Ensuring universal, equitable, safe and affordable drinking water for all

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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:

1. located on premises,

Accessibility

2. available when needed, and

Availability

3. free of faecal and priority chemical contamination (*E. coli*/thermotolerant coliforms, arsenic, fluoride)

Quality







Affordability

- Expenditure surveys
 - Calculate amount spent on water (and sanitation)
 - Compare WASH expenditures to
 - Total expenditure (proportion of consumption)
 - Poverty line
 - Water poverty line (price of minimum basket of services)
- Sector data
 - Tariff structures, subsidies
 - Disconnects due to non-payment of bills

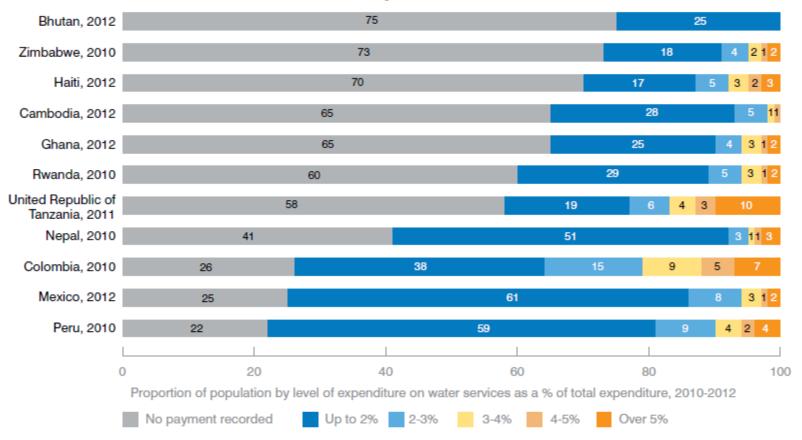






Affordability

Expenditure on water services varies widely between countries









MDG/SDG	Service ladder	Progressive realization
SDG 6.1	Safely managed drinking water services	Drinking water from an improved source which is located on premises, available when needed and free of faecal and priority contamination
	Basic service	Drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing
	Limited service	Drinking water from improved sources which require over 30 minutes for a roundtrip including queuing
	Unimproved	Drinking water from unprotected dug wells or unprotected springs
	Surface water	Drinking water from a river, dam, lake, pond, stream, canal or irrigation channel

Accessibility (travel time)

- On premises (for safely managed services)
- Within 30 minutes (for basic services)
- Over 30 minutes (for limited services)
- Household surveys and censuses
 - "How long does it take to go there, get water, and come back?"
- Sector data
 - Household connections, maximum distances







Data availability in MDG+ countries

- On premises
 - Data for 17 countries, mostly > 90%
 - Iraq, Mauritania, Morocco, Sudan < 80%
- Improved within 1-30 minutes (basic service)
 - Data for 17 countries, mostly < 10%
 - Algeria, Iraq, Morocco, Sudan, UAE > 10%
- Improved over 30 minutes (limited service)
 - Data for 12 countries
 - Mauritania, Sudan, Yemen > 10%







Availability

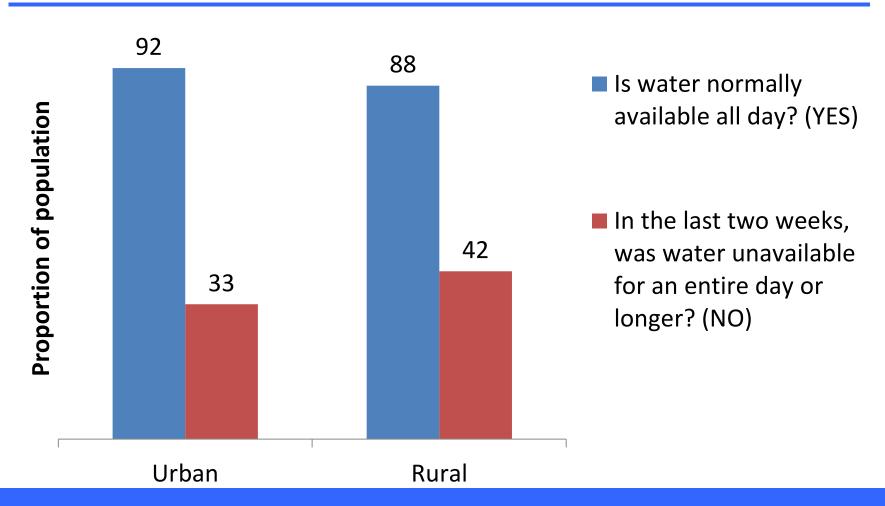
- Household surveys and censuses
 - Introducing new questions
 - Has there been any time in the last month when you did not have water from [your main drinking water source] in sufficient quantities?
- Sector data
 - Continuity of piped supplies
 - Different benchmarks and standards
 - 24/7, 20 hours/day, 16 hours/day, 5 days/week







Jordan PFHS 2007









Intermittent supplies (1)

- Impacts "available when needed", as well as quality in distribution system and household
- Coping strategies
 - Drilling private wells
 - Storage in tanks, cisterns to improve availablity
 - Alternative sources
 - Reliance on tanker truck delivery (now improved)
 - Purchasing water from kiosks
 - Consumption of bottled water (now improved)







Intermittent supplies (2)

- Need for national norms:
 - Intermittent piped supplies
 - Quality, quantity, timing of deliveries (reliability), NRW
 - Storage
 - Standards, cleaning schedules for cisterns, tanks
 - Tankered water
 - Quality, quantity, timing of deliveries (reliability), price
 - Kiosks: quality
 - Bottled water: quality







Quality

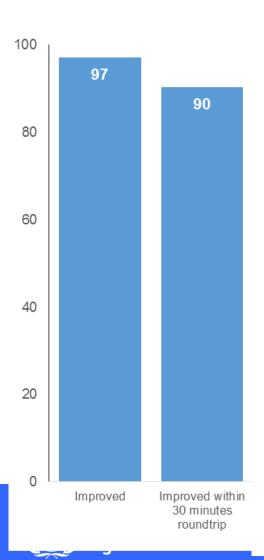
- E. coli/thermotolerant coliforms, arsenic, fluoride
 - Controlled at the point of collection
- Household surveys and censuses
 - New module to test E. coli
- Regulatory data
 - Typically only formal systems, mainly urban
 - Some lack E. coli or thermotolerant coliforms
 - Many lack arsenic and fluoride
 - Some report 'compliance' for multiple parameters







Example of safely managed drinking water



Data availability in MDG+ countries

Type of estimate	Urban	Rural	National
Improved water	12	12	17
Basic water	12	12	17
Limited water	10	10	12
On premises	12	12	17
Availability	9	5	10
Quality	0	0	5
Safely Managed Drinking Water Services	0	0	5







Aspirational global targets

55. The Sustainable Development Goals and targets are integrated and indivisible, global in nature and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities. Targets are defined as aspirational and global, with each Government setting its own national targets guided by the global level of ambition but taking into account national circumstances. Each Government will also decide how these aspirational and global targets should be incorporated into national planning processes, policies and strategies. It is important to recognize the link between sustainable development and other relevant ongoing processes in the economic, social and environmental fields.







Example of national target setting

Water supply

100% of population use improved drinking water sources

> 95% use piped water supplies

Accessibility

100% use improved sources within 30 minutes

> 85% use water supplies on premises

By 2030...

Availability

90% of population at 40+ litres per capita per day

Piped water supplies 18 hours per day (large systems)

Piped water supplies 12 hours per day (small systems)

Quality

100% of piped water supplies meet standards for As, F

80% of piped water supplies meet E. coli standards 95% of time

90% of supplies meet residual chlorine targets

Water safety plans implemented in all piped water supplies

Other

Reduce Non-Revenue Water in piped supplies to 25%

80% of households on piped supplies are metered

Water bills should not exceed 3% of GNI per capita







JMP timeline for 2017 estimates

Activity	Date		
1. Data request via UNICEF/WHO	October – November 2016		
2. Preliminary estimates	November – December 2016		
3. Country consultation	February – March 2017		
4. Final estimates	March – June 2017		
5. JMP progress report published	June 2017		
6. UN SG report on SDG progress	July 2017		











Extra slides

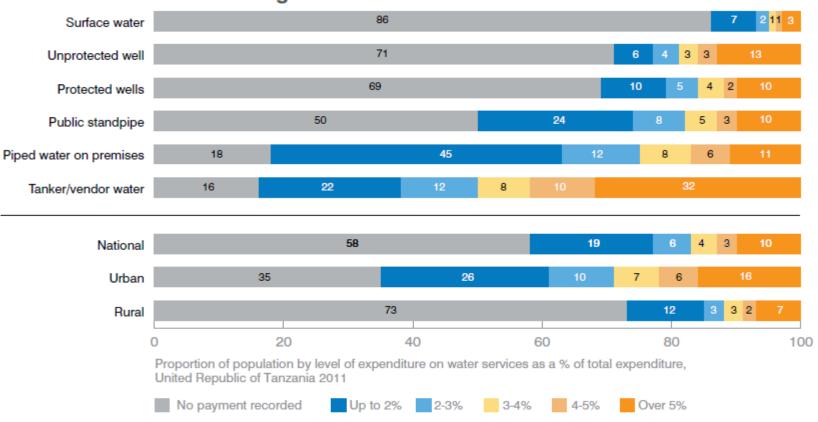






Affordability

In Tanzania, households using tanker/vendor water are most likely to spend over 5 per cent of their annual budget









Data sources

Criterion	Household Surveys	Regulatory data
Accessibility	 Location of water source on premises or elsewhere Collection time (or distance) 	Household connections (piped)Max distance/travel time
Availability	Sufficiency of hh supplyService interruption/down timeSeasonal shortages	Continuity of piped suppliesHours of service
Quality	 Water quality testing at the source Water quality testing in the household 	Compliance with national normsRisk management

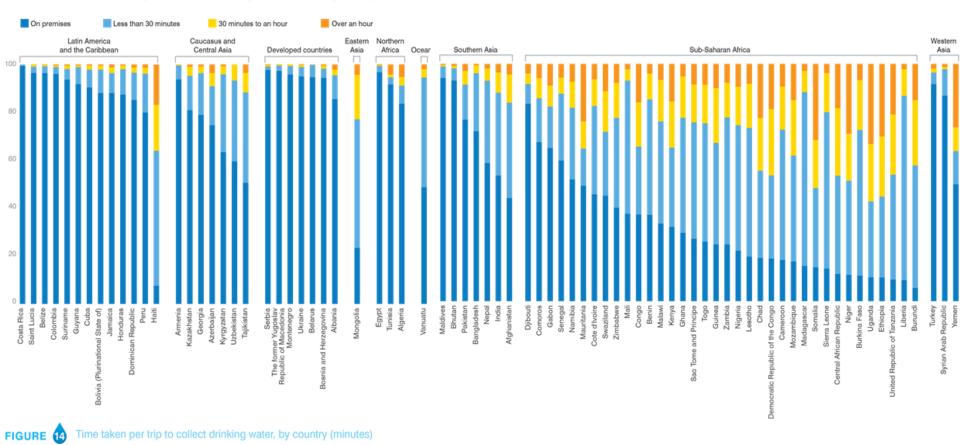






Accessibility

Water collection is a major burden in many countries, especially in sub-Saharan Africa









Availability

Different surveys use different measures of availability

Country	Source	Year	Question	Sources covered	Reported availability
Albania	LSMS	2012	Do you have water continuously? How many hours in a day, on average, did dwellings receive water during last week?	Piped only	60.8% continuous; 69.4% available at least 12 hours per day
Colombia	ENCV	2010	Does water arrive seven days a week? How many days? For those days when water is available is the service for 24 hours?	Piped excluding standpipes	87% available all daily, of which 8.15% not available continuously throughout the day
India	NSS	2012	During which calendar months of the year availability of drinking water was not sufficient?	All water resources	85.8% rural and 89.6% urban sufficient throughout the year
Iraq	IHSES	2012	Are there interruptions in the availability of water from public network? Is the water coming from the public network sufficient?	Public network only	Despite daily interruptions (69.4%) most households are reporting water as being sufficient (74.7%)
Italy	Multiscopo	2014	Are there any irregularities in the water service? If yes to irregularities, how often in the last year?	All water resources	Any irregularity in wate supply, 8.7% nationally
Maviaa	ENICH	2014	How many days a week does water	Piped on	700/ quailable daily

Country consultation

The purpose of the consultation is not to compare JMP and national estimates of WASH coverage but rather to review the completeness or correctness of the datasets in the JMP country file and to verify the interpretation of national data in the JMP estimates. The consultation should focus on three main questions:

- Is the country file missing any relevant national sources of data on drinking water, sanitation and hygiene to get a better estimate?
- Are the data sources listed considered reliable and suitable for use as official national statistics?
- Is the JMP interpretation and classification of the data extracted from national sources accurate and appropriate?







Safely managed drinking water

Data availability: safely managed drinking water

