Sustainable Development Goal (SDG) 6 aims to ‘Ensure availability and sustainable management of water and sanitation for all’ and comprises six technical targets relating to drinking water, sanitation and hygiene, wastewater management, water efficiency, integrated water resource management and protection of aquatic ecosystems.

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP)\(^1\) has been monitoring progress on drinking water and sanitation since 1990 and is collaborating with UN-Water partners to develop a framework for integrated monitoring of water and sanitation related SDG targets under the Global Expanded Monitoring Initiative (GEMI)\(^2\).

This briefing note summarises proposed indicators for monitoring the drinking water, sanitation and hygiene (WASH) elements of the SDG targets and reflects extensive technical consultation with over 100 experts from over 60 organisations worldwide.

The SDG targets apply to all countries so the JMP proposes to use a ‘service ladder’ approach to benchmark and track progress across countries at different stages of development. Emerging JMP ladders build on existing datasets and introduce new indicators which reflect the ambition of the new SDG targets. A Post-2015 Monitoring Green Paper\(^3\), describes the indicators, definitions and proposed methodologies in more detail.

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\(^1\) [http://www.wssinfo.org/](http://www.wssinfo.org/)
INTERPRETING THE WASH TARGETS UNDER GOAL 6

Goal 6 of the proposed Sustainable Development Goals aims ‘to ensure availability and sustainable management of water and sanitation for all’. The following tables illustrate how each element of the proposed WASH targets can be understood from a normative perspective. Indicators used for monitoring are designed to match the normative interpretation as closely as possible, while recognizing that some elements are not yet possible to measure on a routine basis.

Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all

<table>
<thead>
<tr>
<th>LANGUAGE IN PROPOSED TARGETS</th>
<th>NORMATIVE INTERPRETATION</th>
</tr>
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<tbody>
<tr>
<td>By 2030, achieve universal and equitable access to safe and affordable drinking water for all</td>
<td>Implies all exposures and settings including households, schools, health facilities, workplaces, etc.</td>
</tr>
<tr>
<td>access</td>
<td>Implies sufficient water to meet domestic needs is reliably available close to home</td>
</tr>
<tr>
<td>to safe</td>
<td>Safe drinking water is free from pathogens and elevated levels of toxic chemicals at all times</td>
</tr>
<tr>
<td>and affordable</td>
<td>Payment for services does not present a barrier to access or prevent people meeting other basic human needs</td>
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<tr>
<td>drinking water</td>
<td>Water used for drinking, cooking, food preparation and personal hygiene</td>
</tr>
<tr>
<td>for all</td>
<td>Suitable for use by men, women, girls and boys of all ages including people living with disabilities</td>
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</table>

Target 6.2: By 2030, achieve 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

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<tbody>
<tr>
<td>By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation</td>
<td>Implies facilities close to home that can be easily reached and used when needed</td>
</tr>
<tr>
<td>sanitation</td>
<td>Sanitation is the provision of facilities and services for safe management and disposal of human urine and faeces</td>
</tr>
<tr>
<td>and hygiene</td>
<td>Hygiene is the conditions and practices that help maintain health and prevent spread of disease including handwashing, menstrual hygiene management and food hygiene</td>
</tr>
<tr>
<td>for all</td>
<td>Suitable for use by men, women, girls and boys of all ages including people living with disabilities</td>
</tr>
<tr>
<td>end open defecation</td>
<td>Excreta of adults or children are: deposited (directly or after being covered by a layer of earth) in the bush, a field, a beach, or other open area; discharged directly into a drainage channel, river, sea, or other water body; or are wrapped in temporary material and discarded</td>
</tr>
<tr>
<td>paying special attention to the needs of women and girls</td>
<td>Implies reducing the burden of water collection and enabling women and girls to manage sanitation and hygiene needs with dignity. Special attention should be given to the needs of women and girls in ‘high use’ settings such as schools and workplaces, and ‘high risk’ settings such as health care facilities and detention centres</td>
</tr>
<tr>
<td>and those in vulnerable situations</td>
<td>Implies attention to specific WASH needs found in ‘special cases’ including refugee camps, detention centres, mass gatherings and pilgrimages</td>
</tr>
</tbody>
</table>

Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

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<th>NORMATIVE INTERPRETATION</th>
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<tbody>
<tr>
<td>By 2030, improve water quality by halving the proportion of untreated wastewater</td>
<td>Implies halving the proportion of population for whom domestic wastewater (sewage and faecal sludge) is not treated to adequate standards</td>
</tr>
</tbody>
</table>
INEQUALITIES

No target met unless met for all

MEASURING INEQUALITIES

JMP proposes to report on the progressive elimination of inequalities in access to different levels of drinking water, sanitation and hygiene services. Service level indicators correspond with human rights criteria of quality, availability, accessibility, acceptability and affordability and build directly on existing MDG indicators. Some of these indicators can be monitored immediately post-2015, while others will be developed over the short, medium, or long term.

IMMEDIATE/SHORT-TERM APPROACH

- **URBAN vs. RURAL**
  An indicator of inequality could be the gap (or ratio) between WASH coverage for urban and rural populations, and/or the rate of change in this gap or ratio. Data which JMP has already collected from household surveys and censuses can be disaggregated immediately by urban and rural areas.

- **WEALTH**
  An indicator of wealth inequality could be the gap (or ratio) between the sections of the population with the highest and the lowest income, and/or the rate of change in this gap or ratio. JMP has this information for approximately 80 countries.

- **SUBNATIONAL DISTRIBUTION**
  Many of the existing household surveys used by the JMP generate data on 4–10 subnational regions, but this information has not yet been systematically extracted from survey reports into the JMP database. Subnational analysis could also be made for particularly vulnerable areas, such as districts with high levels of poverty or Neglected Tropical Diseases. Such analysis would be relatively straightforward to develop and reporting could start early in the post-2015 period.

MEDIUM-/LONG-TERM APPROACH

- **INFORMAL URBAN SETTLEMENTS**
  Most household surveys and censuses in the JMP database do not include informal urban settlements or slums, which are often not considered in official data collection. In the medium-term, the JMP can engage with researchers or agencies with special expertise (e.g. UN-Habitat) to explore new methods to characterize informal urban settlements and their water and sanitation services.

- **DISADVANTAGED GROUPS**
  Disadvantaged groups will not be the same in all settings. Monitoring of disadvantaged groups is challenging because they often form a small proportion of the population, and are therefore difficult to reach through conventional household surveys (currently the majority of JMP data). Also, through these surveys it is infeasible to accurately measure intra-household inequalities such as sex, age, or disability.

  In many cases locally-important groups are already included in household surveys; ideally Member States would use participatory processes to better identify them and design monitoring instruments accordingly. Alternative survey instruments or specially-designed surveys could lead to more efficient ways to gain information on target sub-populations, and JMP will collaborate with researchers on innovative approaches. Such instruments are more complex and costly than existing surveys, and widespread uptake by national authorities would be a long-term prospect.

Universal SDG targets can only be considered achieved when met for all sub-groups within the population which implies progressive disaggregation of data by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.
SAFELY MANAGED DRINKING WATER SERVICES

The MDG indicator ‘use of an improved source of drinking water’ has been used as a proxy for ‘safe drinking water’ but international consultations since 2011 established consensus on the need to better address normative human rights criteria including accessibility, availability, and quality.

The proposed new core indicator of ‘percentage of population using safely managed drinking water services’ comprises four elements:

- a basic drinking water source (MDG ‘improved indicator),
- which is located on premises,
- available when needed, and
- compliant with faecal and priority chemical standards.

Household surveys and censuses provide information on the types of drinking water sources used and whether sources are located on premises. Increasingly surveys also collect data on the availability and quality of water at the household level, including directly testing drinking water for faecal or chemical contamination.

Data from surveys and censuses will be combined with data from administrative or regulatory databases on availability and compliance with drinking water standards. Data on faecal and chemical contamination are not yet available for all countries but sufficient data exist to make global and regional estimates of safely managed drinking water services in 2016/17.
SAFELY MANAGED SANITATION SERVICES

The MDG indicator ‘use of an improved sanitation facility’ focuses on hygienic separation of excreta from human contact but international consultations since 2011 established consensus on the need to go beyond access to a basic facility and address safe management of faecal waste along the sanitation chain.

The proposed new core indicator of ‘percentage of population using safely managed sanitation services’ comprises three main elements:

- a basic sanitation facility (MDG ‘improved’ indicator),
- which is not shared, and
- where excreta are safely disposed in situ or transported and treated off-site.

Household surveys and censuses provide information on the types of facilities used, and whether they are shared. The percentage of the population using safely managed sanitation services can be calculated by combining data on the proportion of the population using different types of basic sanitation facilities with estimates of the proportion of faecal waste which is safely disposed in situ or transported and treated off-site.

Data on disposal or treatment of excreta are not yet available for all countries but can be estimated based on faecal flows associated with different types of facility. Sufficient data exist to make global and regional estimates of safely managed sanitation services in 2016/17.
HANDWASHING FACILITIES WITH SOAP AND WATER

The benefits associated with improved hygiene are well established but it was not included in the MDGs. Of the range of hygiene behaviours considered important for health, international consultations identified handwashing with soap and water as a top priority in all settings.

The proposed new core indicator of ‘percentage of population with handwashing facilities with soap and water at home’ refers to the presence of a device to contain, transport or regulate the flow of water to facilitate handwashing.

Household surveys increasingly include a section on hygiene practises where the surveyor visits the handwashing facility and observes if water and soap are present. Observation by surveyors represents a more reliable indicator for measuring handwashing behaviour than asking individuals to report their own behaviour.

Following the standardisation of hygiene questions in international surveys data on handwashing facilities are now available for a growing number of countries covering most developing regions of the world.
INSTITUTIONAL WASH

To date global monitoring has focused on access to drinking water, sanitation and hygiene at the household level. While household access remains the primary concern international consultations recommended that future monitoring should also prioritise institutional settings, including schools, health care facilities and workplaces, where lack of access to WASH significantly impacts on the health, welfare and productivity of populations.

The JMP proposes to prioritise schools and health care facilities for extra-household monitoring, as global and national WASH norms exist and it is widely agreed that states have a responsibility to ensure effective provision of WASH services in these settings. While schools and health facilities may have highly sophisticated WASH services, for global monitoring purposes JMP will focus on access to basic services (see Post-2015 Monitoring Green Paper for definitions).

Data on the availability of basic drinking water, sanitation and hygiene facilities are already available for most regions through nationally representative surveys of services and facilities and through Education and Health Management Information Systems (EMIS/HMIS). Further work is needed to identify suitable indicators for menstrual hygiene. JMP is working with the education and health sectors to support ongoing efforts to harmonise indicator definitions across these different data sources.
PROGRESSIVE IMPROVEMENTS IN MONITORING

Achieving higher levels of service in WASH will be a major challenge throughout the SDG period, and a related challenge will be monitoring WASH services.

Many high and some middle-income countries have well-developed routine monitoring systems and regulatory frameworks and could start reporting on safe management of WASH services.

In many low- and middle-income settings, however, sectoral monitoring systems are weak or absent. Inventories may track numbers of facilities but have little information regarding the functionality or use of such systems. Household surveys and censuses can fill gaps and provide basic information about infrastructure and practices at the household level. These surveys and censuses have provided the great majority of data used for tracking the WASH MDGs, and will continue to be at the heart of SDG reporting.

As sector capacities strengthen, national Management Information Systems (MIS) can increasingly provide reliable information about access to and use of services. Such systems can provide information about management of services which cannot be measured through household surveys.

Ideally, independent and robust regulators should conduct surveillance of drinking water and sanitation services, which would yield data not only on access but also quality of service. Such regulatory institutions are still relatively rare and weak in many settings, but should be strengthened throughout the SDG period.

Availability and sustainable management of water and sanitation for all supported by progressive improvements in monitoring

Limited or no monitoring

Monitoring access to and use of basic services

Monitoring and regulating quality of service