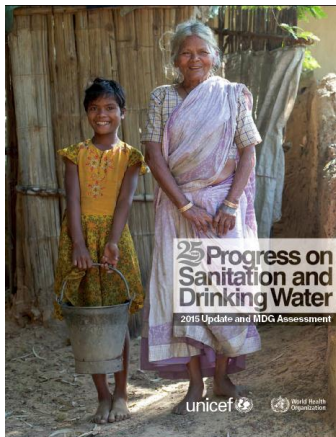# Monitoring the Water SDG
An emerging framework

Swiss Water Partnership
December 1, 2015
Rick Johnston, WHO
johnstonr@who.int

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

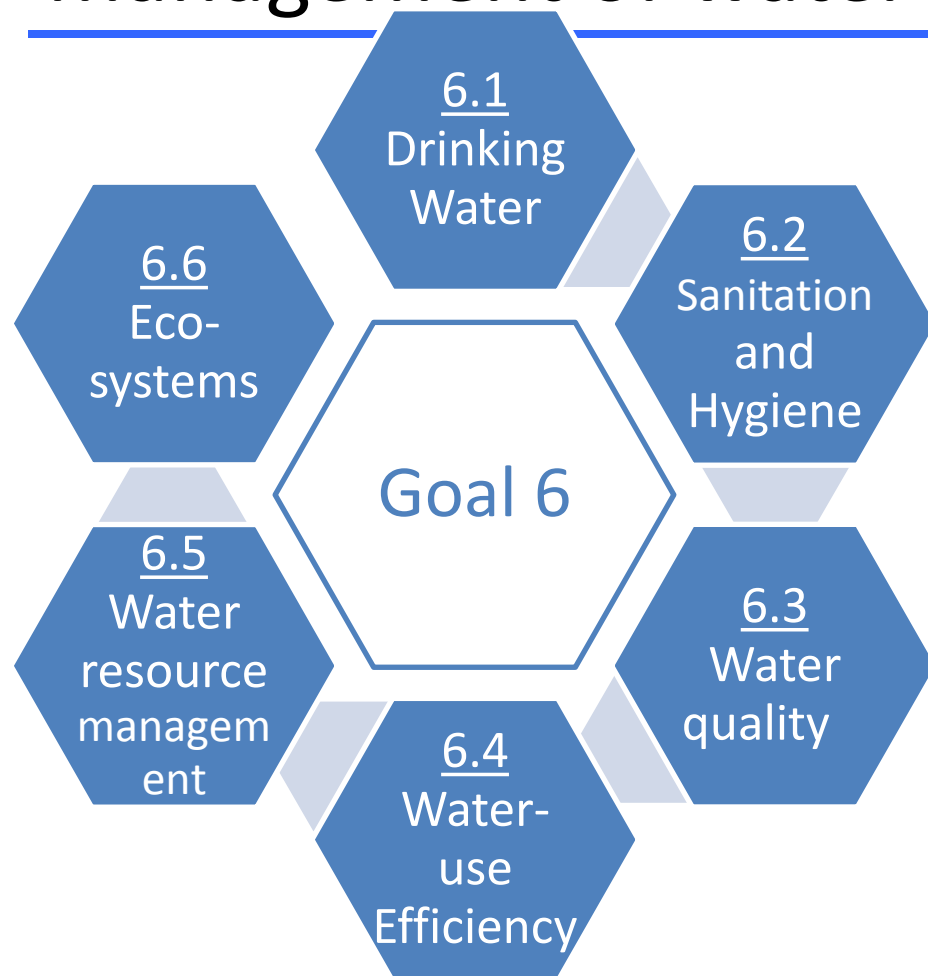- Monitoring by JMP, primarily using household surveys

SDGs

- Total of 17 goals, 169 targets

- 8 targets under "Water and Sanitation" goal

- Twelve core indicators, many sub-indicators

- Relevant to all countries

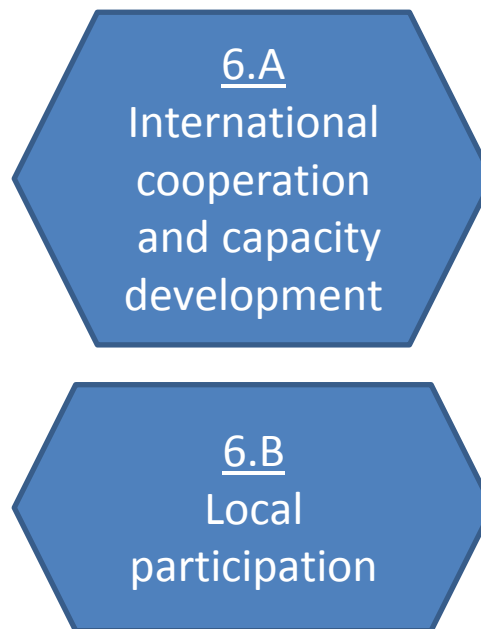- Monitoring by national authorities, feeding into regional and global reports

World Health Organization
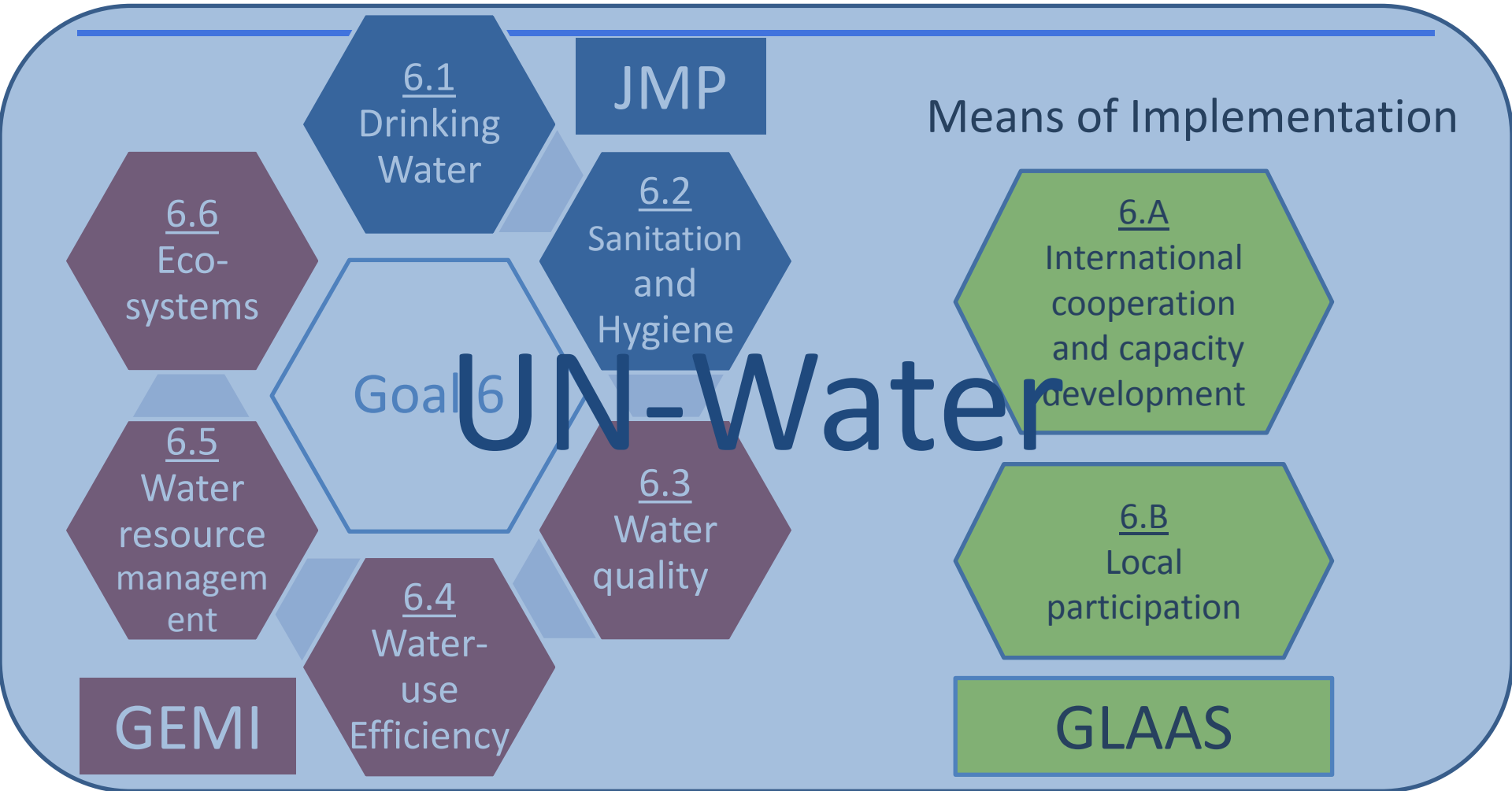
JMP | WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation

unicef

17 SDGs - 169 targets

Goal 6: Ensure availability and sustainable management of water and sanitation for all

Means of Implementation

6.1 Drinking Water

6.6 Eco-systems

Goal 6

6.2 Sanitation and Hygiene

6.5 Water resource management

6.4 Water-use Efficiency

6.3 Water quality

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

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

12 proposed indicators for Goal 6

Indicator	Lead agencies	Indicator (brief title)	
6.1.1	WHO/UNICEF JMP	Safely managed drinking water services	🟢
6.2.1	WHO/UNICEF JMP	Safely managed sanitation services	🟢
6.2.2	WHO/UNICEF JMP	Handwashing in the home	⭕
6.3.1	WHO, UN-Habitat	Safely treated wastewater	🟢
6.3.2	UNEP	Ambient water quality in water bodies	🟢
6.4.1	FAO	Change in water use-efficiency over time	⚪
6.4.2	FAO	Level of water stress	⚪
6.5.1	UNEP	Degree of integrated water resource management implementation	⚪
6.5.2	UNECE, UNEP	Transboundary basin areas with operational arrangements for cooperation	⭕
6.6.1	UNEP	Change in ~~wetlands extent~~ fresh-water ecosystems over time	🟢
6.A	OECD, WHO, UNEP	Water and sanitation ODA as part of coordinated spending plans	🟢
6.B	WHO, UNEP	Participation of local communities in water and sanitation management	🟢

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,   **Accessibility**

- available when needed, and   **Availability**

- free of faecal and priority chemical contamination   **Quality**

Lead: WHO/UNICEF Joint Monitoring Programme

Monitoring drinking water

Criterion	Household Surveys
Availability	Now: What people report using New? Is water always available from your main drinking water source?
Accessibility	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?
Quality	New: Water quality testing in household surveys

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

World Health Organization

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

unicef

Sanitation Chain: evidence, action and monitoring
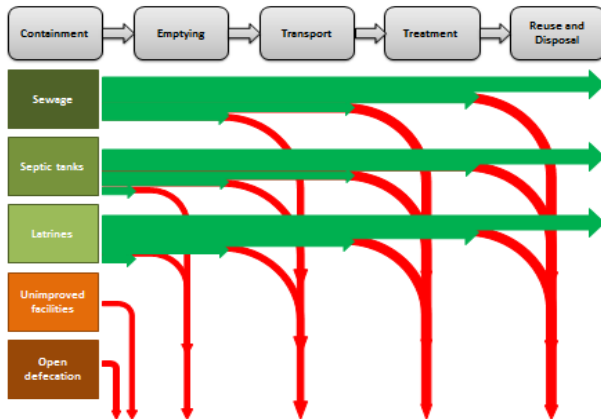
Sanitation Chain Monitoring: Dhaka

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

Accessibility

Availability

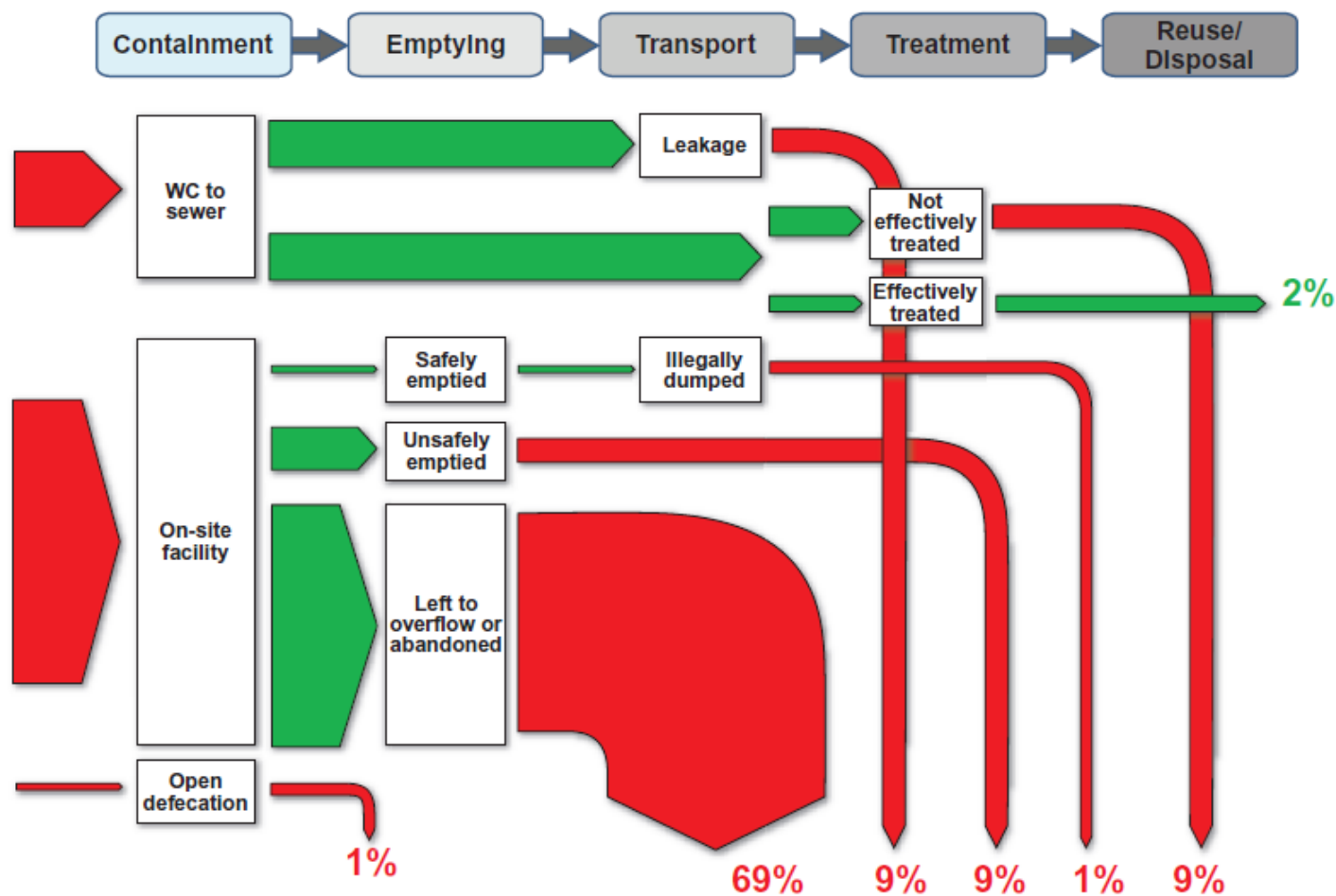Lead: WHO/UNICEF Joint Monitoring Programme

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 O_2
  - 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)

Monitoring 6.4 (FAO-AQUASTAT+)

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)

Monitoring 6.5 (UNEP+)

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

Coordinated monitoring for SDG 6

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