017 <https://www.fin24.com/Economy/cabinet-approves-minimum-wage-bill-20171102>

sector in South Africa – see above). Details of different national minimum wage rates in local currencies can be found online; for example see Brazil figures here:

<https://tradingeconomics.com/brazil/minimum-wages>.

3. Type of data disaggregation and categories that will be used (see further below)
4. Data collection method if there is no centrally available data
5. Interview design - If interviews are required, questions and instrument have to be designed. Training of interviewers may be needed.

Sampling

The purpose of the survey will be to find out new information on numbers of jobs and wage levels. In case these data have to be collected, a survey could be used in specific food business categories or for specific types of businesses within a category. If for example it is decided to focus only on the food retail sector, a typology of businesses within that category is first needed, followed by an audit of the total number of such businesses in each category. In turn this will enable a sampled approach. A 10% sample (10% of all food businesses within one food business category) is minimally needed.

Example

Total number of types of formal food retail businesses: 5

Total number of retail businesses: 380 (10% = 38 businesses to survey)

Supermarkets: 20 (10% = 2)

Smaller grocery stores: 100 (10% = 10)

Specialist food retailers - bakers (40; 10% = 4), butchers (40; 10% = 4), fish sellers (20; 10% = 2), fruit & veg shops (60; 10% = 6)

Registered food market traders – 100 (10% = 10)

NB: If the decision is to only sample one type of retail business then a higher minimal sample number of 25% – ie 25% of all supermarkets (25% = 5). This would give enough to make an educated estimated about the total.

Data collection and data disaggregation

Total number of jobs in the food sector

Data disaggregation can be done by: i) Category of food business; ii) Type of food business within each category; iii) Number of jobs per type of food business; iv) Number of jobs per category of food business; v) Total number of jobs in the food system.

Jobs paid at least the minimum/living/liveable wage

Data disaggregation can be done by: i) Number of such jobs per type of food business; ii) Number of such jobs per category of food business; iii) Total number of such jobs in the food system.

Existing data on food system employment can be collected from national or local government statistics, records and registers. In addition, other departments or organisations may hold useful data that can help with building an overall picture even if estimated. Interviews with key experts, e.g. university academics or government statisticians, or local labour organisations or trade unions may help with further details, accuracy and clarity, especially if only estimates can be reached.

New data from surveys

It is unlikely that any survey could collect absolute data, given the complexity and extent of the food system, so any survey results would be only to develop estimates or to provide specific sub-sets of data in relation to jobs within specific business types or categories.

Data analysis/calculation of the indicator

The indicator is computed by calculating the total number of jobs in the food system, and comparing that total with the total number of jobs paid at or above the national minimum/living wage.

Depending on the data available, estimates may be needed. Or where there is more information about specific sectors, those figures can be presented in the context of whole picture and estimated totals.

As a data subset it could be important to consider number of jobs for men and women separately and to take note of types of jobs that employ more men than women and vice versa if this additional information becomes clear during data analysis. This would provide additional metrics in relation to the MUFPP action area: Promote decent employment for all, within the food system, with the full inclusion of women.

References and links to reports/tools

The World Bank, FAO and RUAF Foundation, 2018. Urban food system diagnostic and metrics framework. Washington, USA

<http://documents.worldbank.org/curated/en/807971522102099658/pdf/Final-report-Urban-Food-Systems-Diagnostic-and-Metrics-Framework.pdf>

Food and drink sector statistics

Cities in many countries have available data on jobs in the food and drink sector – a starting point for this indicator.

UK: In the UK a central website holds employment data relating to Local Government jurisdictional areas. To find out which of the employment categories would include the food and drink sector, an interview with a Local Government statistician would be necessary. For example the city of Bristol: <http://www.nomisweb.co.uk/reports/lmp/la/1946157348/report.aspx?town=bristol#tabjobs>

Toronto: Food and Beverage sector statistics

<https://www.toronto.ca/business-economy/industry-sector-support/food-beverage/>

Minimum and living wage policy in South Africa:

'A National Minimum Wage for South Africa: recommendations on policy and implementation', 2016 http://www.treasury.gov.za/publications/other/NMW_Report_Draft_CoP_FINAL.PDF



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Milan Urban Food Policy Pact Monitoring Framework

July 2018 version

Indicator 22: Number of community-based food assets in the city

MUFPP framework of actions' category: Social and economic equity

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

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	Promote networks and support grassroots activities that create social inclusion and provide food to marginalised individuals.
What the indicator measures	The number of community-based food assets in the city. These could be by category, e.g. community kitchens, community gardens, community shops, cafés, food hubs.
Which variables need to be measured / what data are needed	Geographical location; categories and sub-categories of assets; assets that specifically target particular user groups (e.g. free or low-cost catering or retail)
Unit of measurement (i.e. Percentages, averages, number, etc.)	Number by category of community-based food asset
Unit(s) of Analysis (i.e. people under 5 years old, etc.)	Type of community-based food asset
Possible sources of information of such data	<ul style="list-style-type: none"> -Existing asset maps or directories -Local food sector reports -Public food register (or lists kept by the environmental health team who register premises dealing with food) -NGO's, community sector, local food networks -Food Policy Council or equivalent body -Welfare & food insecurity workers; academics
Possible methods/tools for data-collection	Analysis of existing reports and registers; interviews with key stakeholders; online searches; surveys with key stakeholders.

	(NB: some of the data required for this indicator may already have been collected for other indicators, e.g. school feeding; social assistance programmes, food-related learning and skills development)
Expertise required	Research, data analysis, interview and survey skills
Resources required/ estimated costs	
Specific observations	The most useful way to present the collated data is on food asset maps or in directories. A decision will need to be made about whether to include school-based assets or keep this a separate indicator. GIS mapping of these can be a useful planning and political tool as well as a community engagement vehicle.
Examples of application	Vancouver: http://www.vch.ca/public-health/nutrition/food-asset-map

Rationale/evidence

To enable a connection with the planning system: In 2007 the American Planning Association (APA) produced its Policy Guide on Community and Regional Food Planning, a belated attempt to make amends for the fact that the planning community, academics and professionals alike, had signally failed to engage with the food system (Morgan, 2009).¹

To empower community action: Since 2000, the concept and practice of Food Systems Assessments has developed significantly, driven by i) interest in local food system and ii) the importance of including the food system in urban planning. A review of food system assessment approaches identified eight types of assessments (Freedgood, Meter and Pierce-Quiñonez, 2011). One of these was community food asset mapping, a participatory model that engages a wide range of stakeholders in charting the assets in their food system in the form of a map. 'Avoiding the negative implications of a "needs" assessment (which can spiral community members into inactivity), an "asset map" can bring people together more positively to discuss what their community already has, rather than what it lacks.'²

Sharing information: Understanding the presence, location, and impact of community-based food assets is an important early step in urban food system planning. Sharing this information in the form of a map or directory enables wider engagement, networking and provides a basis for new collaborations to further strengthen the food system. Importantly it can also inform policy and strategic decision making by the municipality.

Baseline data: In Vancouver (as in a number of other cities), one of the ways to create a baseline of Vancouver's food system is to document food assets. 'Food assets are defined as resources, facilities, services or spaces that are available to Vancouver residents, and which are used to support the local food system'³.

Glossary/concepts/definitions used

Categories of food assets: Each city will need to work out the most appropriate categories to use. For example, Vancouver use the following criteria: 'places where people can grow, prepare, share, buy, receive or learn about food' and have identified eight categories.

- Schools
- Community organisations
- Retail stores or markets,
- Growing food spaces
- Kitchen or food programmes,
- Neighbourhood food networks,
- Free or low cost grocery items,
- Free or low cost meals.

Within these categories, some have further sub-categories. For example, kitchens are further broken down into three sub-categories: kitchen access, food skills workshops, community kitchen

¹ Feeding the city: the challenge of urban food planning, Kevin Morgan, Cardiff University (editorial); International planning studies, volume 14, 2009

² Emerging assessment tools to inform food system planning, Julia Freedgood, Marisol Pierce-Quiñonez, Kenneth A. Meter; Journal of Agriculture, Food Systems and Community Development, 2011 <https://foodsystemsjournal.org/index.php/fsj/article/viewFile/84/83>

³ What feeds us: Vancouver food strategy, January 2013 <http://vancouver.ca/files/cov/vancouver-food-strategy-final.PDF>

programmes. Growing food divides into four: community gardens, community orchards, urban farms, garden programmes and education.

Community organizations and schools are included 'because they are places where community members can get support with learning and health or connect with others in their community'.⁴ However, the schools are only noted for their presence rather than any specific food assets they offer.

Vancouver has collected information on food assets and created an interactive online map as a resource. The North Shore Community asset map (north of Vancouver city) is very similar with a few slightly different sub-categories to suit their situation, e.g. growing food categories. (See website link in footnotes for further details).

Preparations

The team responsible for monitoring this indicator should agree on:

1. Whether or not to include schools; clear rationale for decision
2. Main asset categories and sub-categories; clear rationale for decisions
3. Any other types of data disaggregation that will be used (see further below)
4. Data collection and recording method (it may be most efficient to create a map)
5. If surveys are to be used, survey questions and instrument have to be designed. Training of survey enumerators may be needed.
6. How the information gathered for this indicator could be shared (e.g. maps/directories).

Sampling

In case data are collected by means of a survey with food-related community based organisations, the aim is to fill as many gaps and gather specific details so a sample is not relevant. It might be pragmatic to focus on particular neighbourhoods if resources are very limited, with the view to building up more information as soon as that becomes possible.

Data collection and data disaggregation

Note: Some of the data required for this indicator could usefully inform some of the other social and equity indicators, e.g. school feeding; social assistance programmes, food-related learning and skills development. This should be identified from the start. Otherwise, data generated for them would also be useful for this indicator.

Data disaggregation can be done by:

1. Geographical location e.g. neighbourhoods
2. Categories of assets e.g. community kitchens, community gardens, community shops, cafes, food hubs.
3. Sub-categories of assets – see notes above. These may only become clear once analysis of data is underway. Each city will need to decide what sub-categories are most useful and locally relevant.
3. Type of user group - it may be important to identify assets that specifically target particular user groups.

Data collection can be from existing records, registers and reports; from interviews with key stakeholders to identify further sources of information; from a survey with community-based food

⁴ Vancouver Coastal Health, Vancouver Food Asset Map <http://www.vch.ca/public-health/nutrition/food-asset-map>

organisations to identify food assets, specific details of focus of activity and types of users – to help fill gaps in data and clarify sub categories.

Data analysis/calculation of the indicator

The indicator is computed by calculating the total number of community-based food assets. On its own, a number is not very revealing so it needs to be understood alongside a more useful detailed breakdown of assets by geography, category and subcategory, ideally presented visually.

References and links to reports/tools

Ideas on how to gather and present the data on community food assets:

Vancouver, Canada: food asset mapping

Vancouver Coastal Health, Vancouver Food Asset Map <http://www.vch.ca/public-health/nutrition/food-asset-map>

London, UK: using a community-led asset approach

Gipsy Hill Food Village Hub: a community-led asset based approach to positively influencing the local food system; Cunningham and Oki, Public Health Lambeth Borough Council
https://www.lambeth.gov.uk/sites/default/files/Gipsy_Hill_Final_0.pdf

Washington, US: example of a localised neighbourhood asset map

Camp Washington food and community asset map
<https://static1.squarespace.com/static/5633fcede4b0b0c3596ed436/t/5788f6e103596e546ca53ace/1468593896214/Camp+Washington+Food+and+Community+Asset+Map+-+Pages.pdf>

Food coops toolkit, Sustain, UK: includes guidance on food mapping and community audits

A community audit is a type of mapping, but goes into more detail than food mapping because as well as finding out about food outlets, a community audit also includes other local facilities and services. <https://www.sustainweb.org/foodcoopstoolkit/communityaudit/>



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Milan Urban Food Policy Pact Monitoring Framework

July 2018 version

Indicator 23: Presence of food-related policies and targets with a specific focus on socially vulnerable groups

MUFPP framework of actions' category: Social and economic equity

The indicator 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 marginalised individuals.

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	Promote networks and support grassroots activities that create social inclusion and provide food to marginalized individuals.
What the indicator measures	The indicator allows for (self) assessment of the presence (yes/no), and the level of implementation of food-related municipal policies and targets (with help of a scoring sheet), 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 marginalised individuals. The focus is on policies with a specific focus on vulnerable groups. If desired, critical assessment of the actual policy/ies may be implemented in addition. Both exercises help define areas for improvement.
Which variables need to be measured / what data are needed	First, information is collected on any existing food-related policies or strategies and targets that fit these criteria. A broad look may be needed across a number of different municipal policies and strategies, as there may not be any one that has a specific food focus – which policies, strategies and targets are relevant? Second, the specific focus on socially vulnerable groups needs to be clarified – which groups? Third, both the link within the policy/strategy to food and socially vulnerable groups needs to be clarified – which aspects? In order to complete the assessment, the next step is to investigate what is actually happening - the level of implementation, budget allocation, targets and monitoring of impact – as a result of the municipal policies, strategies and targets.

Unit of measurement (i.e. Percentages, averages, number, etc.)	Yes/No. This indicator will be assessed in a qualitative way.
Unit(s) of Analysis (i.e people under 5 years old, etc.)	The policy or programme. This indicator will be assessed in a qualitative way.
Possible sources of information of such data	Policies, strategies and planning documents from the municipality. Specific reports on the work. Key staff in the municipality. Key civil society groups, networks and NGO's involved with food work that targets socially vulnerable groups.
Possible methods/tools for data-collection	-Self assessment -Desk top research of documents -Interviews with relevant staff in the municipality who are involved with the implementation of relevant policy, strategy and targets; interviews with key stakeholders -External evaluation
Expertise required	Research and interview skills; expertise in policy formulation/strategic planning
Resources required/estimated costs	
Specific observations	Every city will have a different situation. Some will have very clear and specific food-related policies that address vulnerable groups while others will not. However there may be other policies and strategies that have an impact on food provision to vulnerable groups, or on food-related activities if not actual food provision. Many cities will have food safety and food hygiene policy required by law. These may or may not be included, as deemed appropriate.
Examples of application	Bristol City Council officers from several different departments took part in an externally facilitated food and planning development review (see tools below.)

Rationale/evidence

Local governments that have signed the Milan Urban Food Policy Pact have all acknowledged and (re)claimed jurisdictional responsibility for food systems activities that directly impact the health and well-being of their residents. One way assess level of commitment is to examine i) the presence (or absence) of food-related policy or strategy, and the expected targets/outcomes, and ii) the specific target groups of people that should benefit from such policies. Most cities are unlikely to have done such an audit.

The significance of local government food-related policy and targets

The existence or absence of local government food related policies and targets potentially have a significant impact. A local government or municipality may have very clear food-related policies and targets. Some if not all of these may focus on addressing the issues faced by socially vulnerable groups. For example, household food security policy or school feeding programmes or mother and baby/child nutrition programmes. Some municipalities may have just one or two specific food policies, for example school meal provision or food safety legislation and procedure. While the presence of such policies and targets are crucial for any type of food system regulation or development, they are still only as effective as their implementation and ongoing development.

A comprehensive national survey on local governments' food-related activities was conducted in the US and found the following ways that local governments can address food systems.

- Policies supporting food access and production;
- Support of food-related projects or programs;
- Inclusion of food-related topics in official plans;
- Departments responsible for food issues;
- Coordination or collaboration with other stakeholders or communities on food system

- activities; and
- Awareness and use of federal resources available to local governments for funding food system development.

The report also noted the following: ‘Distinct from the distribution of emergency food, survey respondents reported far fewer activities more closely targeted toward systemically improving the health and security of vulnerable populations.’¹

Glossary/concepts/definitions used

Definition of ‘vulnerable populations’: In general, ‘vulnerability’ is accepted to mean susceptibility to harm or suffering. ‘Vulnerability’ is a regularly used word that means different things in different contexts. In the context of public health, the World Health Organisation (WHO) states: ‘Vulnerability is the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters. Children, pregnant women, elderly people, malnourished people, and people who are ill or immune-compromised, are particularly vulnerable when a disaster strikes, and take a relatively high share of the disease burden associated with emergencies. Poverty – and its common consequences such as malnutrition, homelessness, poor housing and destitution – is a major contributor to vulnerability.’²

The Comune di Milano uses the definition of relative poverty (compared to an average situation) and absolute poverty (a condition of extreme poverty, so a condition characterized by severe deprivation of basic human needs).

Socially vulnerable groups: (See also definition notes for Indicator 19 “Percentage of people supported by food and/or social assistance programmes”). Social vulnerability is the result of an interaction of different personal, environmental and social factors that affect a person’s wellbeing or ability to cope with difficulties or disasters (as above). For example:

- Personal - age and health
- Environmental - availability of green space, quality of housing
- Social - levels of inequality and income, the strength of social networks, the cohesion of neighbourhoods.

Examples of different socially vulnerable groups could include:

- Very young children
- Older people
- People with poor mobility or access to adequate services
- People of various tenancy status and types of housing
- People who lack access to green space
- People experiencing social isolation
- People on low incomes.

While not all factors known to affect vulnerability can be easily measured, a number of them can be mapped using direct and proxy indicators such as those listed above.³

¹ Local Government Support for food Systems: themes and opportunities from national data, Laura Goddeeris, 2013, Michigan State University Centre for Regional Food Systems
<http://www.canr.msu.edu/foodsystems/uploads/files/local-govt-survey-brief.pdf>

² Environmental health in emergencies and disasters: a practical guide, WHO, 2002

³ Socially vulnerable groups sensitive to climate impacts, 2014; Climate Just <http://www.climatejust.org.uk/socially-vulnerable-groups-sensitive-climate-impacts>

Types of food-related policies and targets that focus on socially vulnerable groups: Each city will have different policies and targets. The starting point may be either the policy or the target group. Some examples are set out below.

Health and food access/provision: The US survey mentioned above found that the area of community health and food security is the most obvious area that connects to socially vulnerable groups, e.g. zoning ordinances that enable the operation of farmers' markets to increase food access, direct support for farmers' market developments, support for organisations dealing with emergency food distribution programmes, improved siting of shops providing fresh food in under-served neighbourhoods, enabling food assistance recipients to use farmers markets.

Food production and infrastructure: Support for production and infrastructure activity is a second area that may in some cities directly support socially vulnerable groups, e.g. land and water provision for urban food production; land use tenancy agreements; permissions for composting, green roofs, bees, chickens, and other small livestock in non-traditional zones; use of buildings for food production or processing.⁴

Healthy eating: In some cities there may be policy or strategy (education and/or practical support for behaviour change) that relates to obesity, healthy weight or healthy eating, and which targets specific groups of people or geographic areas of the city.

Nutrition: There may be specific nutrition-based targets. The World Health Organisation has set six key global nutrition targets to improve maternal, infant and young child nutrition by 2025, each of which connects in some way to food: stunting in under 5yrs.; anaemia in women; low birth weight; childhood overweight; breastfeeding; wasting.⁵

Food storage & cooking facilities: There may be a requirement for a certain standard of kitchen or food preparation and storage spatial specifications in housing development policy. There may be specific programmes to support low-income households with improving food preparation and cooking facilities (including fuel costs or improved fuel types).

Food hygiene and food safety for vulnerable groups: (In many countries this is required by law.) National public health or food safety agencies, local government environmental health or public health departments may have food safety policy or strategy or guidance in place to help protect specific vulnerable groups whose immune systems may be weakened, and thus most at risk of infections caused by food-related bacteria. For example *L. monocytogenes* (listeriosis), which can be a problem with chilled ready-to-eat foods, if food is not stored at the correct temperatures or if hygienic procedures are not adhered to. The groups of people most at risk include cancer patients, patients undergoing immunosuppressive or cytotoxic treatment, unborn and newly delivered infants, pregnant women, people with diabetes, alcoholics (including those with alcoholic liver disease) and a variety of other conditions. Elderly people are also included in this higher risk group.⁶

⁴ Local Government Support for food Systems: themes and opportunities from national data, Laura Goddeeris, 2013, Michigan State University Centre for Regional Food Systems

<http://www.canr.msu.edu/foodsystems/uploads/files/local-govt-survey-brief.pdf>

⁵ WHO Global nutrition targets 2025 <http://www.who.int/nutrition/global-target-2025/en/>

⁶ Reducing the risk of vulnerable groups contracting listeriosis; guidance for healthcare and social care organisations; UK Food Standards Agency <https://www.food.gov.uk/sites/default/files/listeria-guidance-june2016.pdf>

Specific vulnerable groups: It may be more relevant to start with specific categories of vulnerable groups and investigate which specific policies or strategies target support at them, or have outcome targets that relate to addressing the needs of these groups. These could include, for example, policy or strategy to support homeless young people, or street children, or drug users, or people living in a particularly vulnerable neighbourhood. The focus should be on the extent to which any such policies or strategies relate to food issues.

Funding for community-based work on food issues: A local government may choose to make funding available to other community based organisations to carry out work that relates to all of the above issues. In this case the policy (in this case one related to funding, but likely to be linked to specific objectives) may be indirectly targeted at specific vulnerable groups.

Preparations

This indicator could be kept as simple as possible with the research team only doing a review of policy documents, or more in-depth data could be collected to fill in any gaps and get a sense of policy impacts on socially vulnerable groups.

The team responsible for monitoring this indicator should agree on:

1. Clear criteria for selecting which policies or strategies are relevant to this indicator
2. An approach for how to gather information on the relevant existing local government policies, strategies and targets
3. Clear criteria for defining 'socially vulnerable groups', as appropriate for the city
4. A clear methodology for analysing and recording the links between food-related policy and socially vulnerable groups, in order to identify the relevant policies (e.g. review of policy documents, local government officer roundtable discussion – see below)
5. Any information gaps that need follow up and further clarification.
6. How to identify the key stakeholders – the most relevant people to interview for further information. This may be people who create policy or oversee its implementation. It could also include representatives of the groups that are the focus of the policies.
7. If key stakeholder interviews or surveys are to be used, questions have to be designed. Training of interviewers may be needed.
8. If roundtables are needed, the process will need to be designed and run by experienced facilitator who can draw out the information that is needed from the participants.

In case rather than self-assessment/audit other evaluations methods are selected (external evaluation, key informant interviews) respective preparations should be taken.

Sampling

The need for sampling will depend on the required breadth and depth of understanding in relation to this indicator. For example, interviews with key people within the municipality will provide data about the policies themselves but not whether the policy has any actual impact on socially vulnerable people.

For local government officers: A roundtable or series of interviews with all food-related policy makers or implementers could be used to help clarify which policies and targets exist and to what extent they focus on socially vulnerable groups.

If more information is needed on the impact of these policies on socially vulnerable groups, data may be gathered using interviews with representatives from key target groups of the policies.

For a wider assessment: A randomly sampled number of external stakeholders could be asked in a survey if they are aware of the existence, content and results of a food-related municipal policies and targets, that, directly or indirectly focus on socially vulnerable groups. (Such questions could also be included in a broader urban food-related survey.)

An in-depth assessment: A smaller group of randomly sampled external stakeholders could be invited to participate in a structured roundtable discussion to collect their views and experiences of food-related policy that is specifically aimed at socially vulnerable groups.

Data collection and data disaggregation

Data collection for this indicator is qualitative and takes an audit approach. There are several steps to work through. The order may not be as set out below:

- Identify existing food-related policies or strategies and targets that fit the agreed criteria for this indicator. A broad look may be needed across a number of different municipal policies and strategies, as there may not be any one that has a specific food focus – which policies, strategies and targets are relevant?
- Identify which socially vulnerable groups are most relevant. This could be done from the perspective of existing policy that has already identified such groups. Alternatively, interviews with key stakeholders could help to develop the criteria and at the same time build interest and buy-in for the work.
- Analyse the policies/strategies and targets to identify which, if any, specifically focus on socially vulnerable groups and on which aspects of food.
- If this is a priority area for the city, further investigation could assess what is actually happening - the level of implementation, budget allocation, targets and monitoring of impact – as a result of the municipal policies, strategies and targets. This could be done through further interviews or roundtable meetings with key stakeholders.

Scoring sheet

Characteristics	Scoring			Total score	Disaggregation of information	Observations/ Recommendations
Presence of relevant policies/strategies/targets that fit agreed criteria for this indicator	Yes= 1 point	No= 0 points			-Number and type of policies and strategies -Specific targets set -Type of socially vulnerable groups addressed	
Level of implementation: is the policy/strategy actually implemented or enforced?	Yes, completely= 2 points	Partially= 1 point	No= 0 points		-Discuss for each of the policies or strategies. -Indicate reasons for partial or non-implementation/enforcement	
Socially vulnerable groups: The policy/strategy/targets specifically address socially vulnerable groups	Yes, completely= 2 points	Partially= 1 point	No= 0 points		-Distinguish for each of the policies or strategies or targets. -Note: Specific vulnerable groups may be identified depending on local context and policy priorities. The scoring sheet could monitor	

					targeting of each defined vulnerable groups by giving each of them for a score of 1 (this specific group is targeted) or 0 (this groups is not targeted).	
Information and communication: Are policies and regulations widely shared within city government and to potential beneficiaries	Yes, completely= 2 points	Partially= 1 point	No= 0 points		-Number and type of information and communication mechanisms and target groups	
Total score:						

Data analysis/calculation of the indicator

Based on the scoring and further information provided, participants in the monitoring/review process may identify gaps or areas for strengthening or improvement:

- How can existing policies and programmes be better implemented and communicated?
- How can better targets be set?
- What new or revised policies and programmes could be proposed?
- What process should be followed to implement these changes? Steps to be taken?
- Stakeholders to be involved? Critical time-lines? Resources required?

Note: If existing, it may be relevant to further critically assess the specific policies or programmes themselves in order to highlight areas for improvement. The critical policy analysis proposed for Food Governance Indicator 3 (*Presence of a municipal urban food policy or strategy and/or action plans*) may be used and adapted for this purpose. This approach could be adapted along the lines below.

Type of food-related policy/targets	Focus of the policy - type of vulnerable group(s)	Objective of focus on socially vulnerable groups	Actual impact on socially vulnerable groups

Ultimately, the purpose is to find out the extent to which food-related policies and targets are focussed at socially vulnerable groups. The analysis should identify which ones do that and in what way, or at least in which ways they attempt to do that. Assessing actual impact may be beyond the scope of this work, unless it is feasible to do stakeholder interviews or roundtable discussions.

References and links to reports/tools

City Council Food and planning developmental review: A report based on interviews with Bristol City Council staff about their work on food. A peer review team from the University of the West of England visited Bristol City Council on 17 March 2014 and interviewed 14 staff and one elected member about their roles in improving the health, sustainability and resilience of the food system that serves Bristol.

Although this particular review did not focus on any specific policy, this rapid appraisal approach could be adapted for the purposes of this indicator, and also provide other very useful data.

<http://bristolfoodpolicycouncil.org/food-and-planning-developmental-review-a-report-based-on-interviews-with-bristol-city-council-staff-about-their-work-on-food/>



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Milan Urban Food Policy Pact Monitoring Framework

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Indicator 24: Number of opportunities for food system-related learning and skill development in i) food and nutrition literacy, ii) employment training and iii) leadership

MUFPP framework of actions' category: Social and economic equity

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

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	Promote participatory education, training and research in strengthening local food system action to increase social and economic equity, promote rights-based approaches, alleviate poverty and facilitate access to adequate and nutritious foods.
What the indicator measures	Number of opportunities (courses, classes, etc.) for food system-related learning and skill development in three different categories: i) food and nutrition literacy, ii) employment training and iii) leadership. This exercise will support gathering baseline data on which to base analysis of gaps, needs, opportunities, and to build further action.
Which variables need to be measured / what data are needed	Data on types/number of opportunities within each category of learning/skills are needed: i) food and nutrition literacy, ii) employment training and iii) leadership. Data could be further disaggregated within each of those categories for the following sub categories: i) formal; informal learning or training; ii) type of food-related skills gained by beneficiaries; iii) type of provider.
Unit of measurement (i.e. Percentages, averages, number, etc.)	Total number of opportunities in the city to gain formal or informal training or skills development in each of three categories: i) food and nutrition literacy, ii) food-system related employment training, and iii) food-system related leadership

Unit(s) of Analysis <i>(i.e. people under 5 years old, etc.)</i>	Specific typology of learning opportunities, skills gained, and of training providers
Possible sources of information of such data	<ul style="list-style-type: none"> -Adult education; community learning; further/higher education colleges; agricultural colleges; vocational colleges or learning centres; -Food centres; NGO's -Employment training programmes; job centres; business incubators; business support agencies -Environmental/public health department -Schools, colleges and universities -City food partnerships and food governance bodies; local education authority
Possible methods/tools for data-collection	Review of any relevant existing reports; interviews with key stakeholders; surveys
Expertise required	Research design; interviewing & surveys; data collection and analysis
Resources required/estimated costs	
Specific observations	The count should include all relevant programmes, and should note where there is specific support from the municipality. It may be deemed more useful to separate out one or more of the categories into different indicators, depending on the complexity of data. This indicator is currently structured to look at overall numbers and types of learning opportunities provided rather than at numbers of trainees or at any specific target group. If it were a policy priority to focus specific training/skills development on specific groups (e.g. socially vulnerable groups, or young people), then the guidelines still apply but the scope and parameters would need to be adapted. Collecting this data and developing an overview of existing training may prove a more valuable first stage exercise than attempting to start by counting numbers of trainees, but this could be added or done at the same time. This process could rather be seen as gathering baseline data from which to develop a food-systems education strategy based on a clear situation analysis.
Examples of application	

Rationale/evidence

Many varied organisations and institutions, including the municipality, can potentially play an important role in building food-system related capacity and skills. This can be done in a way that promotes participatory education, training and research with a strategic focus on increasing social and economic equity, promoting rights-based approaches, alleviating poverty and facilitating improved access to adequate and nutritious foods.

If this were happening, one indicator would be the extent to which such learning and training opportunities are provided. Another would be to quantify the numbers (and types) of people gaining new skills and knowledge, and taking this further, to assess how they use their training in employment or activities that in turn contribute to strengthening the city (and city region) food system. A single indicator cannot adequately assess this.

However a starting point would be to understand the current situation. This indicator therefore focuses on assessing provision within the city of food-related learning and skills development opportunities. It measures the number of opportunities for food-related learning and skill development in three different categories: i) food and nutrition literacy, ii) employment training and iii) leadership supported by the municipality (directly or indirectly).

It is important to understand the role that different organisations and institutions play, including that of the municipality. Ideally an audit of all such opportunities should be done. Institutions like colleges and universities or even private businesses tend to offer formal academic or employment-related opportunities. Municipalities may provide funding to other organisations to provide these opportunities e.g. community groups, schools, health centres, vocational training centres. They may also provide some directly e.g. through local government-run adult learning programmes or family learning centres. If resources are limited, it may be easier to focus on those provided or supported by the local government in the first instance, given that they are MUFPP signatories.

Glossary/concepts/definitions used

What do we mean by ‘opportunities’ for food-related learning and skill development? Ideally there will be a wide range of opportunities to gain food related learning and skills. That range could include the provision of short or longer-term courses, individual classes, modules of study within other courses, work-based placements with businesses or institutions, apprenticeships in industry, long-term career training programmes. Such opportunities may be formal and result in formally recognised qualifications. Others may be community based and less focussed on formal qualifications but rather new skills and knowledge for improved health and wellbeing. The range will also target different types of learners and different ages in some cases. For example ‘continuing professional development’ learning may be available for people in full-time employment. Some schools may have a strong focus on food and nutrition literacy for children. Some vocational courses may focus specifically on unemployed youth.

Food-related learning and skills development categories & examples:

Food and nutrition literacy: Learning and skills development in this category of opportunities could include food preparation and cooking and or practical food growing sessions on the school curriculum. It could be health and nutrition classes for mothers and babies, or for young families. It could be cooking classes in the community to help encourage confidence to cook with seasonal fresh ingredients while on a low budget or use fuel/energy more efficiently. It could be learning how to grow food to eat, and how to store, preserve or process it. There are numerous examples of different types of opportunities within this category. Generally provision of this category tends to be provided in community settings, though some may be in more formal education settings e.g. diplomas or degrees in nutrition or nutrition education. There could also be more public approaches, such as the UK chef, Jamie Oliver’s work with schools in the US to increase awareness of the difference between positive and less positive food choices, and using this for a series on mainstream television.

Employment training related to food systems: Learning and skills development in this category of opportunities focus on skills for employment and building the capacity of the workforce. Examples include courses on public health, food hygiene and food safety, food and drink processing and manufacturing, the hospitality sector, catering and food service, agricultural and horticultural training, food wholesale, distribution and logistics, food retail, etc. This kind of training tends to be provided by colleges, universities and private companies. There may be apprenticeship or work-placement connections between education providers and business/industry/institutions. A municipality might directly provide related training for adult learners or might contribute funding to other learning and skills development routes.

Leadership related to food systems: The arena of ‘food leadership’ is not widely known, discussed or promoted. However, with the increased awareness of the role that cities and local governments can plan in food system transformation comes the need to develop a new generation of ‘food leaders’. The impact of investment in this area would be to increase the number of people ‘*learning our way out of deeply unsustainable food systems and learning our way in to more sustainable approaches to food production and consumption.*’ Learning and skills development in this category of opportunities could include involvement with food governance bodies, such as food boards, food partnerships or food

policy councils. These could be organisations as a whole, or individuals within organisations. It could be university students, urban agriculture organisers, public sector food procurement officers or catering managers. *‘Combine all of this with a focus on leadership studies and the possibilities tantalizingly unfold. Food movements, community projects, Indigenous initiatives and municipal governance suddenly take on new significance and strategic importance. Learning leadership through food can have lasting repercussions, both for individuals and for society as a whole.’*¹

What do we mean by ‘food-related learning and skill development’? A wide range of different types of knowledge and skills are covered by the three different categories above.

Food and nutrition literacy: Knowledge of how food, health and environment are related; understanding good nutrition; food literacy (understanding the process of how food gets to your plate and what types of foods should be on your plate; or planning and management, selection, preparation and eating); food production in an urban context.

Employment training: Food-related skills for employment and careers.

Leadership: Food system analysis, strengths, vulnerabilities and opportunities for transformation at many different levels (social, political, economic, environmental).

What do we mean by ‘strengthening local food system action’?

Ultimately this indicator relates to this stated MUFPP action plan outcome: ‘Local communities are equipped with knowledge, skills and expertise to develop local food system activities’. These should be actions ‘to increase social and economic equity, promote rights-based approaches, alleviate poverty and facilitate access to adequate and nutritious foods.’

Preparations

The team responsible for monitoring this indicator should agree on:

1. The scope and parameters for this indicator – which categories and types of opportunities to include (e.g. ‘food leadership’ could be treated as a separate indicator).
2. Should opportunities for vulnerable groups be highlighted; or should this be the entire focus of this indicator?
3. How to quantify ‘opportunities’ – attempt to count every single opportunity, or to count the number of types of opportunities within each category.
4. Whether to focus only on those opportunities that are supported by the municipality (directly or indirectly) or whether to include all provision of such opportunities.
5. Type of data disaggregation and categories that will be used and criteria for distinguishing between the categories, the types within the categories, and whether ‘formal’ or ‘informal’.
6. Potential sources of information.
7. Data collection method (analysis of records or surveys).
8. If surveys are to be used, survey questions and instrument have to be designed. Training of survey enumerators may be needed.

Sampling

In case data are collected by means of a survey, a 10% sample of all ‘opportunity’ providers in each of the three categories is minimally needed. Ideally the sample should represent a good range of types

¹ Food Leadership: Leadership and Adult Learning for Global Food Systems Transformation, 2017; edited by Catherine Etmanski; International Issues in Adult Education <https://www.sensepublishers.com/media/3192-food-leadership.pdf>

of providers in each of the categories in order to give as representative an overview of provision as possible.

Data collection and data disaggregation

There are various options on data disaggregation, depending on policy priorities and the amount of resources available for this indicator.

1. By unit of analysis: type of 'opportunity', meaning the means by which learning or skill development is provided, e.g. courses, classes, modules, work-based placements, apprenticeships, long-term training programmes, etc.
2. By number of opportunities within each category of learning/skills: i) food and nutrition literacy, ii) employment training and iii) leadership.
3. Data could be further disaggregated within each of those categories for the following sub categories: i) formal; informal learning or training; and ii) by specific type of food-related skills offered to/gained by beneficiaries.

Data can be collected from existing records and registers of the provider organisations. Further interviews with key stakeholders, and/or surveys with samples of providers will most likely be needed. The purpose of either or both will be to gain more accurate information on the provision of food-related learning and skills development opportunities.

A survey will need to gather information on types and numbers of opportunities/means of learning; types and numbers of skills or learning offered; and whether the learning or skills development is classed as 'informal' or 'formal'; way in which the municipality supports provision.

Data analysis/calculation of the indicator

The indicator is computed by calculating the total number of (or number of types of) opportunities for food-related learning and skill development in three different categories. In order to get to total numbers, all the above information will need to be collected.

References and links to reports/tools

Food Leadership: Leadership and Adult Learning for Global Food Systems Transformation, 2017; edited by Catherine Etmanski; International Issues in Adult Education. 'The middle section of the book looks at food leadership within a variety of contexts. One of these is food policy councils, which can promote inclusive leadership development activities aimed at food system change. Another is community gardens, where leadership can take many forms and support food system transformation. A final context is government and the development of political leadership.'

<https://www.sensepublishers.com/media/3192-food-leadership.pdf>

Sustainable Agriculture with Gender Inclusion and Participation | Quito, Ecuador. This project is run by the city to improve food security, urban agro-ecology, climate change adaptation, and nutrition. The program has been working together with women and female-headed households for over a decade to improve the quality of life of the most vulnerable people of the Metropolitan District of Quito. <https://unfccc.int/climate-action/momentum-for-change/women-for-results/sustainable-agriculture-with-gender-inclusion-and-participation-ecuador>

Example of a food safety course provided by Cambridge City Council. E-Learning: HABC Food Safety - Level 1 Award (online course). This basic foundation qualification is aimed at learners working in a catering environment in low-risk roles but where there is an element of food handling. This could include bar workers, waiting staff, health care workers, kitchen porters and stock/store room staff.

<https://www.cambridge.gov.uk/food-safety-level-1-award-online-course>

Toronto's training for new Canadians. Toronto won a MUFPP award for its Community Food Works for Newcomers program that provides food safety training and a certificate to new Canadians:

<http://www.milanurbanfoodpolicypact.org/wp-content/uploads/2017/10/MPA-winners-2017.pdf>

and a video about the program here:

<https://www.youtube.com/watch?v=ayboGqLIE9w>

An overview of nutrition education and skills approaches from around the world. NOURISHING framework: Nutrition education and skills. This table provides examples of the types of policy action that can be taken within this policy area, examples of where these policy actions have been implemented, and a brief description of what the action involves (World Cancer Research Fund International).

https://www.wcrf-uk.org/sites/default/files/10_Give_Nutrition_Education_and_Skills_June_2017.pdf