

Photo: UNICEF. Women, some of whom balance containers on their heads, cross a road that has been inundated with waters caused by seasonal flooding.

Photo: World Bank / WSP. Proud Owners of Newly Built Bathroom financed through a loan from a local microfinance institution in Peru.

## Introduction

In May 2011, the World Health Organization (WHO) and UNICEF convened a global stakeholder consultation in Berlin, hosted by the German Ministry of Economic Cooperation and Development (BMZ), to start the process of formulating proposed post-2015 WASH targets and corresponding indicators. For the ensuing process the WHO/UNICEF Joint Monitoring Programme on Water Supply and Sanitation (JMP) served as a global platform for information generation, for consultation and for synthesis.

The outcome of this process, led by four working groups (Water, Sanitation, Hygiene, and Equity and Non-Discrimination) has been the subject of a second consultation in The Hague (3-5 December 2012).



At this meeting, there was broad consensus that the proposed targets and indicators provided a basis for further action and could provide valuable input into the political discussions on the post-2015 development agenda.

This document outlines the proposed WASH indicators, targets and definitions, as well as some of the factors that guided their development.

# Fundamental considerations Reducing inequalities

Targets should call for **progressive reduction in inequalities** between rich and poor, urban and rural, slums and formal urban settlements, and disadvantaged groups and the general population. Inequalities related to individual status based on **gender**, **disability and age** should also be reduced. Further details are provided in the endnote below.

#### Levels of service

Households should not simply gain basic access but move upwards through a "ladder" of service levels, specified by multiple criteria and related to service thresholds derived from the normative criteria of the human right to water and sanitation.

#### Settings beyond the household

As well as households, schools and health centres should also be prioritized for provision of access to drinking water and sanitation, with a specific focus on universal handwashing and menstrual hygiene management.

#### Sustainability

Key parameters include affordability, accountability, and financial and environmental sustainability.

## Proposed targets

The two-year consultative process, involving over 200 individuals and over 100 leading organizations in the sector, has resulted in the development of proposed targets which are ambitious yet considered by leaders in the field to be achievable.

The shared vision is that:

- No one practices open defecation
- Everyone has safe water, sanitation and hygiene at home
- All schools and health centres have water, sanitation and hygiene
- Water, sanitation and hygiene are sustainable and inequalities have been progressively eliminated.

## Objectives of the targets

The working groups developed proposed targets for drinking water, sanitation, hygiene and the elimination of inequalities. As the target year of the future global development framework has not yet been set, a **25 year-period** was assumed, between 2015 and 2040.

The targets address the objectives of progressive realization through *increasing the numbers* of people using services, through reducing inequalities, through increases in service levels, by driving progress in schools and health centres as well as households, by achieving universal coverage for as many parameters as possible within the 2015-2040 timeframe and by sustained coverage over the long term.

### **Detailed targets**

When consolidated, the proposals developed by each of the four working groups – Water, Sanitation, Hygiene, and Equity and Non-Discrimination – yield the following, detailed targets.

**Target 1: By 2025,** no one practices open defecation, and inequalities in the practice of open defecation have been progressively eliminated.

**Target 2: By 2030,** everyone uses a basic drinking water supply and handwashing facilities when at home, all schools and health centres provide all users with basic drinking water supply and adequate sanitation, handwashing facilities and menstrual hygiene facilities, and inequalities in access to each of these services have been progressively eliminated.

**Target 3: By 2040,** everyone uses adequate sanitation when at home, the proportion of the population not using an intermediate drinking water supply service at home has been reduced by half, the excreta from at least half of schools, health centres and households with adequate sanitation are safely managed, and inequalities in access to each of these services have been progressively reduced.

**Target 4:** All drinking water supply, sanitation and hygiene services are delivered in a progressively affordable, accountable, and financially and environmentally sustainable manner.

## **Target Dates**

2025 No open defecation

**2030** Basic drinking water, adequate sanitation, handwashing and menstrual hygiene management in schools and health centres; basic water at home; handwashing at home

2040 Adequate sanitation at home

This is laid down in a timeframe for targets reflecting a combination of **universal coverage for some parameters**, and progress towards universal coverage for others.

	Water	Sanitation	Hygiene
2025		No open defecation	
2030	Universal basic drinking water in schools and health centres Universal basic drinking water at home	Universal adequate sanitation in schools and health centres	Universal adequate handwashing and MHM in schools and health centres Universal adequate handwashing at home
2040	Progress towards intermediate drinking water at home	Universal adequate sanitation at home Progress towards safe management of excreta	

## Indicators' by Target

In order to measure the progressive reduction or elimination of inequalities, all indicators must be disaggregated by rural and urban, by wealth quintiles, by slums and formal urban settlements, and by disadvantaged groups and the general population. Disadvantaged groups must be identified through participatory national processes taking into account prohibited grounds of discrimination.

#### Target 1:

**By 2025** no one practices open defecation, and inequalities in the practice of open defecation have been progressively eliminated.

#### **Indicator**

- 1.1 Percentage of population reporting practicing open defecation
- Percentage of population not using any sanitation facility.
- Percentage of households in which open defecation is practiced by any household member.
- Percentage of households with children under 5 reporting hygienic disposal of the stools of children under 5.

#### Target 2:

**By 2030** everyone uses basic drinking-water supply and handwashing facilities when at home, all schools and health centres provide all users with basic drinking-water supply and adequate sanitation facilities, handwashing facilities and menstrual hygiene facilities, and inequalities in access to each of these services have been progressively eliminated.

#### **Indicators**

- 2.1 Percentage of population using a basic drinking-water service
- Percentage of population using an improved source with a total collection time of 30 minutes or less for a roundtrip including queuing.

## 2.2 Percentage of population with basic handwashing facilities in the home

- Percentage of households with soap and water at a hand washing facility commonly used by family members.
- Percentage of households with soap and water at a handwashing facility within or immediately near sanitation facilities.
- Percentage of households with soap and water at a handwashing facility within or immediately near the food preparation area.

- 2.3 Percentage of pupils enrolled in primary and secondary schools providing basic drinking water, adequate sanitation and adequate hygiene services
- Percentage of primary and secondary schools with an improved source (in rural areas, pre-2015 JMP definitions<sup>2</sup>; in urban areas, piped water into school, yard or plot or a stand pipe/public tap or a tubewell /borehole) on premises and water points accessible to all users during school hours.
- Percentage of primary and secondary schools with gender-separated sanitation facilities on or near premises, with at least one toilet for every 25 girls, at least one toilet for female school staff, a minimum of one toilet and one urinal for every 50 boys and at least one toilet for male school staff.
- Percentage of primary and secondary schools with a handwashing facility with soap and water in or near sanitation facilities.
- Percentage of primary and secondary schools with a handwashing facility with soap and water near food preparation areas.
- Percentage of primary and secondary schools with a private place for washing hands, private parts and clothes; drying re-usable materials; and safe disposal of used menstrual materials.

# 2.4 Percentage of beneficiaries using hospitals, health centres and clinics providing basic drinking-water, adequate sanitation and adequate hygiene

- Percentage of hospitals, health centres and clinics with an improved source (in rural areas, pre-2015 JMP definitions; in urban areas, piped water into health centre, yard or plot or a stand pipe/public tap or a tubewell/borehole) on premises and water points accessible to all users at all times.
- Percentage of hospitals, health centres and clinics with improved gender separated sanitation facility on or near premises (at least one toilet for every 20 users at inpatient centres, at least four toilets – one each for staff, female, male and child patients – at outpatient centres).
- Percentage of hospitals, health centres and clinics with a handwashing facility with soap and water in or near sanitation facilities, food preparation areas and patient care areas.
- Percentage of hospitals, health centres and clinics with a private place for washing hands, private parts and clothes; drying reusable materials; and safe disposal of used menstrual materials.

NO ONE
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EVERYONE
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ALL SCHOOLS AND HEALTH CENTRES HAVE WATER, SANITATION AND HYGIENE

WATER, SANITATION AND HYGIENE ARE SUSTAINABLE AND INEQUALITIES HAVE BEEN PROGRESSIVELY ELIMINATED

2 See Endnote.

<sup>1</sup> Headline indicators are expressed in terms of people, while sub-indicators are expressed in terms of households, schools or health centres (as this is the basis on which data are collected). It is assumed that necessary calculations will be carried out to convert one into the other.

#### Target 3:

By 2040, everyone uses adequate sanitation at home, the proportion of the population not using an intermediate drinking water service at home has been reduced by half, the excreta from at least half of schools, health centres and households with adequate sanitation are safely managed, and inequalities in access to all these services have been progressively reduced.

#### **Indicators**

## 3.1 Percentage of population using an intermediate drinking water service

 Percentage of population using an improved drinking water source on premises with discontinuity less than 2 days in the last 2 weeks; with less than 10 cfu *E.coli* / 100ml year round at source; accessible to all members of the household at the times they need it.

## 3.2 Percentage of population using an adequate sanitation facility

- Percentage of population using an adequate sanitation facility.
- Percentage of households in which the sanitation facility is used by all members of household (including men and women, boys and girls, elderly, people with disabilities) whenever needed.

## 3.3 Percentage of population living in households whose excreta are safely managed

- Percentage of households with adequate sanitation whose excreta are safely managed.
- Share of human excreta that reaches designated disposal sites.





3 Affordability and accessibility to individual households could be addressed through questions in cross sectional surveys which include: Percentage of population reporting having been unable to access water when they needed it at some time in the past two weeks [response categories: unreliable, unaffordable, insufficient, unacceptable, access denied, etc].

#### Target 4:

All drinking water, sanitation and hygiene services are delivered in a progressively affordable, accountable, financially and environmentally sustainable manner.

#### **Indicators**

- **4.1** Percentage of population using water and sanitation service providers registered with a regulatory authority (disaggregated by rural and urban).
- **4.2** Percentage of population in the poorest quintile whose financial expenditure on water, sanitation and hygiene is below 3% of the national poverty line (disaggregated by rural and urban)<sup>3</sup>.
- **4.3** Ratio of annual revenue to annual expenditure on maintenance (including operating expenditures, capital maintenance, debt servicing) AND
- **4.4** Ratio of annual expenditure on maintenance (including operating expenditures, capital maintenance, debt servicing) to annualized value of capital assets.
- **4.5** Percentage of raw water quality tests within national standards for faecal contamination AND
- **4.6** EITHER Ratio of water production (lpcpd) to total water consumption (lpcpd) OR per capita renewable water resources.

### Endnote: Underlying Assumptions and Principles Scope

- The targets should be formulated in the context of a simple, inspirational vision, articulated around universal use of water, sanitation and hygiene.
- Targets should focus primarily on outcomes.
- Targets should reflect the human rights to water and sanitation, and the concept of progressive realization of the rights.
- The targets should reflect the aspiration of both an increase in the number of people using water, sanitation and hygiene, and improvements in their level of service, and both are considered progressive realization.
- Targets are global and must therefore be relevant to all countries.
- Targets should look beyond the home to schools and health centres.
- There must be a focus on the poor, disadvantaged and excluded.
- There must be a focus on the elimination of inequalities and inequities.
- The scope of the targets does not limit the scope in terms of what the Working Groups think needs to be regularly monitored and reported on in the water, sanitation and hygiene sector; recommendations will be made for a longer list of parameters in addition to those in the targets.

#### **Format**

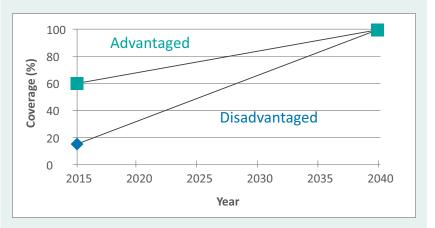
- Three or four targets are needed, with a short set of accompanying indicators.
- The targets need to be unambiguous, as easily communicable as possible, and expressed in simple language that all can understand and relate to.
- Both professional jargon and the over-use of adjectives in the targets should be avoided.
- Clear and comprehensive definitions are needed which capture the details and full aspirations of the targets, allowing the targets to be short and simple.
- A cohesive set of targets, indicators and definitions are required, that have internal consistency<sup>4</sup>.
- Each sub-sector (water, sanitation and hygiene) is important in its own right, and should not be subsumed within each other.
- The targets should be expressed in terms of a set of dates by which various levels of inequality reduction and improvements in service levels and practices will have taken place.
- As the target year of the future global development framework has not yet been set, a 25 year-period is assumed, between 2015 and 2040.

# Proposed measurement and reporting of reduction/ elimination of inequalities

Data will be disaggregated by the four population groups (rich and poor, urban and rural, slums and formal urban settlements, disadvantaged groups and the general population). Building on these disaggregated data, the measurement of reducing inequalities can be determined through the following steps:

- 1. Determine the necessary rate of progress for both worst-off and better-off groups in order to meet each target (this depends both on the target and on the specific year to be set) (see Figure 1).
- Compare the percentage of the worstoff population who use the services set under each target with the percentage of the better-off population to establish the disparity in use.
- 3. If the progress of both the worst-off and better-off groups follows or exceeds the set rate of progress, and if the disparity between the two population groups narrows accordingly, the country is considered "on-track".

## Figure 1: Determining the rate of progress needed to reduce inequalities



#### Three levels of assessment are essential:

- Progress towards meeting the target
- Rate of progress as set according to the target for each population group
- Reduction of inequalities

By measuring the rate of progress for both the worst-off and better-off and comparing these, various elements can be assessed:
1) progress required to meet the target;
2) the reduction in inequalities; and 3) the necessary rate of progress to meet the target. This will also show eventual retrogression. As defined above, these three conditions must be met to be considered 'progressive reduction of inequality'.

4. In addition, a Traffic Lights System will serve for the overall assessment of the progressive reduction of inequalities under each target, combining the four population groups (poorest vs. richest wealth quintile, rural vs. urban, slum vs. formal urban settlement, and disadvantaged groups vs. general population). Green implies "on track", yellow shows that there is some progress, but that it is insufficient, and red means "off-track". If 3 or 4 out of 4 disaggregated groups are on-track, it is assessed as green; 2 out of 4 is yellow; and 0 or 1 out of 4 is red.

<sup>4</sup> That is, not a long list of individual targets and indicators to be selected from, as a "mix and match" approach will not guarantee consistency.

## Definitions and general terms used in this document

Adequate handwashing facilities in schools and health centres: Handwashing facilities, with soap and water, available inside or immediately outside sanitation facilities, where food is prepared or consumed, and in patient care areas.

Adequate menstrual hygiene management facilities in schools and health centres provide privacy for changing materials and for washing hands, private parts and clothes with soap and water; include access to water and soap within a place that provides an adequate level of privacy for washing stains from clothes and drying re-usable menstrual materials; include disposal facilities for used menstrual materials (from collection point to final disposal).

Adequate sanitation at home: Adequate sanitation facilities at home are those that effectively separate excreta from human contact, and ensure that excreta do not re-enter the immediate environment. Each of the following sanitation facility types is considered as adequate sanitation for monitoring progress toward the household sanitation targets, if the facility is shared among no more than 5 families or 30 persons, whichever is fewer, and if the users know each other:

- A pit latrine with a superstructure, and a platform or squatting slab constructed of durable material. A variety of latrine types can fall under this category, including composting latrines, pour-flush latrines, and VIPs.
- A toilet connected to a septic tank.
- A toilet connected to a sewer (small bore or conventional).

Adequate sanitation facilities in schools and health centres are those that effectively separate excreta from human contact, and ensure that excreta do not re-enter the immediate environment. An adequate school or health centre sanitation facility:

- is located in close proximity to the school or health centre;
- is accessible to all users, including adults and children, the elderly, and those with physical disabilities;
- provides separate facilities for males and females (boys and girls at school), and for adults and children;
- is equipped with hand washing stations that include soap and water and are inside or immediately outside the sanitation facility;
- provides adequate menstrual management facilities in sanitation facilities that are used by women and by girls of menstruating age; at schools, provides at least one toilet per 25 girls and at least one toilet for female

- school staff, as well as a minimum of one toilet plus one urinal (or 50 centimeters of urinal wall) per 50 boys, and at least one toilet for male school staff;
- At in-patient health centres, includes at least one toilet per 20 users;
- At out-patient health centres, includes at least four toilets - one each for staff, female patients, male patients, and child patients.

Basic drinking-water service in schools: water from an 'improved' source on premises (in rural, pre-2015 JMP definitions; in urban, piped water into school, yard or plot or a stand pipe/ public tap or a tubewell/borehole) capable of delivering sufficient water at all times for drinking, personal hygiene and, where appropriate, food preparation, cleaning and laundry. Five litres per capita per day (lpcpd) are available for non-residential schoolchildren and staff in non-residential and day schools; and 20 lpcpd are available for all residential schoolchildren and staff in boarding schools. Additional quantities of water may be required depending on sanitation facilities (e.g. pour flush or flush toilets). Drinking water points are accessible to all users, including those with disabilities, throughout the school day.

Basic drinking-water service in health centres: water from an 'improved' source on premises (in rural, pre-2015 JMP definitions; in urban, piped water into health centre yard or plot or a stand pipe/public tap or a tubewell/borehole) capable of delivering the minimum quantity of water that is required for different situations in the health care setting as defined by WHO<sup>5</sup>. Drinking-water points are accessible to all users, including those with disabilities, throughout the school day.

Basic drinking-water at home: Households are considered to have a basic drinking water service when they use water from an 'improved' source (pre-2015 JMP definitions in rural areas; piped water into dwelling, yard or plot, or a standpipe/public tap or a tubewell/borehole in urban areas) with a total collection time of 30 minutes or less for a roundtrip, including queuing.

Basic handwashing facilities at home: handwashing facilities, with soap and water, available near sanitation facilities and where food is prepared or consumed.

<sup>5</sup> The WHO Essential Environmental Health Standards recommend the following minimum quantities of water per person in each setting type: Outpatients: 5 L/consultation; Inpatients: 40-60 L/patient/day; Operating theatre or maternity unit: 100 L/intervention; Dry or supplementary feeding centre: 0.5 - 5 L/consultation (depending on wait time); Wet supplementary feeding centre: 15 L/consultation; Inpatient therapeutic feeding centre: 30 L/patient/day; Cholera treatment centre: 60 L/patient/day; Severe acute respiratory diseases isolation centre: 100 L/patient/day; Viral haemorrhagic fever isolation centre: 300-400 L/patient/day

Disadvantaged groups: These groups will be identified through a participatory national process taking into account group-related prohibited grounds of discrimination: including ethnicity, race, colour, religion, caste, national or social origin. This process must be inclusive and ensure active, free and meaningful participation of all relevant population groups, in particular disadvantaged groups. It should involve national human rights institutions, civil society and community based organizations, human rights organizations and academia.

**Drinking water:** Water used, or intended to be available for use, by humans for drinking, cooking, food preparation, personal hygiene or similar purposes. (European Protocol on Water & Health)

Excreta: human faeces and urine.

**Handwashing facility:** A handwashing facility is a device to contain, transport or regulate the flow of water to facilitate handwashing. It may be fixed or movable.

Health centres: includes all the places WHO defines as health centres: hospitals, clinics, health posts, dental surgeries, general practitioner settings, and home-based care. (WHO 2008 Essential Environmental Health Standards in Health Care)

#### Intermediate drinking water at home:

Households are considered to have intermediate drinking water service when they use water from an 'improved' source (pre-2015 JMP definitions in rural areas; piped water into dwelling, yard or plot,

or a tubewell/borehole in urban areas) located on their premises, which delivers an acceptable quantity of water with only moderate levels of discontinuity (non-functional for no more than two days in the last two weeks), water quality at source meets a threshold of less than 10 cfu *E. coli*/100ml year-round, and the water point is accessible to all household members at the times they need it.

#### Menstrual hygiene management facilities:

Facilities that provide water and space for washing and cleaning the body during menstruation, and that allow hygienic management of material for absorbing menstrual blood and disposal of used menstrual materials.

**Open defecation:** Defecation in which 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; are discharged into a drainage channel, river, sea, or other water body; or are wrapped in temporary material and discarded.

Pre-2015 JMP definition of an improved drinking water source: An improved drinking water source is defined as a source or delivery point that by nature of its construction or through active intervention is protected from outside contamination, in particular from contamination with faecal matter. They include: piped drinking water supply on premises; public taps/standposts; tubewell/borehole; protected dug well; protected spring; rainwater.

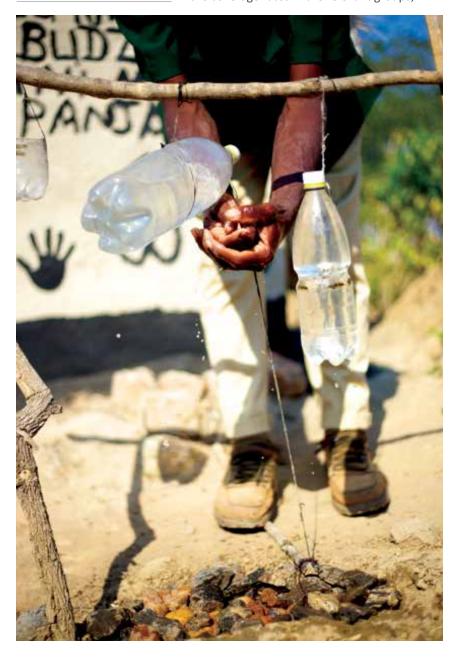
Photo: UNICEF. Their images reflected in a pool of water, women collect water at a handpump, in the town of Jammam, in Maban County, Upper Nile State.



Pre-2015 JMP definition of an improved sanitation facility: An improved sanitation facility is one that hygienically separates human excreta from human contact. It included the following facility types: flush or pour-flush toilets to piped sewer system, septic tank or pit; Ventilated Improved Pit (VIP) latrine; pit latrine with slab; composting toilet.

Progressive reduction and elimination of **inequalities:** The systematic reduction and elimination of the inequalities between different population groups as they progress toward the specified target. When the target aims at universal access, the language should be progressive "elimination" of inequalities, while progressive "reduction" of inequalities refers to other targets. To count as a 'progressive' reduction, the following conditions must be met cumulatively: (1) there must be a reduction in the difference between the coverage rates in the relevant groups;

Photo: Katherine Anderson/WSSCC.



(2) the rate of progress of each group must meet or exceed the rate of progress required for that group to reach the target by the specified time; and (3) the reduction in inequality must not be the result of a reduced rate of coverage for any group. Progress should be reported by poorest vs. richest wealth quintile, rural vs. urban, slum vs. formal urban settlement, and disadvantaged groups vs. general population.

Safe management of household excreta is defined as the containment, extraction, and transport of excreta to a designated disposal or treatment site, or the safe re-use of excreta at the household or community level, as appropriate to the local context. The share of households with safely managed excreta is defined as the fraction of households whose excreta:

- · Are carried through a sewer network to a designated location (e.g. treatment facility);
- Are hygienically collected from septic tanks or latrine pits by a suction truck (or similar equipment that limits human contact) and transported to a designated location (e.g. treatment facility or solid waste collection
- Are stored on site (e.g. in a sealed latrine pit) until they are safe to handle and re-use (e.g. as an agricultural input).

Sanitation: Sanitation is the provision of facilities and services for the safe disposal of human urine and faeces. (WHO)

**Schools:** primary and secondary schools, boarding and day schools, rural and urban schools, and public and private schools (WHO, 2009 Water, Sanitation and Hygiene Standards in Low-cost Settings), as well as day-care centres, nurseries and kindergartens.

#### Sustainable water services

A drinking water, sanitation or hygiene service is considered to be sustainable if it continues to deliver the designated level of service (with respect to affordability, availability, quality and accessibility) over the long term.



