



Food and Agriculture  
Organization of the  
United Nations



## Milan Urban Food Policy Pact Monitoring Framework

March 2021 version

**Indicator 17:** Percentage of population with access to safe drinking water and adequate sanitation

MUFPP framework of actions' category: Sustainable diets and nutrition

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

### Overview table

MUFPP Work stream	Sustainable Diets and Nutrition
<b>MUFPP action</b>	<p>- <b>Adapt standards and regulations to make safe drinking water accessible</b> in public and private sector facilities such as hospitals, health and childcare facilities, workplaces universities, schools, food and catering services, municipal offices and prisons, and to the extent possible, in private sector retail and wholesale food distribution and markets.</p> <p>- <b>Invest in and commit to achieving universal access to safe drinking water and adequate sanitation</b> with the participation of civil society and various partnerships, as appropriate.</p>
<b>What the indicator measures</b>	Percentage of population with access to safe drinking water and adequate sanitation
<b>Which variables need to be measured / what data are needed</b>	<ul style="list-style-type: none"> <li>• Regional differences</li> <li>• Socio-economic variations</li> <li>• Informal urban settlements</li> <li>• Locally important marginalized groups.</li> </ul>
<b>Unit of measurement</b> (i.e. Percentages, averages, number of people, etc.)	Percentage of population
<b>Unit(s) of Analysis</b> (i.e. people under 5 years old, ect.)	<p>Current data can be disaggregated for place of residence and subnational region as well as wealth. Over time, the ambition is to include informal urban settlements in the data collected, as well as to develop survey instruments that can capture marginalized groups.</p> <p>By disaggregating the data spatially and by different socioeconomic strata, it is possible to identify which parts of the population are being left behind.</p>

<b>Possible sources of information of such data</b>	-Household surveys -Institution/ utility records and licensed sanitation emptying service providers
<b>Possible methods/tools for data-collection</b>	Household surveys
<b>Expertise required</b>	Survey data collection and analysis. Experience in primary research in marginalised communities.
<b>Resources required/ estimated costs</b>	
<b>Specific observations</b>	
<b>Examples of application</b>	In 2015, WHO and UNICEF provided estimates for safely managed drinking water for 96 countries, representing 35% of the global population <sup>1</sup> .

### Rationale/evidence

Access to water, sanitation and hygiene is a human right, but approximately 1.8 billion people use a source of drinking water that is fecally contaminated. Globally 2.4 billion people lack access to basic sanitation services. More than 80 percent of wastewater resulting from human activities is discharged into rivers or sea without any treatment, leading to pollution<sup>2</sup>.

Water and sanitation improvements, in addition to hygiene behaviour education, can have significant health effects by reducing a variety of disease conditions such as diarrhoea, intestinal helminths, guinea worm, and skin diseases. Water and sanitation improvements affect health primarily by interrupting or reducing the transmission of disease agents. Raising the quality of drinking water reduces the ingestion of pathogens. With less disease, children can eat and absorb more food, thereby improving their nutritional status. Also, a healthier adult population is a more productive population, and improvements in water and sanitation can improve income and the capacity to acquire food<sup>3</sup>.

Improving the quality and quantity of water available can also lead to greater income generation or food production activities, both of which could result in the intake of more and better food, improving a family's diet as well as child health outcomes. A safely managed sanitation chain is essential to protecting the health of individuals and communities. Leaking latrines and raw wastewater can spread disease and provide a breeding ground for mosquitoes, as well as pollute groundwater and surface water that may serve as potential sources of drinking water.

Target 6 of the Sustainable Development Goals calls for the achievement by 2030 of “universal and equitable access to safe and affordable drinking water for all” and “access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations”. Women and girls are a specific demographic of interest because increasing access to water and sanitation means they will not have to walk for hours to collect water and not having to share sanitary facilities with other households improves women's security. Reduced time in accessing water also frees up time to care for sick household members. Improved access also supports menstrual hygiene management which will help to enable more women and girls

<sup>1</sup> World Health Organization and the United Nations Children's Fund (2017). Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG baselines. Available from <http://www.who.int/mediacentre/news/releases/2017/launch-version-report-jmp-water-sanitation-hygiene.pdf>.

<sup>2</sup> United Nations (2006). Clean Water and Sanitation: Why it matters. Available from [http://www.un.org/sustainabledevelopment/wp-content/uploads/2016/08/6\\_Why-it-Matters\\_Sanitation\\_2p.pdf](http://www.un.org/sustainabledevelopment/wp-content/uploads/2016/08/6_Why-it-Matters_Sanitation_2p.pdf).

<sup>3</sup> Billig, P., Bendahmane, D. & Swindale, A. (1999). Water and Sanitation Indicators Measurement Guide. Food and Nutrition Technical Assistance Project, Academy for Educational Development.

to attend school and work outside the home<sup>4</sup>.

### Glossary/concepts/definitions used

**Access to a safe water source:** The home or compound is connected directly to a piped system or that a public fountain, well, or stand post is located within 200 meters of the home.

**Safe drinking water:** The water is free of contaminants. The treatment needed for water to qualify as “safe” is directly dependent on the quality of the raw water.

**Improved sanitation facility:** Includes flush or pour-flush toilets to sewerage systems, septic tanks or pit latrines, improved pit latrines (pit latrines with a slab or ventilated pit latrines) and composting toilets. Improved sanitation facilities that do not fulfil the above-mentioned criteria for treatment are categorized as “basic” services. If the facility is shared with other households the service is categorized as “limited”.

**Use of safely managed sanitation services:** A sanitation facility is the predominant means of excreta disposal for household members >12 months of age.

### Preparations

Local governments will need to link with national government agencies and ministries in coordination data collection and analysis. One option could include an inter-sectoral monitoring team that includes statistical offices, national agencies/ ministries and other sector representatives. The responsibility for data collection, analysis and dissemination, as well as reporting, could then fall on the inter-sectoral team. Establishing mechanisms for easy and transparent sharing and validation of data is critical for ensuring a strong link among stakeholders for implementing solutions.

A meeting should be organised with all partners who will be involved in this activity to:

- Agree on the objectives and scope of the analysis and data collection requirements
- Define the methodology to be applied for data collection and analysis, and
- How to coordinate the activities within the team.

### Sampling:

Data are collected by means of a survey of a random sample of households. A cluster survey should not be used because water sources may be location related. The survey should be carried out at the time of year when the water quantity is lowest or most sources have run dry. The surveyor(s) should visit each house or compound and verify access to a water supply. In some cases, the distance to the water supply may have to be measured to be sure it is within 200 meters<sup>5</sup>.

### Data Collection and Analysis

This section provides an overview of key issues in data collection and analysis. For a more comprehensive guide, please refer to the resources below:

- The Integrated Monitoring Guide for Sustainable Development Goal 6 (2017)<sup>6</sup> provides additional information on definitions, variables for disaggregation, complementary indicators and stages of monitoring.

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<sup>4</sup> UN Water (2017). Integrated Monitoring Guide for Sustainable Development Goal 6 on Water and Sanitation – Targets and global indicators.

<sup>5</sup> Billig et al. (1999), op. cit.

<sup>6</sup> UN Water (2017), op. cit.

- USAID's Water and Sanitation Indicators Measurement Guide (1999)<sup>7</sup> is an in depth guide covering monitoring indicators for measuring water and sanitation-related program performance with definitions, calculation, sources of data and target values.
- The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation developed a set of harmonized survey questions on access to water and sanitation facilities<sup>8</sup>.

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<sup>7</sup> Billig et al. (1999), op. cit.

<sup>8</sup> World Health Organization (2006). Core questions on drinking-water and sanitation for household surveys. Available from [http://www.who.int/water\\_sanitation\\_health/monitoring/oms\\_brochure\\_core\\_questionsfinal24608.pdf](http://www.who.int/water_sanitation_health/monitoring/oms_brochure_core_questionsfinal24608.pdf).

Indicator	Potential Data Sources	Notes
<b>Percentage of households with year-round access to a safe water source</b>	Data are collected by means of a survey of a random sample of households. A cluster survey should not be used because water sources may be location related.	WHO collected data on “reasonable access to safe drinking water” from national governments five times during the International Decade for Drinking Water Supply and Sanitation (1980 to 1990). Such access was defined for urban areas as access to piped water or a public standpipe within 200 meters of a dwelling or housing unit. For rural areas, “reasonable” is taken to mean that a family member need not spend a “disproportionate” part of the day collecting water.
<b>Proportion of the population using safely managed sanitation services</b>	Household surveys in which the surveyor asks the mother or household head about family latrine use and then inspects the latrine to see if it is functioning, hygienic and shows signs of use.	<p>Improved sanitation facilities include flush or pour-flush toilets to sewerage systems, septic tanks or pit latrines, improved pit latrines (pit latrines with a slab or ventilated pit latrines) and composting toilets.</p> <p>Improved sanitation facilities that do not fulfil the above-mentioned criteria for treatment are categorized as “basic” services. If the facility is shared with other households the service is categorized as “limited”.</p> <p>For young children, the issue is whether their feces are deposited into a sanitation facility, not whether they actually use the facility themselves. For example, mothers may put soiled diapers or feces from small potties into a latrine.</p>

### Variables for Disaggregation

The indicators related to sanitation facilities can be disaggregated by service level – no services, limited services, basic services and safely managed services. The monitoring of access “for all”, as well as the aspect of affordability, require disaggregation of data to capture potential inequalities across socioeconomic strata, including within households and geographical locations. In certain regions, it may be useful to include an indicator on time spent collecting water, to further analyse the state of “basic” services. It is also important to monitor access beyond the household, in institutional settings such as schools, health-care facilities and the workplace.

Other potential data variables to explore for analysis include:

- Regional differences
- Socio-economic variations
- informal urban settlements
- locally important marginalized groups

By disaggregating the data spatially and by different socioeconomic strata, it is possible to identify which parts of the population are being left behind.

### References and links to reports/tools

Billig, P., Bendahmane, D. & Swindale, A. (1999). Water and Sanitation Indicators Measurement Guide. Food and Nutrition Technical Assistance Project, Academy for Educational Development.

UN Water (2017). Integrated Monitoring Guide for Sustainable Development Goal 6 on Water and Sanitation – Targets and global indicators.

UN Water (2016). How to use the Integrated Monitoring Guide for SDG 6. Available from [https://www.pseau.org/outils/ouvrages/un\\_water\\_how\\_to\\_use\\_the\\_integrated\\_monitoring\\_guide\\_for\\_sdg6\\_2016.pdf](https://www.pseau.org/outils/ouvrages/un_water_how_to_use_the_integrated_monitoring_guide_for_sdg6_2016.pdf).

World Health Organization (2006). Core questions on drinking-water and sanitation for household surveys. Available from [http://www.who.int/water\\_sanitation\\_health/monitoring/oms\\_brochure\\_core\\_questionsfinal24608.pdf](http://www.who.int/water_sanitation_health/monitoring/oms_brochure_core_questionsfinal24608.pdf).

World Health Organization and the United Nations Children's Fund (2017). Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG baselines. Available from <http://www.who.int/mediacentre/news/releases/2017/launch-version-report-jmp-water-sanitation-hygiene.pdf>.