Water Statistics and Indicators Efforts

Water Indicators for Sustainable Development

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Workshop on Mainstreaming and Implementing the Water-Energy Nexus for Sustainable Development in the African Region
4-6 September 2018, Addis Ababa, Ethiopia
GOAL 6
ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.1 SAFE DRINKING WATER FOR ALL
6.2 SANITATION FOR ALL
6.3 BETTER WATER QUALITY
6.4 MORE EFFICIENT WATER USE
6.5 INTEGRATED WATER MANAGEMENT
6.6 HEALTHIER ECOSYSTEMS
6.9 INTERNATIONAL COOPERATION
6.B MORE LOCAL PARTICIPATION

CLEAN WATER AND SANITATION

PEOPLE

PLANET

PEACE

PROSPERITY

PARTNERSHIP

Sustainable Development Goals

Sustainable Development

People

Peace

Prosperity

Partnership

Planet

Peaceful, just and inclusive societies

Ecosystems

Safe and affordable drinking water for all

Clean, safe and sustainable management of all freshwater sources

Ensure sustainable consumption and production patterns

End povery

End hunger and ensure healthy lives and promote well-being for all at all ages

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Ensure access to affordable, reliable, sustainable and modern energy for all
6.1:
By 2030, achieve universal and equitable access to safe and affordable drinking water for all

**6.1.1: Proportion of population using safely managed drinking water services**

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

**6.2.1: Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water**

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

**6.3.1: Proportion of wastewater safely treated**

**6.3.2: Proportion of bodies of water with good ambient water quality**
SDG6: Targets & Indicators

6.4
By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

6.4.1: Change in water-use efficiency over time
6.4.2: Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

6.5
By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

6.5.1: Degree of integrated water resources management implementation (0-100)
6.5.2: Proportion of transboundary basin area with an operational arrangement for water cooperation
SDG6: Targets & Indicators

6.6
By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

6.6.1: Change in the extent of water-related ecosystems over time

6.a
By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

6.a.1: Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan

6.b
Support and strengthen the participation of local communities in improving water and sanitation management

6.b.1: Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management
SDG6: Targets, Indicators & Monitoring Efforts

- WHO/UNICEF JMP is the custodian of global data on drinking water, sanitation and hygiene (WASH).

- The JMP is responsible for reporting on SDG targets and indicators related to WASH.

- It has been monitoring global progress since 1990

- [https://washdata.org/](https://washdata.org/)
SDG6: Targets, Indicators & Monitoring Efforts

- JMP is part of the UN-Water Integrated Monitoring Initiative for SDG 6, reporting on progress towards SDG targets 6.1 and 6.2.

- JMP builds on earlier monitoring activities carried out by WHO since the 1960s.

- JMP is the only drinking water and sanitation monitoring mechanism that provides information allowing comparison between countries and over time.

- Provides regular global reports on drinking-water and sanitation coverage to:
  i) facilitate sector planning and management,
  ii) support countries in their efforts to improve their monitoring systems, and
  iii) provide information for advocacy.

- During the MDG period, the JMP reported every two years on progress against the indicators on drinking water and sanitation:

- “The proportion of population using an improved drinking water source” and “The proportion of population using an improved sanitation facility”, separately for rural and urban areas.
SDG6: Targets, Indicators & Monitoring Efforts

• For the SDGs, the JMP uses its 25 years of experience, and focuses on WASH targets: drinking water, sanitation and hygiene (SDG targets 6.1 and 6.2).

• In 2016 JMP focused on communicating with countries about the implications moving from MDGs to SDGs, and worked towards a global baseline on indicators 6.1.1 and 6.2.1.

• JMP report, Progress on drinking water, sanitation and hygiene: 2017 update and Sustainable Development Goal baselines, presents the first global assessment of “safely managed” drinking water and sanitation services.
Access to water and soap for handwashing varies immensely worldwide

- Only 1 in 4 people in low-income countries have handwashing facilities with soap & water at home
- Only 14% of people in sub-Saharan Africa have facilities

While 76% in Western Asia & Northern Africa have facilities

SOAP AND WATER FOR HANDWASHING IN ALL HOMES BY 2030

4.5 billion people globally have no toilets at home that safely manage excreta (2015)

- 2.3 billion still do not have basic sanitation services
- 892 million defecate in the open

600 million share a toilet or latrine with other households

UNIVERSAL AND EQUITABLE ACCESS TO SAFE SANITATION FOR ALL BY 2030
END OPEN DEFECATION

PROGRESS ON DRINKING WATER, SANITATION AND HYGIENE 2017

2.1 billion people globally lack safe water at home

- 263 million spend more than 30 minutes per round trip collecting water
- 159 million drink water directly from surface sources, such as streams or lakes
- 844 million do not have basic drinking water services

UNIVERSAL AND EQUITABLE ACCESS TO SAFE WATER FOR ALL BY 2030
## JMP Ladders

### Drinking Water

<table>
<thead>
<tr>
<th>Safely Managed</th>
<th>Basic</th>
<th>Limited</th>
<th>Unimproved</th>
<th>No Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water from an improved water source which is located on premises, available when needed and free from fecal and priority chemical contamination</td>
<td>Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site</td>
<td>Use of improved facilities which are not shared with other households</td>
<td>Availability of a handwashing facility on premises with soap and water</td>
<td>Availability of a handwashing facility on premises without soap and water</td>
</tr>
</tbody>
</table>

### Sanitation

<table>
<thead>
<tr>
<th>Surface Water</th>
<th>Open Defecation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water directly from a river, dam, lake, pond, stream, well or irrigation canal</td>
<td>Disposal of human excreta in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste</td>
</tr>
</tbody>
</table>

### Hygiene

- **Note:** Improved sources include piped water, boreholes or tubewells, protected spring or other permanent systems; dug wells, protected or unpiped springs with protective earthen structures, tapstands, hand pumps and protected hand-dug wells. Improvements in sanitation include improved pit latrines, composting toilets or pit latrines with slab.
Integrated Monitoring Guide for Sustainable Development Goal 6 on Water and Sanitation Targets and global indicators

The Water Cycle in the Sustainable Development Goals

11.5 Water-related disasters

6.4 Water use and scarcity

6.5 Water resources management

6.6 Ecosystems

6.1 Drinking water

6.2 Sanitation and hygiene

6.3 Water quality and wastewater

6.a-6.b Cooperation & participation

This publication will be continually updated throughout the duration of the 2030 Agenda for Sustainable Development, to incorporate new developments and lessons learned.

Version: 14 July 2017
Integrated Monitoring Guide for Sustainable Development Goal 6 on Water and Sanitation

Good practices for country monitoring systems

This publication will be continually updated throughout the duration of the 2030 Agenda for Sustainable Development, to incorporate new developments and lessons learned.

Version: 12 July 2017

Photo credit: Georgina Smith, Creative Commons Attribution
Step-by-step methodology for monitoring drinking water and sanitation (6.1.1 & 6.2.1)

- Methodology for global indicators 6.1.1 and 6.2.1: Explains how to monitor the “proportion of population using safely managed drinking water services” and the “proportion of population using safely managed sanitation services, including a handwashing facility with soap and water”.
IAEG-SDGs
Inter-agency & Expert Group on SDG Indicators
Mandate and Membership

- On 6 March 2015, at its forty-sixth session, the United Nations Statistical Commission created the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs),

- composed of Member States and including regional and international agencies as observers.

- The IAEG-SDGs was tasked to develop and implement the global indicator framework for the Goals and targets of the 2030 Agenda.

- The global indicator framework was developed by the IAEG-SDGs and agreed upon, including refinements on several indicators, at the 48th session of the United Nations Statistical Commission held in March 2017.

- The global indicator framework was subsequently adopted by the General Assembly on 6 July 2017 and is contained in the Resolution adopted by the General Assembly on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313).
IAEG-SDGs
Inter-agency & Expert Group on SDG Indicators

Working Groups

- At its third meeting, the IAEG-SDGs formed three working groups to address specific areas relevant to SDG indicator implementation. The three working groups:
  
i) Working Group on Geo-spatial Information;
   ii) Working Group on Inter-linkages of SDG Statistics to allow for Integrated Analyses in the Monitoring;
   iii) Working Group on Statistical Data and Metadata Exchange (SDMX)

- Working Groups are responsible for their own detailed work plans, methods of work, and communication and coordination mechanisms with other partners.

- Countries that are not members of the IAEG-SDGs, international organizations, civil society, academia and the private sector were invited to participate in these groups subject to criteria established by each working group.

- Each of the three working groups reports on its progress at each of the meetings of the IAEG-SDGs.
As of May 2017, the following United Nations Member States are currently members of IAEG–SDG Indicators:

Eastern Africa: Ethiopia, Tanzania

Middle and Southern Africa: Botswana, Cameroon

Western Africa: Ghana, Niger

Northern Africa: Algeria, Egypt

Chair of UN Statistical Commission: Kenya (ex-officio member)

Western Asia: Bahrain; Central, Eastern, Southern, and South–Eastern Asia: China, India, Tajikistan, The Philippines;
Oceania: Fiji, Samoa; The Caribbean: Grenada, Trinidad and Tobago; Central and South America: Brazil, Colombia, Mexico; Eastern Europe: Belarus, Russian Federation; North America and Northern, Southern and Western Europe: Canada, France, Germany, The Netherlands, Sweden
**Tier 1**

- Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50% of countries and of the population in every region where the indicator is relevant.

**Tier 2**

- Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.

**Tier 3**

- No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.
Tier I Indicators: Is the indicator accessible?

<table>
<thead>
<tr>
<th>Goal</th>
<th>Number of Indicators</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>17</td>
<td>3</td>
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Legend:
- No
- Yes with calculation
- Yes
IIASA - Research for a Changing World
Global assessment: identifying the challenges

- Development of high resolution global projections for water, energy, land and socioeconomic challenges
- 3 climate change and 3 socioeconomic scenarios used
- Identification of multi-sector exposure and vulnerability hotspots

Paris Agreement

Agenda 2030

Development of scenarios and PATHWAYS needs to be interactive between science, policy, investors and others to establish a path forward.
We present six strategies (planned, not autonomous), or water-stress wedges, that collectively lead to a reduction in the population affected by water stress by 2050.

- **Water productivity** – crop per drop
- **Irrigation efficiency** – decrease losses
- **Water use intensity** – industry and domestic
- **Population growth**
- **Reservoir storage**
- **Desalination**

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**Is it possible to reduce water scarcity by 2050?**

Each solution = 2% reduction

Source: Wada et al. 2014