Monitoring the Water SDG
An emerging framework

Swiss Water Partnership
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From MDGs to SDGs

**MDGs**
- Total of 8 goals, 21 targets
- 1 target under “Environmental Sustainability” goal
- Two core indicators: drinking-water and sanitation
- Primarily relevant to low income countries
- Monitoring by JMP, primarily using household surveys

**SDGs**
- Total of 17 goals, 169 targets
- 8 targets under “Water and Sanitation” goal
- Twelve core indicators, many sub-indicators
- Relevant to all countries
- Monitoring by national authorities, feeding into regional and global reports
17 SDGs - 169 targets
Goal 6: Ensure availability and sustainable management of water and sanitation for all

6.1 Drinking Water
6.2 Sanitation and Hygiene
6.3 Water quality
6.4 Water-use Efficiency
6.5 Water resource management
6.6 Eco-systems

Means of Implementation

6.A International cooperation and capacity development
6.B Local participation
Goal 6: Monitoring initiatives

GEMI – Integrated monitoring of water and sanitation related SDG targets

WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation

UN-Water
Inter Agency Expert Group on SDG Indicators

Membership

• 28 member states (plus observers)
• Statistical experts from international agencies (MDG IAEG+)
• Regional commissions, academia, civil society
• UN Statistical Division as Secretariat

Expected outputs by March 2016

1. Integrated statistical framework for monitoring of the SDGs
2. Assessment of inter-linkages between target indicators
3. Criteria for selection of global indicators
4. Final list of global indicators

→ Annual SDG Progress Report
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WASH and other targets

1.4  ○ Access to basic services for the poor
   Household access to basic drinking water, sanitation and hygiene

2.2  ○ End malnutrition

3.3  Combat water-borne diseases

3.8  ○ Universal health coverage
   Household WASH proposed as a tracer intervention

3.9  ○ Deaths and illness from water pollution

4.a  ○ Education facilities
   Basic drinking-water, sanitation and hygiene facilities in schools

11.1  ○ Safe and affordable housing and basic services (urban)

11.5  ○ Reduce deaths from water related disasters
Target 6.1: Drinking water

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

6.1.1: Population using safely managed drinking water services

Definition: Pop. using an improved drinking water source which is:

- located on premises,
- available when needed, and
- free of faecal and priority chemical contamination

Accessiblity

Availability

Quality

Lead: WHO/UNICEF Joint Monitoring Programme
## Monitoring drinking water

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<th>Criterion</th>
<th>Household Surveys</th>
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<td><strong>Availability</strong></td>
<td>Now: What people report using New? Is water always available from your main drinking water source?</td>
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<td>New? Has there been any time in the last month when you have not been able to access water when needed?</td>
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<td><strong>Accessibility</strong></td>
<td>Now: What people report using New? Has there been any time in the last month when you have not been able to access water when needed?</td>
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<td><strong>Quality</strong></td>
<td>New: Water quality testing in household surveys</td>
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Affordability?
Target 6.2: **Sanitation and hygiene**

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: **Population using safely managed sanitation services**

Definition: Pop. using an improved sanitation facility which is:

- not shared with other households and where
- excreta are safely disposed in situ or
- transported and treated off-site

Lead: WHO/UNICEF Joint Monitoring Programme

Accessibility

Quality
Sanitation Chain: evidence, action and monitoring

Burden of Disease

low-and-middle-income countries

SDG-2015 Monitoring

Global Guidelines

World Health Organization

JMP

WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation

UNICEF
Sanitation Chain Monitoring: Dhaka

Containment → Emptying → Transport → Treatment → Reuse/Disposal

- WC to sewer
- Leakage
- Not effectively treated
- Effectively treated
- Safely emptied
- Illegally dumped
- Unsafely emptied
- Left to overflow or abandoned
- Open defecation

1%  69%  9%  9%  1%  9%  2%
Target 6.2: Sanitation and hygiene

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

6.2.2: Population with handwashing facilities with soap and water at home

- Standard question in MICS and DHS since 2009
- Observation by survey teams
- Data available from 50+ countries

Lead: WHO/UNICEF Joint Monitoring Programme
Target 6.3: Water quality

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: Percentage of wastewater safely treated
Lead: WHO and UN-Habitat (GEMI)

6.3.2 Percentage of water bodies with good ambient water quality
Lead: UNEP, drawing on GEMS/Water (GEMI)
Monitoring 6.3 (WHO, UN-Habitat)

6.3.1. Wastewater

• Ratio: safely treated / total
• Multi-sectoral
  – Domestic (sewage + faecal sludge)
  – Hazardous industrial wastes (point sources)
• Data from:
  – JMP (domestic waste)
  – National inventories of industries (hazardous wastes)

6.3.2. Ambient WQ

• Key water bodies
• Water Quality Index
  – Total dissolved solids
  – Dissolved O₂
  – Dissolved inorganic N
  – Dissolved inorganic P
  – E. coli
• Data from GEMS/Stat (in situ and modeled), OECD, remote sensing
Target 6.4: Water scarcity

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: Percentage change in water use efficiency over time
6.4.2: Level of water stress

Lead agency: FAO (GEMI)
6.4.1. Efficiency

- Ratio: value added to volume water used
- Change over 3-5 year period
- Multi-sectoral
  - Agricultural ($)
  - Industrial ($)
  - Energy (MWh)
  - Municipal supply (NRW)
- Data from AQUASTAT, World Energy Outlook, IB-NET ...

6.4.2. Water stress

- Ratio: total freshwater withdrawn to total renewable resources
  - Reserving environmental water requirements
- Multi-sectoral
  - Agricultural
  - Industrial
  - Municipal supply
- Data from national sources
Target 6.5: Water resources management

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 (IWRM) implementation (0-100)

Lead agency: UNEP (GEMI)

6.5.2: Percentage of transboundary basin area with an operational arrangement for water cooperation

Lead agencies: UNECE, UNEP and UNESCO (GEMI)
6.5.1. IWRM implementation

- Composite indicator
  - Policies
  - Institutions
  - Management tools
  - Financing
- Equal weighting, score 0-100
- Data from national surveys completed by ministries

6.5.2. Transboundary

- Proportion of surface area of transboundary basins that have an operational arrangement for cooperation
  - Operational: regular meetings are held
- Data from UNECE water convention, Transboundary Water Assessment Project...
Target 6.6: Water-related ecosystems

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

6.6.1: Percentage of change in water-related ecosystems over time

Lead: UNEP supported by the Convention on Biological Diversity, and the Ramsar Convention on Wetlands (GEMI)
Monitoring 6.6 (UNEP+)

- Percentage of change in water-related ecosystems over time
  - Wetlands, forests and drylands
    - Wetlands: marshes, fens, swamps, ponds, lakes, rivers, aquifers...
- Extent, Quantity, Quality, Status
- Data from ground data + Earth Observations
- Reporting on UNEP-Live platform
## 12 proposed indicators for Goal 6

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