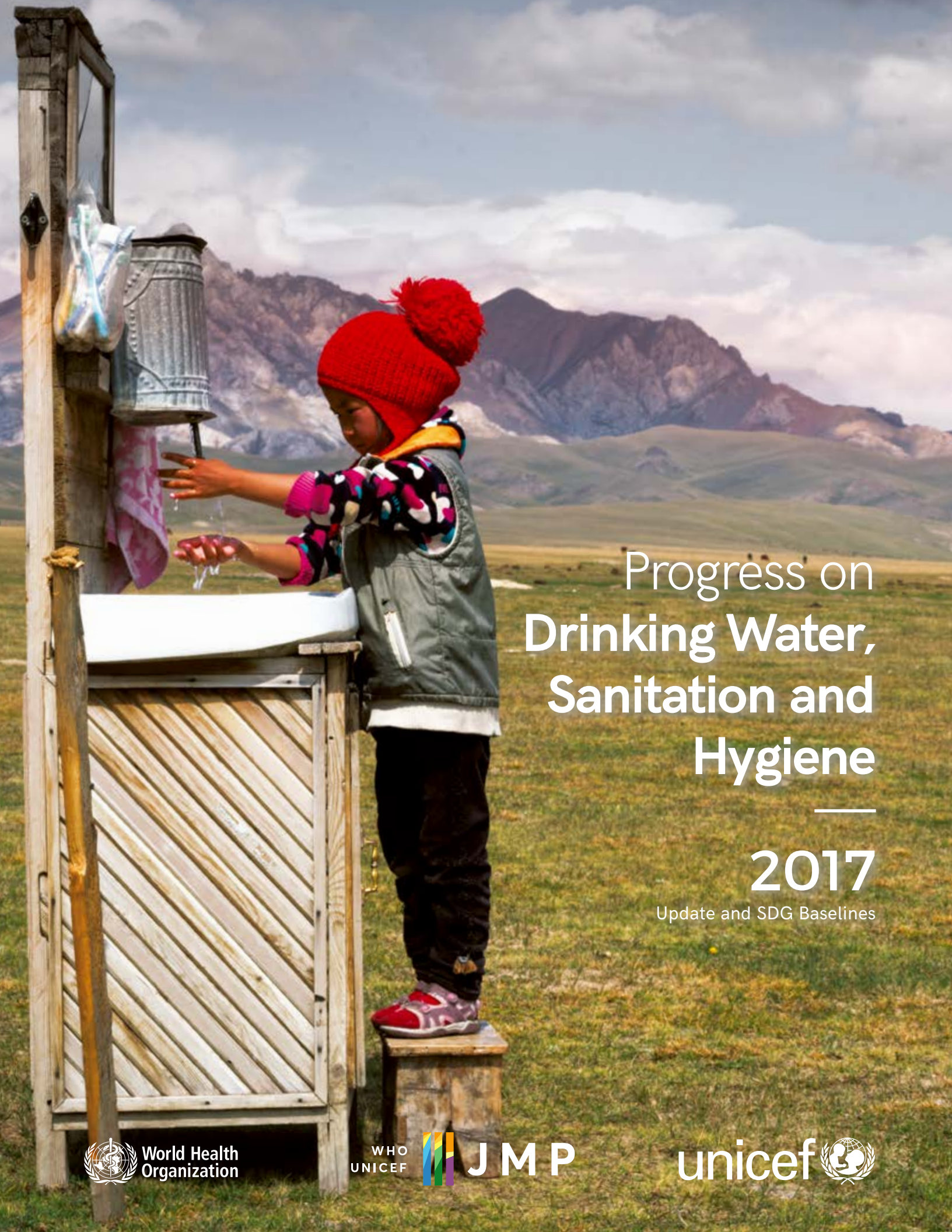

Progress on Drinking Water, Sanitation and Hygiene

2017

Update and SDG Baselines

World Health Organization

WHO UNICEF JMP

unicef

Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines

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Progress on **Drinking Water, Sanitation and Hygiene**

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Foreword

No child should die or get sick as a result of drinking contaminated drinking water, being exposed to other people's excreta, or having no place to wash their hands. No child should have to stay away from school for lack of a clean toilet and privacy. No mother or newborn should contract an infection from an unsanitary delivery room when they are most vulnerable. And no one should suffer the indignity of having to defecate in the open.

But unfortunately, far too many children, women and men around the world experience some or all of these risks to their health and wellbeing -- and, thus to their futures.

That is why the 2030 Agenda for Sustainable Development recognize safe drinking water, effective sanitation, and good hygiene (WASH) both as an end in itself and as a driver of progress on many of the SDGS, including health, nutrition, education and gender equality. To meet these targets, we need a better understanding of the progress we have made and a strategic approach to meet the challenges that lie ahead in our shared effort to reach every community, every family, and every child.

WHO and UNICEF established the Joint Monitoring Programme for Water Supply, Sanitation and Hygiene in 1990, and published regular global updates throughout the Millennium Development Goal period. This report is the first update of the SDG period. It is by far the most comprehensive global assessment of drinking water, sanitation and hygiene to date and includes a wealth of new information on the types of facilities people use and the level of service they receive.

The data highlight how far we have come since 2000. Open defecation rates have fallen and billions have gained access to basic water and sanitation services – both achievements translating into more children growing up free from disease and thus, better lives and brighter futures. Despite these successes, progress has been uneven in both areas, with wide disparities among and within countries.

This report establishes the first-ever national, regional and global baseline estimates for the new SDG indicators of "safely managed" drinking water and sanitation services – meaning drinking water at home that is free from contamination and available when needed, and toilets from which excreta are treated and disposed of safely. Additionally, the report provides global data on the percentage of people who have access to soap and water for handwashing. These new indicators correspond with the ambition of the SDG targets, and raise expectations for both service providers and monitoring systems. They are universally applicable and meeting them will pose challenges for rich countries as well as poor ones.

Safely managed services represent an ambitious new global benchmark and estimates are not yet available for all countries. The report identifies a number of critical data gaps that will need to be addressed in order to enable systematic monitoring of SDG targets, if we are to realise the SDGs commitment to "leave no one behind".

Yet the data we have now are more than enough to show the tasks at hand: to eliminate open defecation for the nearly 900 million people who continue to lack even the most rudimentary sanitation; to bring basic water, sanitation and hygiene within the reach of the most disadvantaged; and to support progress for those who already have basic services, but still don't have truly safe drinking water or adequate sanitation.

These SDG baseline findings set a clear agenda on the work to be done for all of us across the world to progress towards the shared vision of Water, Sanitation, Hygiene and Health for All.

Dr Tedros Adhanom Ghebreyesus
Director-General
WHO

Anthony Lake
Executive Director
UNICEF

Progress on drinking water, sanitation and hygiene 2017 update and SDG baselines

1. Highlights

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has produced regular estimates of national, regional and global progress on drinking water, sanitation and hygiene (WASH) since 1990. The JMP service 'ladders' enable benchmarking and comparison of progress across countries at different stages of development. This 2017 report introduces updated water and sanitation ladders which build on established indicators and establish new rungs with additional criteria relating to service levels. A third ladder has also been introduced for hygiene. The JMP will continue to monitor all rungs on each ladder, with a particular focus on those that relate to the Sustainable Development Goal (SDG) global targets and indicators.

Global goals, targets and indicators for drinking water, sanitation and hygiene

WASH SECTOR GOAL	SDG GLOBAL TARGET		SDG GLOBAL INDICATOR	
Ending open defecation	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	Population practising **open defecation**
Achieving universal access to basic services	1.4	By 2030, ensure all men and women, in particular the poor and vulnerable, have equal rights to economic resources, as well as **access to basic services**...	1.4.1	Population living in households with access to basic services (including **basic drinking water, sanitation and hygiene**)
Progress towards safely managed services	6.1	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**
	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	Population using **safely managed sanitation services**
			6.2.1	Population with a basic **handwashing facility** with soap and water available on premises

Table 1

Updated JMP ladders for drinking water and sanitation and a new ladder for hygiene

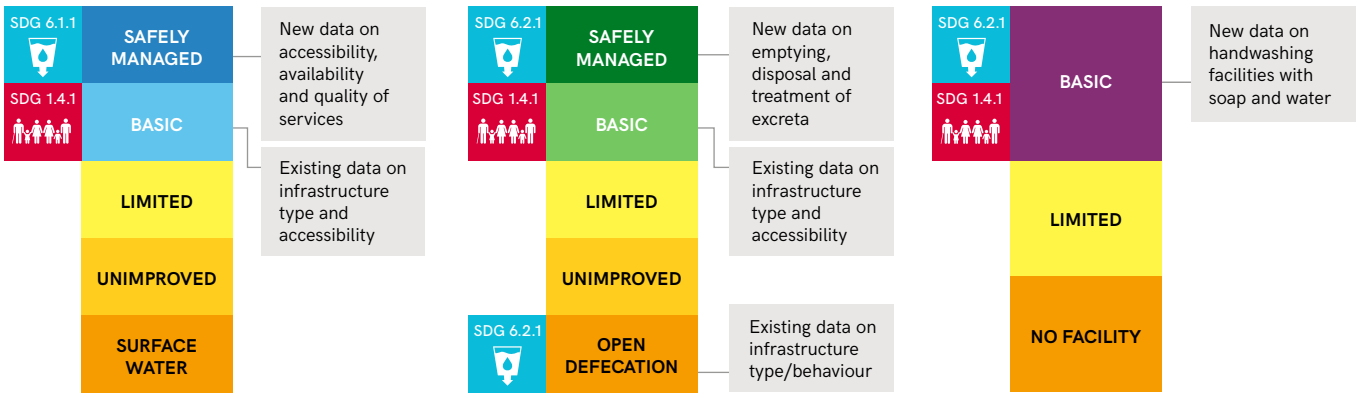


Fig. 1 Updated JMP service ladders

Drinking Water

Key messages

In 2015,

1. 71 per cent of the global population (5.2 billion people) used a **safely managed** drinking water service; that is, one located on premises, available when needed and free from contamination.
2. Estimates for **safely managed** drinking water were available for 96 countries (representing 35 per cent of the global population), and for four out of eight SDG regions[1].
3. One out of three people using **safely managed** drinking water services (1.9 billion) lived in rural areas.
4. Eight out of ten people (5.8 billion) used improved sources with **water available when needed**.
5. Three out of four people (5.4 billion) used improved sources **located on premises**.
6. Three out of four people (5.4 billion) used improved sources **free from contamination**.
7. 89 per cent of the global population (6.5 billion people) used at least a **basic** service; that is, an improved source within 30 minutes' round trip to collect water.
8. 844 million people still lacked even a **basic** drinking water service.
9. 263 million people spent over 30 minutes per round trip to collect water from an improved source (constituting a **limited** drinking water service).
10. 159 million people still collected drinking water directly from **surface water** sources, 58% lived in sub-Saharan Africa.

7 out of 10 people used safely managed drinking water services in 2015

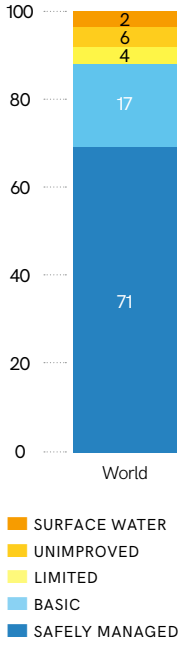


Fig.2 Global drinking water coverage, 2015

Estimates of safely managed drinking water services are available for four out of eight SDG regions

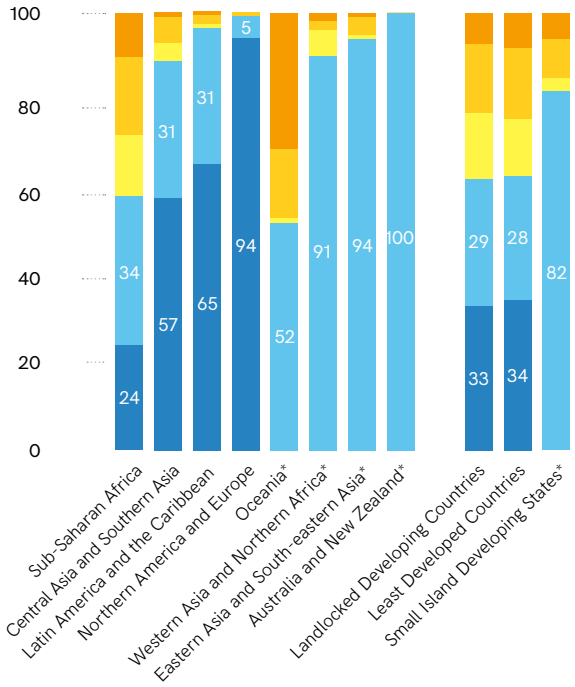


Fig. 3 Regional drinking water coverage, 2015[2]

* Insufficient data to estimate safely managed services.

By 2015, 181 countries had achieved over 75% coverage with at least basic drinking water services[3]

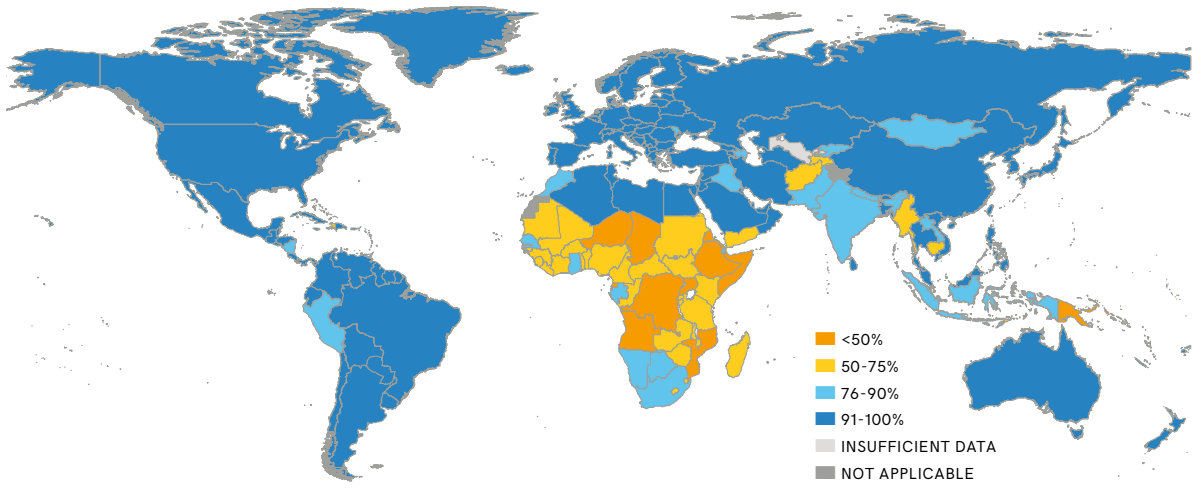


Fig. 4 Proportion of population using at least basic drinking water services, 2015

[1] National estimates are made where data are available for at least 50% of the relevant population. Regional and global estimates are made where data are available for at least 30% of the relevant population.
[2] This report refers to the SDG region of "Oceania excluding Australia and New Zealand" as Oceania.
[3] The JMP tracks progress for 232 countries, areas and territories, including all United Nations Member States. Statistics in this report refer to countries, areas or territories.

Sanitation

Key messages

In 2015,

1. 39 per cent of the global population (2.9 billion people) used a **safely managed** sanitation service; that is, excreta safely disposed of in situ or treated off-site.
2. Estimates for **safely managed** sanitation were available for 84 countries (representing 48 per cent of the global population), and for five out of eight SDG regions[4].
3. Two out of five people using **safely managed** sanitation services (1.2 billion) lived in rural areas.
4. 27 per cent of the global population (1.9 billion people) used private sanitation facilities connected to sewers from which **wastewater was treated**.
5. 13 per cent of the global population (0.9 billion people) used toilets or latrines where excreta were **disposed of in situ**.
6. Available data were insufficient to make a global estimate of the proportion of population using septic tanks and latrines from which excreta are **emptied and treated off-site**.
7. 68 per cent of the global population (5.0 billion people) used at least a **basic** sanitation service.
8. 2.3 billion people still lacked even a **basic** sanitation service.
9. 600 million people used a **limited** sanitation service; that is, improved facilities shared with other households.
10. 892 million people worldwide still practised **open defecation**.

Two out of five people used safely managed sanitation services in 2015

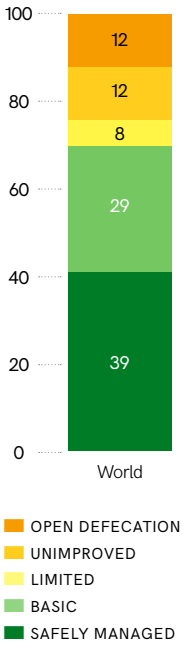


Fig.5 Global sanitation coverage, 2015

Estimates of safely managed sanitation services are available for five out of eight SDG regions

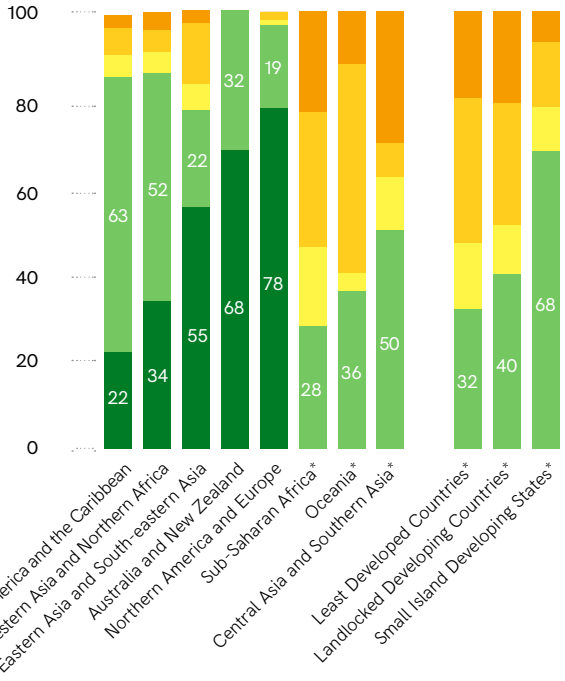


Fig. 6 Regional sanitation coverage, 2015

* Insufficient data to estimate safely managed services.

By 2015, 154 countries had achieved over 75% coverage with basic sanitation services

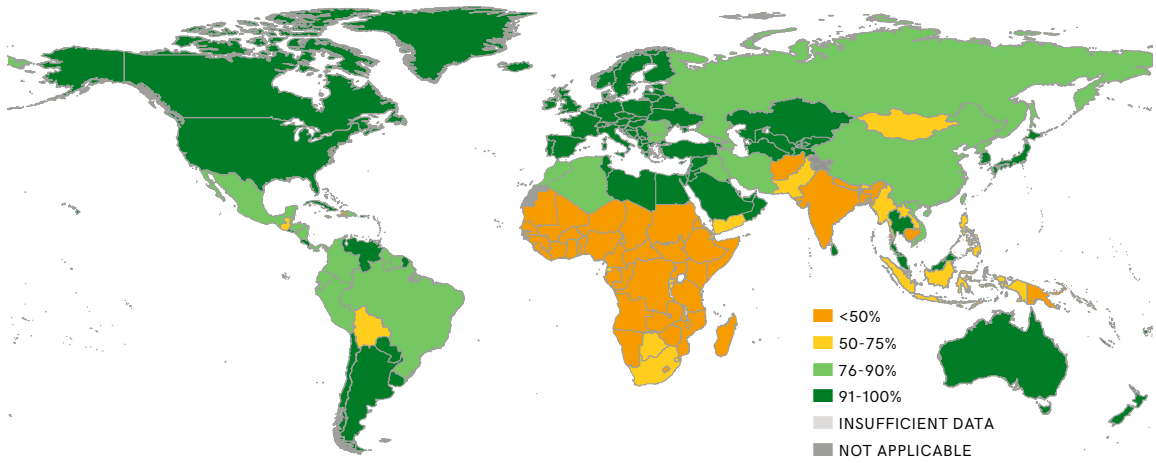


Fig. 7 Proportion of population using at least basic sanitation services, 2015

[4] National estimates are made where data are available for at least 50% of the relevant population. Regional and global estimates are made where data are available for at least 30% of the relevant population.

Hygiene

Key messages

In 2015,

1. 70 countries had comparable data available on handwashing with soap and water, representing 30 per cent of the global population.
2. Coverage of basic handwashing facilities with soap and water varied from 15 per cent in sub-Saharan Africa to 76 per cent in Western Asia and Northern Africa, but data are currently insufficient to produce a global estimate, or estimates for other SDG regions.
3. In Least Developed Countries, 27 per cent of the population had basic handwashing facilities with soap and water, while 26 per cent had handwashing facilities lacking soap or water. The remaining 47 per cent had no facility.
4. In sub-Saharan Africa, three out of five people with basic handwashing facilities (89 million people) lived in urban areas.
5. Many high-income countries lacked sufficient data to estimate the population with basic handwashing facilities.

70 countries had comparable data available on handwashing in 2015

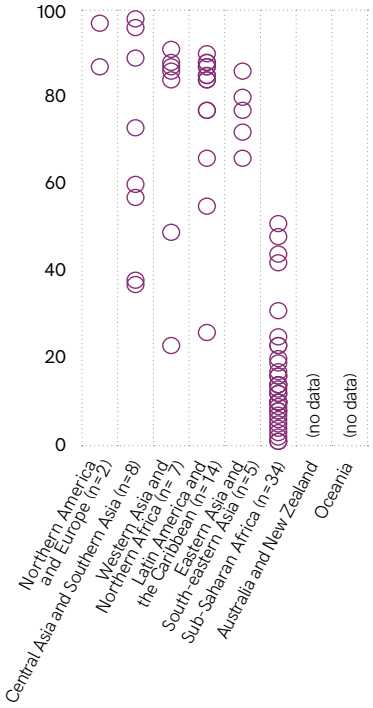


Fig.8 Proportion of population with basic handwashing facilities in 70 countries, 2015

A substantial acceleration is needed to end open defecation by 2030

Between 2000 and 2015, the number of people practising open defecation declined from 1229 million to 892 million, an average decrease of 22 million people per year. As shown in Figure 9, progress will need to accelerate in order to end open defecation by 2030.

All SDG regions saw a drop in the number of people practising open defecation, except for sub-Saharan Africa, where high population growth led to an increase in open defecation from 204 to 220 million, and in Oceania, where open defecation increased from 1 to 1.3 million.

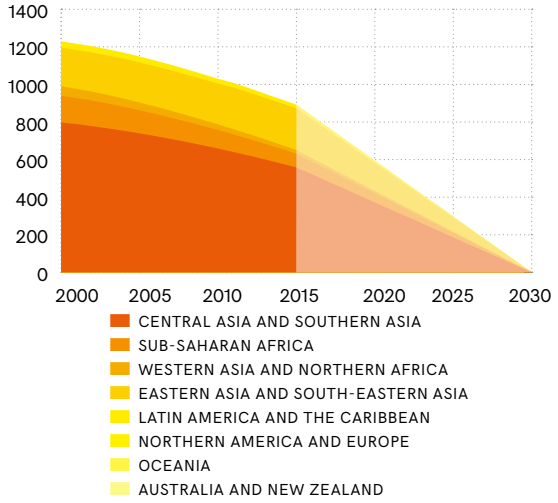


Fig. 9 Regional trends in national population practising open defecation, 2000-2015 (in millions)

In 2015, most countries in Africa had less than 50% coverage with basic handwashing facilities

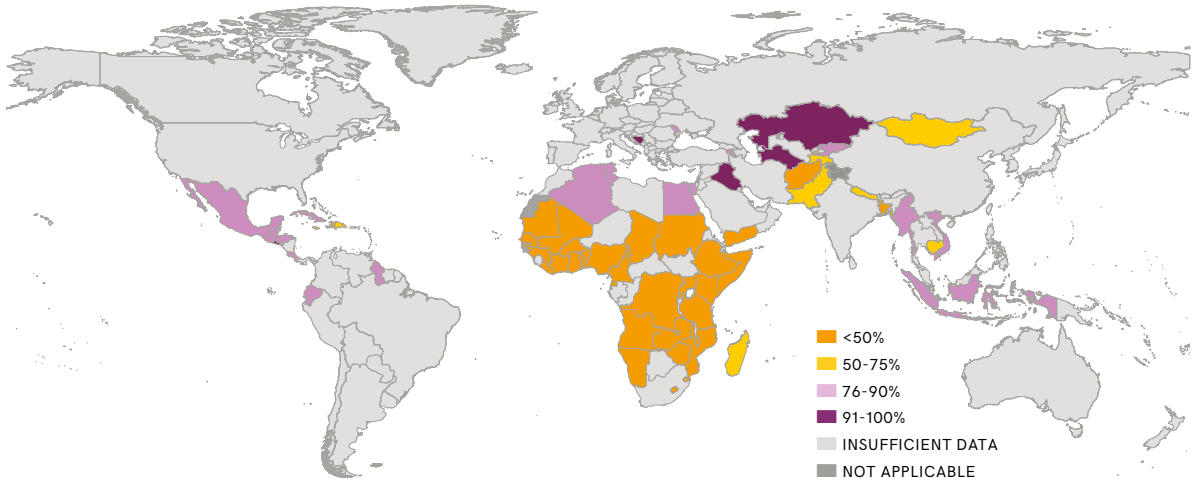


Fig. 10 Proportion of population with handwashing facilities including soap and water at home, 2015

2. Introduction

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has produced regular estimates of global progress on drinking water, sanitation and hygiene (WASH) since 1990. It has established an extensive global database and has been instrumental in developing global norms to benchmark progress. The JMP was responsible for monitoring the 2015 Millennium Development Goal (MDG) target 7c[5] and is now responsible for tracking progress towards the 2030 Sustainable Development Goal (SDG) targets related to drinking water, sanitation and hygiene (WASH). This 2017 update is the most comprehensive assessment to date and establishes the first global baseline estimates for SDG targets 6.1 and 6.2.

2.1 2030 vision for water, sanitation and hygiene

On 25 September 2015, Member States of the United Nations adopted the 2030 Agenda for Sustainable Development.[6] The 2030 Agenda comprises 17 Sustainable Development Goals and 169 targets addressing social, economic and environmental aspects of development, and seeks to end poverty, protect the planet and ensure prosperity for all. The SDGs are **aspirational global targets** that are intended to be universally relevant and applicable to all countries, "with each Government setting its own national targets guided by the global level of ambition, but taking into account national circumstances" (para. 55). Global indicators will be tracked by mandated agencies, using consistent international definitions and methods to compare data from national sources. National targets will be tracked by national authorities, and in some cases indicators, definitions and methods may differ from those used at the global levels.

SDG 1 calls on Member States to "End poverty in all its forms everywhere" and includes a target for universal access to basic services, with a particular focus on poor and vulnerable groups (1.4). Goal 6 is to "Ensure availability and sustainable management of water and sanitation for all" and includes targets addressing all aspects of the freshwater cycle (Box 1). The targets agreed upon by Member States focus on improving the standard of WASH services (6.1 and 6.2); increasing treatment, recycling and reuse of wastewater (6.3); improving efficiency and ensuring sustainable withdrawals (6.4); and protecting water-related ecosystems (6.6) as part of an integrated approach to water resources management (6.5). They also address the means of implementation for achieving these development outcomes (6.a and 6.b).

In March 2016, the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDG) published a list of global SDG indicators for monitoring the goals and targets of the 2030 Agenda.[7] The list included a subset of the indicators recommended by the JMP following international consultations with water and sanitation sector stakeholders. WHO and UNICEF serve as the custodian agencies responsible for global reporting on SDG targets 6.1 and 6.2, and contribute to the wider UN-Water integrated monitoring initiative for Goal 6.[8] The JMP also collaborates with custodian agencies responsible for monitoring other SDG goals and targets related to WASH, including SDG target 1.4 on universal access to basic services, SDG target 3.9 on the disease burden from inadequate WASH, and SDG target 4.a on basic WASH in schools.

[5] United Nations Children's Fund and World Health Organization, *Progress on Sanitation and Drinking Water: 2015 update and MDG assessment*, UNICEF and WHO, New York, 2015.
[6] *Transforming Our World: The 2030 Agenda for Sustainable Development*, United Nations General Assembly Resolution, A/RES/70/1, 21 October 2015.
[7] United Nations Department of Economic and Social Affairs, Statistics Division, 'IAEG-SDGs', <https://unstats.un.org/sdgs/iaeg-sdgs>.
[8] UN-Water, *Monitor and Report*, <www.unwater.org/what-we-do/monitoring-and-report>.

Box 1

GOAL 6. Ensure availability and sustainable management of water and sanitation for all

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

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

6.3 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

6.4 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

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

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

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

2.2 MDGs to SDGs: Addressing unfinished business and raising the bar

SDG targets 6.1 and 6.2 relate to drinking water, sanitation and hygiene and are far more ambitious than the previous MDG target 7c, which aimed to halve the proportion of the population without access to water and sanitation by 2015. First, the SDG targets call for universal and equitable access for all, which implies eliminating inequalities in service levels. Second, they include hygiene, which was not addressed in the MDGs. Third, they specify that drinking water should be safe and affordable, and that sanitation should be adequate. Lastly, they include explicit references to ending open defecation and to the needs of women and girls and those in vulnerable situations. The JMP has developed a normative interpretation for each of the terms used in the targets, and the approach to global monitoring aims to reflect these as closely as possible.[9]

The JMP uses service **ladders** to benchmark and compare progress across countries, and these have been updated and expanded to facilitate enhanced monitoring. The new ladders build on the established improved/unimproved facility type classification, thereby providing continuity with MDG monitoring, and introduce additional criteria relating to the level of service provided to households. The JMP will continue to monitor all rungs on each ladder, with a particular focus on those that relate to progress towards the following Sustainable Development Goal (SDG) global targets:

- Ending **open defecation** (SDG 6.2)
- Achieving universal access to **basic services** (SDG 1.4)
- Achieving universal access to **safely managed services** (SDG targets 6.1 and 6.2).

[9] WHO/United Nations Children's Fund Joint Monitoring Programme for Water Supply and Sanitation, *WASH in the 2030 Agenda: New global indicators for drinking water, sanitation and hygiene*, UNICEF and WHO, 2016, https://washdata.org/report/jmp-2017-wash-2030-agenda.

Improved drinking water sources are those which by nature of their design and construction have the potential to deliver safe water. During the SDG period, the population using improved sources will be subdivided into three groups according to the level of service provided. In order to meet the criteria for a **safely managed** drinking water service (SDG 6.1), people must use an improved source meeting three criteria (Figure 11, and Section 4.1):

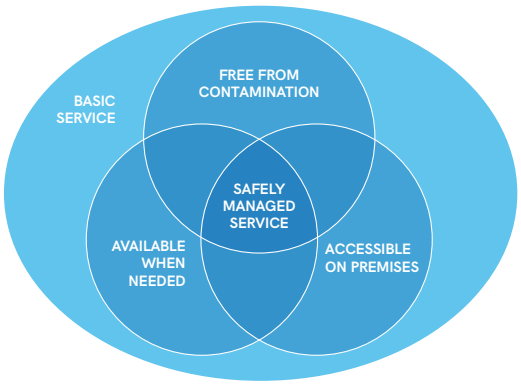
- it should be accessible on premises,
- water should be available when needed, and
- the water supplied should be free from contamination.

If the improved source does not meet any one of these criteria, but a round trip to collect water takes 30 minutes or less, it will be classified as a **basic** drinking water service (SDG 1.4). If water collection from an improved source exceeds 30 minutes, it will be categorized as a **limited** service.

Improved sanitation facilities are those designed to hygienically separate excreta from human contact. There are three main ways to meet the criteria for having a **safely managed** sanitation service (SDG 6.2). People should use improved sanitation facilities that are not shared with other households, and the excreta produced should either be (Figure 12, and Section 4.2):

- treated and disposed of in situ,
- stored temporarily and then emptied, transported and treated off-site, or
- transported through a sewer with wastewater and then treated off-site.

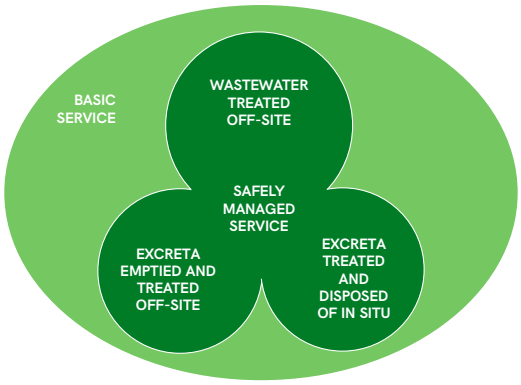
If the excreta from improved sanitation facilities are not safely managed, then people using those facilities will be classed as having a **basic** sanitation service (SDG 1.4). People using improved facilities that are shared with other households will



SERVICE LEVEL	DEFINITION
SAFELY MANAGED	Drinking water from an improved water source that is located on premises, available when needed and free from faecal and priority chemical contamination
BASIC	Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing
LIMITED	Drinking water from an improved source for which collection time exceeds 30 minutes for a round trip, including queuing
UNIMPROVED	Drinking water from an unprotected dug well or unprotected spring
SURFACE WATER	Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal

Note: Improved sources include: piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packaged or delivered water.

Fig. 11 The new JMP ladder for drinking water services



SERVICE LEVEL	DEFINITION
SAFELY MANAGED	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite
BASIC	Use of improved facilities that are not shared with other households
LIMITED	Use of improved facilities shared between two or more households
UNIMPROVED	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines
OPEN DEFECATION	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches or other open spaces, or with solid waste

Note: improved facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs.

Fig. 12 The new JMP ladder for sanitation services

SERVICE LEVEL	DEFINITION
BASIC	Availability of a handwashing facility on premises with soap and water
LIMITED	Availability of a handwashing facility on premises without soap and water
NO FACILITY	No handwashing facility on premises

Note: Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents.

Fig. 13 The new JMP ladder for hygiene

be classified as having a **limited** service. The JMP will also continue to monitor the population practising **open defecation**, which is an explicit focus of SDG target 6.2.

The presence of a handwashing facility with soap and water on premises has been identified as the priority indicator for global monitoring of hygiene under the SDGs. Households that have a handwashing facility with soap and water available on premises will meet the criteria for a **basic** hygiene facility (SDG 1.4 and 6.2). Households that have a facility but lack water or soap will be classified as having a **limited** facility, and distinguished from households that have no facility at all (Figure 13).

2.3 Report overview

The new service ladders are discussed in more detail in subsequent sections.

Section 3 examines coverage of basic drinking water and sanitation services and handwashing facilities with soap and water, and assesses the prospects for achieving SDG target 1.4 of universal access to basic services by 2030. It shows that while billions have gained access to basic water and sanitation services since 2000, faster progress will be required in order to achieve universal access to basic drinking water, sanitation and handwashing facilities by 2030.

Section 4 examines the extent to which existing drinking water and sanitation facilities met the new SDG criteria for safely managed services in 2015. It shows that while the majority of the global population used services meeting the new SDG criteria for safely managed drinking water services, relatively few people used services meeting the new SDG criteria for safely managed sanitation services.

Section 5 examines inequalities in WASH services in light of the SDG call to reduce inequalities within and between countries and to "leave no one behind". It identifies populations that will need to be targeted in order to eliminate open defecation by 2030 and documents inequalities in basic services between rich and poor as well as subnational regions. It also highlights significant disparities in safe management of drinking water and sanitation services between rural and urban areas.

Section 6 considers the implications of monitoring SDG targets for universal access, which means looking beyond the household and addressing WASH in institutional settings and public spaces. It outlines proposed indicators for monitoring WASH in schools and in health care facilities and considers national sources of data that can potentially be used for SDG monitoring.

The report finds that while billions of people have gained access to basic services since 2000, faster progress will be required in order to end open defecation and achieve universal access to basic services by 2030. Achieving safely managed drinking water and sanitation services presents a major challenge in many parts of the world, and there is a need to address significant inequalities. There are major data gaps, and effective monitoring of inequalities in WASH services during the SDG era will require significant improvements in the availability and quality of data underpinning national, regional and global estimates of progress.

3. Basic services: Towards universal access

Target 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

Indicator 1.4.1 Proportion of the population living in households with access to basic services.

The 2030 Agenda is universal and applies to all countries including those at different stages of development. While SDG targets 6.1 and 6.2 aim to progressively raise the standard of drinking water and sanitation services for all (Section 4), the immediate priority in many developing countries will be to first ensure that everyone has access to at least a basic level of service. This 'unfinished business' from the MDG period remains a central focus of SDG 1 ("End poverty in all its forms everywhere"), which includes a target for universal access to basic services, with a particular focus on poor and vulnerable groups. For this reason, the JMP will continue to track the population using **basic** drinking water, sanitation and hygiene as well as lower levels of service, such as limited services, unimproved facilities, or no facilities at all.

SDG 1.4.1

3.1 Basic drinking water services

In 2015, 6.5 billion people used improved sources of drinking water that required no more than 30 minutes per trip to collect water, and are thus classified as having **at least basic** drinking water services. A further 263 million people (4 per

89% of the global population used at least a basic drinking water service in 2015

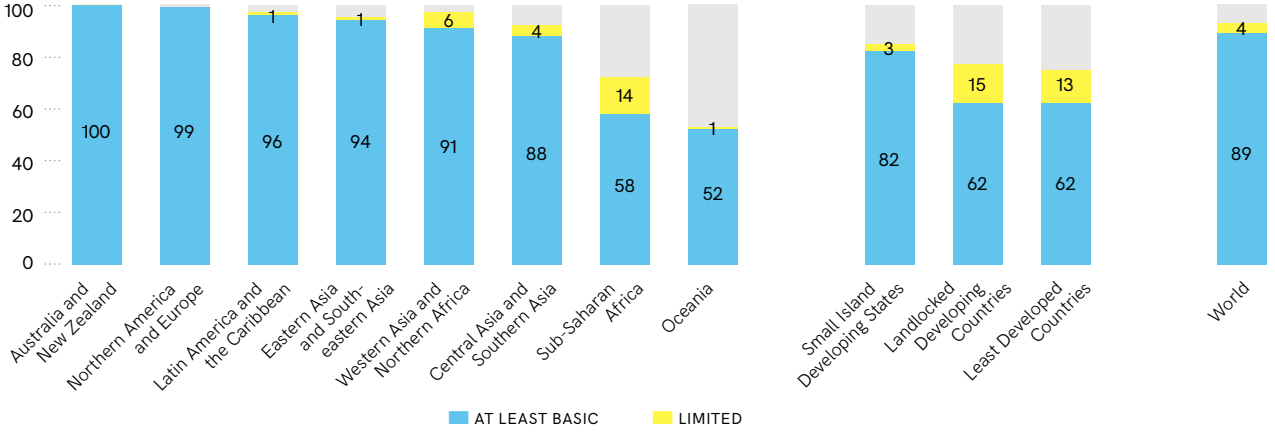


Fig. 14 Proportion of population with at least basic and limited drinking water services, 2015 (%)

One in five countries below 95% coverage is on track to achieve universal basic water services by 2030

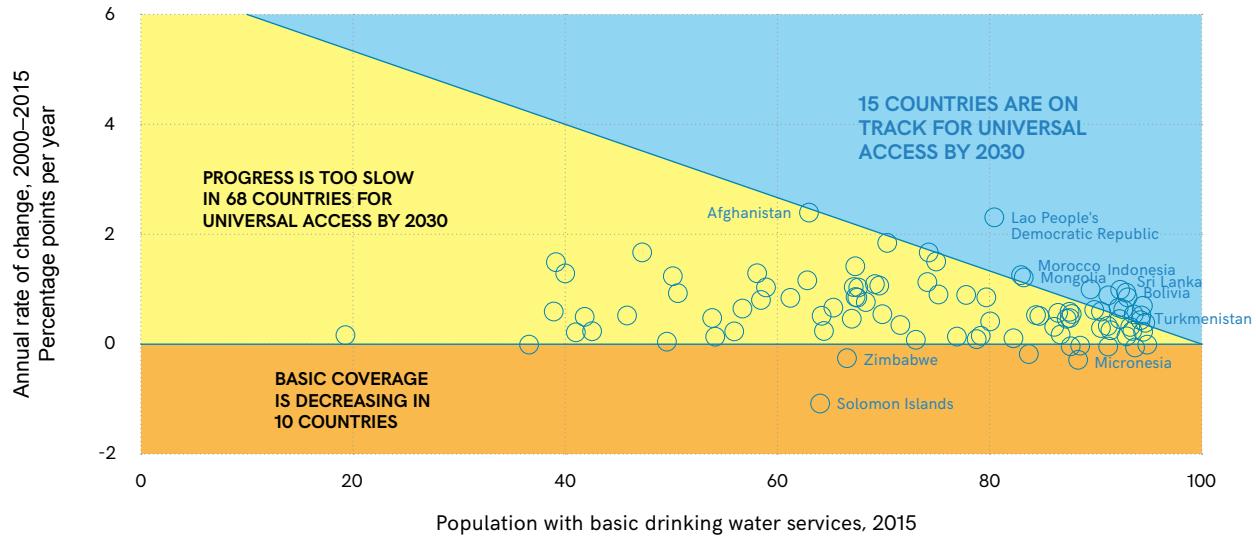


Fig. 15 Progress towards universal basic drinking water services (2000–2015) among countries where at least 5% of the population did not have basic services in 2015

cent of the population) used improved sources that required more than 30 minutes collection time, and are therefore classified as having **limited** drinking water services.

The proportion of the population with **at least basic** drinking water services has increased by an average of 0.49 percentage points per year between 2000 and 2015, but the increase was substantially faster in Eastern Asia and South-eastern Asia (0.97) and sub-Saharan Africa (0.88). Australia and New Zealand and North America and Europe are already very close to achieving **universal basic** drinking water services, while Latin America and the Caribbean, as well as Eastern Asia and South-eastern Asia, are on track to achieve universal access by 2030.[10]

The 844 million people who still lacked a **basic** drinking water service in 2015 either used improved sources with water collection times exceeding 30 minutes (**limited** services), used unprotected wells and springs (**unimproved** sources), or took water directly from **surface water** sources. Previous JMP analysis has shown that water collection from unimproved sources and surface water is more likely to take over 30 minutes, representing a double burden.[11] Women and girls are responsible for water collection in 8 out of 10 households with water off premises, so reducing the population with limited drinking water services will have a strong gender impact. Of the 10 countries where at least 20 per cent of the national population uses limited services, eight are in sub-Saharan Africa and two are in Oceania.

[10] Universal access not only implies extending access to the entire population, but also sustaining access in the face of social and economic change.
[11] United Nations Children's Fund and World Health Organization, *Safely Managed Drinking Water: Thematic report on drinking water*, UNICEF and WHO, New York, 2017, <https://washdata.org/report/jmp-2017-tr-smdw>.

Box 2

Types of improved water sources

The JMP uses a simple improved/unimproved facility type classification that has been refined over time. **Improved sources** are those that have the potential to deliver safe water by nature of their design and construction. These include piped supplies (such as households with tap water in their dwelling, yard or plot; or public standposts) and non-piped supplies (such as boreholes, protected wells and springs, rainwater and packaged or delivered water). Between 2000 and 2015, the population using piped supplies increased from 3.5 billion to 4.7 billion, while the population using non-piped supplies increased from 1.7 billion to 2.1 billion. Globally, two out of five people in rural areas and four out of five people in urban areas now use piped supplies.

Packaged water and delivered water can potentially be safely managed, but these were previously treated as unimproved due to lack of data on accessibility, availability and quality. For SDG monitoring, the JMP will treat them as improved and classify them as **limited**, **basic** or **safely managed**, based on the criteria outlined above.

Reclassifying packaged water (including bottled water and sachets of water) as improved has only a minor impact on global statistics, because the JMP previously counted bottled water as improved when the source of water used for other purposes was improved. This was nearly always the case, and in most cases people drinking bottled water also have access to piped water or at least other improved supplies (Figure 17).

Over 1 billion people gained access to piped supplies between 2000 and 2015

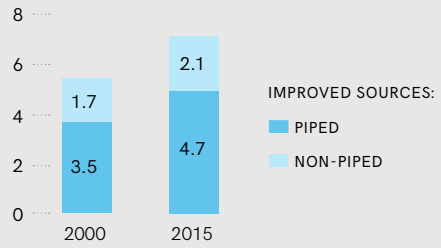


Fig. 16 Global population using piped and non-piped improved sources (billions)

The reclassification of delivered water also has only a minor impact on global statistics, but significantly impacts estimates in a number of countries where it is common for people to drink water delivered by tanker trucks (Figure 18). For SDG monitoring, the JMP will classify households using tanker trucks with collection times of 30 minutes or less as having at least basic services. Drinking water from tanker trucks will be classified as safely managed if it meets the criteria outlined in Section 4.

In 15 countries, at least one in five people drink bottled water, and use an improved source for other purposes[12]

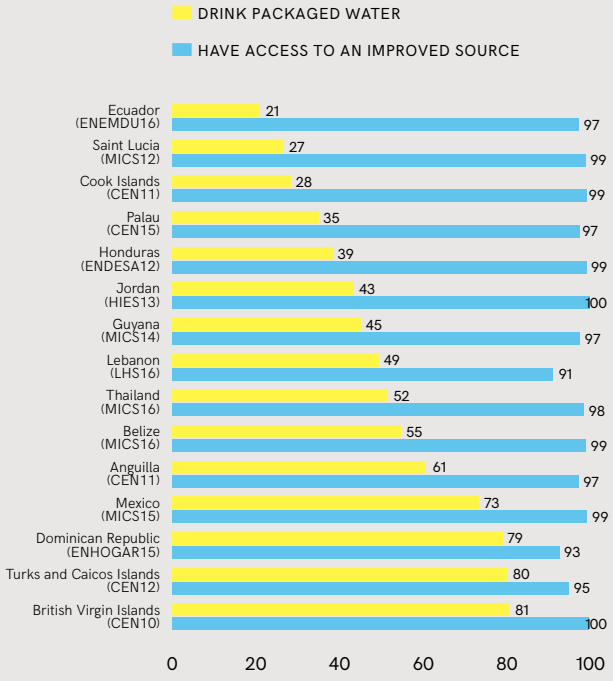


Fig. 17 Proportion of population drinking bottled or sachet water and having access to improved water supplies, 2010-2016, %

In 18 countries, at least 5% of the population relies on delivered water

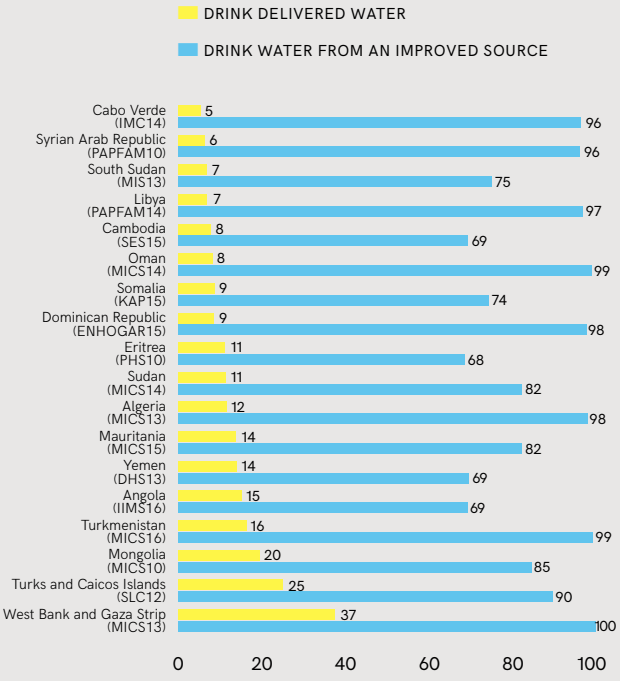


Fig. 18 Proportion of population relying on delivered water and all improved water sources, 2010-2016, %

[12] See country files for full names of data sources. Note that statistics from a single data source may differ from JMP estimates for the same year, as JMP estimates are generated from multiple data sources.

SDG 1.4.1

3.2 Basic sanitation services

In 2015, 5 billion people used an improved sanitation facility that was not shared with other households, and thus are classified as having at least **basic** sanitation services. In addition, 600 million people (8 per cent of the population) used improved but shared facilities that are classified as **limited** sanitation services.

Globally, use of basic sanitation services has increased more rapidly than use of basic drinking water services, at an average of 0.63 percentage points per year between 2000 and 2015. However, coverage is generally lower for basic sanitation than for basic water, and no SDG region is on track to achieve universal basic sanitation by 2030, with the exception of Australia and New Zealand, where coverage is already nearly universal. Figure 20 shows that 9 out of 10 countries where more than 5 per cent of the population lacked basic sanitation in 2015 are progressing too slowly to achieve **universal basic sanitation** by 2030, and suggests that in one out of seven countries, use of basic sanitation is actually decreasing. Progress needs to accelerate in these countries to achieve SDG target 1.4, universal access to basic services by 2030.

68% of the global population used at least basic sanitation services in 2015

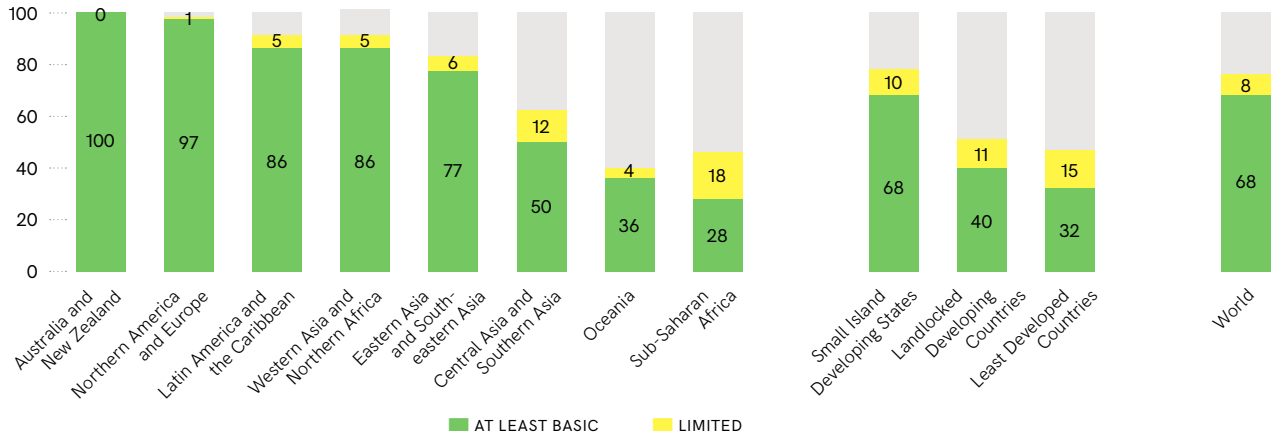


Fig. 19 Proportion of population with at least basic or limited sanitation services, 2015 (%)

Just 1 in 10 countries below 95% coverage are on track to achieve universal basic sanitation by 2030

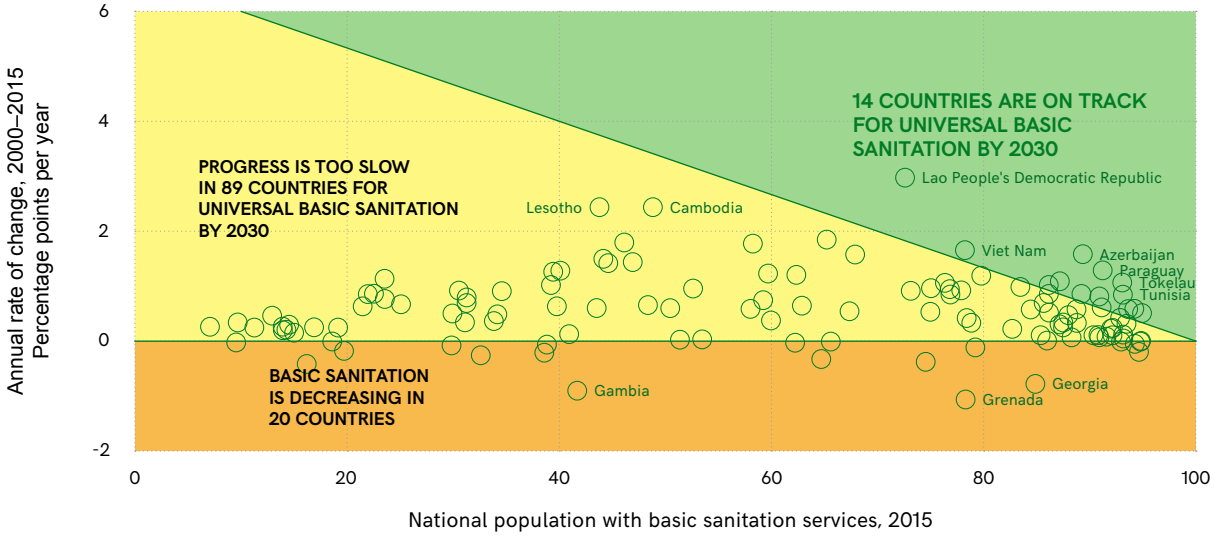


Fig. 20 Progress towards universal basic sanitation services (2000–2015) among countries where at least 5 per cent of the population did not have basic services in 2015

The majority of the 2.3 billion people who still lacked a **basic sanitation** service either practise **open defecation** (892 million) or use **unimproved** facilities such as pit latrines without a slab or platform, hanging latrines or bucket latrines (856 million). The remaining 600 million use improved sanitation facilities that are shared with other households. These **limited** sanitation services reflect both cultural practices and socioeconomic constraints in densely populated areas. While universal use of private toilets accessible on premises remains the ultimate goal, high-quality shared sanitation facilities may be the best option in the short term in some low-income urban settings. Sixteen of the 24 countries in which at least one person in five has limited sanitation services are found in sub-Saharan Africa (Figure 21). In all of these countries, the proportion sharing facilities is larger in urban areas.

In 24 countries, at least one in five people used limited sanitation services in 2015

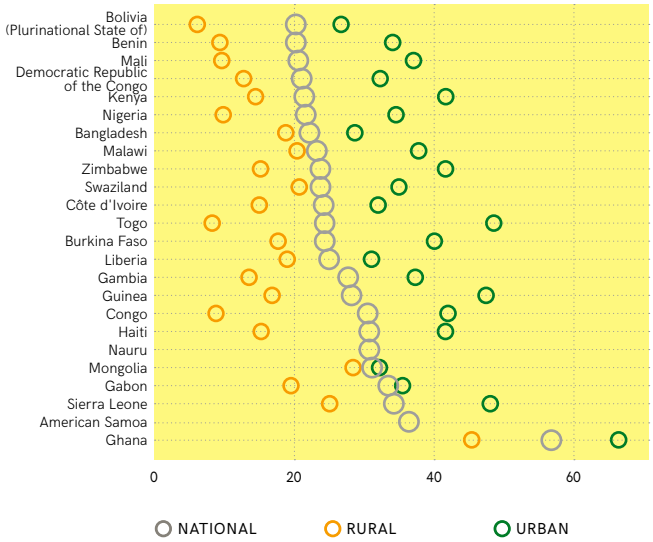


Fig. 21 Proportion of population using limited (shared) sanitation services, national, urban and rural, 2015. Note: American Samoa and Nauru do not have rural populations.

Box 3

Types of improved sanitation

Improved sanitation facilities are those designed to hygienically separate excreta from human contact. These include wet sanitation technologies (flush and pour flush toilets connecting to sewers, septic tanks or pit latrines) and dry sanitation technologies (ventilated improved pit latrines; pit latrines with slabs; or composting toilets). Improved facilities shared with other households have previously been reported separately and did not count towards the MDG target.

The JMP now divides improved sanitation facilities into three categories: **limited**, **basic** and **safely managed** services. The population using improved facilities that are shared with other households will now be called **limited** rather than **shared**. Improved facilities that are not shared count as either **basic** or **safely managed** services, depending on how excreta are managed.

Improved sanitation facilities can be connected to either sewer networks or to on-site storage and treatment facilities such as septic tanks or latrine pits. With the SDG focus on safe management of excreta, it is useful to distinguish between sewered and non-sewered sanitation facilities, as they require different forms of excreta management.

Globally, improved sanitation facilities (including shared facilities) are evenly split between sewer connections and on-site systems, with 2.8 billion people (38 per cent) using sewer connections and another 2.8 billion using septic tanks, latrines or other improved on-site systems (Figure 22).

Sewer connections dominate in urban areas, where they are used by two thirds of the population (63 per cent), compared to only 9 per cent of the rural population. Conversely, on-site improved sanitation facilities are used by nearly half (48 per cent) of the rural population, and only a quarter (29 per cent) of the urban population. Septic tanks are used by one in six people globally, with very similar proportions in urban (17 per cent) and rural (18 per cent) areas. They account for 56 per cent of on-site improved sanitation facilities in urban settings, and 38 per cent in rural areas.

While septic tanks have certain defining design features (including watertight walls and floor, multiple chambers separated by baffles, and an outlet pipe leading to a soak pit or leachfield), many on-site systems lack these features, and should actually be classified as simple vaults or cesspools. However, the terms "septic tanks" and "latrines" are widely used in household surveys and administrative records and the JMP will report on these separately, recognizing that the term "septic tanks" covers many kinds of on-site storage systems. For the purposes of calculating safely managed sanitation services (Section 4.2) all improved on-site sanitation systems are treated equally.

Although in many countries urban areas are mainly served by sewer connections, on-site sanitation is the principal form of improved sanitation in urban as well as rural areas of Central Asia and Southern Asia, Oceania and sub-Saharan Africa (Figure 23).

9 out of 10 people using sewer connections lived in urban areas in 2015

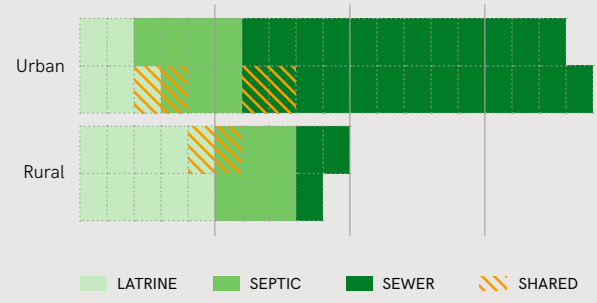


Fig. 22 Population using different types of improved sanitation facilities, urban and rural, 2015 (each block represents 100 million people)

In four SDG regions, coverage of on-site facilities exceeded sewer connections in 2015

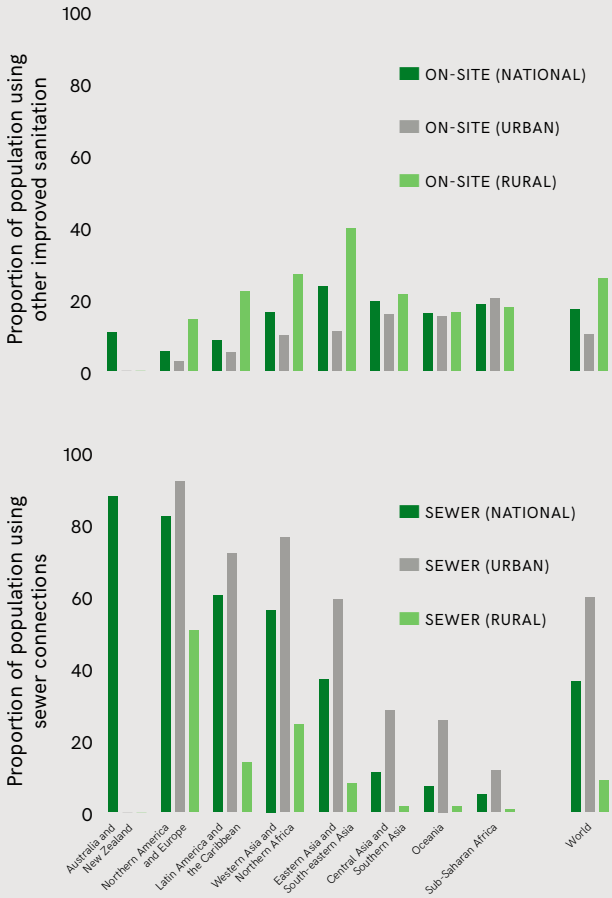


Fig. 23 Proportion of population using sewer connections and on-site improved sanitation facilities in 2015, by region (%)

SDG 1.4.1

3.3 Basic hygiene facilities

Hygiene has long-established links with public health, but was not included in any MDG targets or indicators. The explicit reference to hygiene in the text of SDG target 6.2 represents increasing recognition of the importance of hygiene and its close links with sanitation. Hygiene is multi-faceted and can comprise many behaviours, including handwashing, menstrual hygiene and food hygiene. International consultations among WASH sector professionals identified handwashing with soap and water as a top priority in all settings, and also as a suitable indicator for national and global monitoring.

The new global SDG indicator for handwashing is the **proportion of population with handwashing facilities with soap and water at home**. Handwashing facilities can consist of a sink with tap water, but can also include other devices that contain, transport or regulate the flow of water. Buckets with taps, tippy-taps and portable basins are all examples of handwashing facilities. Bar soap, liquid soap, powder detergent and soapy water all count as **soap** for monitoring purposes.

People living in households that have a handwashing facility with soap and water available on premises are classified as having **basic** facilities. Households that have a handwashing facility but lack water and/or soap are classified as having **limited** facilities. In some cultures, ash, soil, sand or other materials are used as handwashing agents, but these are less effective than soap and are therefore counted as limited handwashing facilities.

Household surveys increasingly include a section on hygiene practices where the surveyor visits the handwashing facility and observes if water and soap are present. Observation of handwashing materials by surveyors represents a more reliable proxy for handwashing behaviour than asking individuals whether they wash their hands. The small number of cases where households refuse to give enumerators permission to observe their facilities are not used in calculating JMP estimates.

Following the standardization of hygiene questions in international surveys, data on handwashing facilities are available for a growing number of low- and middle-income countries. This type of information is not available from most high-income countries, where access to basic handwashing facilities is assumed to be nearly universal. Handwashing data are available for 70 countries, nearly half of which are in sub-Saharan Africa. No data on handwashing facilities are available for Oceania.

Since the availability of handwashing facilities is considered a **basic** level of service, regional and global estimates can only be made when data are available for at least half of the population. Estimates could be made for two SDG regions, as well as for Small Island Developing States (SIDS), Least-Developed Countries (LDCs) and Landlocked Developing Countries (LLDCs). Availability of handwashing facilities is higher in urban than in rural areas in each of these regions.[13]

[13] In Western Asia and Northern Africa, data coverage in urban areas was only 42 per cent, so no regional estimate is made.

Coverage of basic handwashing facilities varies widely in 70 countries with data

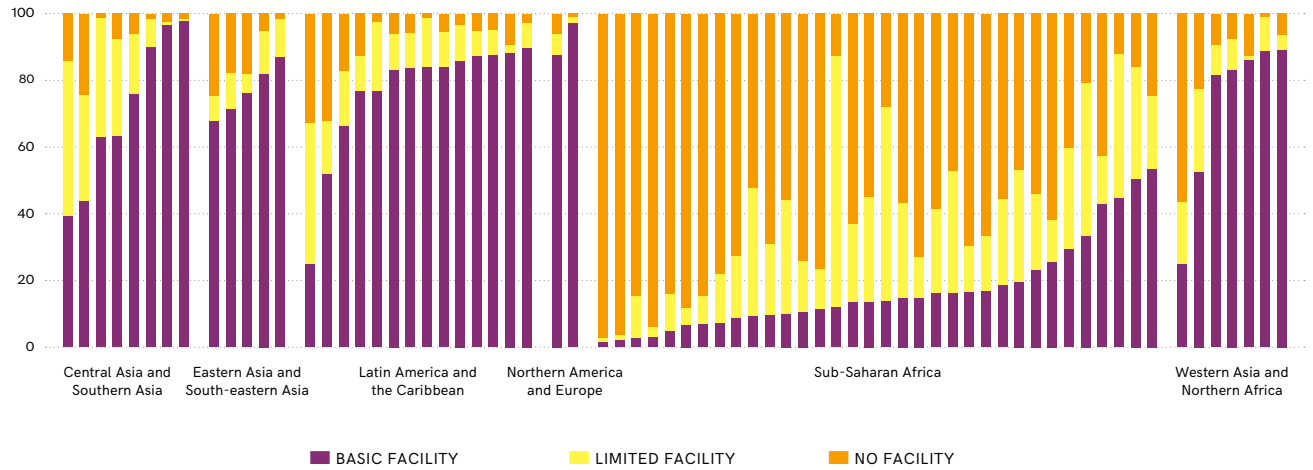


Fig. 24 Proportion of population using basic and limited handwashing facilities in 2015, by country and SDG region (%). See Annex 5 for country details.

In 34 out of 38 African countries with data, less than 50% of the population used basic handwashing facilities in 2015

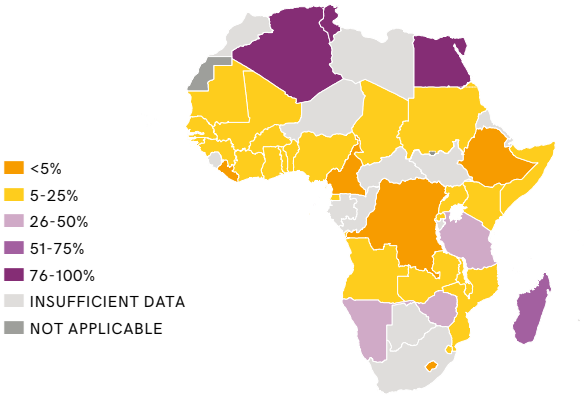


Fig. 25 Population with basic handwashing facilities including soap and water at home in Africa, 2015 (%).

Coverage of basic handwashing facilities was higher in urban areas in all regions with data available in 2015

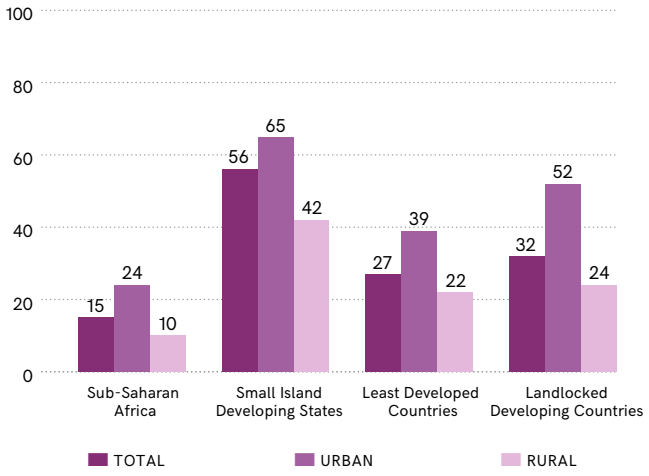


Fig. 26 Population with basic handwashing facilities including soap and water at home, by region, 2015 (%)

To overcome the data gap for high-income countries for future reporting on SDGs 1 and 6, the JMP will develop a suitable proxy for the availability of handwashing facilities in the home, drawing on data that are more likely to be available for high-income countries, such as the availability of piped water supplies, hot water, showers or bathrooms on premises.

Affordability of drinking water, sanitation and hygiene

The human rights to water and sanitation place obligations on States to ensure that services are affordable.[14] This concern is reflected in SDG target 6.1, which calls for universal and equitable access to safe and affordable drinking water for all. Affordability implies that payment for services should not present a barrier to access or prevent people from meeting other basic human needs. While affordability is an important consideration for all households, regardless of service level, there is no commonly agreed-upon way to measure it. The JMP is therefore collaborating with the World Bank, academics and others to develop and test indicators that will enable more systematic and consistent monitoring of affordability in the future.

A promising proxy measure of affordability, which has been used in several countries, is the proportion of the household budget spent on water, sanitation and hygiene. A similar approach has been used to assess the affordability of other basic services, ranging from energy to transport.[15] This report presents a preliminary analysis of **household expenditure on water, sanitation and hygiene (WASH) as a proportion of total expenditure**. Actual levels of expenditure vary depending on socioeconomic characteristics and the costs of WASH and other essential services, but governments and international agencies have often set an affordability threshold of between 2 and 6 per cent of total expenditure.[16]

It is possible to benchmark household expenditure against different affordability thresholds using data from household surveys, especially income and expenditure surveys. But collecting expenditure data presents a number of challenges, and household surveys typically do not capture all of the costs associated with accessing and using WASH services (Table 2). Income and expenditure surveys tend to capture water (and wastewater) charges from piped networks with regular billing systems, but often miss irregular payments, periodic capital expenditures and non-financial costs. Some costs may also be hidden in other expenditure categories (for example, bottled water in soft drinks, personal hygiene products under general hygiene items).

The JMP has collaborated with the World Bank Data Group to prepare initial estimates of household expenditure on water supply (data on sanitation and hygiene were not consistently available) for 52 countries for which harmonized datasets are available for surveys conducted between 2008 and 2014.

SERVICE	RECURRENT COSTS	CAPITAL COSTS	NON-FINANCIAL COSTS
Water	• Water tariff or user fee • Bottled or vendor water • Maintenance fees	• Piped network connection • Water supply construction	• Collection time for water
Sanitation	• Wastewater tariff • Public toilet user fees • Maintenance costs	• Toilet construction • Sewer network connection	• Travel time to community facility or open defecation
Hygiene	• Purchase of soap • Menstrual hygiene materials • Maintenance costs	• Handwashing station • Bins for menstrual materials	• Collection of water for handwashing and anal cleansing

Table 2 Examples of different types of costs associated with WASH services

[14] United Nations General Assembly, *Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation*, Note by the Secretary-General, A/65/254, 65th session, 6 August 2010, para. 31.

[15] Smets, Henri, *Quantifying the Affordability Standard: A comparative approach*, in *The Human Right to Water: Theory, practice and prospects*, edited by Malcolm Langford and Anna Russell, Cambridge University Press, 2017.

[16] Hutton, Guy, *Monitoring "Affordability" of Water and Sanitation Services after 2015: Review of global indicator options*, Revised draft, United Nations Office of the High Commissioner for Human Rights, 2012, <https://washdata.org/report/hutton-2012-monitoring-affordability-water-and-sanitation-services>.

In three SDG regions, over 10% of the population spends more than 2% of annual household expenditure on WASH

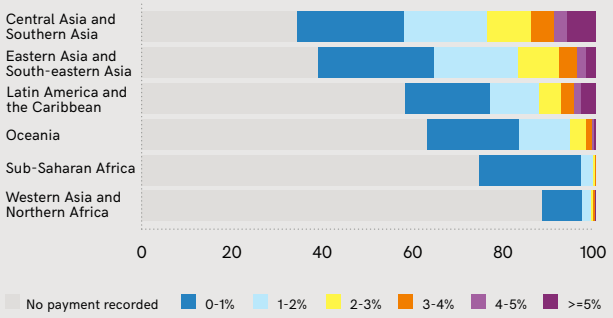


Fig. 27 Proportion of total household expenditure on WASH services, by region (52 countries)

Households are more likely to pay for piped water than other sources

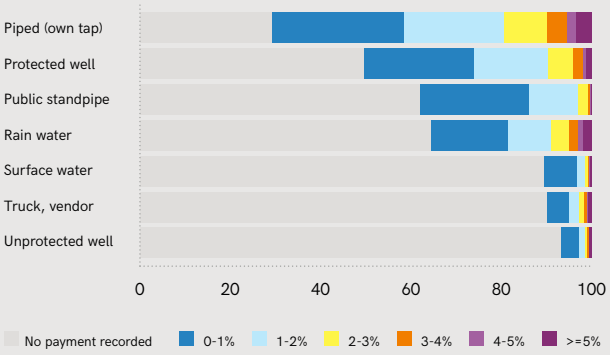


Fig. 28 WASH expenditure as a percentage of household expenditure, by main source of drinking water (51 countries)

These data cover 42 per cent of the global population (3.1 billion people) and at least 30 per cent of the population in six SDG regions.

Figure 27 shows results by SDG region. For four regions, the majority of households recorded no payments, while the majority in two other regions recorded water expenditures of less than 2 per cent of household expenditure. In all regions, less than 10 per cent of households recorded water expenditures of more than 3 per cent of overall household expenditure. The region with the largest proportion of households spending over 5 per cent of annual expenditure on water was Latin America and the Caribbean. Available data indicate clear differences between countries and between rural and urban areas.

A key advantage of using household survey data is that results can be disaggregated by household characteristics, such as wealth or the type of water and sanitation services used. Figure 28 summarizes data from 51 of the countries studied, and shows that households using piped water are most likely to pay for drinking water services, followed by those using truck or vendor-supplied water and public standpipes. Figure 29 shows that in European countries with data, poor households are much more likely to spend a significant proportion of their annual budget on WASH services than non-poor households. In Poland, one in five households in the bottom quintile spends more than 3 per cent of annual expenditure on WASH services.

This initial assessment of household expenditures has shown that some populations are spending a significant share of their household budgets on WASH services. While there is no internationally agreed-upon benchmark for affordability, the observation that households are spending more than 3 per cent of their total expenditure on WASH services should give cause for concern, especially considering that many of these households are in the poorest quintile.

The results presented here focus on what households pay for WASH. They do not show how much governments or community organizations are contributing to the costs of WASH services. Nor do they reflect the extent to which households are not accessing services due to financial barriers. Further work is required to examine the relationship between household expenditure and subsidies, in order to assess whether subsidies are being effectively targeted at the households that are least able to afford to access WASH services without them.

The International Household Survey Network has recently completed a detailed review of information captured in income and expenditure surveys for 100 countries.[17] The study highlighted a lack of consistency in the questions used, which makes it difficult to produce comparable estimates of total and WASH-related expenditures. Whereas the majority of surveys record information on the types of services used by households, most only record expenditure on water, and relatively few capture expenditure on sanitation (Figure 30). Almost all surveys include some information on personal care products, some of which may be relevant to personal hygiene (for instance, soap or sanitary pads). Very few surveys capture information on tariffs or subsidies, which are significant determinants of affordability. In order to better monitor the affordability of WASH services, survey questions need to be harmonized to better capture WASH expenditures, and information on tariffs and subsidies received by households needs to be systematically collected to supplement the information from household surveys.

[17] International Household Survey Network, 'Measuring non-food expenditures', <www.ihsn.org/projects/non-food-assessment>.

In Europe, poor households are more likely to spend over 3% of total expenditure on WASH

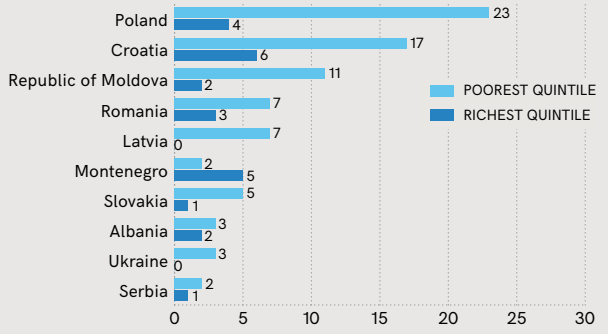


Fig. 29 Per cent of households spending more than 3% of total expenditure on WASH services, for poorest and richest quintiles in selected European countries

Most income and expenditure surveys record spending on water, but not on sanitation

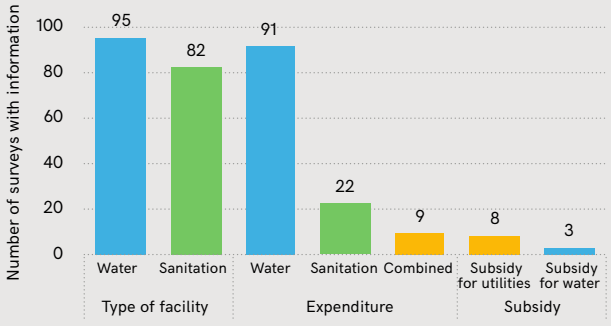
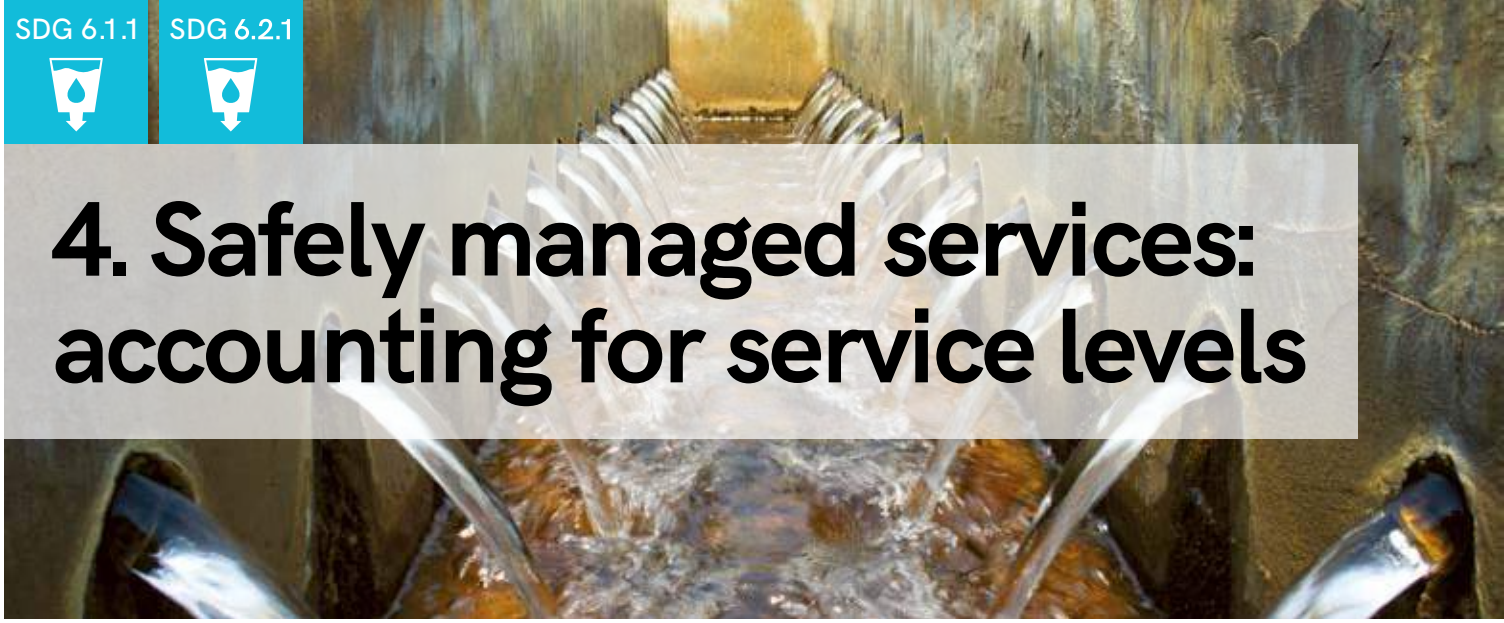


Fig. 30 Data available from 100 income and expenditure surveys

SDG 6.1.1 SDG 6.2.1



4. Safely managed services: accounting for service levels

4.1 Safely managed drinking water services

SDG 6.1.1

Target 6.1 By 2030, to achieve universal and equitable access to safe and affordable drinking water for all.

Indicator 6.1.1 Proportion of the population using safely managed drinking water services.

Safely managed drinking water services represent an ambitious new global service norm that forms part of the new JMP ladder for enhanced global monitoring of household drinking water services (Section 2). The JMP estimates that 5.2 billion people used safely managed drinking water services in 2015. For this first global baseline report, national estimates were available for 96 countries. The coverage in these countries ranged from 6 per cent to 100 per cent of the national population.

The JMP only produces national estimates when data are available for at least 50 per cent of the relevant population. The threshold for regional and global estimates is 30 per cent population coverage[18]. Regional estimates are currently available for four out of eight SDG regions (Figure 32).[19] Six regions had estimates for urban areas, and just one region had estimates for rural areas in 2015. In regions where national-level estimates could be made, coverage of safely managed services varied from 24 per cent in sub-Saharan Africa to 94

5.2 billion people used safely managed drinking water services in 2015

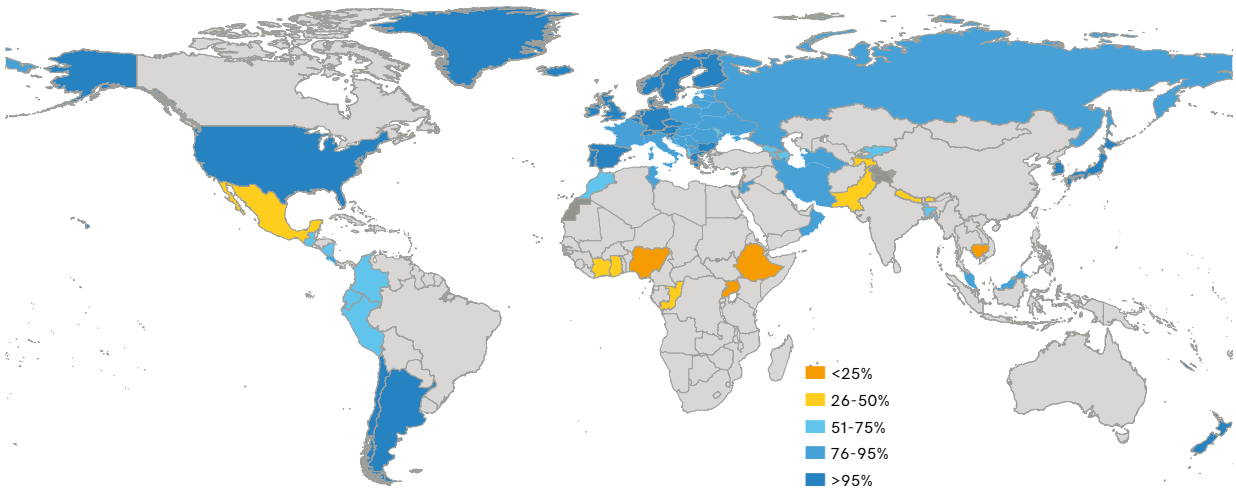


Fig. 31 Proportion of population using safely managed drinking water services, 2015

[18] For a description of the methods used to calculate country, region, and global estimates, see Annex 1.
[19] For more details on the new SDG regions, see Annex 2.

Four out of eight SDG regions had estimates for safely managed drinking water in 2015

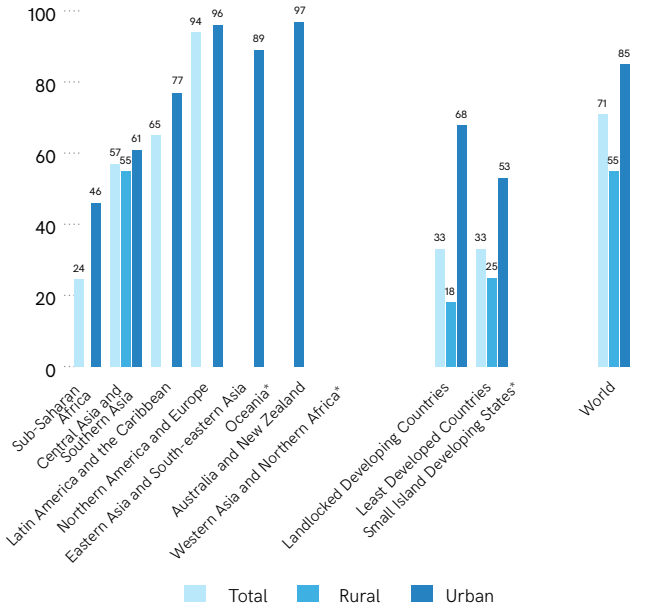


Fig. 32 Proportion of population using safely managed drinking water services, by region and urban/rural residence, 2015 (%)

* Insufficient data to estimate safely managed services.

per cent in Northern America and Europe, and was generally higher in urban areas, where two out of three people with safely managed drinking water services reside. One third (33 per cent) of the population in Least Developed Countries used safely managed services in 2015.

Figure 33 illustrates the global implications of taking into account the new SDG criteria for safely managed drinking water services. In 2015, 92 per cent of the global population used improved drinking water sources (the indicator used for monitoring drinking water during the MDG period). While 89 per cent met the SDG criteria for a **basic** drinking water service — no more than 30 minutes per round trip to collect water from an improved source – far fewer met the new SDG criteria for **safely managed** services. Globally, it is estimated that 74 per cent of these sources were accessible on premises, 79 per cent supplied water when needed, and 73 per cent were free from contamination.

On this basis, the JMP estimates that 71 per cent of the global population used **safely managed** drinking water services in 2015.[20] The 15 per cent using improved sources

[20] Estimates are based on the minimum value of the three criteria for safely managed drinking water services. The global estimate (71 per cent) is the weighted average of the population using safely managed services in rural (55 per cent) and urban (85 per cent) areas.

71% of the global population used safely managed drinking water services in 2015

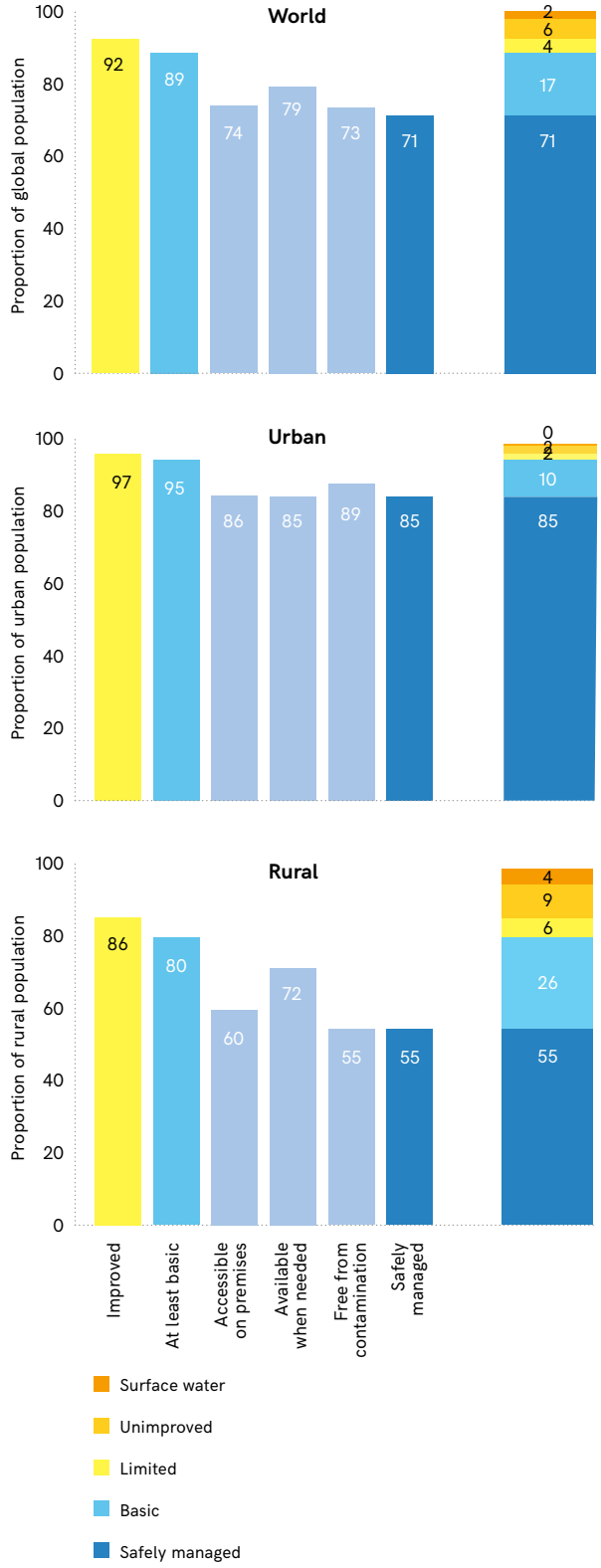


Fig. 33 Population using drinking water sources meeting SDG criteria for safely managed services, global, rural and urban, 2015

located off-premises but within a 30 minute round trip are classified as having **basic** services, and the four per cent using improved sources for which collection time exceeds 30 minutes are classified as having **limited** services. An additional six per cent of the global population used **unimproved** sources, and two per cent used **surface water** in 2015.

Global estimates are based on the population-weighted average of estimates for rural and urban populations. It is estimated that 55 per cent of the rural population and 85 per cent of the urban population use safely managed services. Figure 33 shows that the greatest disparities in service levels relate to accessibility and quality, which are 25 and 34 percentage points higher, respectively, in urban areas. Urban areas account for three out of five people with improved sources accessible on premises, three out of five people with water available when needed, and two out of three people with water free from contamination.

Of the 2.1 billion people lacking **safely managed** drinking water services in 2015, 1.3 billion used **basic** services, 263 million used **limited** services, 423 million used **unimproved** sources and 159 million used **surface water**. Figure 34 shows the global population using each level of service in rural and urban areas.

Safely managed drinking water is defined as **use of an improved drinking water source that is located on premises, available when needed and free from faecal and priority chemical contamination**. Household surveys and censuses remain the primary source of information on the different types of facilities that households use, but information on service levels is available from both household surveys and administrative sources, including regulators (see Annex 1). The JMP first estimates the population using piped and non-piped supplies and then integrates information on the accessibility, availability and quality of drinking water from piped and non-piped supplies.

In order to meet the standard for safely managed drinking water, a household must use an improved source type that meets three criteria.[21] First, the facility should be accessible on premises (located within the dwelling, yard or plot). Second, water should be available when needed (sufficient water in the last week or available for at least 12 hours per day). Third, water supplied should be free from contamination (compliant with standards for faecal and priority chemical contamination). As the three criteria are interrelated, the JMP calculates the population using safely managed drinking water services based on the minimum value for each domain (rural, urban, national).[22]

National data sources for the three critera are selected in consultation with national authorities, but many countries currently lack one or more criteria for at least part of the population. The JMP will only make an estimate for safely managed drinking water where data are available on water quality and for either accessibility or availability for at least half of the relevant population. Where estimates for

2.1 billion people lacked safely managed drinking water services in 2015

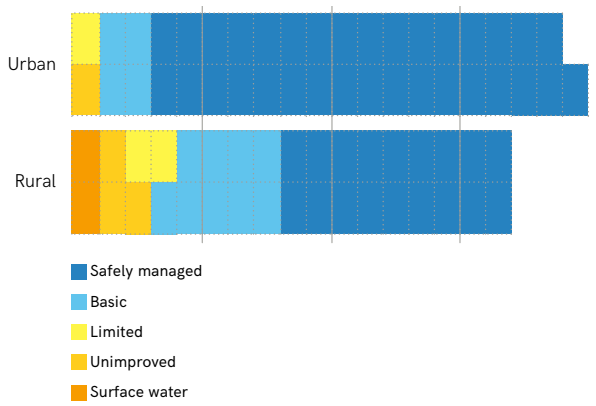


Fig. 34 Number of people using different levels of drinking water services in 2015, urban and rural (each unit represents 100 million people)

Safely managed drinking water takes account of the accessibility, availability and quality of services

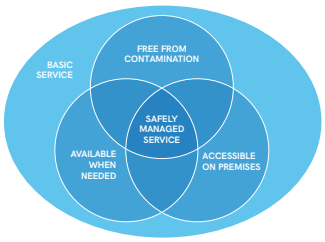


Fig. 35 Criteria for safely managed drinking water services

[21] The criteria for safely managed services draw on the normative criteria of the human right to safe drinking water (see the JMP thematic report on safely managed drinking water: <https://washdata.org/report/jmp-2017-tr-smdw>).

[22] While this approach may overestimate the population with services meeting all three criteria, few countries currently have data disaggregated to lower administrative levels.

safely managed services are not yet available, the JMP only reports the population using at least a **basic** level of service (see Section 3).

Coverage of **safely managed** drinking water varied widely among the 96 countries with estimates available in 2015. The proportion using improved sources on premises ranged from 6 per cent to 100 per cent, the proportion with water available when needed ranged from 51 per cent to 100 per cent, and the proportion with water free from contamination ranged from 13 per cent to 100 per cent. Figure 36 shows the relative importance of each criterion in determining national estimates of safely managed drinking water for each country.

Accessibility, availability and quality vary widely in the 96 countries with national estimates for safely managed drinking water services

Fig. 36 Accessibility, availability and quality of drinking water for countries with a safely managed estimate at national level

Box 4

Service level monitoring

Accessibility, availability and quality are three of the normative criteria of the human right to safe drinking water, and are used by the JMP for global monitoring of drinking water.

Accessible on premises

Information on the population with household connections, the location of non-piped sources and the time taken to collect water from sources located off premises is routinely collected in many national household surveys and censuses. These data show that improved sources are more likely to be located on premises than unimproved sources.

Globally, access to improved supplies on premises has been growing at 0.78 percentage points per year. Progress has been much faster in two SDG regions (Central Asia and South Asia, and Eastern and South-eastern Asia), but in Oceania access to supplies on premises is declining. Figure 37 shows that estimates of the population using improved sources located on premises are available for nearly all of the global population and all SDG regions.

Available when needed

National statistical offices, regulators and utilities all collect information on availability, but use a range of different measures. For the purpose of global monitoring, the JMP focuses on the amount of time when water is available, rather than directly measuring the quantity of water delivered. Where possible, the JMP uses household survey and census responses to questions on the availability of drinking water when needed during the last week or month. The JMP also uses data on the number of hours of service per day, drawn from household surveys, regulators and utilities, and uses 12 hours per day as the global minimum benchmark for 'available when needed'.

Available data show that 5.8 billion people use improved sources with water available when needed. Estimates of the population using improved sources that supply water when needed are available for 41 per cent of the global population and at least 30 per cent of the population in all SDG regions, except for Oceania and sub-Saharan Africa.

Free from contamination

Direct testing of drinking water quality provides an important measure of 'safety', and most countries have national standards aligned with the WHO guidelines for drinking water quality. Faecal contamination, arsenic and fluoride have been identified as the highest priority parameters for global monitoring. Microbial contamination is a universal concern, whereas the risk of contamination with arsenic and fluoride is greater in some parts of the world than others. The recommended measure of faecal contamination is the presence of indicator bacteria such as *E. coli* or thermotolerant coliforms in a 100 mL sample of water tested at the point of delivery/collection. This may differ from the quality of water at the point of consumption but very few countries currently collect data on the latter.

Available data show that 5.3 billion people use water supplies that tests have shown to be compliant with standards for microbial and chemical contamination. Estimates for water quality are only available for 45 per cent of the global population and for four of the eight SDG regions. These data suggest that levels of compliance are low in many developing countries.

The challenges associated with monitoring service levels are discussed in more detail in the JMP *Thematic Report on Safely Managed Drinking Water Services*,[23] and the JMP estimation method is described further in Annex 1.

[23] United Nations Children's Fund and World Health Organization, *Safely Managed Drinking Water: Thematic report on drinking water*, UNICEF and WHO, New York, 2017, <https://washdata.org/report/jmp-2017-tr-smdw>.

Data on drinking water quality are insufficient to generate regional estimates for four SDG regions

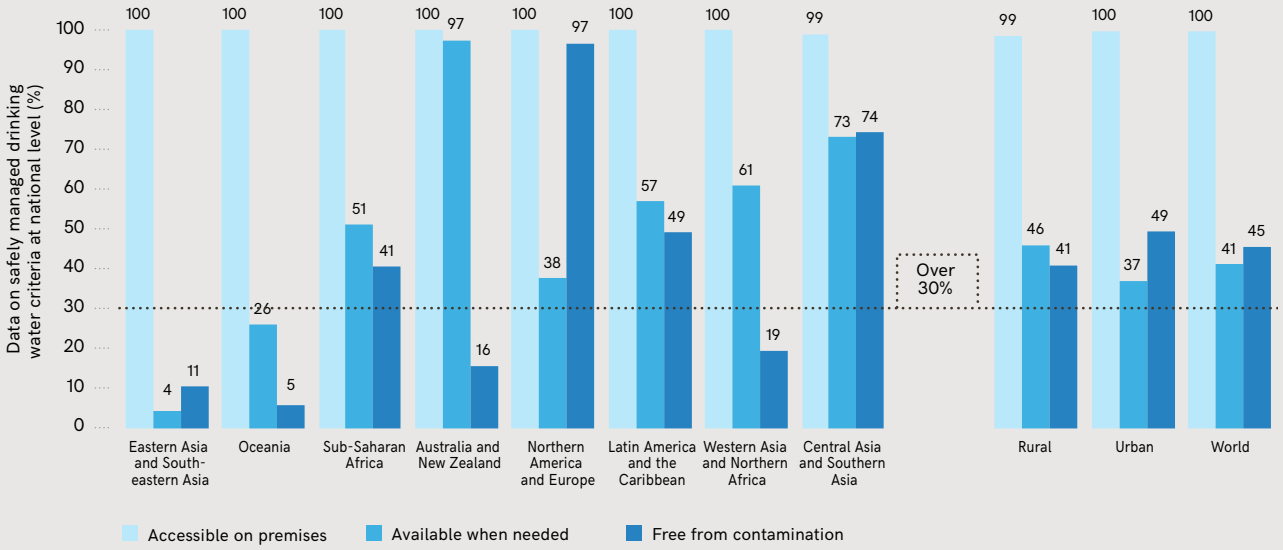


Fig. 37 Proportion of global and regional population for which data are available on accessibility, availability and quality of drinking water, 2015 (%)

4.2 Safely managed sanitation services

SDG 6.2.1

Target 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.

Indicator 6.2.1 Percentage of population using safely managed sanitation services, including a handwashing facility with soap and water.

The JMP indicator for **basic** sanitation services (population using improved sanitation facilities, which are not shared) refers to the types of facilities used by households but does not take account of excreta management. Recognizing that management of excreta along the entire sanitation chain is essential to protect communities and children from pathogen exposure, international consultations during the development of the 2030 Agenda recommended that downstream management of excreta — in both sewered and non-sewered systems — should be reflected in indicators for national and global monitoring.

Safely managed sanitation services represent an ambitious new global service norm, which forms part of the new JMP ladder for enhanced global monitoring of sanitation services (Section 2) and is defined as the **population using an improved sanitation facility that is not shared with other households, and where excreta are disposed of in situ or transported and treated off-site**. For this first global SDG report, national estimates of safely managed sanitation services were made for 84 countries and ranged from 9 per cent to 100 per cent (Figure 38).

The JMP makes country estimates for safely managed sanitation when information on excreta management is available for at least 50 per cent of the population using the dominant type of improved sanitation facility (sewer connections or on-site sanitation systems). Regional and global estimates are made when such data are available for at least 30 per cent of the relevant population[24].

[24] For a description of the methods used to calculate country, region, and global estimates, see Annex 1.

2.9 billion people used safely managed sanitation services in 2015

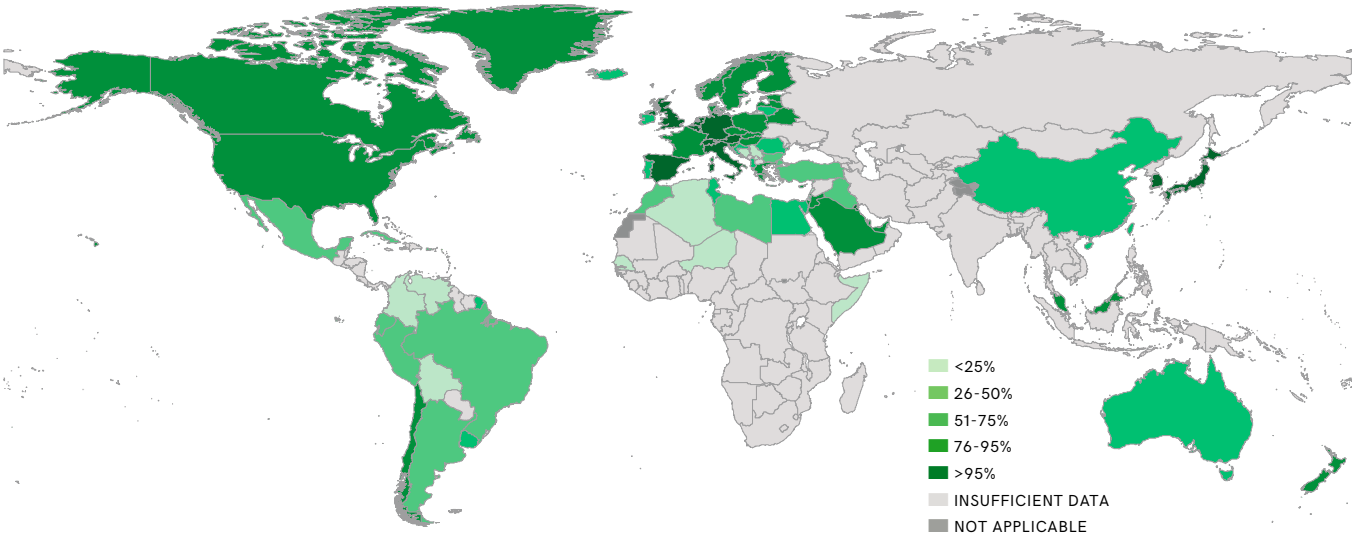


Fig. 38 Proportion of population using safely managed sanitation services, 2015

Five out of eight SDG regions had estimates of safely managed sanitation in 2015

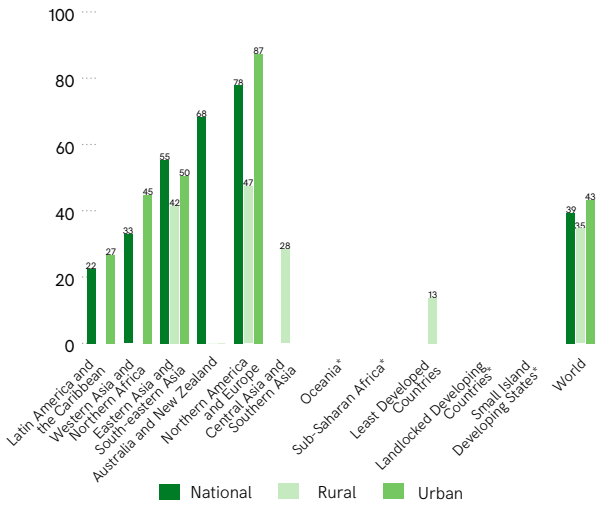


Fig. 39 Proportion of population with safely managed sanitation services in 2015, by region and urban/rural residence

* Insufficient data to estimate safely managed services.

In 2015, national-level estimates were available for five of the eight SDG regions, for four regions in urban areas, and for three regions in rural areas (Figure 39). Coverage of safely managed services was consistently higher in urban areas and only reached 14 per cent of the population in rural areas of Least Developed Countries.

Figure 40 illustrates the global implications of taking into account the new SDG criteria for safely managed sanitation services. Globally, 76 per cent of the population used improved sanitation facilities in 2015, of which 68 per cent were not shared and count as **at least basic** sanitation services. Thirty-six per cent of the population had at least basic services provided by means of sewer connections, while 32 per cent used septic tanks, latrines or other improved on-site sanitation facilities that were not shared with other households.

Where data on excreta management are available, some of these basic services can meet the criteria for **safely managed** sanitation services. Twenty-six per cent of the population used toilets connected through sewers to a facility which provided wastewater treatment, and were thus classified as having safely managed sanitation services. Another 13 per cent used improved on-site facilities where wastes are disposed of in situ. This counts as a form of treatment and is also classified as **safely managed**. Where data on excreta management are not available, the entire

Two out of five people used safely managed sanitation services in 2015

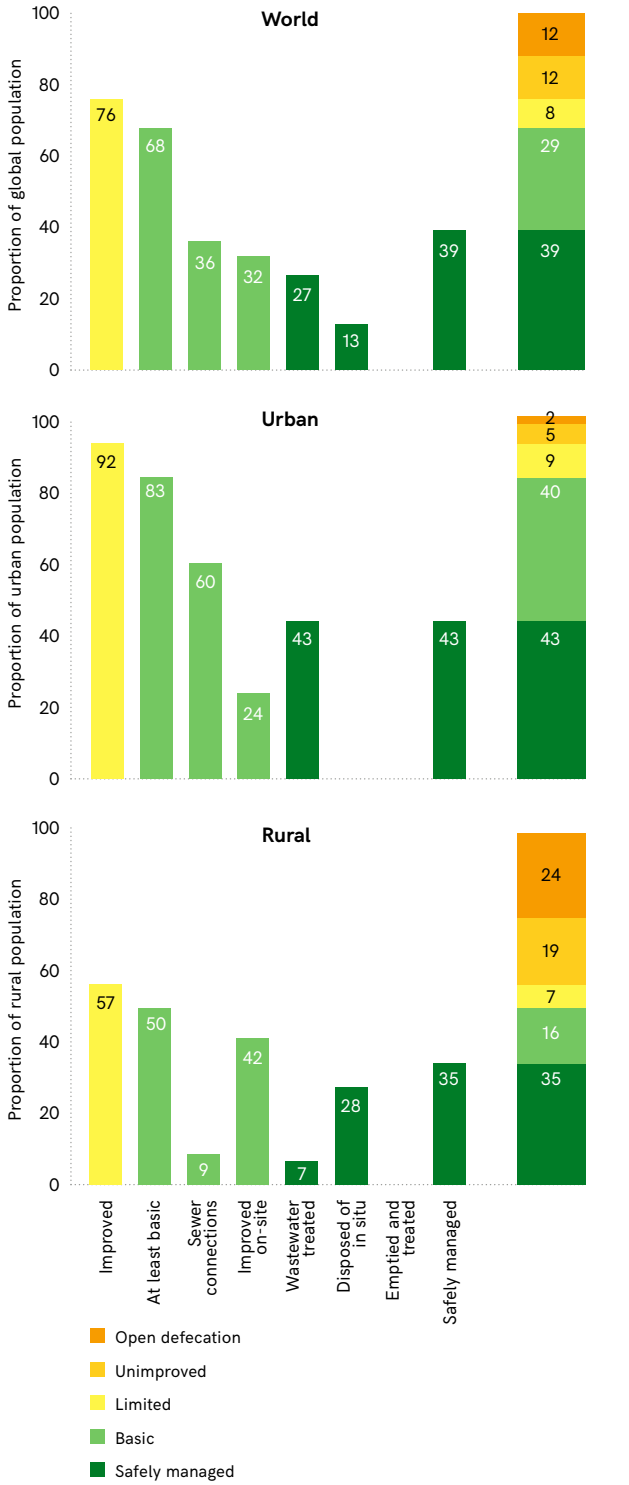


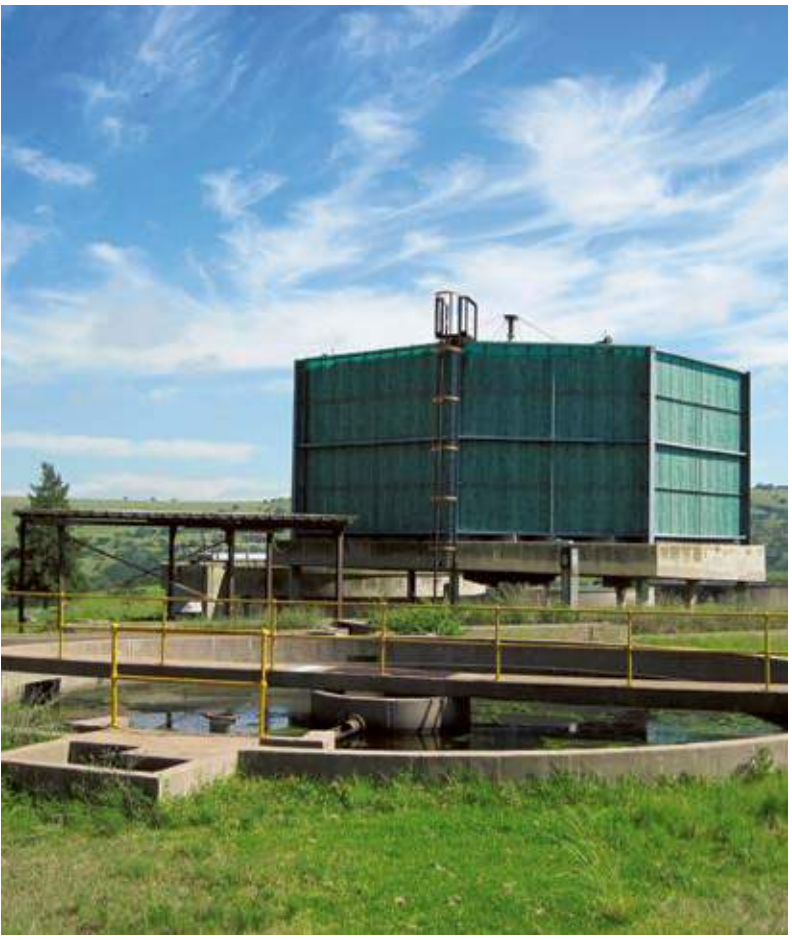
Fig. 40 Population using sanitation facilities meeting SDG criteria for safely managed services, global, rural and urban, 2015

population using improved facilities that are not shared is classified as having **at least basic** services.

Figure 41 shows the population using each type of sanitation service in urban and rural areas. Three out of five people with safely managed sanitation lived in urban areas (1.7 billion), while two out of five were in rural areas (1.2 billion). The 4.5 billion people without safely managed sanitation services in 2015 included 2.1 billion with **basic** services, 600 million with **limited** services, 856 million using **unimproved** sanitation and 892 million still practising **open defecation**.

There are three main ways in which households can meet the criteria for a **safely managed** sanitation service. Households using toilets where the excreta are flushed out of the household, transported through sewers and treated at a treatment plant, count as **wastewater treated off-site**. For households using toilets or latrines connected to septic tanks or pits, the criteria are met when excreta are either **emptied and treated off-site**, or remain stored and are considered **treated and disposed of in situ**.

This report presents for the first time disaggregated estimates of the populations using sewer connections and on-site sanitation systems (see Section 3), since they lead to different kinds of excreta management. Figure 43 shows that, globally, the population using sewer connections and on-site sanitation are evenly split, at 38 per cent each. In four of the SDG regions, on-site systems are more common.



4.5 billion lacked safely managed sanitation services in 2015

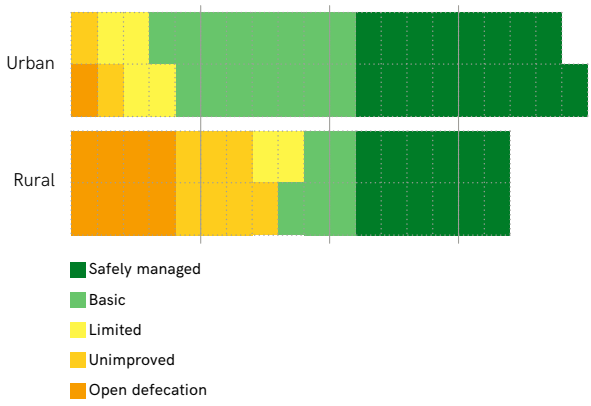


Fig. 41 Numbers of people using different levels of sanitation services in 2015, urban and rural (each block represents 100 million people)

Safely managed sanitation includes excreta management from sewered and on-site sanitation systems

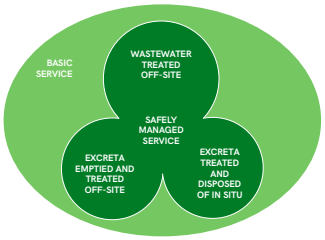


Fig. 42 Criteria for safely managed sanitation services

If data on wastewater treatment are available, and sewer connections are more prevalent than on-site sanitation systems, the JMP can make an estimate of **safely managed** sanitation services. If on-site sanitation is more prevalent, however, data on wastewater treatment are not sufficient to produce an estimate of safely managed sanitation and some information on treatment of excreta from on-site systems is required. The collection of reliable statistics on treatment and disposal of excreta is a prerequisite for safe management, so if countries do not have any data it is not possible to estimate the proportion of on-site facilities which are safely managed.

Globally equal numbers of people use sewer connections and on-site sanitation, but large regional variations exist

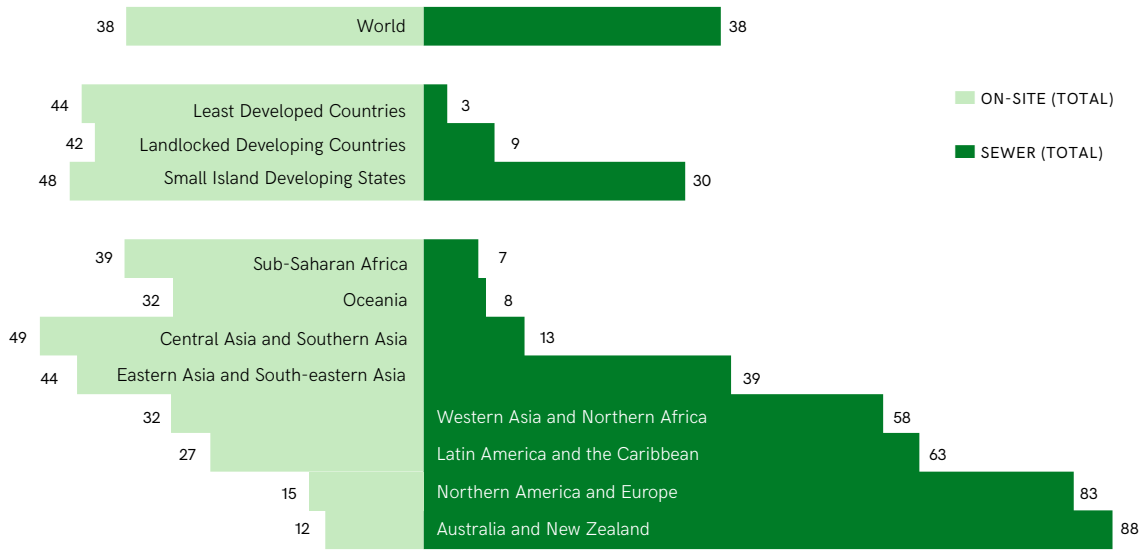


Fig. 43 Population using on-site and sewered sanitation systems, by region, 2015 (%).

* Note: includes shared facilities.

Sewer systems

Two out of five people globally (38 per cent), two thirds of those in urban areas (63 per cent) and 1 in 10 in rural areas (9 per cent) report having sewer connections.[25] These households are classified as having **safely managed** sanitation services if the toilets are not shared, and if the wastes flushed out of the household reach a treatment plant and undergo at least a minimum level of treatment:

- primary treatment where the effluent is discharged through a long ocean outfall,[26]
- secondary treatment,[27] or
- tertiary or advanced treatment.[28]

Not all excreta flushed down toilets actually reach treatment plants. Toilet lines can connect to open drains or directly discharge to surface water instead of reaching sewers, or sewage can leak or overflow out of sewers and pumping stations before reaching treatment plants. Where data are available on failures in containment and transport, for example 'flush to an open drain', these households are classified as not having safely managed services. In the absence of data, however, the JMP assumes that excreta from households that report having sewer connections actually reach a sewer line, and are transported as wastewater to a treatment plant.[29]

Data on **wastewater treatment** at the national level were available from 115 countries, representing 88 per cent of the global population with sewer connections. Information was collected from national authorities, including statistical offices and sanitation regulators, often published in reports such as annual statistical or environmental yearbooks. In some cases, data from regional or international databases were used.[30] In 76 of these countries, more people use sewer

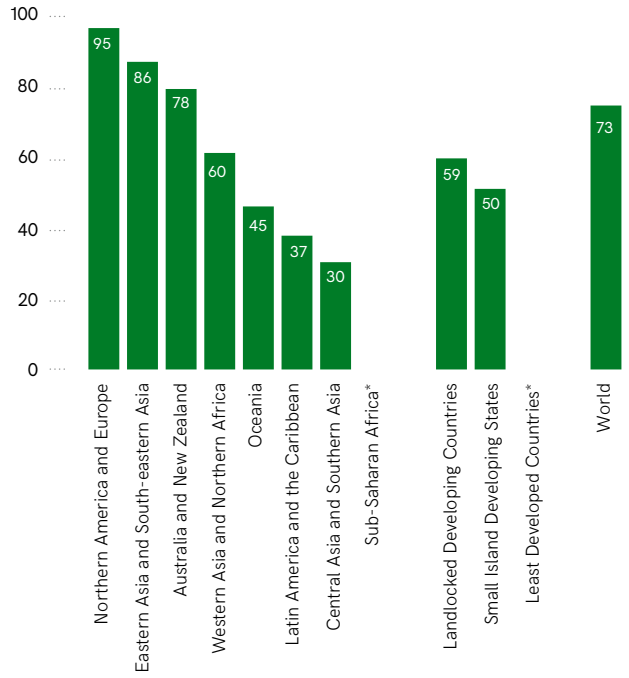
[25] Including shared facilities.
[26] Primary treatment is a mechanical, physical or chemical process involving settlement of suspended solids or any other process in which the biochemical oxygen demand (BOD) of the incoming water is reduced by at least 20 per cent before discharge, and the total suspended solids of the incoming water are reduced by at least 50 per cent.
[27] Secondary treatment is a process that follows primary treatment of water and generally involves biological or other treatment with a secondary settlement or other process that results in a BOD removal of at least 70 per cent and a chemical oxygen demand (COD) removal of at least 75 per cent.
[28] Tertiary treatment is a process that follows secondary treatment and removes nitrogen, phosphorous or any other pollutant, such as microbiological pollution or colour, that affects the quality or a specific use of water.
[29] For more details, see the forthcoming *Thematic Report on Safely Managed Sanitation.*
[30] See, for example, the European Union <http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=env_ww_con&lang=en>, the Organisation for Economic Co-operation and Development <https://data.oecd.org/water/waste-water-treatment.htm>, MDG+ <http://www.acwua.org/mdg+/library>, or the International Benchmarking Network for Water and Sanitation Utilities (IBNET) <https://www.ib-net.org/>.

connections than on-site sanitation. National estimates of safely managed sanitation could be made for these countries, plus an additional eight where data on excreta management in on-site systems were available.

Globally, three quarters of sewer-borne wastewater (73 per cent) is estimated to undergo at least secondary treatment. By applying this ratio to the population with sewer connections (2.8 billion), and adjusting for sharing (given that 5 per cent of people using toilets with sewer connections share them), 1.9 billion people with sewer connections are classified as having safely managed sanitation services.

A total of 711 million people, over 90 per cent of whom live in urban areas, have sewer connections that do not receive the minimum level of treatment specified above. Many more are connected to wastewater treatment plants that do not provide effective treatment or comply with effluent requirements.

Three quarters of wastewater undergoes at least secondary treatment



* Insufficient data to estimate wastewater treatment

Fig. 44 Proportion of wastewater treated, by region, 2015

Box 5

Targets 6.2 and 6.3

SDG target 6.3 aims, inter alia, to halve the proportion of untreated wastewater and to substantially increase recycling and safe reuse globally. SDG global indicators 6.3.1 "Proportion of wastewater safely treated" and 6.2.1a "Proportion of population using safely managed sanitation services" have many common elements, but also some key differences. Most notably, target 6.2 considers only excreta generated by households, while target 6.3 additionally considers wastewater from economic activities (such as industrial wastes).

While both indicators rely on data from household surveys and censuses to quantify the population using different types of sanitation facilities (sewer, septic, latrine or other), for target 6.2, excreta are considered to be safely managed if they receive at least some basic level of treatment, while target 6.3 could consider actual efficiency of treatment, including compliance with environmental and public health effluent standards relevant for disposal or reuse, where data are available.

In countries with data most rural on-site sanitation facilities have never been emptied and count as safely managed

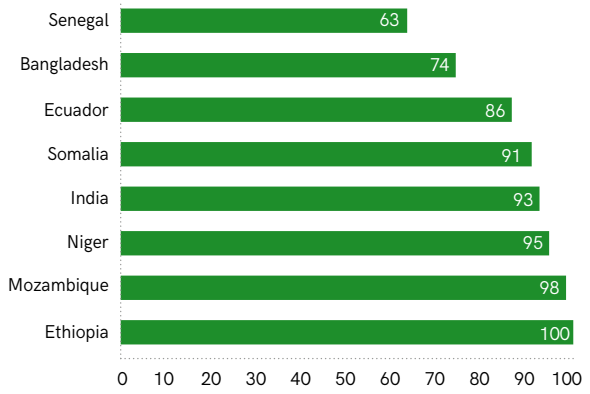


Fig. 45 Proportion of on-site sanitation facilities never emptied, rural areas, 2015

On-site sanitation

A third of the global population (38 per cent), a quarter of the urban population (29 per cent), and half of the rural population (48 per cent) report using improved sanitation systems such as septic tanks or improved latrines,[31] where excreta are stored on-site in pits or tanks. Households using such on-site systems can be considered to have safely managed sanitation services if the facilities are not shared, and if excreta are either disposed of in situ or emptied, transported and treated off-site.

In a number of countries, household surveys have asked people if their latrines or septic tanks have ever been emptied, and in most cases the respondents report that they have not (Figure 45). When storage facilities have not been emptied, the excreta are considered to be treated and disposed of in situ, and therefore safely managed. Excreta that are emptied from storage facilities and buried on premises are also considered safely managed. Such burial after emptying accounted for the majority of safely managed sanitation in rural areas of Bangladesh and Niger. There are cases where storage facilities are made to leak intentionally, to avoid the need for emptying. In principle, these should not be counted as safely managed, but data are rarely available on effective containment in latrines and septic tanks. Excreta that are emptied and transported off-site can be classified as safely managed if there is information on the proportion of excreta that reach treatment plants, and the type of treatment that they receive.

Some on-site sanitation facilities are specifically designed to facilitate safe management of excreta (such as twin-vault alternating pit latrines). In China, such systems are called 'harmless sanitary latrines' and account for two thirds of on-site facilities in rural areas.

Box 6

On-site sanitation in Japan

In Japan, the Ministry of the Environment maintains detailed registers of different types of on-site sanitation facilities, which are called decentralized wastewater treatment systems. According to the 2014 Survey on the Disposal of General Waste database, 73 per cent of the population have sewer connections, 21 per cent use an advanced type of septic tank called *jokhasou*, while the remaining six per cent use other on-site systems. Of the excreta from *jokhasou* and other on-site systems, 99.5 per cent are removed and treated with 'night soil treatment technologies', which include chemical treatment, aerobic and anaerobic digestion, and denitrification treatment. All of these technologies are considered equivalent to secondary or higher treatment, and are counted as safely managed.

[31] Including shared facilities.

Septic tanks are designed to separate solids from liquids, and the solids that are retained need to be regularly removed, or desludged. Trucks can then deliver the excreta to a treatment plant, sometimes via a transfer station.

Latrines may also be emptied, and excreta removed off-site for treatment. While desludging and emptying of on-site pits and tanks is common, data on excreta management from on-site systems are scarce at present.

Box 7

Data coverage and limitations

The JMP relies primarily on data from household surveys and censuses to calculate the population with basic services (see Section 3). But since survey respondents have only limited information on how excreta are managed once they leave the household, information on excreta management has been collected from national authorities, including ministries, regulators and statistical offices.

The JMP has collected data on management of wastewater in sewer systems from 115 countries, comprising 88 per cent of the global population connected to sewers. These data are applied to the population with sewer connections in both urban and rural areas. These data, however, may reflect installed treatment technology rather than actual performance, overestimating safe management. Furthermore, the JMP recognizes that not all excreta from households with sewer connections actually connect with a sewer line and reach a wastewater treatment plant. The estimate that 27 per cent of the global population uses sewer connections that lead to excreta treatment and qualify as safely managed sanitation services, is therefore an upper limit.

In countries where no information on excreta management is available, households using improved sanitation are classified as having either basic or limited services. Some of those classified as having basic services may be re-classified as having safely managed services when information on excreta management becomes available. The limited data coverage for on-site sanitation likely leads to underestimation of excreta management in rural areas. On the other hand, the assumption that all on-site storage systems are fully contained may lead to an overestimation in some settings.

Incomplete data on excreta management in on-site systems is the most challenging data gap for monitoring Target 6.2. The JMP and its partners are developing and testing new data collection tools to help fill these gaps, including new questions for household surveys on emptying of pit latrines and septic tanks, and questionnaires for local authorities and service providers such as treatment plant operators or desludging trucks. Important gaps also exist for sewered systems, such as the amount of excreta that is lost in transport, and the amount of excreta that bypasses treatment plants or is discharged without receiving at least secondary treatment.

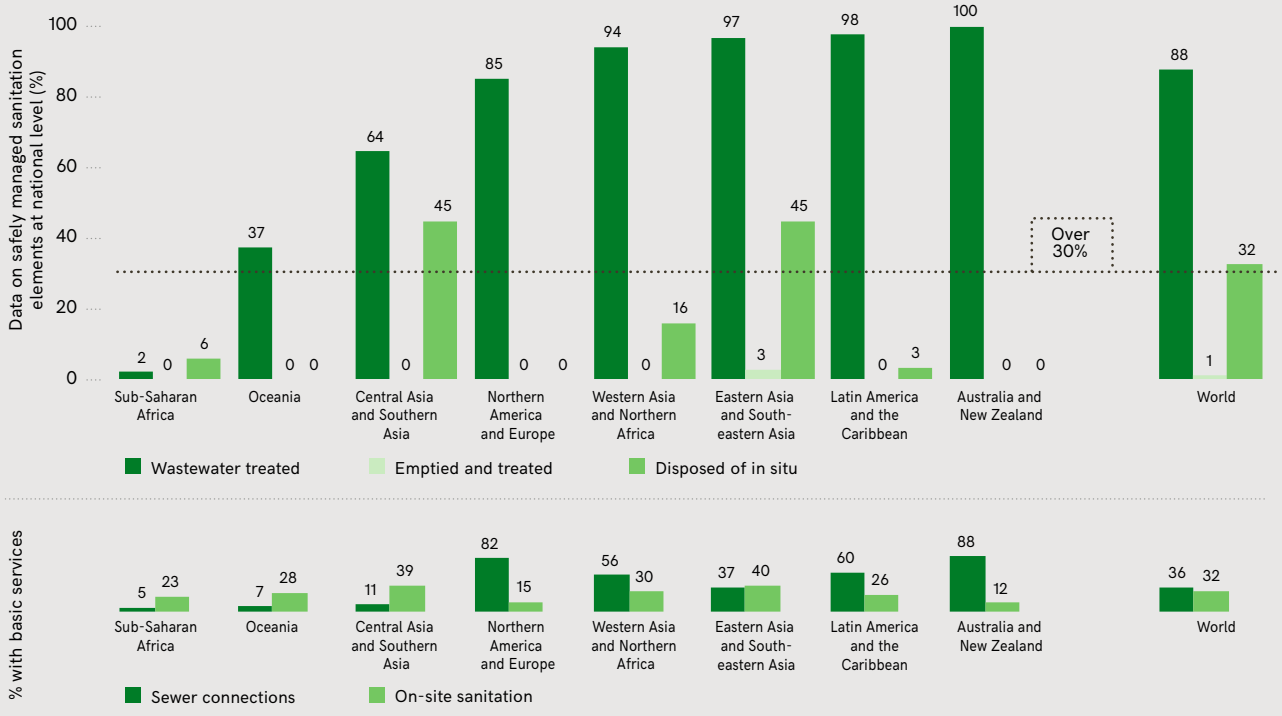
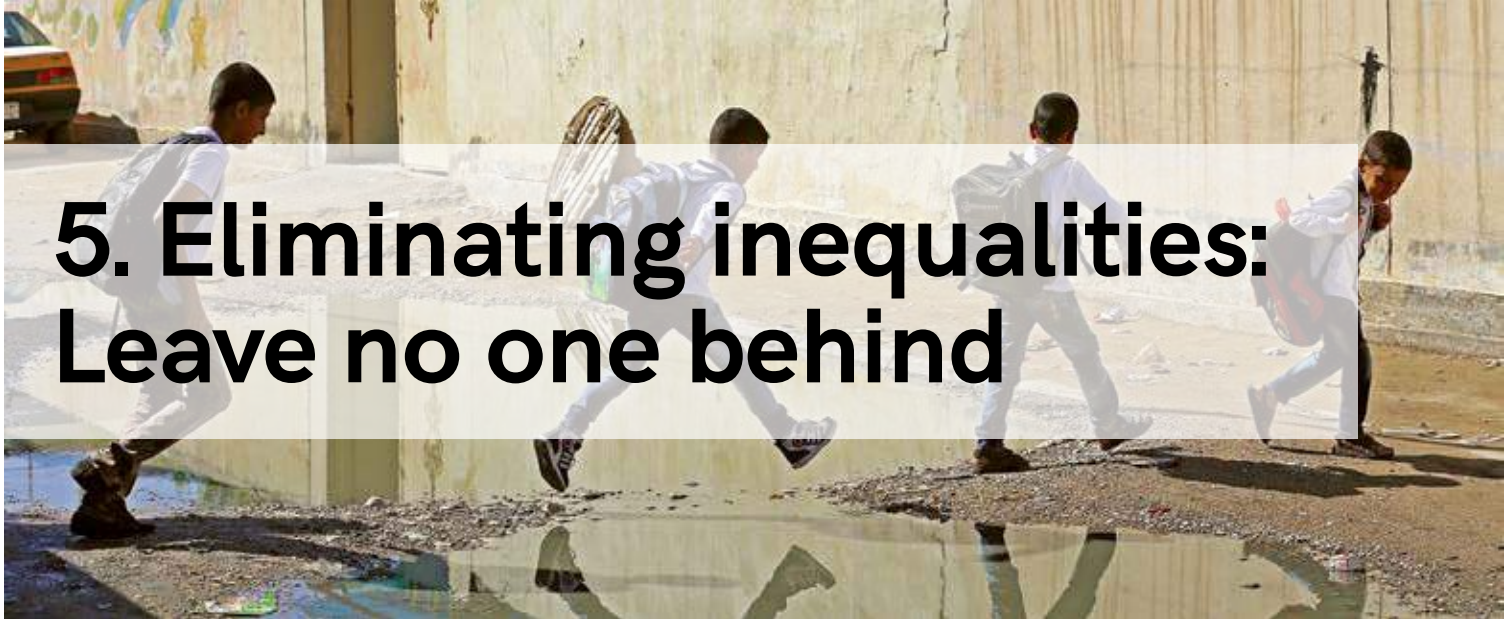


Fig. 46 Proportion of global and regional population for which data are available on safe disposal of excreta in situ, emptying and treatment of excreta from on-site sanitation, and wastewater treatment, 2015 (%)



5. Eliminating inequalities: Leave no one behind

The JMP has been drawing attention to inequalities in drinking water, sanitation and hygiene since 1990. The MDG target to halve the proportion of the population without access focused attention on aggregate coverage, but JMP updates have also highlighted inequalities between rural and urban areas, between rich and poor, and between other groups and the general population.

The SDGs have a much stronger focus on inequalities, with Goal 10 dedicated to "reducing inequalities between and within countries". The 2030 Agenda further commits Member States to "leave no one behind" and states that SDG indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographic location.[32]

During 2016, the JMP global database was restructured and expanded to incorporate new information required for SDG monitoring. While very few countries have disaggregated information on the populations using safely managed water and sanitation services, the database on basic services has been further expanded to include new estimates by wealth quintile and by subnational region for over 80 countries.

Figure 47 shows that there are not only significant inequalities in basic WASH services and open defecation between SDG regions and between countries within each region, but also within individual countries between urban and rural areas, subnational regions and wealth quintiles.

Disaggregating population data at these different levels is an essential first step towards ensuring that no one is left behind.

For example, Angola has relatively high coverage of basic drinking water compared to other countries in sub-Saharan Africa, but there is an 40 percentage point gap between urban and rural areas and a 65 percentage point gap between the richest and poorest quintiles. In the best-performing subnational region in Panama, 95 per cent of the population uses basic sanitation, compared to just one per cent in the worst-performing subnational region. In Tunisia, coverage of basic handwashing facilities exceeds 80 per cent in all except the poorest wealth quintile, which lags behind at 54 per cent. While Bangladesh is close to eliminating open defecation, the problem is now concentrated among the bottom wealth quintiles and two subnational regions.

5.1 No services: The bottom of the ladder

The elimination of open defecation has been identified as a top priority and is closely associated with wider efforts to end extreme poverty by 2030. The world has made steady progress: The proportion of the global population practising open defecation decreased from 20 per cent to 12 per cent between 2000 and 2015. But much remains to be done, especially in rural areas, where open defecation has been declining at a rate of just 0.7 percentage points per year. This rate would need to more than double in order to eliminate open defecation in rural areas by 2030.

[32] United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development*, United Nations General Assembly Resolution, A/RES/70/1, 21 October 2015.

New disaggregations reveal significant subnational inequalities

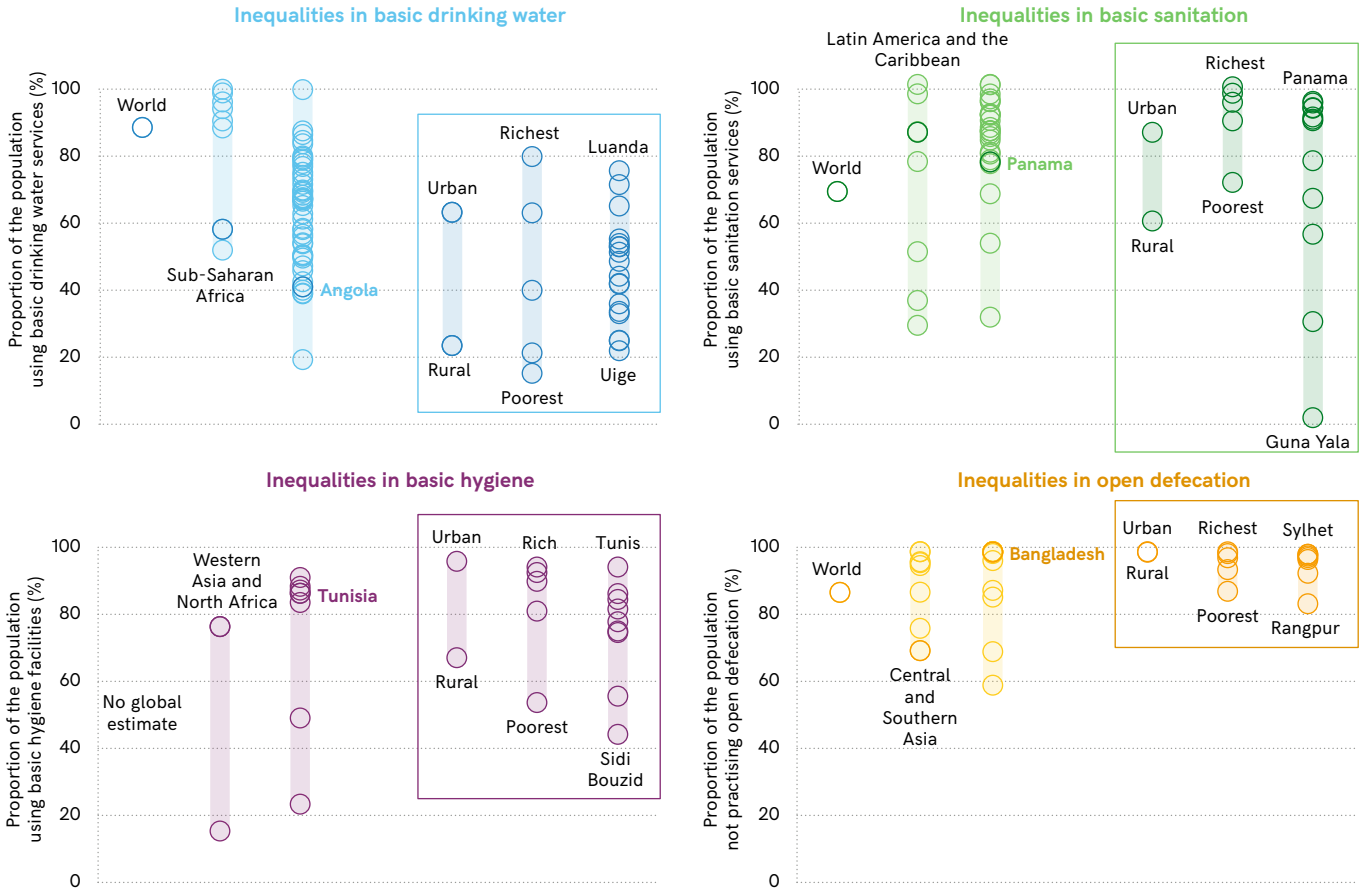


Fig. 47 Population using basic services and practising open defecation, disaggregated by SDG region, country, urban-rural, subnational regions and wealth quintiles for selected countries

Note: Figure 47 shows 2015 estimates for the world, regions and countries, and recent surveys for subnational estimates: Angola MIS 2011 (wealth quintiles) and IIMS 2015-2016 (subnational); Panama MICS 2013; Tunisia MICS 2011-2012; Bangladesh MICS 2012-2013.

In 2015, at the start of the SDG period, 892 million people still practised open defecation. Nine out of 10 (812 million) lived in rural areas, and the vast majority lived in just two regions. Nearly two thirds (558 million) lived in Central Asia and Southern Asia, with another quarter (220 million) in sub-Saharan Africa. Figure 48 shows changes in the proportion and number of people practising open defecation between 2000 and 2015. While Central Asia and Southern Asia have decreased open defecation rates from 53 per cent to 30 per cent, and sub-Saharan Africa has achieved a decrease from 32 per cent to 23 per cent, rates in Oceania have only dropped from 13 to 12 per cent. Only two regions recorded an increase in the number of open defecators, which rose from 204 million to 220 million in sub-Saharan Africa and from 1 million to 1.3 million in Oceania.

Faster progress is required to end open defecation by 2030, especially in rural areas

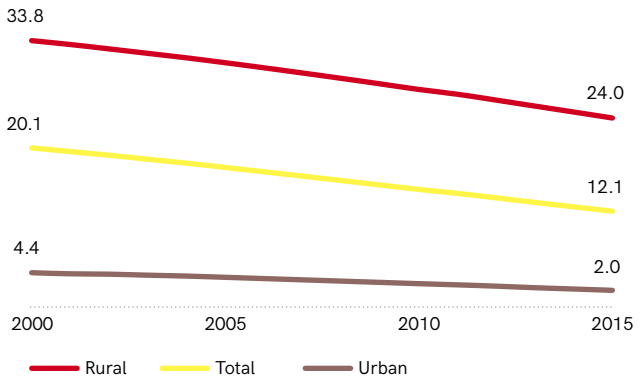


Fig. 48 Global population practising open defecation, rural and urban, 2000–2015 (%)

Since 2000, the rate of open defecation has decreased in all regions except Oceania

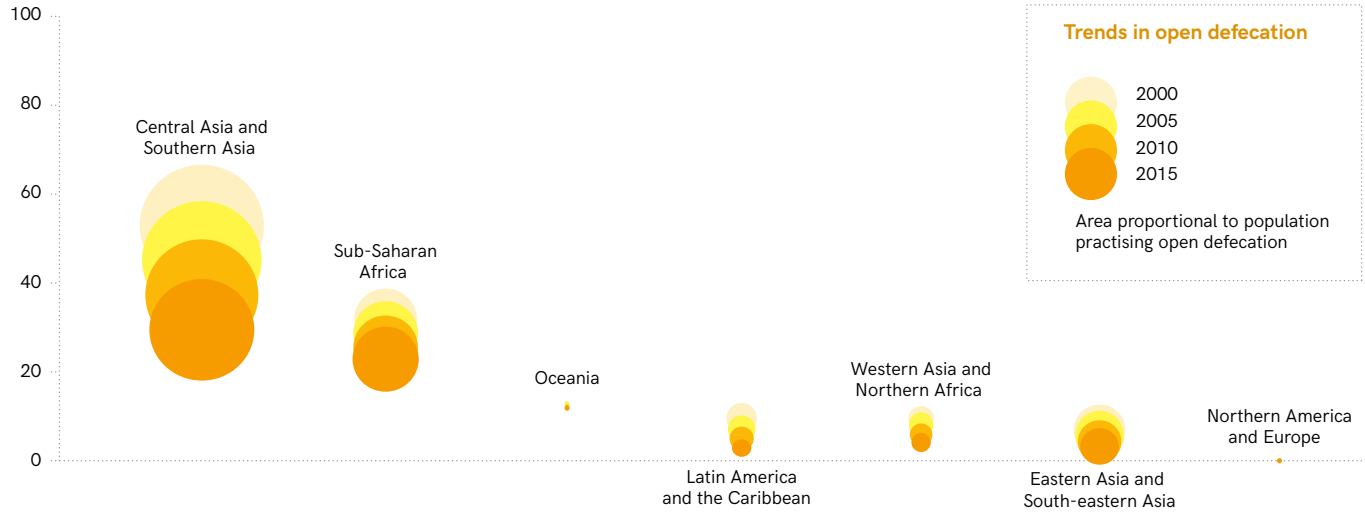


Fig. 49 Proportion and number of people practising open defecation in 2015, by region

Box 8

The Swachh Bharat Mission to end open defecation in India

In October 2014, the Prime Minister of India launched an ambitious national sanitation programme that aims to eliminate open defecation by 2019. The Swachh Bharat Mission (SBM) has unprecedented political support and has mobilized nearly $25 billion from Government, the private sector and civil society. The rural programme promotes pour flush twin-pit toilets, which are designed to contain wastes in situ until they are safe to handle. The programme targets behaviour change and community approaches to sanitation are being adopted throughout the country.

The SBM has developed a national database with detailed information on latrine coverage down to the household level and a multi-stage verification process.[33] As of June 2017, according to the SBM, over 205,000 villages, 149 districts and five States had reported themselves to be open-defecation free. The Government estimated that since the start of the Mission, in October 2014, coverage of latrines in rural India has increased from 42% to 65%, and the number of rural Indians defecating in the open had come down from 550 to 330 million people by June 2017.

The SBM programme recognizes the need to go beyond reporting infrastructure **coverage**, and is conducting population-based surveys to determine household **use** of sanitation facilities, which is the internationally agreed-upon indicator used by JMP to compare progress across countries. The National Annual Rural Sanitation Survey will generate up-to-date data on progress towards elimination of open defecation and trigger rewards for areas that have achieved targets.

[33] See India Ministry of Drinking Water and Sanitation, 'Swachh Bharat Mission-Gramin', <http://sbm.gov.in/sbm>.

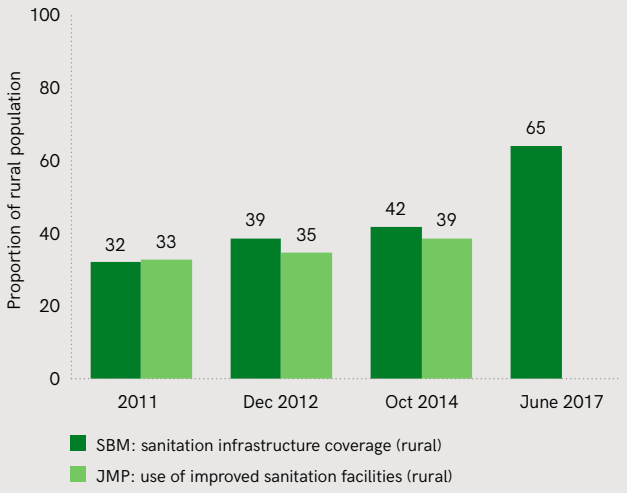


Fig. 50 Changes in infrastructure coverage and use of improved sanitation in rural India, 2011–2017 (%)

The JMP estimates in this report draw upon data from household surveys and censuses conducted during the period 2000–2015 and include only one survey since the inception of the Swachh Bharat Mission. JMP estimates for 2017 will be published in 2019, and it may take time for any rapid changes in the use of sanitation facilities to be fully reflected by the longer-term trends monitored by the JMP.

Populations that have no drinking water service at all and collect water directly from surface water sources such as rivers, lakes and irrigation canals face serious risks to their health and well-being. The global population using surface water decreased from 4 per cent in 2000 to just 2 per cent in 2015. Of the 159 million using surface water in 2015, 147 million lived in rural areas, and over half live in sub-Saharan Africa, where 10 per cent of the population still drinks surface water. The proportion of the population drinking surface water is highest in Papua New Guinea, at 42 per cent.

5.2 Reducing the gap in basic services

The JMP has established a new database on inequalities in basic drinking water, sanitation and hygiene. Wealth quintile estimates, calculated using a customized wealth index that excludes water and sanitation variables, are now available in a standardized format for national, urban and rural populations.

Inequalities are found in all countries, but the spread in basic service coverage between the different quintiles provides a useful measure of the extent to which access to services is equitable. Figure 52 reveals significant differences in coverage of basic water, basic sanitation and basic hygiene across wealth quintiles. Overall, the gaps between quintiles are larger for sanitation than for drinking water or hygiene. Absolute gaps tend to be smaller at very low levels of coverage and then increase through lower and mid-range coverage, before converging again at higher levels of coverage.

There are nevertheless marked differences between the patterns observed. In countries with low coverage nationally, the absolute gap between rich and poor tends to be smaller, but relative inequalities may be very large. For example, in Liberia, sanitation coverage is 9 per cent among the richest quintile but just 1 per cent among the poorest quintile. In Burundi, Nepal and Costa Rica, absolute inequalities are

Over 10 per cent of the population still relies on untreated surface water in 22 countries

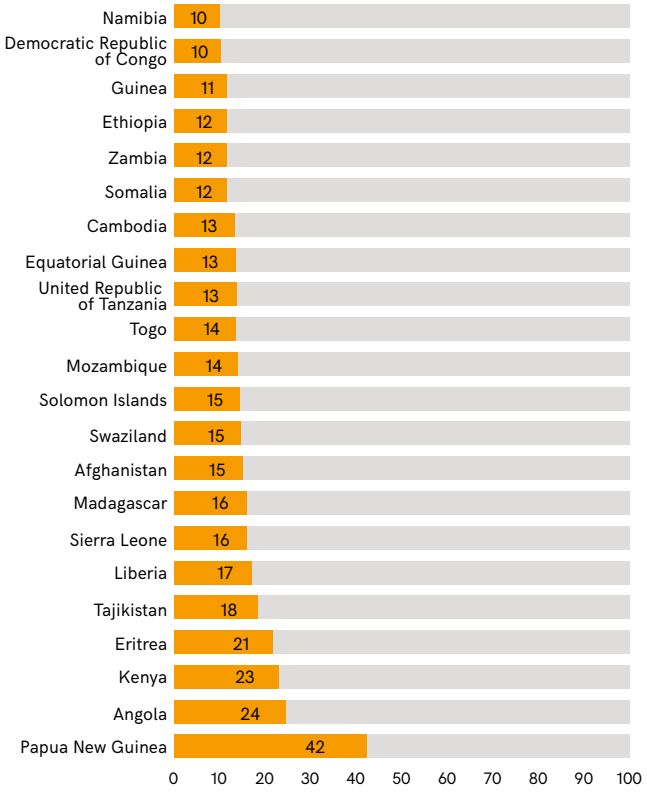


Fig. 51 Proportion of national population drinking surface water, 2015

Rich-poor gaps are generally larger for sanitation than for drinking water or hygiene

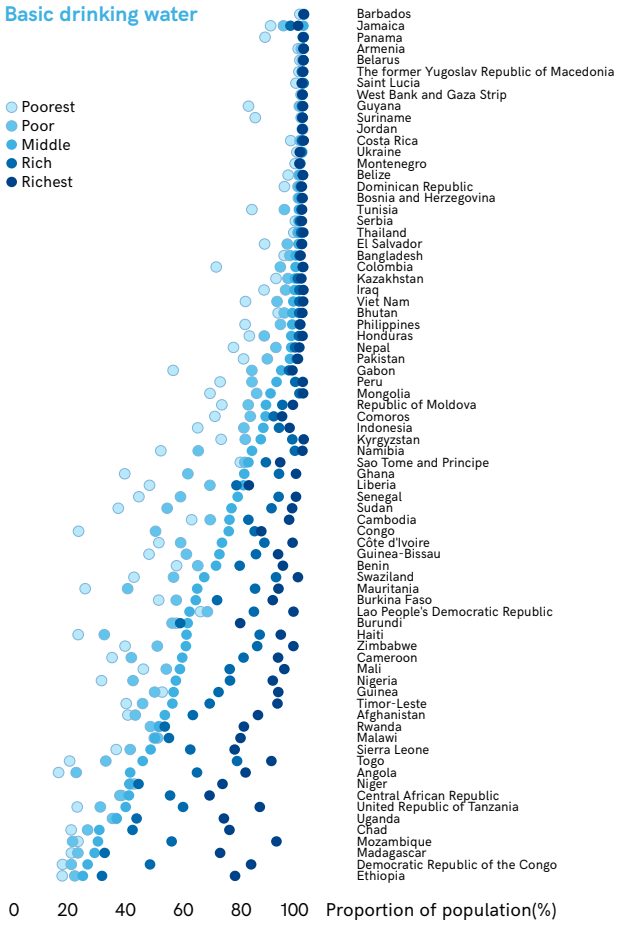
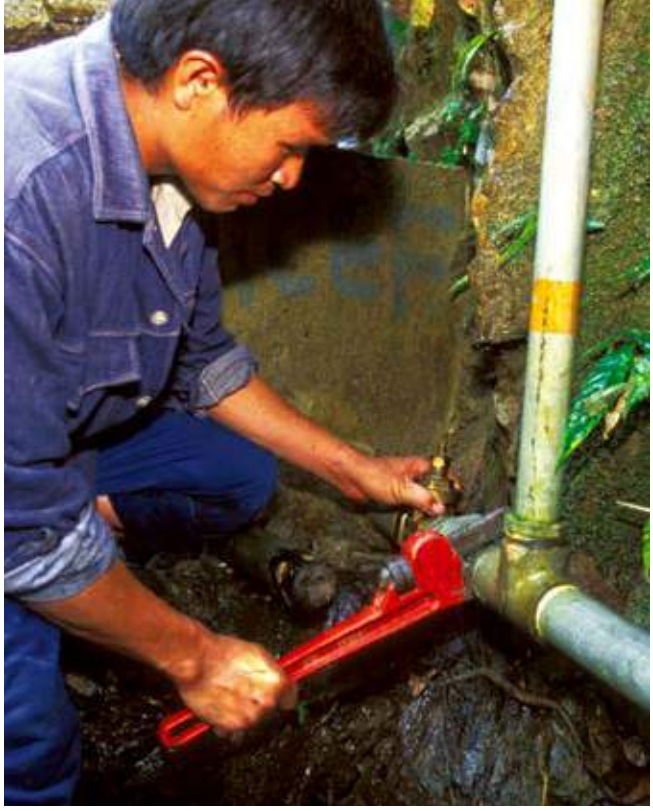
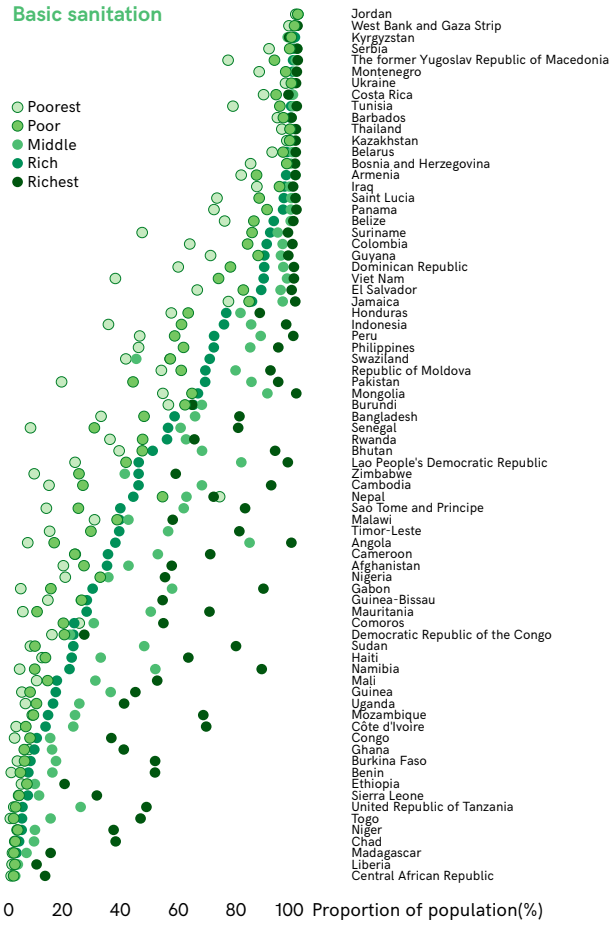


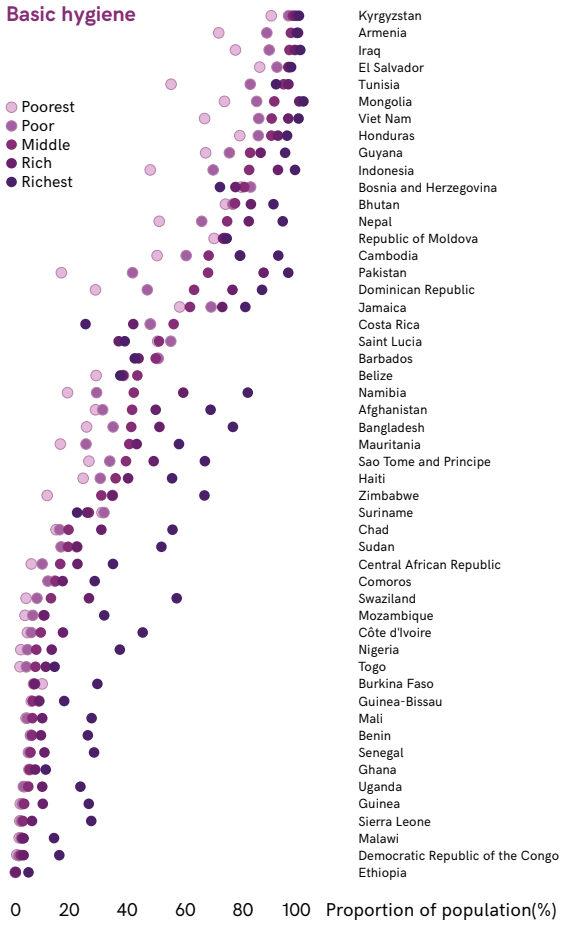
Fig. 52 Use of basic drinking water, sanitation and hygiene by national wealth quintiles, 2010-2014

small, with the quintiles closely grouped with similarly low or high coverage. Absolute inequalities are greatest in countries with the largest spread between the richest and the poorest, such as Angola for sanitation, Haiti for water, and Pakistan for hygiene. For water, Gabon and Viet Nam have a big gap between the second and the poorest quintile, while for sanitation, Côte d'Ivoire and Mozambique have a large gap between the fourth and richest quintile. Understanding these different patterns of inequality is an important first step in devising appropriate strategies to reduce them.

The JMP inequalities database also includes new estimates of coverage by subnational region derived from household surveys and censuses. The majority of national surveys stratify the population by at least one or two administrative levels. While the number and size of administrative units at each level varies across countries, the difference in coverage between them nevertheless provides a useful comparative measure of inequality.







National averages mask significant inequalities between subnational regions

Fig. 53 Proportion of population in subnational regions with basic drinking water, sanitation and hygiene, 2010–2014

Figure 53 highlights absolute and relative inequalities in basic service coverage between subnational regions. It shows that many countries have one or two regions with very low or very high coverage, but the distribution of regions in between varies widely. Those that are closely grouped at similarly high coverage or low coverage, as illustrated by hygiene in Kyrgyzstan, sanitation in Afghanistan, and water in the former Yugoslav Republic of Macedonia, are more equal than those that are widely spread, such as sanitation in Suriname or water in the Lao People's Democratic Republic. The extent to which coverage in subnational regions deviates from the national average is a potentially useful measure of inequality.

Basic drinking water

Proportion of the population with basic drinking water services, by subregion (%)

Box 9

Fragile states have farther to go to reach universal access to basic drinking water and sanitation services

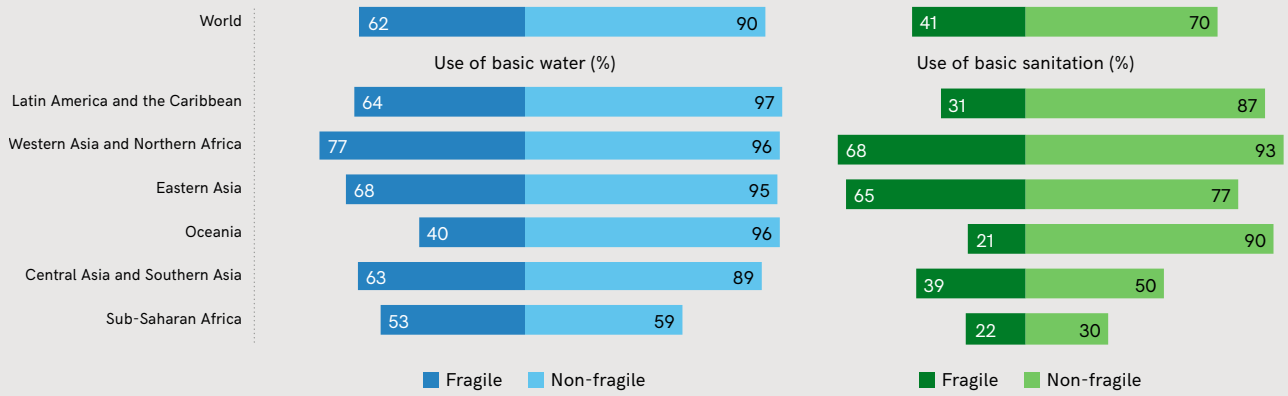


Fig. 54 Proportion of population using basic drinking water and sanitation services in fragile and non-fragile states in 2015, by SDG region

Conflict, violence and instability can derail progress towards universal access. The World Bank's Fragile, Conflict and Violence Group maintains a harmonized list of countries identified as **fragile** based on Country Policy and Institutional Assessments scores and ongoing peacekeeping or peacebuilding missions.

[34] World Bank Harmonised List of Fragile Situations <http://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations>

Based on the World Bank's harmonized classification[34], the JMP estimates that in 2015, 484 million people lived in fragile situations. In 2015, 284 million did not use basic sanitation, and 183 million lacked basic drinking water. Globally, people living in fragile situations are twice as likely to lack basic sanitation and four times as likely to lack basic drinking water as populations in non-fragile situations, and marked disparities are observed in all SDG regions (Figure 54).

5.3 Reducing the gap in services levels

Tracking inequalities in safely managed services is more challenging, as there is currently less information available on service levels, and it is rarely disaggregated by population subgroups. Currently, 28 countries have rural and urban estimates for safely managed sanitation, and only 19 countries have rural and urban estimates for safely managed drinking water. Figure 55 shows the percentage point gap in coverage of safely managed services for countries with estimates for both rural and urban areas.

It shows that urban coverage of safely managed drinking water and sanitation is greater than rural coverage in almost all countries with data. The coverage gaps for safely managed drinking water are particularly striking, and exceed 30 percentage points in half of the countries with data. Further work is required to understand the relationship between inequalities in different elements of safely managed services, so that these can be more systematically monitored in the future.

Large gaps exist between urban and rural coverage of safely managed services

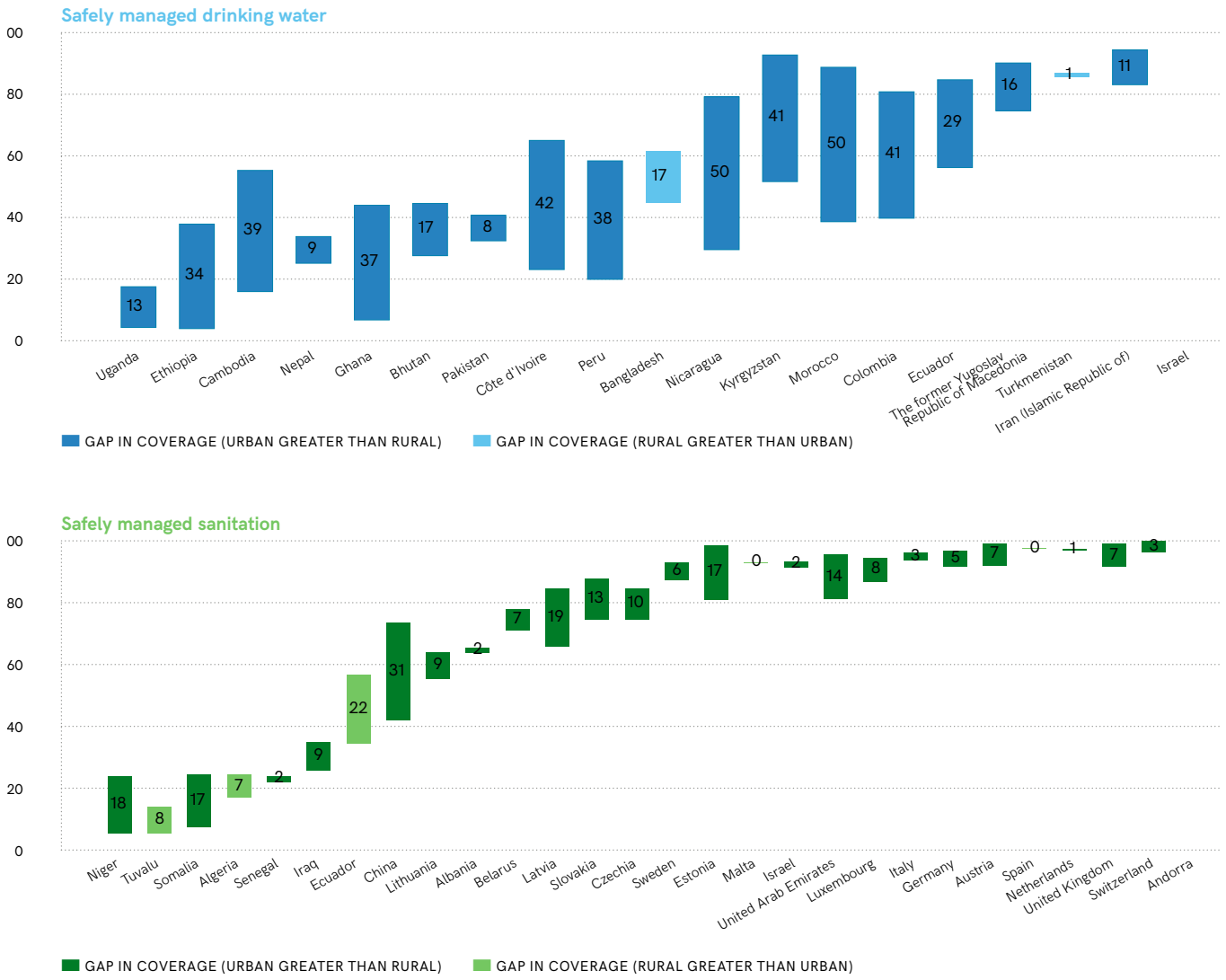


Fig. 55 Percentage point difference in the use of safely managed services between urban and rural areas, 2015

6. Institutional WASH: New frontiers

The SDG targets aim to achieve 'universal access' by 2030 (Section 1). 'Universal' implies all settings, not only households, but also schools, health care facilities, workplaces and other public spaces. The JMP is therefore expanding its global databases to include information on WASH in institutional settings. The first priority is to establish baseline estimates to inform global monitoring of SDG targets relating to WASH in schools (SDG 4.a) and health care facilities, with plans to expand global monitoring to include other institutional settings in the future.

Initial landscaping reviews of WASH in schools and health care facilities from 2015 have identified datasets for at least 149 and 54 countries, respectively, and highlighted serious shortcomings in water and sanitation coverage, and availability of handwashing facilities with soap and water.[35,36] However the lack of harmonized definitions has made it difficult to compare progress across countries. Some of these datasets are not representative of the entire country, and cover only certain regions or types of schools or health care facilities. In 2016, the JMP convened expert group meetings to define harmonized criteria and indicators for monitoring WASH in each setting based on global norms and standards and existing national and international surveys.[37,38] The JMP is currently compiling national sources of data, with a view to publishing comprehensive harmonized global baseline estimates for WASH in schools and WASH in health care facilities in 2018.

[35] United Nations Children's Fund, *Advancing WASH in Schools Monitoring*, UNICEF, New York, 2015, <https://www.unicef.org/wash/schools/files/Advancing_WASH_in_Schools_Monitoring(1).pdf>.

[36] World Health Organization and United Nations Children's Fund, *Water, Sanitation and Hygiene in Health Care Facilities: Status in low- and middle-income countries and way forward*, WHO, Geneva, 2015,<www.who.int/water_sanitation_health/publications/wash-health-care-facilities/en>.

[37] World Health Organization and United Nations Children's Fund, *Core Questions and Indicators for Monitoring WASH in Schools in the Sustainable Development Goals*, WHO and UNICEF, Geneva and New York, 2016, <https://washdata.org/report/jmp-2016-core-questions-and-indicators-monitoring-wins>.

[38] World Health Organization and United Nations Children's Fund, 'Monitoring WASH in Health Care Facilities: Final core indicators and questions', WHO and UNICEF, 2016, <https://washdata.org/report/jmp-2016-core-questions-and-indicators-monitoring-winhcf>

WASH in schools

The new JMP service ladders for WASH in schools enable countries to track progress towards SDG target 4.a, which aims for **basic** drinking water, sanitation and hygiene in all schools (Table 3). In countries where **basic** services are not ambitious, a country-defined **advanced** level may be appropriate based on the national context, priorities and resources. Criteria for an advanced level might include normative elements that are not captured by the basic indicator, such as the quality of drinking water, ratios of pupils per toilet, or availability of menstrual hygiene management materials in bathrooms.

SERVICE LEVEL	DRINKING WATER	SANITATION	HYGIENE
Advanced	*To be defined at national level*	*To be defined at national level*	*To be defined at national level*
Basic (SDG)	Drinking water from an improved source is available at the school	Improved facilities, which are single-sex and usable at the school	Handwashing facilities that have water and soap are available
Limited	There is an improved source (piped, protected well/spring, rainwater, packaged/delivered water), but water is not available at time of survey	There are improved facilities (flush/pour flush toilets, pit latrine with slab, composting toilet), but not single-sex or not usable at time of survey	Handwashing facilities with water, but no soap
No service	No water source or unimproved source (unprotected well/spring, surface water)	No toilets or latrines, or unimproved facilities (pit latrines without a slab or platform, hanging latrines, bucket latrines)	No handwashing facilities at the school or handwashing facilities with no water

Table 3 JMP service ladders for monitoring WASH in schools

Data from EMIS can be mapped to JMP service ladders

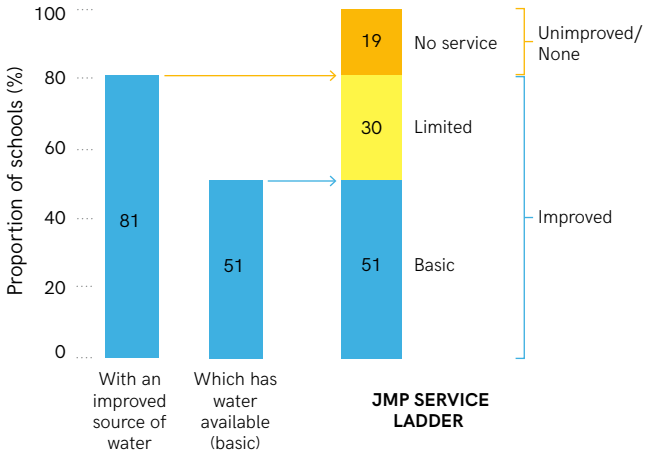


Fig. 56 Proportion of schools with different levels of water services, Papua New Guinea, 2015/2016

Preliminary EMIS data suggest that coverage is often lower in schools that serve young children

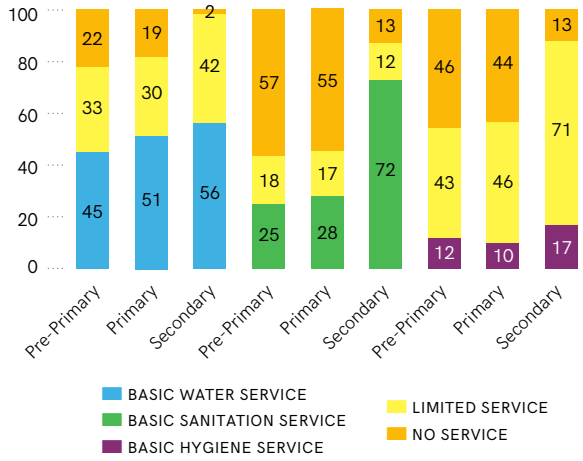


Fig. 57 Proportion of schools with different levels of WASH service, by school type. Papua New Guinea, 2015/2016

Regional scoping studies in East Asia and the Pacific[39] and Latin America and the Caribbean[40] have shown how national monitoring data can be mapped to the JMP service ladders, and highlighted the need to further standardize definitions and metrics to enable comparison across countries. Education Management Information System (EMIS) data from Papua New Guinea (Figure 56) show the implications of going beyond counting infrastructure (such as the presence of a water point) and taking account of service levels (such as the availability of water from that point).

The same data suggest that WASH service coverage may be lower in schools that serve younger children (Figure 57), but the classification of pre-primary schools is not yet standardized, which limits cross-country comparability. This highlights broader challenges of facility type classification, given that different national monitoring systems will include different types of educational facilities: public schools, private schools, boarding schools, community schools, monastic schools, Islamic schools and others.

Colombia's EMIS data from 2012 suggest that national averages may mask large disparities between subnational departments, especially when service levels are considered. Regional coverage may be quite different for water, sanitation and hygiene in schools (Figure 58). While some departments have similar levels of coverage for all three indicators, others vary widely, underlining the need to measure them separately.

[39] World Health Organization and United Nations Children's Fund, *Scoping Study: Preparing for SDG reporting of WASH in schools in East Asia and the Pacific*, WHO and UNICEF, 2017, <https://washdata.org/report/jmp-2017-wash-hcf-eapro>.

[40] World Health Organization and United Nations Children's Fund, *Scoping Study: Are data available to monitor the SDGs for WASH in schools and health care facilities in the Latin America and Caribbean region?*, WHO and UNICEF, 2017, <https://www.wssinfo.org/fileadmin/user_upload/resources/SDG-WASH-institutions-LACRO-FINAL.pdf>.

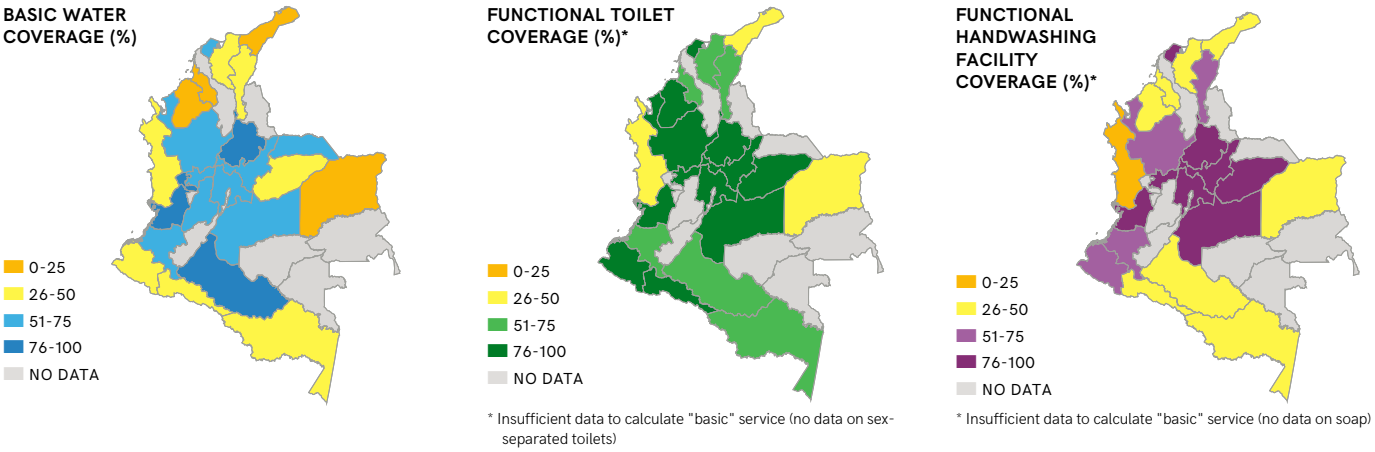


Fig. 58 Regional coverage of WASH in Colombian schools (including pre-primary, primary and secondary schools)

WASH in health care facilities

There are four JMP service ladders for WASH in health care facilities – water, sanitation, hand hygiene, and health care waste – that each focus on conditions in the outpatient setting (Table 4). The indicators are universally applicable, but reporting will disaggregate among different types of health care facilities. As with schools, in countries where **basic** services are already the norm, a country-defined **advanced** service level may be appropriate based on the national context, priorities and resources. Examples of requirements for an advanced level might include drinking water quality, excreta management systems, or compliance with mandated cleaning routines.

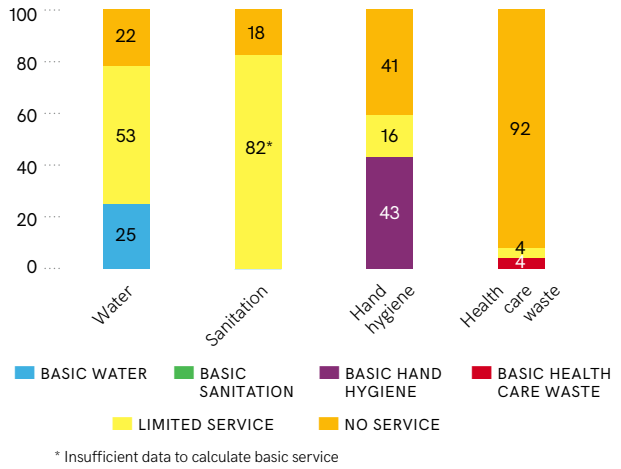
Figure 59 illustrates how health care facility data from the Haiti 2014 Service Provision Assessment can be mapped to the JMP service ladders. In this example, a lack of data on sex-separated toilets, separated toilets for staff and patients, accessibility to those with limited mobility, and facilities for menstrual hygiene management limit the ability to calculate whether there are basic sanitation services.

Subnational analysis of hand hygiene data indicates that WASH coverage is lower, on average, in rural areas and in small facilities (Figure 60). Cross-country comparability is limited, however, by the lack of standardized facility type definitions in national monitoring systems.

JMP service ladders for monitoring WASH in health care facilities

SERVICE LEVEL	WATER	SANITATION	HAND HYGIENE	HEALTH CARE WASTE
Advanced	*To be defined at national level*	*To be defined at national level*	*To be defined at national level*	*To be defined at national level*
Basic (SDG)	Water from an improved source is available on premises	Improved facilities are usable, separated for patients and staff, separated for women, provide menstrual hygiene facilities, and meet the needs of people with limited mobility	Hand hygiene materials, either a basin with water and soap or alcohol hand rub, are available at points of care and toilets	Waste is safely segregated into at least three bins in the consultation area, and sharps and infectious waste are safely treated and disposed of
Limited	Water from an improved source is available off premises; or an improved source is on-site, but no water is available	Improved sanitation facilities are present but are not usable or do not meet the needs of specific groups (women, people with limited mobility, staff)	Hand hygiene station at either points of care or toilets, but not both	Waste is segregated but not disposed of safely, or bins are in place but not used effectively
No service	Unprotected dug well or spring, surface water, or no water source	Pit latrines without a slab or platform, hanging latrines, or no toilets or latrines at the facility	Hand hygiene stations are absent, or present but with no soap or water	Waste is not segregated or safely treated and disposed of

Table 4



* Insufficient data to calculate basic service

Fig. 59 Proportion of health care facilities with different levels of WASH services in Haiti, SPA survey, 2014.

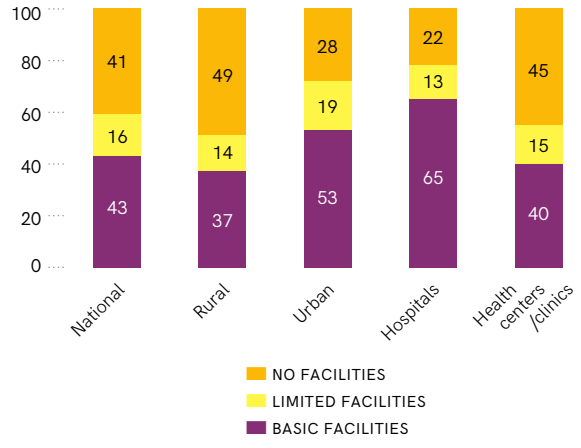


Fig. 60 Proportion of health care facilities with hand hygiene materials in Haiti, SPA survey, 2014.

While challenges exist, the inclusion of institutional WASH in JMP monitoring provides an opportunity to better understand the current WASH situation away from the home (Box 10). This will enable national governments to track progress towards meeting the associated SDGs and inform more effective resource allocation and programming. In preparation for forthcoming JMP reports on WASH in schools and health care facilities, efforts to roll out the standardized core and expanded questions and indicators will continue, in addition to the development of a new set of indicators for use in birth settings.

Box 10

Towards global baseline estimates for WASH in schools and health care facilities

The JMP is currently working on baseline estimates for WASH in schools and health care facilities, for publication in 2018. Data sources for SDG monitoring of WASH in these settings include national management information systems, such as EMIS or health management information systems , and facility-based surveys, such as the UNESCO Latin American Laboratory for Assessment of the Quality of Education,[41] the World Bank Service Delivery Indicators,[42] the United States Agency for International Development Service Provision Assessment,[43] and the WHO Service Availability and Readiness Assessment.[44] These surveys already cover some of the JMP core indicators, but require further alignment to establish comparable SDG baseline estimates (Figure 61).

Many countries already have an EMIS that provides an opportunity for routine monitoring of WASH in schools, but this type of self-reported data need to be validated against other data sources. A number of EMIS already include some of the SDG criteria for WASH in schools. In a review of 71 national EMIS questionnaires, 39 per cent included three or more of the seven SDG criteria for basic WASH in schools; 14 per cent included five or more (Figure 61). Availability of soap at handwashing stations was the least frequently monitored indicator.

In a scoping study of 10 countries, 15 national data sources for WASH in health care facilities were identified.[45] Content analysis of these surveys suggests that water source type and water availability are the most frequently captured criteria, while data on sex-separated toilets and facilities for menstrual hygiene management were not collected in any of the surveys identified.

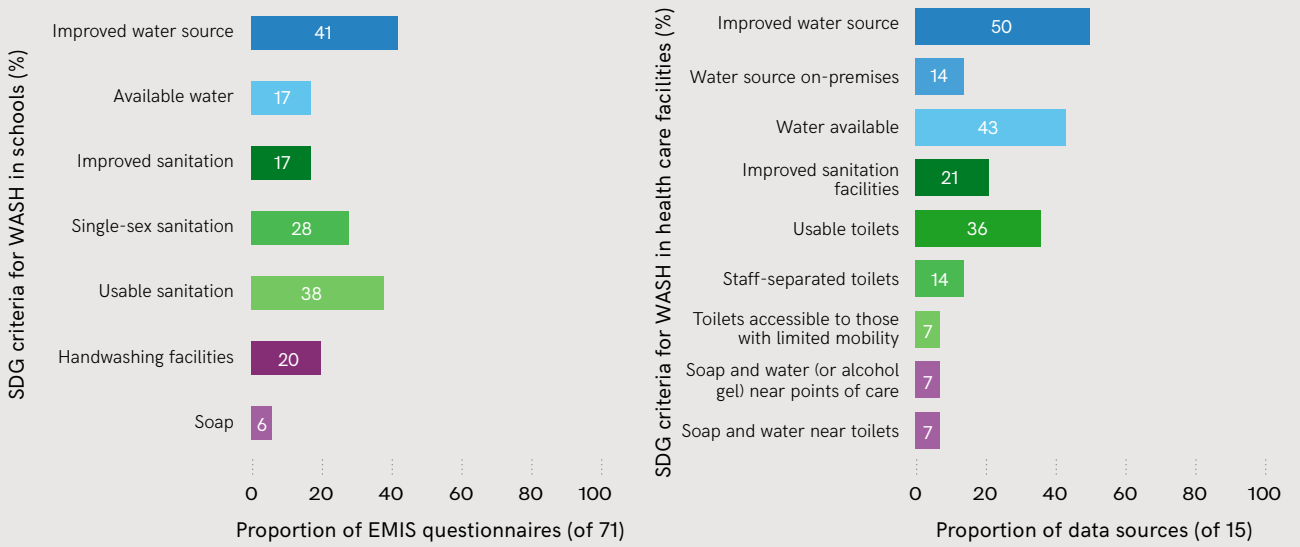


Fig. 61 Proportion of national EMIS questionnaires that currently include each of the SDG criteria for WASH in schools (left); proportion of data sources that include each of the SDG criteria for WASH in health care facilities (right)

[41] United Nations Educational, Scientific and Cultural Organization Office in Santiago, 'Education Assessment (LLECE)', <www.unesco.org/new/en/santiago/education/education-assessment-llece>.
[42] The World Bank, 'Service Delivery Indicators (SDI)', <http://datatopics.worldbank.org/sdi>.
[43] United States Agency for International Development, Demographic and Health Survey Program, 'SPA Overview', <http://dhsprogram.com/What-We-Do/Survey-Types/SPA.cfm>.
[44] World Health Organization, 'Service Availability and Readiness Assessment', <www.who.int/healthinfo/systems/sara_introduction/en>.
[45] UNICEF and WHO, Scoping Study: Are data available to monitor the SDGs for WASH in schools and health care facilities in the Latin America and Caribbean region? 2017. <https://washdata.org/report/sdg-wash-institutions-lacro>.

Annexes

ANNEX 1
JMP methods

Since it was established in 1990, the JMP has been instrumental in developing global norms to benchmark progress on drinking water, sanitation and hygiene, and has produced regular updates on country, regional, and global trends.

The JMP regularly convenes expert task forces to provide technical advice on specific issues and methodological challenges related to WASH monitoring, and has established a Strategic Advisory Group to provide independent advice on the continued development of the JMP as a trusted custodian of global WASH data[1].

Data collection and analysis

JMP estimations begin with the collection of national data sources that contain information about household water and sanitation services, and the availability of handwashing facilities in the home. The populations using different types of drinking water and sanitation infrastructure are classified as using **improved** and **unimproved** facilities, or **no facilities** at all (Table 1-1). Improved drinking water sources are those that have the potential to deliver safe water by nature of their design and construction, while improved sanitation facilities are those designed to hygienically separate excreta from human contact.

Data are also collected on the level of service households receive, which are used to subdivide the population using improved facilities into the **limited**, **basic**, and **safely managed** drinking water and sanitation services, as defined in Section 2.

Data collection on hygiene focuses on the availability of handwashing facilities, soap and water in the home, which are used to categorize populations as having access to **no facilities, limited facilities** and **basic facilities**.

The JMP 2015 update drew upon 1,982 national data sources, covering the years 1990-2015. 1,982 sources were used to produce estimates; two thirds of these were household surveys, with censuses and administrative sources each contributing one sixth of data inputs. The JMP global database has been significantly expanded to incorporate the additional data required for SDG monitoring including information on safely managed service levels which comes mainly from administrative sources. The 2017 JMP database has more than doubled to include 4,710 data inputs, 3,408 of which were used to produce estimates. Nearly five times as many administrative data inputs were used for the 2017 update and household surveys now comprise only 42 per cent of the JMP global database.

Most of these data sources were collected directly from published reports of national authorities, including statistical offices, ministries, and regulators. Regional programmes such as the WHO/UNECE Protocol for Water and Health in the European Region, the Statistical Office of the European

[1] For further details see the JMP website: www.washdata.org

JMP classification of improved and unimproved facility types

	DRINKING WATER*	SANITATION
Improved facilities	Piped supplies • Tap water in the dwelling, yard or plot • Public standposts Non-piped supplies • Boreholes/tubewells • Protected wells and springs • Rainwater • Packaged water, including bottled water and sachet water • Delivered water, including tanker trucks and small carts	Networked sanitation • Flush and pour flush toilets connected to sewers On-site sanitation • Flush and pour flush toilets or latrines connected to septic tanks or pits • Ventilated improved pit latrines • Pit latrines with slabs • Composting toilets, including twin pit latrines and container-based systems
Unimproved facilities	Non-piped supplies • Unprotected wells and springs	On-site sanitation • Pit latrines without slabs • Hanging latrines • Bucket latrines
No facilities	Surface water	Open defecation

Table 1-1

* Note: the JMP recognizes that bottled water and tanker truck water can potentially deliver safe water, but has previously treated them as unimproved due to lack of data on accessibility, availability and quality. From now on, the JMP will treat them as improved and classify households as having 'limited', 'basic' or 'safely managed' services, based on the accessibility, availability and quality criteria.

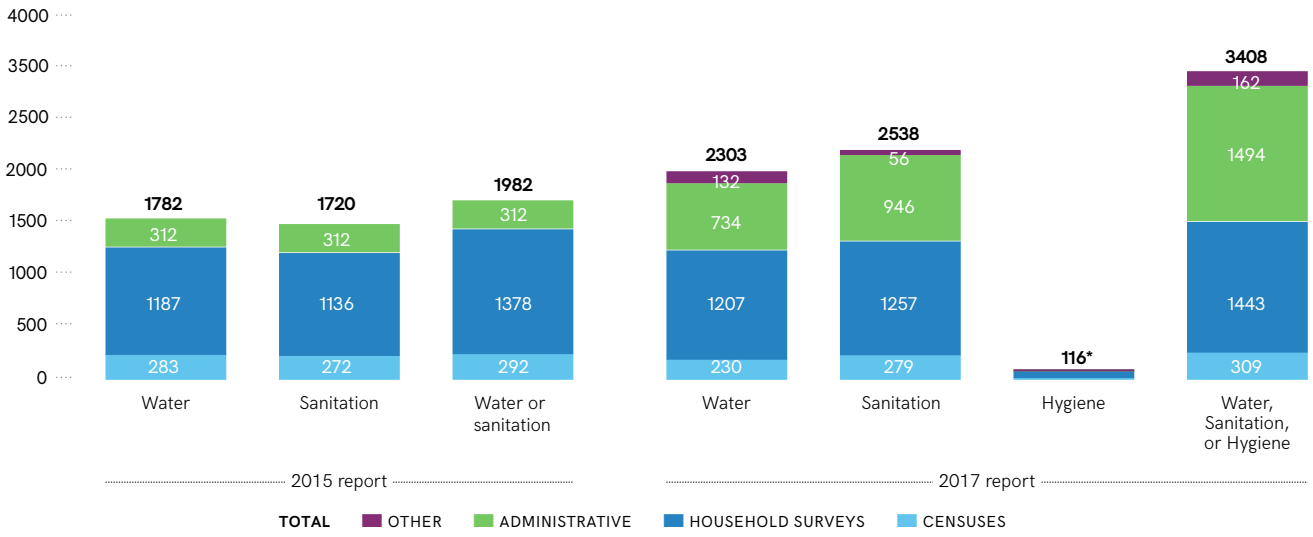


Fig. 1-1 Number of data sources used in 2015 and 2017 reports.

* Note: in 2017 28 censuses, 83 household surveys, four administrative data sources, and one other data source were used for hygiene estimates.

Union (EUROSTAT), the International Benchmarking Network (IB-NET), and the MDG+ initiative for Arabic countries were also important resources in compiling national data on drinking water quality and wastewater treatment.

The population data used in this report, including the proportion of the population living in urban and rural areas, are published by the United Nations Population Division. National populations were taken from the World Population Prospects 2015 revision, while the proportion of population living in rural areas was taken from the World Urbanization Prospects 2014 revision.

Country estimates

For each country, the JMP develops estimates for WASH indicators by fitting a regression line to the collected data inputs. Only data from 2000 onwards are used, in contrast to previous JMP updates which included data going back to 1990.

Simple linear regression is used to estimate the proportion of the population using the following drinking water sources:

- Improved drinking water sources
- Surface water

As well as the proportion of the population using the following sanitation facilities:

- Improved types of sanitation (including shared facilities)
- Open defecation

The remaining population uses unimproved drinking water sources and unimproved sanitation facilities, respectively. Separate linear regressions are also made for specific types of improved facilities: piped drinking water, sewer connections, and septic tanks. The remaining population using improved facilities is classed as using non-piped improved water sources, or latrines and other improved sanitation facilities.

The population that shares an improved sanitation facility is subtracted from the trend estimates of the population using improved sanitation facilities, to produce the estimate of the population having at least **basic sanitation** services. The sharing ratio is taken as the average of data from household surveys or censuses that collect information on shared sanitation. Likewise, the average of all available data points is used to estimate the population using improved drinking water sources which require more than 30 minutes for collection. This is subtracted from the trend estimates of

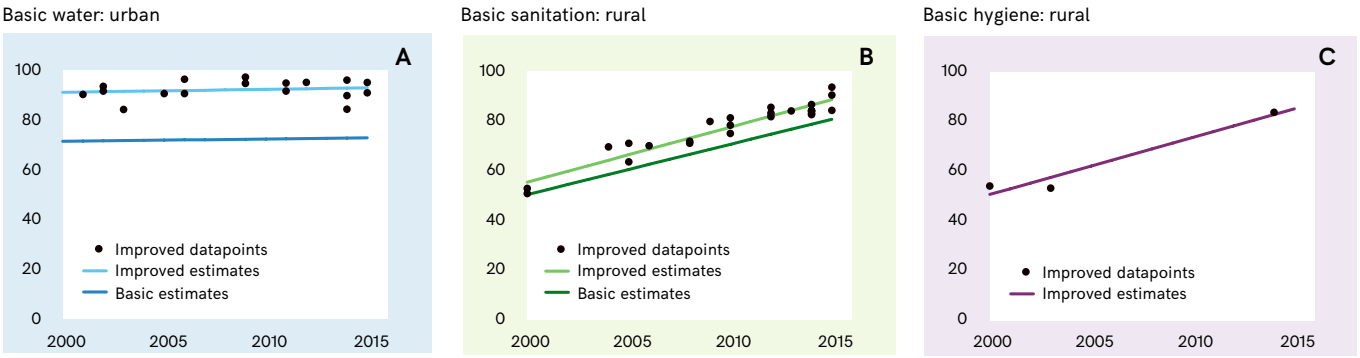


Fig. 1-2 Examples of linear regressions producing estimates of basic services. A) Urban water services where 22% of improved water requires over 30 minutes; B) Rural sanitation services where 9% of improved sanitation facilities are shared; and C) availability of basic handwashing facilities in rural areas.

improved drinking water sources, to generate the estimate of the population having at least **basic drinking water** services[2].

Linear regression is used to estimate **basic handwashing** facilities, drawing on data on the population with handwashing facilities, soap and water observed at home.

Separate regressions are used for urban and rural areas (Figure 1-2), and the resulting population estimates are combined to generate national estimates for basic services. The **JMP country files** provide a complete record of the original sources for each data input and the linear regressions used to generate estimates[3].

While the data required to estimate access to basic drinking water, sanitation and handwashing facilities are readily available for most countries, the JMP has not been able to find sufficient data to estimate safely managed drinking water and sanitation services in all countries. The JMP will only make national estimates if data are available for at least 50% of the relevant population.

To calculate **safely managed drinking water** services the JMP uses linear regression to separately estimate the proportion of improved drinking water sources used which are:

- accessible on premises,
- available when needed, and
- free from faecal and priority chemical contamination

These values are multiplied by the proportion of the population using improved drinking water sources, to estimate the populations using improved water sources that are on premises, available when needed, and free from contamination. The JMP then uses the minimum of these three values to estimate coverage of safely managed drinking water services[4].

Many countries lack data on one or more criteria for safely managed drinking water. The JMP will only make national estimates when data are available on drinking water quality and at least one of the other criteria (accessibility and availability).

To calculate **safely managed sanitation** services the JMP uses linear regression to estimate the proportion of improved sanitation facilities from which excreta are:

- safely disposed in situ (contained and not emptied, or emptied and buried on site), or
- emptied from on-site storage facilities, transported to a treatment plant and treated, or
- removed from the home through sewer lines and treated at a treatment plant.

These values are multiplied by the proportion of the population using sewer connections or improved on-site sanitation facilities which are not shared, and added together to produce estimates of the total population using safely managed sanitation services.

Many countries lack information on either wastewater treatment or the management of on-site sanitation. The JMP will only produce a national estimate if information is available for the dominant type of sanitation system. If no information is available for the non-dominant type of sanitation system the JMP assumes that 50 per cent is safely managed[5].

[2] Since **safely managed** drinking water and sanitation services meet the criteria for **basic services**, the statistics on the population with **basic services** often include the population with safely managed services. The JMP sometimes uses the term **at least basic services** to be clear that the statistic refers to populations with either basic or safely managed services.

[3] JMP country files can be downloaded from www.washdata.org

[4] See UNICEF and WHO (2017) Safely Managed Drinking Water – JMP thematic report on drinking water.

[5] See WHO and UNICEF (2017) Safely managed sanitation – JMP thematic report on sanitation (forthcoming).

Regional and global estimates

Regional and global estimates for basic drinking water, sanitation and hygiene services are only made when data are available for at least 50% of the regional or global population. The JMP calculates population-weighted averages for rural and urban areas of each region[6] and assigns these to any countries without a national estimate for the reference year. The JMP does not use "imputed" statistics to produce country-level estimates.

Populations using basic, limited, unimproved and no service are then summed for each regional grouping (see Annex 2 for regional groupings used in this report), and population weighted rural and urban estimates are combined to calculate the regional and global populations with each level of service. An equivalent approach is taken for facility types (sewer, septic, latrine; piped, non-piped improved) with estimates weighted by the population using improved drinking water and sanitation facilities rather than the total population.

Regional and global estimates for individual elements of safely managed services are calculated by summing up country-level estimates (including "imputed" estimates for countries lacking data), if actual data are available for at least 30% of the relevant population.

The three criteria for safely managed drinking water services are calculated as weighted averages amongst the urban, rural and national populations, provided that data are available for at least 30% of the regional population using improved drinking water. These ratios are then multiplied by the proportion of the population using improved drinking water in each region. Following the approach taken for countries, the proportion of the population using safely managed drinking water services is then calculated at regional and global levels by taking a minimum of the three criteria for urban and rural areas. Where possible, a weighted average of the rural and urban populations is used to produce regional and global total estimates.

For safely managed sanitation services, regional estimates are calculated based on the populations using sewer connections or improved on-site sanitation systems (septic, latrines and other improved facilities). Estimates are only calculated where data are available for at least 30% of the population using the dominant form of sanitation (sewer connections or on-site sanitation). The population using sewer connections is used to weight estimates of the proportion of wastewater treated, while the population using onsite facilities is used to weight estimates of excreta disposed of in situ. Data are currently insufficient to allow regional or global estimates to be made for the proportion of people using on-site sanitation facilities with excreta emptied and treated off-site.

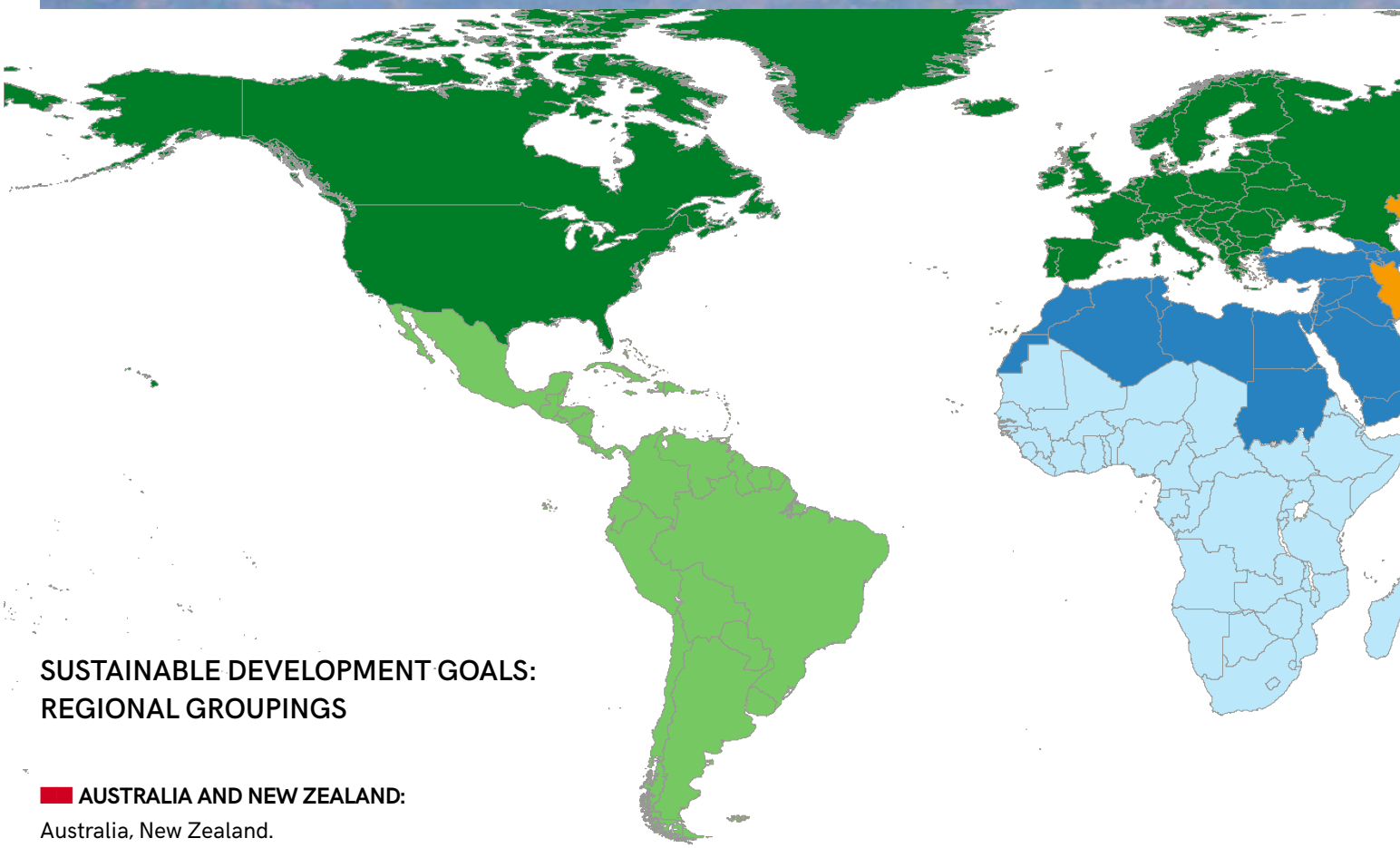
Finally, regional and global estimates of the population using safely managed sanitation services are calculated by adding together the populations with wastewater treated and excreta disposed of in situ for rural and urban areas. Where data coverage is below 30% for the non-dominant form of sanitation, estimates are based only on the dominant form of sanitation. Regional and global totals are calculated by weighted averages from rural and urban areas where data permit.

The methodology used to make country, regional and global estimates will be documented in more detail in a forthcoming methodological note.

[6] Using the M49 sub-regions see <https://unstats.un.org/unsd/methodology/m49/overview/>

Fig. 1-3 Proportion of relevant population for which data are available for individual criteria of safely managed drinking water, safely managed sanitation, and basic handwashing services, by SDG region and urban/rural status, (%)

ANNEX 2
Regional groupings



SUSTAINABLE DEVELOPMENT GOALS: REGIONAL GROUPINGS

AUSTRALIA AND NEW ZEALAND:
Australia, New Zealand.

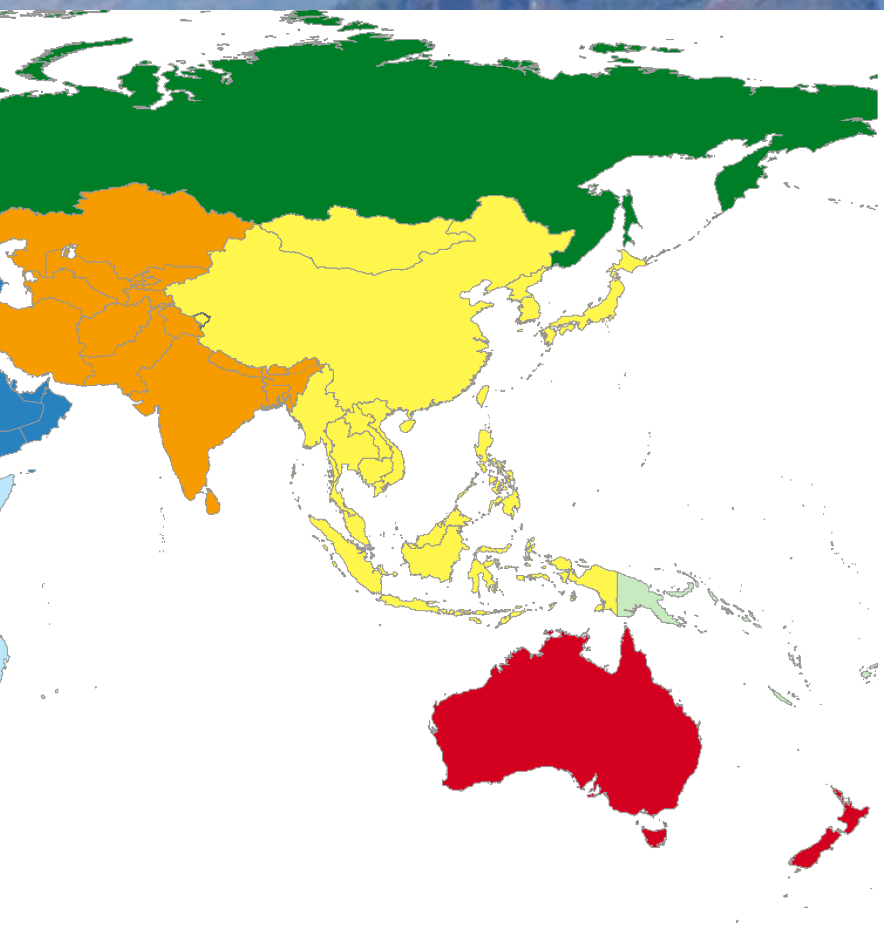
CENTRAL ASIA AND SOUTHERN ASIA: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Kazakhstan, Kyrgyzstan, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan, Uzbekistan.

EASTERN ASIA AND SOUTH-EASTERN ASIA: Brunei Darussalam, Cambodia, China, China (Hong Kong Special Administrative Region), China (Macao Special Administrative Region), Democratic People's Republic of Korea, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Myanmar, Mongolia, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste, Viet Nam.

LATIN AMERICA AND THE CARIBBEAN: Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Bonaire, Sint Eustatius and Saba (Caribbean Netherlands), Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands (Malvinas), French Guiana, Guadeloupe, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten (Dutch part), Suriname, Trinidad and Tobago, Turks and Caicos Islands, United States Virgin Islands, Uruguay, Venezuela (Bolivarian Republic of).

NORTHERN AMERICA AND EUROPE: Albania, Andorra, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bermuda, Bulgaria, Canada, Channel Islands, Croatia, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Holy See, Hungary, Ireland, Iceland, Isle of Man, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Saint Pierre and Miquelon, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America.

OCEANIA (EXCLUDING AUSTRALIA AND NEW ZEALAND): American Samoa, Cook Islands, Fiji, French Polynesia, Guam,



Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna Islands.

SUB-SAHARAN AFRICA: Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Mozambique, Namibia, Niger, Nigeria, Réunion, Rwanda, Saint Helena, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

WESTERN ASIA AND NORTHERN AFRICA: Algeria, Armenia, Azerbaijan, Bahrain, Cyprus, Egypt, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, Turkey, United Arab Emirates, West Bank and Gaza Strip, Western Sahara, Yemen.

OTHER REGIONAL GROUPINGS

LANDLOCKED DEVELOPING COUNTRIES (LLDCS)

Afghanistan, Armenia, Azerbaijan, Bhutan, Bolivia (Plurinational State of), Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Malawi, Mali, Mongolia, Nepal, Niger, Paraguay, Republic of Moldova, Rwanda, South Sudan, Swaziland, Tajikistan, The former Yugoslav Republic of Macedonia, Turkmenistan, Uganda, Uzbekistan, Zambia, Zimbabwe.

LEAST DEVELOPED COUNTRIES (LDCS)

Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zambia.

SMALL ISLAND DEVELOPING STATES (SIDS)

American Samoa, Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bonaire, Sint Eustatius and Saba (Caribbean Netherlands), British Virgin Islands, Cabo Verde, Comoros, Cook Islands, Cuba, Curaçao, Dominica, Dominican Republic, Fiji, French Polynesia, Grenada, Guam, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia (Federated States of), Montserrat, Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Seychelles, Singapore, Sint Maarten (Dutch part), Solomon Islands, Suriname, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu, United States Virgin Islands, Vanuatu.

ANNEX 3
National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Afghanistan	2000	19 702	21	27	2	46	24	2.39	21	2	49	28	2.17	50	3	37	10	2.62
	2015	32 527	27	63	6	16	15		53	6	20	20		89	4	6	1	
Albania	2000	3 122	42	88	9	2	1	0.25	82	13	3	2	0.54	96	4	0	0	-0.21
	2015	2 897	57	91	5	4	0		90	5	5	0		93	4	3	0	
Algeria	2000	31 184	60	90	6	4	0	0.24	83	8	7	1	0.36	94	4	2	0	0.08
	2015	39 667	71	93	5	1	0		89	9	2	0		95	4	1	0	
American Samoa	2000	58	89	99	-	2	0	0.05	-	-	-	-	-	-	-	-	-	-
	2015	56	87	99	-	1	0		-	-	-	-		-	-	-	-	
Andorra	2000	65	92	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	70	85	100	-	0	0		100	-	0	0		100	-	0	0	
Angola	2000	15 059	32	38	16	11	35	0.22	24	13	16	47	-0.02	67	20	3	10	-0.24
	2015	25 022	44	41	16	19	24		23	13	22	42		63	19	15	3	
Anguilla	2000	11	100	93	-	7	0	0.37	-	-	-	-	-	93	-	7	0	0.37
	2015	15	100	98	-	2	0		-	-	-	-		98	-	2	0	
Antigua and Barbuda	2000	78	32	98	-	2	0	-0.10	-	-	-	-	-	-	-	-	-	-
	2015	92	24	97	-	3	0		-	-	-	-		-	-	-	-	
Argentina	2000	37 057	89	99	-	0	1	0.04	94	-	0	6	0.42	100	-	0	0	0.00
	2015	43 417	92	100	-	0	0		100	-	0	0		100	-	0	0	
Armenia	2000	3 076	65	96	1	3	0	0.20	90	3	7	0	0.57	99	0	0	0	0.00
	2015	3 018	63	99	1	0	0		99	1	0	0		99	0	0	0	
Aruba	2000	91	47	94	-	5	0	0.23	-	-	-	-	-	-	-	-	-	-
	2015	104	42	98	-	2	0		-	-	-	-		-	-	-	-	
Australia	2000	19 107	87	100	-	0	0	0.02	99	-	1	0	0.06	100	-	0	0	0.01
	2015	23 969	89	100	-	0	0		100	-	0	0		100	-	0	0	
Austria	2000	8 051	66	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	8 545	66	100	-	0	0		100	-	0	0		100	-	0	0	
Azerbaijan	2000	8 118	51	76	6	7	10	0.53	59	9	13	19	0.87	93	4	2	1	0.11
	2015	9 754	55	84	7	6	2		72	11	12	5		95	4	1	0	
Bahamas	2000	298	82	98	-	2	0	-0.04	-	-	-	-	-	-	-	-	-	-
	2015	388	83	98	-	2	0		-	-	-	-		-	-	-	-	
Bahrain	2000	667	88	100	-	0	0	0.01	-	-	-	-	-	-	-	-	-	-
	2015	1 377	89	100	-	0	0		-	-	-	-		-	-	-	-	
Bangladesh	2000	131 281	24	95	1	2	2	0.18	94	1	2	3	0.22	98	1	1	0	0.01
	2015	160 996	34	97	1	1	1		97	1	1	1		98	1	1	1	
Barbados	2000	270	34	99	0	1	0	-0.03	-	-	-	-	-	-	-	-	-	-
	2015	284	31	98	0	2	0		-	-	-	-		-	-	-	-	
Belarus	2000	9 952	70	98	2	0	0	0.01	99	0	1	0	0.00	98	2	0	0	0.01
	2015	9 496	77	98	2	0	0		99	0	1	0		98	2	0	0	
Belgium	2000	10 268	97	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	11 299	98	100	-	0	0		100	-	0	0		100	-	0	0	
Belize	2000	247	48	88	1	8	3	0.64	84	1	9	5	0.75	91	1	7	1	0.53
	2015	359	44	97	1	2	0		96	1	3	0		99	1	0	0	
Benin	2000	6 949	38	60	8	20	12	0.46	50	10	24	16	0.61	76	4	14	6	0.06
	2015	10 880	44	67	8	21	3		60	12	24	5		77	4	18	1	
Bermuda	2000	64	100	100	-	0	0	-0.01	-	-	-	-	-	100	-	0	0	-0.01
	2015	62	100	100	-	0	0		-	-	-	-		100	-	0	0	
Bhutan	2000	564	25	81	2	6	11	1.11	76	2	8	15	1.49	97	2	0	1	0.02
	2015	775	39	98	2	0	0		98	2	0	0		97	2	1	0	

"-" = no estimate, NA = not applicable. For JMP estimation methods see Annex 1. Annual rates of change in percentage points per year, calculated as the difference between the 2015 and 2000 estimates, divided by 15. For unrounded estimates see www.washdata.org.

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Afghanistan	2000	-	14	-	-	6	23	-	8	-	-	2	21	-	38	-	-	21	31
	2015	-	40	-	-	12	56	-	26	-	-	6	54	-	76	-	-	30	63
Albania	2000	43	61	49	96	76	21	-	39	53	-	62	33	-	92	44	-	96	4
	2015	69	89	70	88	86	10	-	90	68	-	77	18	-	89	72	-	92	4
Algeria	2000	-	69	-	-	81	15	-	50	-	-	67	25	-	82	82	-	90	8
	2015	-	81	-	-	77	22	-	74	-	-	64	34	-	84	83	-	82	17
American Samoa	2000	-	78	-	-	97	1	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	91	-	-	99	1	-	-	-	-	-	-	-	-	-	-	-	-
Andorra	2000	-	100	-	-	100	0	-	100	-	-	100	0	-	100	-	-	100	0
	2015	-	100	-	-	100	0	-	100	-	-	100	0	-	100	-	-	100	0
Angola	2000	-	6	27	-	21	33	-	2	23	-	14	24	-	14	35	-	35	52
	2015	-	23	28	-	29	28	-	6	23	-	9	28	-	45	33	-	55	28
Anguilla	2000	-	93	83	-	56	37	NA	NA	NA	NA	NA	NA	-	93	83	-	56	37
	2015	-	98	88	-	98	0	NA	NA	NA	NA	NA	NA	-	98	88	-	98	0
Antigua and Barbuda	2000	-	83	91	-	98	0	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	75	90	-	94	2	-	-	-	-	-	-	-	-	-	-	-	-
Argentina	2000	98	98	-	98	98	1	-	92	-	-	94	0	98	98	-	99	98	1
	2015	99	99	-	99	100	0	-	100	-	-	99	1	98	99	-	98	100	0
Armenia	2000	27	89	32	82	88	9	-	74	56	-	71	21	-	98	19	-	97	2
	2015	61	98	61	84	98	2	-	99	44	-	96	4	-	98	71	-	99	1
Aruba	2000	-	93	-	-	91	3	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	96	-	-	94	4	-	-	-	-	-	-	-	-	-	-	-	-
Australia	2000	-	97	90	-	84	15	-	87	-	-	59	40	98	98	-	100	88	12
	2015	-	98	96	-	91	8	-	89	-	-	84	16	99	99	-	100	92	8
Austria	2000	98	100	99	98	-	-	-	-	99	-	-	-	-	-	99	-	-	-
	2015	99	100	99	99	-	-	-	-	99	-	-	-	-	-	99	-	-	-
Azerbaijan	2000	51	60	83	51	52	31	-	38	-	-	22	46	-	81	-	-	79	17
	2015	72	72	91	79	77	15	-	47	-	-	58	25	-	92	-	-	93	6
Bahamas	2000	-	98	98	-	96	2	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	96	98	-	95	2	-	-	-	-	-	-	-	-	-	-	-	-
Bahrain	2000	99	99	-	99	97	2	-	-	-	-	-	-	-	-	-	-	-	-
	2015	99	99	-	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangladesh	2000	56	64	-	56	7	89	59	60	-	59	0	95	45	77	-	45	29	69
	2015	56	77	-	56	14	84	61	74	-	61	2	96	45	82	-	45	38	61
Barbados	2000	-	98	89	-	97	2	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	98	89	-	98	0	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	2000	79	81	-	99	82	17	-	54	-	-	53	46	-	92	-	-	95	5
	2015	94	94	-	97	89	11	-	94	-	-	66	33	-	95	-	-	96	4
Belgium	2000	100	100	-	100	100	0	-	100	-	-	100	0	-	100	-	-	100	0
	2015	98	99	-	100	100	0	-	97	-	-	100	0	-	99	-	-	100	0
Belize	2000	-	85	-	-	65	24	-	81	-	-	52	34	-	89	49	-	78	13
	2015	-	95	-	-	83	15	-	93	-	-	75	22	-	98	54	-	93	7
Benin	2000	-	41	-	-	41	27	-	23	-	-	25	35	-	68	-	-	66	14
	2015	-	27	-	-	42	34	-	13	-	-	30	41	-	44	-	-	57	24
Bermuda	2000	-	100	-	-	100	0	NA	NA	NA	NA	NA	NA	-	100	-	-	100	0
	2015	-	100	-	-	100	0	NA	NA	NA	NA	NA	NA	-	100	-	-	100	0
Bhutan	2000	27	67	-	27	79	4	21	66	-	21	72	5	44	69	-	44	98	0
	2015	34	87	-	34	100	0	28	83	-	28	100	0	45	92	-	45	99	0

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Bolivia (Plurinational State of)	2000	8 340	62	79	0	7	14	0.94	53	0	12	35	1.75	95	0	4	1	0.29
	2015	10 725	69	93	0	2	5		79	1	5	15		99	0	0	0	
Bosnia and Herzegovina	2000	3 793	39	96	2	1	0	0.08	96	2	2	0	0.16	97	2	0	0	-0.03
	2015	3 810	40	98	2	0	0		98	2	0	0		97	3	0	0	
Botswana	2000	1 737	53	77	19	2	3	0.15	57	34	3	6	0.08	94	5	1	0	0.03
	2015	2 262	57	79	18	1	2		58	35	2	5		95	5	0	0	
Brazil	2000	175 786	81	94	1	5	1	0.25	74	2	20	3	0.83	98	0	1	0	0.07
	2015	207 848	86	97	0	1	1		87	3	3	8		99	0	1	0	
British Virgin Islands	2000	21	42	95	-	5	0	0.30	-	-	-	-	-	-	-	-	-	-
	2015	30	46	100	-	0	0		-	-	-	-		-	-	-	-	
Brunei Darussalam	2000	331	71	-	-	-	-	-	-	-	-	-	-	100	-	0	0	0.00
	2015	423	77	100	-	0	0		99	-	1	0		100	-	0	0	
Bulgaria	2000	8 001	69	100	-	0	0	-0.03	99	-	0	1	-0.05	100	-	0	0	-0.03
	2015	7 150	74	99	-	1	0		99	-	1	0		99	-	0	0	
Burkina Faso	2000	11 608	18	47	22	26	6	0.48	41	23	29	8	0.17	75	15	10	0	0.29
	2015	18 106	30	54	22	22	2		43	24	30	3		79	16	4	1	
Burundi	2000	6 767	8	52	19	13	15	0.23	50	21	14	16	0.12	82	7	3	8	0.38
	2015	11 179	12	56	20	17	7		52	21	19	8		88	7	3	2	
Cabo Verde	2000	439	53	78	11	11	0	0.57	70	17	12	1	0.26	85	6	9	0	0.55
	2015	521	66	86	10	3	0		74	16	10	0		93	7	0	0	
Cambodia	2000	12 198	19	52	0	21	26	1.50	47	0	24	29	1.49	75	0	11	14	1.39
	2015	15 578	21	75	0	12	13		70	0	15	15		96	0	2	2	
Cameroon	2000	15 928	46	55	9	26	9	0.67	35	8	40	17	0.56	80	10	10	1	0.27
	2015	23 344	54	65	10	17	8		43	11	31	15		84	10	5	1	
Canada	2000	30 702	79	100	-	0	0	-0.07	-	-	-	-	-	-	-	-	-	-
	2015	35 940	82	99	-	1	0		-	-	-	-		-	-	-	-	
Caribbean Netherlands	2000	14	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	25	75	-	-	-	-		-	-	-	-		-	-	-	-	
Cayman Islands	2000	42	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	60	100	96	-	4	0		-	-	-	-		96	-	4	0	
Central African Republic	2000	3 726	38	52	13	27	7	0.14	39	13	37	11	0.14	74	13	11	1	-0.01
	2015	4 900	40	54	14	29	3		41	14	40	5		74	13	13	0	
Chad	2000	8 343	22	39	12	42	7	0.24	30	13	48	9	0.14	71	7	21	1	0.47
	2015	14 037	22	43	13	39	6		32	14	47	7		78	7	13	1	
Channel Islands	2000	149	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	164	31	94	-	6	0		-	-	-	-		-	-	-	-	
Chile	2000	15 170	86	95	-	5	0	0.32	72	-	28	0	1.84	99	-	1	0	0.07
	2015	17 948	90	100	-	0	0		100	-	0	0		100	-	0	0	
China	2000	1 269 975	36	78	1	19	3	1.22	66	1	29	5	2.02	98	1	1	0	-0.19
	2015	1 376 049	56	96	1	3	0		96	1	2	1		96	1	3	0	
China, Hong Kong Special Administrative Region	2000	6 784	100	99	-	1	0	0.09	-	-	-	-	-	99	-	1	0	0.09
	2015	7 288	100	100	-	0	0		-	-	-	-		100	-	0	0	
China, Macao Special Administrative Region	2000	432	100	100	-	0	0	0.00	-	-	-	-	-	100	-	0	0	0.00
	2015	588	100	100	-	0	0		-	-	-	-		100	-	0	0	
Colombia	2000	40 404	72	90	0	6	4	0.43	70	0	16	13	1.05	98	0	2	0	0.14
	2015	48 229	76	97	0	1	2		86	1	5	8		100	0	0	0	
Comoros	2000	548	28	86	6	5	2	-0.18	87	7	4	2	-0.44	86	5	9	0	0.47
	2015	788	28	84	6	10	1		80	6	13	1		93	5	1	0	
Congo	2000	3 109	59	57	10	25	8	0.77	19	8	55	19	1.20	83	12	5	0	0.10
	2015	4 620	65	68	13	11	8		37	15	26	22		85	12	3	0	
Cook Islands	2000	18	65	100	-	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	21	75	100	-	0	0		-	-	-	-		-	-	-	-	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Bolivia (Plurinational State of)	2000	-	71	68	-	74	6	-	39	42	-	45	8	-	91	85	-	91	4
	2015	-	92	78	-	74	19	-	77	60	-	39	40	-	98	86	-	90	10
Bosnia and Herzegovina	2000	87	91	87	91	84	14	-	87	86	-	77	21	-	97	90	-	96	3
	2015	89	91	89	98	90	10	-	92	88	-	86	14	-	90	90	-	96	4
Botswana	2000	-	61	-	-	89	7	-	33	-	-	77	14	84	85	-	84	99	0
	2015	-	64	-	-	90	7	-	34	-	-	77	16	84	86	-	84	99	0
Brazil	2000	-	84	-	-	86	8	-	45	-	-	51	26	93	93	-	97	95	4
	2015	-	97	-	-	96	2	-	85	-	-	79	11	97	99	-	97	99	0
British Virgin Islands	2000	-	93	-	-	92	4	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brunei Darussalam	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	100	0
	2015	-	99	-	-	99	0	-	99	-	-	99	0	-	100	-	-	100	0
Bulgaria	2000	97	100	-	99	95	5	-	99	-	-	88	11	-	100	-	-	98	2
	2015	97	97	-	99	99	0	-	94	-	-	99	0	-	98	-	-	99	0
Burkina Faso	2000	-	3	52	-	22	46	-	0	51	-	9	54	-	13	54	-	82	8
	2015	-	15	55	-	26	50	-	1	54	-	4	63	-	47	58	-	76	19
Burundi	2000	-	5	-	-	14	58	-	1	-	-	8	62	-	43	-	-	77	12
	2015	-	7	-	-	33	43	-	1	-	-	25	48	-	54	-	-	87	8
Cabo Verde	2000	-	60	-	-	68	21	-	51	-	-	60	26	-	68	-	-	75	16
	2015	-	81	-	-	90	7	-	74	-	-	76	14	-	84	-	-	97	3
Cambodia	2000	17	37	-	17	7	45	11	30	-	11	1	46	43	69	-	43	34	41
	2015	24	58	-	24	21	54	16	54	-	16	8	62	55	75	-	55	72	24
Cameroon	2000	-	8	-	-	39	25	-	4	-	-	12	31	-	14	-	-	71	18
	2015	-	29	-	-	39	36	-	6	-	-	13	41	-	48	-	-	61	32
Canada	2000	-	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	98	-	-	70	29	-	-	-	-	-	-	-	-	-	-	-	-
Caribbean Netherlands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cayman Islands	2000	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
	2015	-	91	82	-	86	10	NA	NA	NA	NA	NA	NA	-	91	82	-	86	10
Central African Republic	2000	-	8	38	-	21	44	-	3	22	-	4	48	-	16	66	-	49	38
	2015	-	8	40	-	18	50	-	3	23	-	1	54	-	15	66	-	43	44
Chad	2000	-	15	-	-	17	33	-	3	-	-	7	36	-	59	-	-	55	23
	2015	-	10	-	-	19	36	-	2	-	-	9	37	-	38	-	-	53	33
Channel Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	92	92	-	94	90	4	-	-	-	-	-	-	-	-	-	-	-	-
Chile	2000	92	92	94	95	94	2	-	53	67	-	62	10	98	98	99	99	99	0
	2015	98	99	99	98	100	0	-	95	93	-	100	0	98	100	99	98	100	0
China	2000	-	63	-	-	48	30	-	43	-	-	26	41	94	98	-	94	88	11
	2015	-	94	-	-	78	19	-	95	-	-	62	35	91	94	-	91	90	6
China, Hong Kong Special Administrative Region	2000	98	98	-	99	97	1	-	-	-	-	-	-	98	98	-	99	97	1
	2015	100	100	-	100	100	0	-	-	-	-	-	-	100	100	-	100	100	0
China, Macao Special Administrative Region	2000	100	100	100	100	100	0	-	-	-	-	-	-	100	100	100	100	100	0
	2015	100	100	100	100	100	0	-	-	-	-	-	-	100	100	100	100	100	0
Colombia	2000	67	89	72	74	83	7	32	66	48	32	52	19	81	98	81	90	96	2
	2015	71	96	74	79	88	9	40	85	53	40	63	23	81	99	81	91	95	4
Comoros	2000	-	67	-	-	48	45	-	67	-	-	38	56	-	67	-	-	73	18
	2015	-	65	-	-	63	27	-	62	-	-	53	33	-	72	-	-	87	11
Congo	2000	30	31	-	35	52	15	-	6	-	-	10	17	-	48	-	-	81	14
	2015	37	37	-	42	57	24	-	21	-	-	9	43	-	45	-	-	83	14
Cook Islands	2000	-	85	100	-	69	31	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	87	100	-	75	25	-	-	-	-	-	-	-	-	-	-	-	-

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Costa Rica	2000	3 925	59	94	0	2	3	0.39	86	0	5	8	0.87	99	0	0	0	0.05
	2015	4 808	77	100	0	0	0		100	0	0	0		100	0	0	0	
Côte d'Ivoire	2000	16 518	44	72	9	14	5	0.08	57	13	21	9	-0.23	91	3	6	1	-0.09
	2015	22 702	54	73	7	15	5		54	12	23	11		89	3	7	0	
Croatia	2000	4 428	56	99	-	1	0	0.07	97	-	2	1	0.20	100	-	0	0	-0.03
	2015	4 240	59	100	-	0	0		100	-	0	0		100	-	0	0	
Cuba	2000	11 117	75	93	2	4	1	0.14	80	4	14	2	0.61	97	1	1	0	-0.02
	2015	11 390	77	95	2	2	0		90	4	4	2		97	1	2	0	
Curaçao	2000	132	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	157	89	99	-	1	0		-	-	-	-		-	-	-	-	
Cyprus	2000	943	69	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	1 165	67	100	-	0	0		100	-	0	0		100	-	0	0	
Czech Republic	2000	10 263	74	100	-	0	0	0.00	100	-	0	0	0.01	100	-	0	0	0.00
	2015	10 543	73	100	-	0	0		100	-	0	0		100	-	0	0	
Democratic People's Republic of Korea	2000	22 840	59	100	0	0	0	-0.02	100	0	0	0	-0.04	100	0	0	0	-0.01
	2015	25 155	61	100	0	0	0		99	0	1	0		100	0	0	0	
Democratic Republic of the Congo	2000	48 049	35	34	10	37	18	0.50	16	8	49	26	0.32	67	14	15	3	0.15
	2015	77 267	42	42	12	36	10		21	11	53	16		70	14	14	2	
Denmark	2000	5 338	85	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	5 669	88	100	-	0	0		100	-	0	0		100	-	0	0	
Djibouti	2000	723	77	75	15	9	1	0.14	51	13	32	4	0.24	82	15	3	0	0.09
	2015	888	77	77	15	6	2		55	14	24	7		83	15	1	0	
Dominica	2000	70	65	93	-	7	0	0.20	-	-	-	-	-	-	-	-	-	-
	2015	73	70	97	-	4	0		-	-	-	-		-	-	-	-	
Dominican Republic	2000	8 563	62	91	3	3	3	0.23	81	6	7	6	0.28	97	1	1	0	-0.02
	2015	10 528	79	94	2	2	1		86	6	3	5		97	1	2	0	
Ecuador	2000	12 629	60	83	0	9	7	0.63	72	1	9	18	0.56	90	0	9	0	0.61
	2015	16 144	64	93	0	3	4		80	1	8	11		100	0	0	0	
Egypt	2000	68 335	43	98	0	1	0	0.01	97	1	2	0	0.02	99	0	0	0	0.00
	2015	91 508	43	98	0	1	0		98	1	2	0		99	0	1	0	
El Salvador	2000	5 812	59	80	3	11	5	0.85	60	6	22	12	1.58	95	1	4	0	0.22
	2015	6 127	67	93	4	0	3		83	9	0	8		98	1	0	1	
Equatorial Guinea	2000	531	39	49	2	13	36	0.05	40	2	6	53	-0.62	63	3	25	8	1.01
	2015	845	40	50	2	35	13		31	1	46	22		78	4	18	0	
Eritrea	2000	3 535	18	17	48	31	4	0.16	6	52	37	5	-0.04	67	30	2	0	-0.04
	2015	5 228	23	19	43	16	21		6	47	20	28		66	30	3	1	
Estonia	2000	1 399	69	99	-	1	0	0.03	97	-	3	0	0.11	100	-	0	0	0.00
	2015	1 313	68	100	-	0	0		99	-	1	0		100	-	0	0	
Ethiopia	2000	66 444	15	17	8	42	33	1.49	7	6	48	38	1.51	72	17	6	5	0.37
	2015	99 391	19	39	25	25	12		30	26	30	14		77	18	3	2	
Falkland Islands (Malvinas)	2000	3	68	-	-	-	-	-	-	-	-	-	-	100	-	0	0	0.00
	2015	3	76	95	-	5	0		78	-	22	0		100	-	0	0	
Faroe Islands	2000	46	36	100	-	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	48	42	100	-	0	0		-	-	-	-		-	-	-	-	
Fiji	2000	811	48	95	-	3	2	-0.06	91	-	5	4	-0.12	99	-	1	0	-0.07
	2015	892	54	94	-	4	2		89	-	7	4		98	-	2	0	
Finland	2000	5 176	82	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	5 503	84	100	-	0	0		100	-	0	0		100	-	0	0	
France	2000	59 387	76	100	-	0	0	0.01	100	-	0	0	0.03	100	-	0	0	0.00
	2015	64 395	80	100	-	0	0		100	-	0	0		100	-	0	0	
French Guiana	2000	163	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	269	84	93	-	7	0		-	-	-	-		-	-	-	-	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Costa Rica	2000	70	94	79	70	90	4	-	86	49	-	80	7	-	99	99	-	97	2
	2015	90	100	90	95	99	1	-	99	56	-	99	1	-	100	100	-	99	1
Côte d'Ivoire	2000	36	39	-	44	43	37	14	14	-	27	23	47	66	71	-	66	69	24
	2015	46	54	-	47	50	30	23	23	-	26	26	40	65	79	-	65	70	22
Croatia	2000	89	89	-	95	85	14	-	80	-	-	72	25	-	97	-	-	95	5
	2015	90	97	-	90	100	0	-	97	-	-	100	0	-	97	-	-	100	0
Cuba	2000	-	80	-	-	74	21	-	55	83	-	48	36	-	87	-	-	82	16
	2015	-	93	-	-	79	18	-	83	92	-	57	37	-	95	-	-	86	12
Curaçao	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	99	-	-	99	1	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	2000	96	100	-	96	100	0	-	100	-	-	100	0	-	100	-	-	100	0
	2015	100	100	-	100	100	0	-	100	-	-	100	0	-	100	-	-	100	0
Czech Republic	2000	96	96	-	98	96	3	-	94	-	-	91	8	-	97	100	-	98	2
	2015	98	98	-	99	100	0	-	98	-	-	100	0	-	98	100	-	100	0
Democratic People's Republic of Korea	2000	-	94	-	-	82	18	-	91	-	-	71	29	-	96	-	-	90	10
	2015	-	94	-	-	90	10	-	91	-	-	84	15	-	96	-	-	93	6
Democratic Republic of the Congo	2000	-	14	-	-	23	21	-	1	-	-	3	21	-	38	-	-	60	21
	2015	-	9	-	-	31	23	-	1	-	-	8	24	-	20	-	-	63	21
Denmark	2000	94	97	-	94	100	0	-	98	-	-	100	0	-	97	-	-	100	0
	2015	97	97	-	98	100	0	-	98	-	-	100	0	-	97	-	-	100	0
Djibouti	2000	-	45	-	-	76	14	-	5	-	-	30	35	-	57	-	-	90	7
	2015	-	46	-	-	80	12	-	5	-	-	24	45	-	58	-	-	96	3
Dominica	2000	-	66	51	-	92	2	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	75	53	-	95	2	-	-	-	-	-	-	-	-	-	-	-	-
Dominican Republic	2000	-	75	-	-	75	19	-	62	75	-	56	31	-	83	-	-	87	12
	2015	-	92	-	-	80	17	-	73	79	-	65	27	-	97	-	-	84	14
Ecuador	2000	66	77	79	66	72	12	50	65	65	50	56	17	77	85	88	77	83	8
	2015	74	91	88	74	86	7	56	78	73	56	67	14	85	98	97	85	96	3
Egypt	2000	-	90	63	-	88	11	-	84	62	-	79	19	-	98	63	-	99	1
	2015	-	97	71	-	98	1	-	95	66	-	97	1	-	98	77	-	98	2
El Salvador	2000	-	71	72	-	71	12	-	46	51	-	44	22	86	88	86	96	90	6
	2015	-	90	71	-	88	9	-	77	59	-	75	17	77	96	77	99	94	6
Equatorial Guinea	2000	-	9	-	-	9	42	-	3	-	-	3	39	-	18	-	-	20	46
	2015	-	10	-	-	33	19	-	2	-	-	22	10	-	23	-	-	48	34
Eritrea	2000	-	16	-	-	23	42	-	6	-	-	14	45	-	64	-	-	67	31
	2015	-	19	-	-	47	15	-	6	-	-	41	11	-	64	-	-	69	27
Estonia	2000	93	93	-	99	86	13	-	82	-	-	66	31	-	98	-	-	96	4
	2015	82	96	-	82	96	3	-	92	-	-	89	10	-	99	-	-	100	0
Ethiopia	2000	5	5	18	7	17	7	0	0	12	2	6	8	32	32	50	35	83	5
	2015	11	16	51	13	33	31	4	4	50	7	20	36	38	63	54	38	86	9
Falkland Islands (Malvinas)	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	100	0
	2015	-	92	-	-	90	5	-	67	-	-	56	22	-	100	-	-	100	0
Faroe Islands	2000	-	100	-	-	100	0	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	100	-	-	100	0	-	-	-	-	-	-	-	-	-	-	-	-
Fiji	2000	-	78	95	-	-	-	-	60	-	-	-	-	-	97	-	-	-	-
	2015	-	69	94	-	87	7	-	37	-	-	74	15	-	96	-	-	97	1
Finland	2000	92	100	-	92	99	1	-	97	-	-	94	6	-	100	-	-	100	0
	2015	97	97	-	100	100	0	-	98	-	-	100	0	-	97	-	-	100	0
France	2000	93	93	-	97	100	0	-	93	-	-	99	0	-	93	-	-	100	0
	2015	93	93	-	98	100	0	-	94	-	-	100	0	-	93	-	-	100	0
French Guiana	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	90	-	-	87	7	-	-	-	-	-	-	-	-	-	-	-	-

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
French Polynesia	2000	237	56	100	-	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	283	56	100	-	0	0		-	-	-	-		-	-	-	-	
Gabon	2000	1 232	80	79	5	5	11	0.59	35	5	17	42	1.57	89	5	2	3	0.15
	2015	1 725	87	88	6	3	4		59	9	7	25		92	5	2	1	
Gambia	2000	1 229	48	74	10	16	0	0.41	65	14	21	0	0.24	84	6	10	0	0.28
	2015	1 991	60	80	10	10	0		68	15	17	0		88	6	6	0	
Georgia	2000	4 744	53	89	4	7	0	0.31	79	8	13	0	0.58	97	1	1	0	0.06
	2015	4 000	54	93	5	2	0		87	9	4	0		98	1	1	0	
Germany	2000	81 896	73	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	80 689	75	100	-	0	0		100	-	0	0		100	-	0	0	
Ghana	2000	18 825	44	64	9	8	18	0.90	51	10	9	29	0.98	81	8	7	4	0.45
	2015	27 410	54	78	11	5	6		66	13	8	13		88	9	3	0	
Gibraltar	2000	27	100	100	-	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	32	100	100	-	0	0		-	-	-	-		-	-	-	-	
Greece	2000	10 954	73	99	-	1	0	0.04	98	-	2	0	0.13	100	-	0	0	0.01
	2015	10 955	78	100	-	0	0		100	-	0	0		100	-	0	0	
Greenland	2000	56	82	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	56	86	100	-	0	0		100	-	0	0		100	-	0	0	
Grenada	2000	102	36	93	1	6	0	0.15	-	-	-	-	-	-	-	-	-	-
	2015	107	36	96	1	0	3		-	-	-	-		-	-	-	-	
Guadeloupe	2000	431	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	468	98	100	-	0	0		-	-	-	-		-	-	-	-	
Guam	2000	155	93	99	-	1	0	0.02	-	-	-	-	-	-	-	-	-	-
	2015	170	95	100	-	0	0		-	-	-	-		-	-	-	-	
Guatemala	2000	11 689	45	85	1	10	3	0.54	78	1	15	6	0.77	95	0	5	0	0.19
	2015	16 343	52	94	1	4	2		89	1	6	4		97	0	2	0	
Guinea	2000	8 799	31	54	9	20	16	0.86	44	10	24	23	0.77	79	8	13	1	0.61
	2015	12 609	37	67	11	10	11		55	13	14	18		88	8	3	0	
Guinea-Bissau	2000	1 315	37	53	4	40	3	1.09	41	4	51	4	0.87	73	5	21	1	0.77
	2015	1 844	49	69	5	25	1		54	5	40	1		85	5	10	0	
Guyana	2000	742	29	88	2	5	5	0.45	86	2	6	6	0.47	94	2	4	0	0.43
	2015	767	29	95	1	1	2		93	2	2	3		100	0	0	0	
Haiti	2000	8 549	36	56	8	19	17	0.52	41	10	26	23	-0.02	85	5	5	5	-0.26
	2015	10 711	59	64	7	29	0		40	10	50	0		81	5	14	0	
Holy See	2000	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	1	100	-	-	-	-		-	-	-	-		-	-	-	-	
Honduras	2000	6 243	45	82	1	5	12	0.66	71	1	6	22	0.87	95	0	4	0	0.22
	2015	8 075	55	92	1	5	2		84	1	10	4		99	0	1	0	
Hungary	2000	10 224	65	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	9 855	71	100	-	0	0		100	-	0	0		100	-	0	0	
Iceland	2000	281	92	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	329	94	100	-	0	0		100	-	0	0		100	-	0	0	
India	2000	1 053 481	28	80	4	14	1	0.48	76	4	18	2	0.61	92	2	5	0	0.03
	2015	1 311 051	33	88	4	7	1		85	5	9	1		93	2	5	0	
Indonesia	2000	211 540	42	75	1	21	4	1.00	64	1	29	6	1.12	89	0	10	1	0.54
	2015	257 564	54	90	1	8	2		81	1	14	4		97	0	3	0	
Iran (Islamic Republic of)	2000	65 850	64	95	2	3	0	-0.01	89	4	6	1	0.01	98	1	1	0	-0.09
	2015	79 109	73	95	2	3	0		89	4	6	0		97	1	2	0	
Iraq	2000	23 575	68	81	2	5	12	0.32	52	6	11	31	1.74	95	0	3	3	-0.35
	2015	36 423	69	86	9	2	3		78	8	5	9		90	9	1	0	
Ireland	2000	3 842	59	96	-	4	0	0.19	97	-	3	0	0.16	96	-	4	0	0.21
	2015	4 688	63	99	-	1	0		99	-	1	0		99	-	1	0	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
French Polynesia	2000	-	95	-	-	90	10	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	99	-	-	100	0	-	-	-	-	-	-	-	-	-	-	-	-
Gabon	2000	-	42	-	-	79	5	-	8	-	-	23	18	-	50	-	-	93	1
	2015	-	69	-	-	85	8	-	23	-	-	24	44	-	76	-	-	94	2
Gambia	2000	-	21	-	-	54	30	-	4	-	-	27	52	41	41	-	79	84	6
	2015	-	45	-	-	75	15	-	8	-	-	53	29	70	70	-	83	89	5
Georgia	2000	74	79	-	74	66	27	-	61	-	-	42	45	-	94	-	-	88	11
	2015	73	75	-	83	86	12	-	52	-	-	74	22	-	96	-	-	97	3
Germany	2000	99	100	-	100	99	0	-	100	-	-	-	-	-	100	-	-	-	-
	2015	99	99	-	100	100	0	-	99	-	-	100	0	-	99	-	-	100	0
Ghana	2000	16	16	63	44	44	29	2	2	54	34	16	46	34	34	74	58	81	8
	2015	27	27	76	54	32	57	7	7	70	44	20	60	44	44	81	62	42	54
Gibraltar	2000	99	99	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	99	99	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Greece	2000	99	99	-	99	99	1	-	95	-	-	96	2	-	100	-	-	100	0
	2015	99	99	-	100	100	0	-	99	-	-	100	0	-	99	-	-	100	0
Greenland	2000	94	97	-	94	100	0	-	98	-	-	100	0	-	97	-	-	100	0
	2015	97	97	-	98	100	0	-	98	-	-	100	0	-	97	-	-	100	0
Grenada	2000	-	79	90	-	92	3	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	90	92	-	92	4	-	-	-	-	-	-	-	-	-	-	-	-
Guadeloupe	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	99	-	-	99	0	-	-	-	-	-	-	-	-	-	-	-	-
Guam	2000	-	99	-	-	99	0	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	100	-	-	99	0	-	-	-	-	-	-	-	-	-	-	-	-
Guatemala	2000	50	72	50	62	77	9	-	58	46	-	65	14	-	88	55	-	92	3
	2015	61	86	61	92	77	17	-	77	57	-	64	27	-	94	65	-	91	7
Guinea	2000	-	7	-	-	22	42	-	0	-	-	0	54	-	23	-	-	69	17
	2015	-	35	-	-	28	50	-	17	-	-	7	61	-	67	-	-	65	31
Guinea-Bissau	2000	-	15	-	-	26	31	-	4	-	-	14	31	-	35	-	-	46	32
	2015	-	32	-	-	19	56	-	12	-	-	3	56	-	53	-	-	36	55
Guyana	2000	-	75	-	-	68	22	-	74	-	-	64	24	-	78	95	-	79	16
	2015	-	94	-	-	66	30	-	91	-	-	58	37	-	100	100	-	86	14
Haiti	2000	-	21	53	-	44	21	-	11	40	-	31	20	-	38	77	-	68	22
	2015	-	7	60	-	25	47	-	5	40	-	24	26	-	9	73	-	25	61
Holy See	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras	2000	-	78	54	-	77	6	-	66	56	-	64	8	-	92	52	-	93	3
	2015	-	91	60	-	89	4	-	83	66	-	81	4	-	99	54	-	96	3
Hungary	2000	52	94	-	52	94	6	-	90	-	-	91	9	-	96	-	-	96	4
	2015	82	99	-	82	99	1	-	99	-	-	98	2	-	99	-	-	100	0
Iceland	2000	90	100	-	90	100	0	-	100	-	-	100	0	-	100	-	-	100	0
	2015	98	100	-	98	100	0	-	100	-	-	100	0	-	100	-	-	100	0
India	2000	-	38	75	-	43	42	29	29	71	64	31	49	-	61	85	-	74	21
	2015	-	57	80	-	43	48	49	49	77	64	31	59	-	73	86	-	69	26
Indonesia	2000	-	61	-	-	20	56	-	45	-	-	7	59	-	84	-	-	37	52
	2015	-	54	-	-	18	72	-	57	-	-	9	73	-	51	-	-	25	72
Iran (Islamic Republic of)	2000	91	91	-	94	91	6	83	83	-	86	83	11	96	96	-	98	96	3
	2015	91	91	-	94	93	4	83	83	-	86	87	7	94	94	-	97	95	3
Iraq	2000	-	75	38	-	76	7	-	32	26	-	41	17	-	95	44	-	92	2
	2015	-	71	69	-	82	13	-	66	46	-	65	22	-	72	80	-	90	9
Ireland	2000	92	96	-	92	96	0	-	96	-	-	96	1	-	96	-	-	96	0
	2015	99	99	-	99	99	0	-	99	-	-	99	0	-	99	-	-	99	0

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Isle of Man	2000	77	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	88	52	96	-	4	0		-	-	-	-		-	-	-	-	
Israel	2000	6 014	91	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	8 064	92	100	-	0	0		100	-	0	0		100	-	0	0	
Italy	2000	57 147	67	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	59 798	69	100	-	0	0		100	-	0	0		100	-	0	0	
Jamaica	2000	2 600	52	91	3	3	3	0.14	85	5	5	6	0.23	96	1	2	0	0.03
	2015	2 793	55	93	3	2	2		88	5	3	4		97	1	2	0	
Japan	2000	125 715	79	98	-	2	0	0.03	-	-	-	-	-	-	-	-	-	-
	2015	126 573	93	99	-	1	0		-	-	-	-		-	-	-	-	
Jordan	2000	4 767	80	100	-	0	0	-0.07	99	-	1	0	-0.13	100	-	0	0	-0.06
	2015	7 595	84	99	-	1	0		97	-	3	0		99	-	1	0	
Kazakhstan	2000	14 957	56	86	5	7	2	0.33	76	8	13	4	0.54	94	2	3	0	0.21
	2015	17 625	53	91	5	3	0		84	9	7	1		97	3	0	0	
Kenya	2000	31 066	20	46	7	18	29	0.80	36	7	21	36	0.93	88	4	6	1	-0.33
	2015	46 050	26	58	9	10	23		50	10	11	29		83	4	5	7	
Kiribati	2000	84	43	61	1	39	0	0.24	49	1	50	0	-0.29	77	0	23	0	0.84
	2015	112	44	64	1	35	0		44	1	55	0		90	0	10	0	
Kuwait	2000	1 929	98	100	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	3 892	98	100	0	0	0		-	-	-	-		-	-	-	-	
Kyrgyzstan	2000	4 955	35	80	1	5	14	0.46	73	2	5	21	0.61	95	1	5	0	0.18
	2015	5 940	36	87	2	2	9		82	2	3	13		97	1	0	2	
Lao People's Democratic Republic	2000	5 343	22	46	1	27	26	2.31	37	1	30	32	2.42	77	0	18	5	0.98
	2015	6 802	39	80	1	14	4		73	2	18	7		92	0	7	1	
Latvia	2000	2 371	68	98	1	2	0	0.06	95	0	5	0	0.18	99	1	0	0	0.01
	2015	1 971	67	99	1	1	0		98	0	2	0		99	1	0	0	
Lebanon	2000	3 235	86	85	7	8	0	0.46	-	-	-	-	-	-	-	-	-	-
	2015	5 851	88	92	7	0	0		-	-	-	-		-	-	-	-	
Lesotho	2000	1 856	20	66	11	21	1	0.35	62	12	25	1	0.24	84	8	8	0	0.21
	2015	2 135	27	72	12	16	1		66	13	21	1		87	8	4	0	
Liberia	2000	2 892	44	62	6	32	0	0.55	49	3	48	0	0.71	78	9	13	0	0.18
	2015	4 503	50	70	7	6	17		60	4	4	32		80	9	9	2	
Libya	2000	5 337	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	6 278	79	97	-	3	0		-	-	-	-		-	-	-	-	
Liechtenstein	2000	33	15	100	-	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	38	14	100	-	0	0		-	-	-	-		-	-	-	-	
Lithuania	2000	3 486	67	90	-	10	0	0.49	77	-	23	0	1.03	96	-	4	0	0.23
	2015	2 878	67	97	-	3	0		93	-	7	0		100	-	0	0	
Luxembourg	2000	436	84	100	-	0	0	0.00	100	-	1	0	0.00	100	-	0	0	0.00
	2015	567	90	100	-	0	0		100	-	1	0		100	-	0	0	
Madagascar	2000	15 745	27	37	2	21	41	0.93	25	1	24	50	0.60	69	3	12	15	0.86
	2015	24 235	35	51	3	31	16		34	2	41	23		82	4	12	2	
Malawi	2000	11 193	15	52	15	25	8	1.04	46	16	29	10	1.16	84	9	6	1	0.15
	2015	17 215	16	67	20	10	3		63	22	12	3		87	9	4	0	
Malaysia	2000	23 421	62	98	0	1	1	-0.11	96	1	1	2	-0.47	100	0	0	0	-0.04
	2015	30 331	75	96	0	3	0		89	1	11	0		99	0	1	0	
Maldives	2000	280	28	89	0	11	0	0.62	85	0	15	0	0.98	98	0	2	0	-0.16
	2015	364	46	98	0	2	0		100	0	0	0		96	0	4	0	
Mali	2000	11 047	28	49	4	43	4	1.67	39	4	51	5	1.57	74	4	20	1	1.15
	2015	17 600	40	74	6	18	2		63	6	28	3		91	5	4	0	
Malta	2000	387	92	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	419	95	100	-	0	0		100	-	0	0		100	-	0	0	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Isle of Man	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	96	96	-	96	96	0	-	-	-	-	-	-	-	-	-	-	-	-
Israel	2000	99	100	-	99	100	0	99	100	-	99	100	0	99	100	-	99	100	0
	2015	99	100	-	99	100	0	99	100	-	99	100	0	99	100	-	99	100	0
Italy	2000	86	94	86	97	100	0	-	93	-	-	100	0	-	94	-	-	100	0
	2015	94	94	95	94	100	0	-	93	-	-	100	0	-	94	-	-	100	0
Jamaica	2000	-	84	54	-	79	15	-	73	41	-	61	28	-	93	66	-	95	3
	2015	-	83	56	-	81	15	-	72	43	-	66	27	-	93	67	-	93	5
Japan	2000	97	97	-	98	97	1	-	-	-	-	-	-	-	-	-	-	-	-
	2015	97	97	-	99	98	1	-	-	-	-	-	-	-	-	-	-	-	-
Jordan	2000	94	95	94	99	97	3	-	90	91	-	86	13	-	97	95	-	100	0
	2015	93	95	93	98	86	12	-	88	90	-	80	17	-	96	94	-	87	12
Kazakhstan	2000	-	58	-	-	65	26	-	24	-	-	32	52	-	84	-	-	91	6
	2015	-	84	-	-	75	22	-	74	-	-	55	38	-	93	-	-	93	7
Kenya	2000	-	24	38	-	31	22	-	14	31	-	18	26	63	63	63	70	85	7
	2015	-	27	52	-	32	35	-	17	46	-	22	38	54	54	69	66	61	26
Kiribati	2000	-	52	-	-	32	29	-	38	-	-	21	29	-	72	-	-	48	29
	2015	-	56	-	-	33	32	-	34	-	-	3	42	-	84	-	-	71	19
Kuwait	2000	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	2000	46	46	-	72	39	43	28	28	-	64	21	53	80	80	-	88	72	24
	2015	66	66	-	82	89	0	52	52	-	75	84	0	93	93	-	95	98	0
Lao People's Democratic Republic	2000	-	7	-	-	15	32	-	0	-	-	8	30	-	31	-	-	39	38
	2015	-	68	-	-	42	40	-	53	-	-	22	53	-	92	-	-	73	19
Latvia	2000	81	82	-	97	81	17	-	60	-	-	57	39	-	92	-	-	93	7
	2015	82	82	-	98	91	8	-	62	-	-	81	17	-	92	-	-	96	4
Lebanon	2000	44	83	65	44	84	8	-	-	-	-	-	-	-	-	-	-	-	-
	2015	48	89	88	48	85	14	-	-	-	-	-	-	-	-	-	-	-	-
Lesotho	2000	-	9	-	-	62	16	-	1	-	-	57	17	-	39	-	-	84	9
	2015	-	25	-	-	65	18	-	7	-	-	57	22	-	74	-	-	89	7
Liberia	2000	-	11	-	-	14	53	-	7	-	-	4	48	-	16	-	-	27	60
	2015	-	6	-	-	4	73	-	4	-	-	0	64	-	9	-	-	7	82
Libya	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	85	-	-	41	56	-	-	-	-	-	-	-	-	-	-	-	-
Liechtenstein	2000	100	100	-	100	100	0	-	-	-	-	-	-	-	-	-	-	-	-
	2015	100	100	-	100	100	0	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	2000	71	77	-	71	80	10	-	48	-	-	54	23	-	91	-	-	93	4
	2015	92	96	-	92	95	3	-	90	-	-	85	7	-	99	-	-	100	0
Luxembourg	2000	98	98	-	100	100	0	-	97	-	-	-	-	-	98	-	-	100	0
	2015	98	98	-	100	100	0	-	97	-	-	99	1	-	98	-	-	100	0
Madagascar	2000	-	6	30	-	24	14	-	1	20	-	11	15	-	17	54	-	59	14
	2015	-	24	41	-	34	19	-	13	28	-	15	20	-	43	64	-	68	18
Malawi	2000	-	6	49	-	22	44	-	1	51	-	12	49	-	34	42	-	79	14
	2015	-	16	65	-	22	65	-	9	70	-	10	75	-	49	43	-	81	15
Malaysia	2000	94	94	-	98	95	4	-	87	-	-	88	9	-	98	-	-	99	1
	2015	92	93	-	97	94	3	-	81	-	-	79	10	-	97	-	-	98	1
Maldives	2000	-	86	65	-	32	57	-	81	57	-	16	69	-	98	86	-	73	25
	2015	-	95	75	-	43	55	-	95	67	-	0	100	-	95	84	-	94	1
Mali	2000	-	20	45	-	22	31	-	10	40	-	8	35	-	45	58	-	58	21
	2015	-	32	67	-	41	39	-	16	63	-	16	53	-	56	72	-	79	17
Malta	2000	100	100	-	100	100	0	-	100	-	-	100	0	-	100	-	-	100	0
	2015	100	100	-	100	100	0	-	100	-	-	100	0	-	100	-	-	100	0

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Marshall Islands	2000	52	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	53	73	78	21	1	0		99	0	1	0		70	28	2	0	
Martinique	2000	387	90	100	-	0	0	0.02	-	-	-	-	-	94	-	6	0	-
	2015	396	89	100	-	0	0		-	-	-	-		-	-	-	-	
Mauritania	2000	2 711	49	54	12	29	6	1.07	27	12	52	10	1.22	81	11	6	1	0.32
	2015	4 068	60	70	15	15	0		45	20	34	1		86	12	2	0	
Mauritius	2000	1 185	43	99	0	1	0	0.04	99	0	1	0	0.06	100	0	0	0	0.01
	2015	1 273	40	100	0	0	0		100	0	0	0		100	0	0	0	
Mayotte	2000	150	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	240	47	98	-	2	0		-	-	-	-		-	-	-	-	
Mexico	2000	102 809	75	89	0	8	3	0.60	74	1	15	9	1.30	94	0	5	0	0.34
	2015	127 017	79	98	0	1	0		94	2	4	1		100	0	0	0	
Micronesia (Federated States of)	2000	107	22	93	-	7	0	-0.28	92	-	8	0	-0.41	94	-	6	0	0.14
	2015	104	22	88	-	12	0		86	-	14	0		97	-	3	0	
Monaco	2000	32	100	100	-	0	0	0.00	-	-	-	-	-	100	-	0	0	0.00
	2015	38	100	100	-	0	0		-	-	-	-		100	-	0	0	
Mongolia	2000	2 397	57	65	6	10	19	1.21	32	6	20	42	1.61	90	5	3	2	0.27
	2015	2 959	72	83	7	5	5		56	10	15	19		94	5	1	0	
Montenegro	2000	614	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	626	64	98	2	0	0		99	0	0	0		97	3	0	0	
Montserrat	2000	5	2	99	-	1	0	-0.16	-	-	-	-	-	-	-	-	-	-
	2015	5	9	97	-	3	0		-	-	-	-		-	-	-	-	
Morocco	2000	28 951	53	64	4	29	2	1.26	31	6	57	5	2.16	93	2	5	0	0.19
	2015	34 378	60	83	7	7	3		64	13	16	8		96	2	2	0	
Mozambique	2000	18 265	29	22	5	57	16	1.67	7	4	68	21	1.68	59	7	29	5	1.31
	2015	27 978	32	47	14	24	14		32	17	32	19		79	9	8	3	
Myanmar	2000	47 670	27	55	11	17	17	0.85	47	12	20	21	0.84	75	9	9	7	0.48
	2015	53 897	34	68	13	10	9		60	15	13	13		82	9	5	3	
Namibia	2000	1 898	32	77	8	7	7	0.09	68	12	10	11	-0.31	98	1	1	0	-0.06
	2015	2 459	47	79	6	5	10		63	11	7	19		97	1	2	0	
Nauru	2000	10	100	95	0	5	0	0.33	-	-	-	-	-	95	0	5	0	0.33
	2015	10	100	100	0	0	0		-	-	-	-		100	0	0	0	
Nepal	2000	23 740	13	80	2	16	3	0.55	77	2	17	3	0.66	92	2	4	1	-0.23
	2015	28 514	19	88	2	7	3		87	2	7	3		89	2	8	1	
Netherlands	2000	15 894	77	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	16 925	90	100	-	0	0		100	-	0	0		100	-	0	0	
New Caledonia	2000	210	62	95	-	5	0	0.30	-	-	-	-	-	-	-	-	-	-
	2015	263	70	99	-	1	0		-	-	-	-		-	-	-	-	
New Zealand	2000	3 858	86	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	4 529	86	100	-	0	0		100	-	0	0		100	-	0	0	
Nicaragua	2000	5 027	55	81	1	14	4	0.11	62	2	26	9	-0.11	96	0	4	0	0.11
	2015	6 082	59	82	1	13	3		61	2	30	8		97	0	2	0	
Niger	2000	11 225	16	38	8	51	3	0.52	28	8	60	3	0.51	88	8	4	0	0.03
	2015	19 899	19	46	10	42	2		36	10	51	3		89	8	4	0	
Nigeria	2000	122 877	35	46	6	22	26	1.42	31	5	29	35	1.53	74	9	10	8	0.53
	2015	182 202	48	67	9	15	8		54	8	23	14		82	10	7	1	
Niue	2000	2	33	99	-	1	0	-0.07	-	-	-	-	-	-	-	-	-	-
	2015	2	43	98	-	2	0		-	-	-	-		-	-	-	-	
Northern Mariana Islands	2000	68	90	99	-	1	0	0.03	-	-	-	-	-	-	-	-	-	-
	2015	55	89	99	-	1	0		-	-	-	-		-	-	-	-	
Norway	2000	4 492	76	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	5 211	80	100	-	0	0		100	-	0	0		100	-	0	0	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Marshall Islands	2000	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-
	2015	-	74	-	-	11	88	-	98	-	-	0	99	-	65	-	-	15	83
Martinique	2000	95	95	-	100	-	-	-	-	-	-	-	-	-	-	-	-	94	0
	2015	100	100	-	100	100	0	-	-	-	-	-	-	-	-	-	-	-	-
Mauritania	2000	-	46	-	-	29	36	-	13	-	-	15	24	-	80	-	-	44	48
	2015	-	63	-	-	52	33	-	33	-	-	35	30	-	83	-	-	63	35
Mauritius	2000	-	99	72	-	99	0	-	99	-	-	99	0	-	100	-	-	100	0
	2015	-	100	73	-	100	0	-	100	-	-	100	0	-	100	-	-	100	0
Mayotte	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	85	85	-	96	96	2	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	2000	39	80	70	39	83	6	-	57	58	-	62	13	-	87	74	-	90	4
	2015	43	94	69	43	95	4	-	82	61	-	85	10	-	97	72	-	98	2
Micronesia (Federated States of)	2000	-	66	-	-	-	-	-	66	-	-	-	-	-	69	-	-	-	-
	2015	-	63	-	-	-	-	-	61	-	-	-	-	-	71	-	-	-	-
Monaco	2000	100	100	-	100	100	0	NA	NA	NA	NA	NA	NA	100	100	-	100	100	0
	2015	100	100	-	100	100	0	NA	NA	NA	NA	NA	NA	100	100	-	100	100	0
Mongolia	2000	-	22	-	-	32	39	-	1	-	-	3	35	-	38	-	-	53	41
	2015	-	25	-	-	26	64	-	9	-	-	4	63	-	32	-	-	35	64
Montenegro	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	90	96	-	90	84	16	-	99	-	-	67	33	94	94	-	100	94	6
Montserrat	2000	-	99	-	-	99	0	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	97	-	-	97	0	-	-	-	-	-	-	-	-	-	-	-	-
Morocco	2000	55	55	67	61	59	9	19	19	34	31	19	19	86	86	95	87	95	0
	2015	69	69	86	79	76	13	39	39	69	63	50	27	89	89	98	90	94	4
Mozambique	2000	-	10	-	-	21	6	-	0	-	-	6	5	-	36	-	-	58	9
	2015	-	13	-	-	32	30	-	4	-	-	13	36	-	33	-	-	72	17
Myanmar	2000	-	28	-	-	12	53	-	19	-	-	7	52	-	51	-	-	26	58
	2015	-	53	-	-	23	57	-	41	-	-	9	66	-	76	-	-	52	40
Namibia	2000	-	45	-	-	73	13	-	26	-	-	61	19	-	84	-	-	99	0
	2015	-	52	-	-	73	12	-	34	-	-	52	22	-	72	-	-	97	1
Nauru	2000	-	95	-	-	-	-	NA	NA	NA	NA	NA	NA	-	95	-	-	-	-
	2015	-	99	-	-	68	32	NA	NA	NA	NA	NA	NA	-	99	-	-	68	32
Nepal	2000	24	43	74	24	45	36	22	39	73	22	43	37	35	74	80	35	62	33
	2015	27	61	81	27	48	42	25	58	83	25	45	45	34	75	77	34	60	31
Netherlands	2000	100	100	-	100	100	0	-	100	-	-	100	0	-	100	-	-	100	0
	2015	100	100	-	100	100	0	-	100	-	-	100	0	-	100	-	-	100	0
New Caledonia	2000	86	86	-	93	89	5	-	-	-	-	-	-	-	-	-	-	-	-
	2015	97	97	-	98	98	1	-	-	-	-	-	-	-	-	-	-	-	-
New Zealand	2000	77	100	-	77	100	0	-	100	-	-	100	0	-	100	100	-	100	0
	2015	100	100	-	100	100	0	-	100	-	-	100	0	-	100	100	-	100	0
Nicaragua	2000	54	60	67	64	67	15	26	26	54	30	38	26	78	87	78	92	91	5
	2015	59	78	61	67	70	14	30	51	36	30	33	30	79	97	79	94	95	2
Niger	2000	-	10	33	-	22	24	-	4	25	-	11	26	-	42	72	-	81	15
	2015	-	13	39	-	31	24	-	3	38	-	18	28	-	53	44	-	90	6
Nigeria	2000	17	17	-	40	18	34	-	11	-	-	6	29	-	28	-	-	40	43
	2015	19	20	-	59	10	66	-	13	-	-	7	55	-	27	-	-	14	78
Niue	2000	98	99	99	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	97	98	98	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Mariana Islands	2000	77	82	77	96	96	3	-	-	-	-	-	-	-	-	-	-	-	-
	2015	82	82	99	96	97	2	-	-	-	-	-	-	-	-	-	-	-	-
Norway	2000	95	95	-	100	100	0	-	96	-	-	100	0	-	95	-	-	100	0
	2015	95	95	-	97	100	0	-	96	-	-	100	0	-	95	-	-	100	0

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Oman	2000	2 239	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	4 491	78	91	9	0	0		78	22	0	0		95	5	0	0	
Pakistan	2000	138 250	33	89	3	3	5	-0.03	85	3	5	7	0.14	98	2	0	1	-0.41
	2015	188 925	39	89	3	6	2		87	3	6	4		92	2	7	0	
Palau	2000	19	70	92	-	8	0	0.53	80	-	20	0	1.09	97	-	3	0	0.23
	2015	21	87	100	-	0	0		97	-	3	0		100	-	0	0	
Panama	2000	3 029	62	88	1	7	4	0.45	76	1	12	11	0.77	96	1	3	0	0.20
	2015	3 929	67	95	1	3	1		87	1	8	4		99	1	0	0	
Papua New Guinea	2000	5 374	13	37	2	20	42	-0.01	29	1	21	48	0.00	84	4	8	4	0.00
	2015	7 619	13	37	2	20	42		29	1	21	48		84	4	8	4	
Paraguay	2000	5 303	55	75	0	22	3	1.59	52	0	41	7	3.10	94	0	6	0	0.37
	2015	6 639	60	99	0	1	0		98	0	1	0		99	0	1	0	
Peru	2000	25 915	73	81	1	11	7	0.62	51	1	24	24	1.44	91	1	7	1	0.21
	2015	31 377	79	90	1	6	3		72	2	13	13		95	1	4	1	
Philippines	2000	77 932	48	86	3	6	5	0.29	80	3	7	9	0.36	92	2	4	2	0.28
	2015	100 699	44	91	3	6	1		86	4	9	1		96	2	2	0	
Poland	2000	38 486	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	38 612	61	98	-	2	0		96	-	4	0		99	-	1	0	
Portugal	2000	10 279	54	99	-	1	0	0.09	98	-	2	0	0.08	99	-	1	0	0.09
	2015	10 350	63	100	-	0	0		100	-	0	0		100	-	0	0	
Puerto Rico	2000	3 797	94	97	-	3	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	3 683	94	97	-	3	0		-	-	-	-		-	-	-	-	
Qatar	2000	593	96	100	-	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	2 235	99	100	-	0	0		-	-	-	-		-	-	-	-	
Republic of Korea	2000	46 206	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	50 293	82	100	-	0	0		-	-	-	-		-	-	-	-	
Republic of Moldova	2000	4 201	46	84	1	15	0	0.18	74	1	24	0	0.33	95	1	3	0	0.02
	2015	4 069	45	87	1	12	0		79	2	19	0		96	1	3	0	
Réunion	2000	737	90	100	-	1	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	861	95	100	-	1	0		-	-	-	-		-	-	-	-	
Romania	2000	22 128	53	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	19 511	55	100	-	0	0		100	-	0	0		100	-	0	0	
Russian Federation	2000	146 401	73	95	1	3	1	0.07	86	1	10	2	0.30	99	0	1	0	-0.02
	2015	143 457	74	96	1	3	0		90	2	8	0		99	0	1	0	
Rwanda	2000	8 022	15	47	20	14	19	0.65	42	22	15	21	0.41	73	11	7	8	0.25
	2015	11 610	29	57	21	15	8		49	25	17	10		77	12	9	2	
Saint Helena	2000	5	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	4	39	99	-	1	0		-	-	-	-		-	-	-	-	
Saint Kitts and Nevis	2000	46	33	98	-	2	0	-	-	-	-	-	-	-	-	-	-	-
	2015	56	32	-	-	-	-		-	-	-	-		-	-	-	-	
Saint Lucia	2000	157	28	88	2	10	0	0.65	87	2	12	0	0.76	93	2	5	0	0.33
	2015	185	19	98	2	0	0		98	2	0	0		98	2	0	0	
Saint Pierre and Miquelon	2000	6	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	6	90	91	-	9	0		-	-	-	-		-	-	-	-	
Saint Vincent and the Grenadines	2000	108	45	93	-	7	0	0.13	-	-	-	-	-	-	-	-	-	-
	2015	109	51	95	-	4	1		-	-	-	-		-	-	-	-	
Samoa	2000	175	22	93	2	5	0	0.17	94	2	3	0	0.03	89	0	10	0	0.69
	2015	193	19	96	2	2	0		95	2	3	0		99	1	0	0	
San Marino	2000	27	93	100	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	32	94	100	0	0	0		-	-	-	-		-	-	-	-	
Sao Tome and Principe	2000	137	53	67	13	5	15	0.85	60	12	7	21	0.89	73	14	4	9	0.68
	2015	190	65	80	15	2	2		74	14	5	7		83	16	1	0	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Oman	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	89	89	-	97	88	12	-	75	-	-	73	27	-	93	100	-	92	8
Pakistan	2000	38	83	-	38	34	58	32	77	-	32	19	69	51	95	-	51	64	36
	2015	36	77	-	36	33	58	32	75	-	32	19	71	41	80	-	41	55	38
Palau	2000	-	84	-	-	92	0	-	74	-	-	80	0	-	88	97	-	97	0
	2015	-	95	-	-	100	0	-	93	-	-	97	0	-	95	100	-	100	0
Panama	2000	-	85	73	-	88	1	-	72	66	-	75	1	-	93	77	-	96	1
	2015	-	93	85	-	92	4	-	85	74	-	81	7	-	98	90	-	98	2
Papua New Guinea	2000	-	19	-	-	20	18	-	16	-	-	13	18	-	43	80	-	71	17
	2015	-	19	-	-	20	18	-	16	-	-	13	18	-	43	80	-	71	17
Paraguay	2000	-	72	64	-	51	24	-	48	43	-	19	33	-	92	82	-	77	16
	2015	-	95	86	-	89	10	-	91	82	-	81	17	-	97	89	-	95	4
Peru	2000	45	72	66	45	72	10	14	36	45	14	34	18	56	86	74	56	86	6
	2015	50	84	73	50	83	8	20	67	51	20	60	14	58	89	79	58	89	6
Philippines	2000	-	39	79	-	47	42	-	26	74	-	32	52	-	54	84	-	63	31
	2015	-	61	83	-	43	50	-	47	79	-	31	58	-	78	88	-	59	40
Poland	2000	-	-	-	-	96	-	-	-	-	-	92	-	-	-	-	-	99	-
	2015	94	95	-	98	97	1	-	91	-	-	95	1	-	97	-	-	99	0
Portugal	2000	93	98	93	95	98	0	-	97	90	-	98	0	-	99	96	-	99	0
	2015	95	96	95	99	100	0	-	97	91	-	100	0	-	96	98	-	100	0
Puerto Rico	2000	-	94	75	-	94	3	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	94	94	-	94	3	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	2000	-	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Korea	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	98	99	-	98	98	1	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Moldova	2000	36	41	82	76	38	48	-	14	74	-	1	75	-	74	92	-	82	15
	2015	70	71	85	74	60	28	-	59	79	-	37	44	-	87	92	-	88	9
Réunion	2000	-	100	-	-	100	0	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	100	-	-	100	0	-	-	-	-	-	-	-	-	-	-	-	-
Romania	2000	95	100	-	95	56	44	-	100	-	-	17	83	-	100	-	-	91	9
	2015	88	100	-	99	-	-	-	100	-	-	-	-	-	100	-	-	-	-
Russian Federation	2000	75	75	-	94	79	17	-	53	-	-	44	43	-	83	-	-	92	7
	2015	76	76	-	95	92	5	-	55	-	-	81	10	-	83	-	-	96	3
Rwanda	2000	-	4	-	-	37	30	-	0	-	-	32	32	26	26	85	80	68	16
	2015	-	13	-	-	40	38	-	4	-	-	27	46	36	36	89	84	73	16
Saint Helena	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	98	-	-	98	1	-	-	-	-	-	-	-	-	-	-	-	-
Saint Kitts and Nevis	2000	-	97	86	-	97	1	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Lucia	2000	-	86	-	-	89	1	-	85	-	-	87	1	-	89	-	-	95	0
	2015	-	96	-	-	96	4	-	96	-	-	95	5	-	94	-	-	100	0
Saint Pierre and Miquelon	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	83	83	91	91	91	1	-	-	-	-	-	-	-	-	-	-	-	-
Saint Vincent and the Grenadines	2000	-	92	68	-	86	7	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	94	70	-	93	2	-	-	-	-	-	-	-	-	-	-	-	-
Samoa	2000	-	92	95	-	86	9	-	93	-	-	85	11	-	88	-	-	90	0
	2015	-	94	97	-	82	15	-	93	-	-	84	13	-	98	-	-	77	23
San Marino	2000	100	100	100	100	100	0	-	-	-	-	-	-	-	-	-	-	-	-
	2015	100	100	100	100	100	0	-	-	-	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	2000	-	27	-	-	74	6	-	19	-	-	64	8	-	33	-	-	83	4
	2015	-	36	-	-	91	5	-	24	-	-	81	7	-	42	-	-	96	3

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Saudi Arabia	2000	21 392	80	97	-	3	0	0.21	-	-	-	-	-	-	-	-	-	-
	2015	31 540	83	100	-	0	0		-	-	-	-		-	-	-	-	
Senegal	2000	9 861	40	62	4	33	2	0.90	42	5	50	3	1.41	91	2	6	1	0.00
	2015	15 129	44	75	5	19	0		63	8	29	0		91	2	7	0	
Serbia	2000	9 463	53	92	8	0	0	-0.04	93	7	1	0	0.16	91	9	0	0	-0.20
	2015	8 851	56	91	8	1	0		95	4	1	0		88	11	1	0	
Seychelles	2000	81	50	93	-	7	0	0.20	-	-	-	-	-	-	-	-	-	-
	2015	96	54	96	-	0	4		-	-	-	-		-	-	-	-	
Sierra Leone	2000	4 061	36	39	6	16	39	1.29	24	3	17	56	1.55	66	12	14	9	0.59
	2015	6 453	40	58	9	17	16		47	6	23	24		75	14	7	4	
Singapore	2000	3 918	100	100	-	0	0	0.00	-	-	-	-	-	100	-	0	0	0.00
	2015	5 604	100	100	-	0	0		-	-	-	-		100	-	0	0	
Sint Maarten (Dutch part)	2000	32	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	39	100	96	-	5	0		-	-	-	-		-	-	-	-	
Slovakia	2000	5 386	56	98	2	0	0	0.00	97	3	0	0	0.00	99	1	0	0	0.00
	2015	5 426	54	98	2	0	0		97	3	0	0		99	1	0	0	
Slovenia	2000	1 989	51	100	-	0	0	-0.01	99	-	1	0	0.00	100	-	0	0	-0.01
	2015	2 068	50	100	-	0	0		99	-	1	0		100	-	0	0	
Solomon Islands	2000	412	16	80	6	10	4	-1.08	78	6	11	4	-1.46	90	3	5	1	0.00
	2015	584	22	64	4	17	15		56	5	20	19		90	3	5	1	
Somalia	2000	7 385	33	21	9	36	35	1.29	7	6	39	48	0.90	48	14	29	8	1.44
	2015	10 787	40	40	19	29	12		20	18	43	19		70	20	9	1	
South Africa	2000	44 897	57	77	10	4	8	0.51	52	20	9	19	0.74	96	3	1	0	0.03
	2015	54 490	65	85	10	2	3		63	24	5	9		97	3	0	0	
South Sudan	2000	6 693	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	12 340	19	50	30	13	7		48	29	15	7		60	34	2	5	
Spain	2000	40 750	76	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	46 122	80	100	-	0	0		100	-	0	0		100	-	0	0	
Sri Lanka	2000	18 784	18	77	2	13	7	0.99	73	3	16	9	1.20	95	2	2	0	0.07
	2015	20 715	18	92	3	5	0		91	3	5	0		96	2	1	0	
Sudan	2000	28 080	32	43	19	29	8	1.03	35	18	35	11	1.09	60	21	16	3	0.85
	2015	40 235	34	59	26	6	9		52	27	8	13		73	25	1	1	
Suriname	2000	481	66	89	1	3	8	0.39	72	1	5	22	1.06	97	0	2	0	0.05
	2015	543	66	95	1	1	4		88	1	0	11		98	0	1	0	
Swaziland	2000	1 064	23	52	5	15	27	1.03	42	6	18	34	1.22	87	1	6	5	0.54
	2015	1 287	21	68	8	10	15		60	9	12	19		95	2	2	2	
Sweden	2000	8 872	84	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	9 779	86	100	-	0	0		100	-	0	0		100	-	0	0	
Switzerland	2000	7 166	73	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	8 299	74	100	-	0	0		100	-	0	0		100	-	0	0	
Syrian Arab Republic	2000	16 354	52	95	2	3	0	0.13	90	4	6	1	0.28	100	1	0	0	-0.05
	2015	18 502	58	97	2	1	0		94	4	2	0		99	0	1	0	
Tajikistan	2000	6 186	26	57	3	6	34	1.13	45	3	8	44	1.53	92	2	1	4	-0.01
	2015	8 482	27	74	4	3	18		68	5	4	23		92	2	1	5	
Thailand	2000	62 693	31	94	1	4	0	0.27	92	1	6	1	0.35	99	0	1	0	0.02
	2015	67 959	50	98	1	1	0		97	1	1	1		99	0	0	0	
The former Yugoslav Republic of Macedonia	2000	2 012	59	98	1	1	0	-0.07	98	1	1	0	0.03	98	2	0	0	-0.16
	2015	2 078	57	97	3	1	0		98	1	1	0		96	4	0	0	
Timor-Leste	2000	847	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	1 185	33	70	6	18	6		60	8	24	8		91	2	7	0	
Togo	2000	4 875	33	45	4	28	23	1.16	30	5	32	33	1.02	78	3	18	1	0.81
	2015	7 305	40	63	6	18	14		45	8	25	22		90	4	6	0	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Saudi Arabia	2000	-	79	-	-	60	36	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	99	-	-	98	2	-	-	-	-	-	-	-	-	-	-	-	-
Senegal	2000	-	37	-	-	53	13	-	11	-	-	30	17	-	76	93	-	86	7
	2015	-	60	-	-	70	10	-	45	-	-	59	12	-	79	93	-	86	7
Serbia	2000	76	76	-	99	81	19	-	60	-	-	61	38	-	91	-	-	98	2
	2015	88	88	-	99	95	4	-	95	-	-	92	7	-	83	-	-	97	2
Seychelles	2000	-	90	-	-	86	7	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	95	-	-	95	2	-	-	-	-	-	-	-	-	-	-	-	-
Sierra Leone	2000	-	13	-	-	21	24	-	2	-	-	6	20	-	32	-	-	48	30
	2015	-	11	-	-	28	40	-	5	-	-	17	36	-	20	-	-	43	45
Singapore	2000	100	100	-	100	100	0	NA	NA	NA	NA	NA	NA	100	100	-	100	100	0
	2015	100	100	-	100	100	0	NA	NA	NA	NA	NA	NA	100	100	-	100	100	0
Sint Maarten (Dutch part)	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	90	-	-	84	12	-	-	-	-	-	-	-	-	-	-	-	-
Slovakia	2000	93	93	-	98	95	5	-	93	-	-	91	9	-	94	-	-	98	2
	2015	93	93	-	98	98	2	-	93	-	-	100	0	-	94	-	-	97	3
Slovenia	2000	77	100	-	77	100	0	-	99	-	-	99	0	-	100	-	-	100	0
	2015	98	98	-	98	99	1	-	98	-	-	99	1	-	98	-	-	99	0
Solomon Islands	2000	-	62	44	-	59	27	-	58	68	-	57	28	-	83	-	-	73	21
	2015	-	51	35	-	47	21	-	42	49	-	40	21	-	83	-	-	73	21
Somalia	2000	-	11	22	-	11	19	-	1	7	-	4	9	-	31	52	-	24	38
	2015	-	19	43	-	30	29	-	2	22	-	8	30	-	45	75	-	62	28
South Africa	2000	-	64	83	-	81	6	-	30	67	-	58	13	91	91	96	97	98	1
	2015	-	74	72	-	90	5	-	43	48	-	75	12	85	90	85	97	99	1
South Sudan	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	2	-	-	7	73	-	1	-	-	6	71	-	7	-	-	12	81
Spain	2000	98	100	-	99	99	1	-	100	-	-	100	0	-	100	-	-	99	1
	2015	98	98	-	98	100	0	-	98	-	-	100	0	-	98	-	-	100	0
Sri Lanka	2000	-	58	73	-	27	53	-	52	68	-	15	61	85	85	94	95	79	19
	2015	-	77	89	-	38	58	-	74	87	-	29	65	93	93	98	96	75	23
Sudan	2000	-	28	60	-	29	34	-	17	54	-	18	36	-	52	73	-	51	30
	2015	-	38	82	-	44	41	-	24	78	-	32	46	-	63	88	-	67	31
Suriname	2000	-	87	50	-	76	13	-	68	44	-	49	24	-	96	53	-	90	8
	2015	-	90	53	-	67	28	-	78	53	-	47	42	-	97	53	-	77	21
Swaziland	2000	-	28	-	-	45	12	-	16	-	-	35	14	67	67	89	81	82	7
	2015	-	46	-	-	57	18	-	34	-	-	47	22	88	91	97	88	93	4
Sweden	2000	98	98	-	100	100	0	-	98	-	-	100	0	-	98	-	-	100	0
	2015	98	98	-	100	100	0	-	98	-	-	100	0	-	98	-	-	100	0
Switzerland	2000	93	97	-	93	100	0	-	98	-	-	100	0	-	97	-	-	100	0
	2015	95	97	-	95	100	0	-	98	-	-	100	0	-	97	-	-	100	0
Syrian Arab Republic	2000	-	79	-	-	80	17	-	64	-	-	63	31	-	93	-	-	96	4
	2015	-	81	-	-	86	13	-	67	-	-	80	18	-	92	-	-	90	9
Tajikistan	2000	37	38	39	39	48	12	-	22	32	-	33	15	-	82	58	-	89	5
	2015	47	48	51	68	60	18	-	36	48	-	50	23	-	82	58	-	89	5
Thailand	2000	-	90	-	-	33	62	-	87	-	-	15	78	-	97	-	-	72	27
	2015	-	97	-	-	67	32	-	96	-	-	49	49	-	99	-	-	84	15
The former Yugoslav Republic of Macedonia	2000	91	91	-	99	93	7	81	81	-	99	85	14	98	98	100	100	98	2
	2015	83	94	-	88	92	7	75	98	-	75	85	14	90	90	100	99	98	1
Timor-Leste	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	50	-	-	42	34	-	37	-	-	30	38	-	78	-	-	66	27
Togo	2000	-	11	-	-	38	12	-	5	-	-	20	15	-	23	-	-	75	6
	2015	-	15	-	-	24	44	-	5	-	-	9	44	-	31	-	-	48	45

ANNEX 3 National drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
Tokelau	2000	2	0	99	-	1	0	0.07	99	-	1	0	0.07	-	-	-	-	-
	2015	1	0	100	-	0	0		100	-	0	0		-	-	-	-	
Tonga	2000	98	23	98	-	2	0	0.09	99	-	1	0	0.07	97	-	3	0	0.16
	2015	106	24	100	-	0	0		100	-	0	0		100	-	0	0	
Trinidad and Tobago	2000	1 268	11	92	1	6	1	0.34	-	-	-	-	-	-	-	-	-	-
	2015	1 360	8	97	1	2	0		-	-	-	-		-	-	-	-	
Tunisia	2000	9 699	63	88	4	7	1	0.44	70	11	17	2	0.86	98	0	2	0	0.14
	2015	11 254	67	94	4	1	0		83	12	4	0		100	0	0	0	
Turkey	2000	63 240	65	95	-	4	0	0.23	89	-	10	0	0.69	99	-	1	0	-0.02
	2015	78 666	73	99	-	1	0		100	-	0	0		99	-	1	0	
Turkmenistan	2000	4 501	46	84	5	2	10	0.70	78	1	3	18	1.29	91	9	0	0	0.04
	2015	5 374	50	94	5	0	0		98	2	0	1		91	9	0	0	
Turks and Caicos Islands	2000	19	85	86	-	14	0	0.52	-	-	-	-	-	-	-	-	-	-
	2015	34	92	94	-	6	0		-	-	-	-		-	-	-	-	
Tuvalu	2000	9	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	10	60	99	-	1	0		99	-	1	0		100	-	0	0	
Uganda	2000	23 758	12	30	30	26	14	0.59	24	31	29	16	0.54	71	20	8	1	0.09
	2015	39 032	16	39	38	15	8		32	41	17	10		73	20	6	1	
Ukraine	2000	48 746	67	96	2	2	0	0.14	93	1	6	0	0.41	97	3	1	0	0.01
	2015	44 824	70	98	2	0	0		100	0	0	0		97	3	0	0	
United Arab Emirates	2000	3 050	80	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	9 157	86	100	-	0	0		100	-	0	0		100	-	0	0	
United Kingdom	2000	58 867	79	100	-	0	0	0.00	100	-	0	0	0.00	100	-	0	0	0.00
	2015	64 716	83	100	-	0	0		100	-	0	0		100	-	0	0	
United Republic of Tanzania	2000	33 992	22	32	8	43	17	1.24	21	8	50	21	1.06	69	8	20	3	0.67
	2015	53 470	32	50	13	24	13		37	15	31	18		79	9	9	3	
United States Virgin Islands	2000	109	93	100	-	0	0	0.00	-	-	-	-	-	-	-	-	-	-
	2015	106	95	100	-	0	0		-	-	-	-		-	-	-	-	
United States of America	2000	282 896	79	-	-	-	-	-	-	-	-	-	-	100	-	0	0	0.00
	2015	321 774	82	99	-	1	0		97	-	3	0		100	-	0	0	
Uruguay	2000	3 321	92	97	1	2	0	0.17	72	4	22	2	1.42	99	0	1	0	0.04
	2015	3 432	95	99	1	0	0		94	5	1	0		100	0	0	0	
Uzbekistan	2000	24 518	37	85	6	3	6	-	79	8	5	7	-	95	1	0	3	0.23
	2015	29 893	36	-	-	-	-		-	-	-	-		99	1	0	0	
Vanuatu	2000	185	22	82	1	11	7	0.59	78	1	13	8	0.64	96	0	4	0	0.25
	2015	265	26	91	1	2	6		87	1	3	8		99	0	0	0	
Venezuela (Bolivarian Republic of)	2000	24 481	88	96	-	1	3	0.09	82	-	1	17	0.30	98	-	1	1	0.05
	2015	31 108	89	97	-	2	1		86	-	5	9		99	-	1	0	
Viet Nam	2000	80 286	24	78	3	10	9	0.89	74	2	12	12	1.13	90	5	3	2	0.12
	2015	93 448	34	91	3	5	0		91	1	7	1		92	6	2	0	
Wallis and Futuna Islands	2000	14	0	100	-	0	0	-0.01	100	-	0	0	-0.01	-	-	-	-	-
	2015	13	0	100	-	0	0		100	-	0	0		-	-	-	-	
West Bank and Gaza Strip	2000	3 224	72	88	0	10	1	-0.04	84	1	12	3	0.64	90	0	9	1	-0.28
	2015	4 668	75	88	0	12	0		94	1	5	0		86	0	14	0	
Western Sahara	2000	306	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	573	81	-	-	-	-		-	-	-	-		-	-	-	-	
Yemen	2000	17 795	26	43	12	40	5	1.84	30	12	53	6	2.20	79	14	6	1	0.38
	2015	26 832	35	70	21	4	5		63	25	6	7		85	15	0	0	
Zambia	2000	10 585	35	49	5	28	19	0.84	30	5	38	27	0.96	83	4	11	2	0.14
	2015	16 212	41	61	6	21	12		44	7	29	19		86	4	9	1	
Zimbabwe	2000	12 500	34	70	10	14	6	-0.25	58	13	20	8	-0.30	94	4	1	0	-0.05
	2015	15 603	32	67	10	17	7		54	12	23	11		94	4	3	0	

COUNTRY, AREA OR TERRITORY	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Tokelau	2000	-	74	-	-	-	-	-	74	-	-	-	-	NA	NA	NA	NA	NA	NA
	2015	-	91	-	-	94	5	-	91	-	-	94	5	NA	NA	NA	NA	NA	NA
Tonga	2000	-	98	-	-	96	2	-	99	-	-	97	2	-	97	-	-	94	3
	2015	-	71	-	-	94	6	-	71	-	-	97	3	-	74	-	-	86	14
Trinidad and Tobago	2000	-	82	73	-	83	10	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	95	80	-	92	6	-	-	-	-	-	-	-	-	-	-	-	-
Tunisia	2000	37	86	92	37	80	12	-	70	-	-	58	23	-	96	98	-	92	6
	2015	93	93	99	99	87	12	-	83	-	-	68	28	-	98	100	-	96	4
Turkey	2000	-	94	-	-	91	4	-	86	-	-	80	10	-	98	-	-	98	1
	2015	-	96	-	-	99	0	-	94	-	-	100	0	-	97	-	-	99	0
Turkmenistan	2000	67	71	-	70	56	32	50	58	-	50	29	50	87	87	-	94	88	11
	2015	86	90	-	92	56	44	87	94	-	87	33	67	86	86	-	97	79	21
Turks and Caicos Islands	2000	-	85	-	-	42	45	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	90	-	-	68	26	-	-	-	-	-	-	-	-	-	-	-	-
Tuvalu	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	97	-	-	99	0	-	-	-	-	99	0	0	-	0	50	100	0
Uganda	2000	4	4	52	31	9	50	1	1	49	24	2	53	25	25	78	84	60	31
	2015	6	6	67	42	19	58	4	4	65	32	11	62	18	18	79	93	56	37
Ukraine	2000	65	66	-	91	79	18	-	6	-	-	49	45	-	95	-	-	94	5
	2015	92	92	-	93	66	34	-	100	-	-	26	74	-	89	-	-	83	16
United Arab Emirates	2000	-	89	99	-	79	21	-	85	-	-	71	29	-	90	99	-	80	19
	2015	-	89	99	-	-	-	-	85	-	-	-	-	-	90	99	-	-	-
United Kingdom	2000	96	96	-	100	100	0	-	97	-	-	100	0	-	95	-	-	100	0
	2015	96	96	-	100	100	0	-	97	-	-	100	0	-	95	-	-	100	0
United Republic of Tanzania	2000	-	2	19	-	35	5	-	0	15	-	24	4	8	8	29	66	72	5
	2015	-	19	29	-	35	28	-	8	27	-	24	27	34	42	34	75	59	30
United States Virgin Islands	2000	-	99	-	-	68	32	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	99	-	-	64	36	-	-	-	-	-	-	-	-	-	-	-	-
United States of America	2000	-	-	-	-	-	-	-	-	-	-	-	-	100	100	100	100	100	0
	2015	99	99	99	99	99	0	-	97	96	-	95	2	100	100	100	100	100	0
Uruguay	2000	-	96	97	-	96	2	-	72	-	-	58	18	94	98	99	94	99	0
	2015	-	99	100	-	100	0	-	94	-	-	94	4	94	99	100	94	100	0
Uzbekistan	2000	51	51	-	85	73	18	32	32	-	82	62	25	84	84	96	91	91	5
	2015	-	-	-	-	-	-	-	-	-	-	-	-	87	87	100	93	100	0
Vanuatu	2000	-	45	-	-	50	32	-	38	-	-	41	38	-	68	-	-	83	13
	2015	-	50	-	-	32	60	-	43	-	-	23	65	-	71	-	-	56	44
Venezuela (Bolivarian Republic of)	2000	-	87	60	-	85	11	-	53	51	-	50	32	-	91	61	-	90	8
	2015	-	89	60	-	86	11	-	59	53	-	52	34	-	93	61	-	90	8
Viet Nam	2000	-	65	-	-	13	67	-	57	-	-	2	74	-	90	95	-	49	47
	2015	-	88	-	-	40	55	-	91	-	-	20	72	-	83	98	-	78	20
Wallis and Futuna Islands	2000	-	99	-	-	100	0	-	99	-	-	100	0	NA	NA	NA	NA	NA	NA
	2015	-	99	-	-	99	0	-	99	-	-	99	0	NA	NA	NA	NA	NA	NA
West Bank and Gaza Strip	2000	-	81	81	-	84	4	-	81	79	-	69	16	-	81	81	-	90	0
	2015	-	80	80	-	52	36	-	90	89	-	81	14	-	77	77	-	42	43
Western Sahara	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yemen	2000	-	31	35	-	43	12	-	16	27	-	35	7	-	70	58	-	66	27
	2015	-	49	58	-	42	50	-	35	56	-	24	64	-	75	62	-	76	24
Zambia	2000	-	20	-	-	33	20	-	4	-	-	7	28	49	49	70	67	82	6
	2015	-	23	-	-	29	38	-	6	-	-	4	48	47	47	90	89	66	23
Zimbabwe	2000	-	39	61	-	42	39	-	11	60	-	13	58	-	94	62	-	98	0
	2015	-	32	57	-	29	47	-	14	55	-	9	57	-	70	61	-	71	26

ANNEX 4
National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Afghanistan	2000	19 702	21	24	5	44	26	1.02	-0.86	22	3	43	32	0.74	-0.87	31	12	49	8	1.67	-0.51
	2015	32 527	27	39	9	38	14			33	5	43	18			56	21	23	0		
Albania	2000	3 122	42	88	2	9	1	0.62	-0.04	82	2	14	1	0.98	-0.05	97	2	1	0	0.09	-0.03
	2015	2 897	57	98	2	0	0			97	3	0	0			98	2	0	0		
Algeria	2000	31 184	60	84	8	1	6	0.25	-0.37	72	10	3	15	0.66	-0.84	91	7	0	1	-0.11	-0.04
	2015	39 667	71	87	8	3	1			82	11	4	2			90	7	3	0		
American Samoa	2000	58	89	63	37	1	0	-0.03	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	56	87	62	36	1	0			-	-	-	-			-	-	-	-		
Andorra	2000	65	92	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	70	85	100	0	0	0			100	0	0	0			100	0	0	0		
Angola	2000	15 059	32	20	8	20	51	1.26	-1.23	8	2	24	67	0.92	-0.70	48	21	13	19	0.99	-1.07
	2015	25 022	44	39	15	13	33			21	5	17	56			62	27	7	3		
Anguilla	2000	11	100	90	2	6	2	0.48	-0.14	NA	NA	NA	NA	NA	NA	90	2	6	2	0.48	-0.14
	2015	15	100	97	2	1	0			NA	NA	NA	NA			97	2	1	0		
Antigua and Barbuda	2000	78	32	82	4	12	1	0.34	-0.07	-	-	-	-	-	-	-	-	-	-	-	-
	2015	92	24	88	4	8	0			-	-	-	-			-	-	-	-		
Argentina	2000	37 057	89	95	3	2	0	0.00	0.09	97	0	3	0	-0.21	0.00	95	4	2	0	0.03	0.10
	2015	43 417	92	95	3	1	1			94	0	6	0			95	4	0	1		
Armenia	2000	3 076	65	90	2	8	0	0.08	-0.01	82	0	18	0	0.12	0.00	95	3	2	0	0.09	-0.01
	2015	3 018	63	92	2	7	0			83	0	17	0			96	3	1	0		
Aruba	2000	91	47	98	0	1	1	-0.05	0.03	-	-	-	-	-	-	-	-	-	-	-	-
	2015	104	42	98	0	1	1			-	-	-	-			-	-	-	-		
Australia	2000	19 107	87	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	23 969	89	100	0	0	0			-	-	-	-			-	-	-	-		
Austria	2000	8 051	66	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	8 545	66	100	0	0	0			100	0	0	0			100	0	0	0		
Azerbaijan	2000	8 118	51	66	4	30	0	1.58	0.00	54	2	45	0	2.21	0.01	77	7	16	0	0.97	-0.01
	2015	9 754	55	89	6	5	0			87	2	11	0			92	8	0	0		
Bahamas	2000	298	82	89	4	6	1	0.23	-0.08	-	-	-	-	-	-	-	-	-	-	-	-
	2015	388	83	92	5	3	0			-	-	-	-			-	-	-	-		
Bahrain	2000	667	88	100	0	0	0	0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	1 377	89	100	0	0	0			-	-	-	-			-	-	-	-		
Bangladesh	2000	131 281	24	25	12	44	18	1.44	-1.22	21	9	48	22	1.52	-1.48	41	22	32	5	0.86	-0.36
	2015	160 996	34	47	22	31	0			43	19	38	0			54	29	18	0		
Barbados	2000	270	34	88	2	10	1	0.57	0.01	-	-	-	-	-	-	-	-	-	-	-	-
	2015	284	31	96	2	1	1			-	-	-	-			-	-	-	-		
Belarus	2000	9 952	70	95	5	0	0	-0.05	0.00	97	2	0	0	-0.16	0.00	94	6	0	0	0.01	0.00
	2015	9 496	77	94	5	1	0			95	2	3	0			94	6	0	0		
Belgium	2000	10 268	97	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	11 299	98	99	1	0	0			99	1	0	0			99	1	0	0		
Belize	2000	247	48	83	8	5	4	0.31	-0.21	79	10	4	7	0.36	-0.37	87	7	5	1	0.29	-0.03
	2015	359	44	87	9	3	1			84	10	4	2			91	7	1	1		
Benin	2000	6 949	38	10	14	8	68	0.26	-0.84	3	6	5	86	0.14	-0.63	21	28	13	39	0.28	-0.70
	2015	10 880	44	14	20	11	55			5	9	9	76			25	34	13	28		
Bermuda	2000	64	100	100	0	0	0	-0.01	0.00	NA	NA	NA	NA	NA	NA	100	0	0	0	-0.01	0.00
	2015	62	100	100	0	0	0			NA	NA	NA	NA			100	0	0	0		
Bhutan	2000	564	25	53	7	29	11	0.65	-0.77	46	4	37	14	0.74	-0.91	75	15	5	5	-0.16	-0.36
	2015	775	39	63	8	29	0			57	4	39	0			72	15	13	0		

"-" = no estimate, NA = not applicable. Annual rates of change in percentage points per year, calculated as the difference between the 2015 and 2000 estimates, divided by 15. For JMP estimation methods see Annex 1. For unrounded estimates see www.washdata.org.

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Afghanistan	2000	-	-	-	-	17	6	2	-	-	-	-	20	1	1	-	-	-	-	7	19	5
	2015	-	-	-	-	30	7	3	-	-	-	-	31	1	1	-	-	-	-	30	19	7
Albania	2000	55	13	0	42	11	14	63	48	20	0	28	18	22	42	64	2	0	62	1	3	93
	2015	65	1	0	64	0	2	96	64	2	0	62	0	4	93	65	0	0	65	0	0	98
Algeria	2000	21	10	0	11	4	16	64	24	17	0	7	7	26	39	19	5	0	14	3	8	81
	2015	19	6	0	13	4	8	76	24	15	0	9	10	20	52	17	2	0	15	1	2	86
American Samoa	2000	-	-	-	-	16	27	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	7	25	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Andorra	2000	6	0	0	6	0	-	100	6	0	0	6	0	-	100	6	0	0	6	0	-	100
	2015	100	0	0	100	0	-	100	100	0	0	100	0	-	100	100	0	0	100	0	-	100
Angola	2000	-	-	-	-	15	0	6	-	-	-	-	6	0	1	-	-	-	-	33	0	14
	2015	-	-	-	-	5	28	7	-	-	-	-	4	16	1	-	-	-	-	5	44	13
Anguilla	2000	-	-	-	-	0	89	1	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	0	89	1
	2015	-	-	-	-	4	92	1	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	4	92	1
Antigua and Barbuda	2000	-	-	-	5	10	68	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	1	11	76	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Argentina	2000	29	25	0	4	22	27	46	-	-	-	0	64	29	4	27	22	0	5	18	26	51
	2015	26	19	0	8	10	28	57	-	-	-	1	27	56	10	25	17	0	8	9	25	61
Armenia	2000	-	-	-	-	28	0	62	-	-	-	-	62	0	19	-	-	-	-	10	0	85
	2015	-	-	-	-	25	1	66	-	-	-	-	64	2	18	-	-	-	-	2	0	94
Aruba	2000	-	-	-	14	1	82	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	7	0	90	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Australia	2000	65	6	0	60	12	-	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	74	6	0	68	12	-	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Austria	2000	97	3	0	94	1	5	94	92	8	0	84	0	15	84	99	1	0	98	2	0	98
	2015	97	3	0	94	1	5	94	92	8	0	84	0	15	84	99	1	0	98	2	0	98
Azerbaijan	2000	-	-	-	36	28	1	37	-	-	-	0	52	1	0	71	4	0	68	6	1	70
	2015	-	-	-	35	52	1	37	-	-	-	6	80	1	6	73	16	0	58	30	1	61
Bahamas	2000	-	-	-	9	3	75	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	10	1	79	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bahrain	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangladesh	2000	-	-	-	-	16	7	2	15	15	0	0	17	3	0	-	-	-	-	14	20	7
	2015	-	-	-	-	34	9	3	32	32	0	0	37	6	0	-	-	-	-	30	15	9
Barbados	2000	-	-	-	0	78	10	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	5	82	10	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	2000	82	13	0	69	23	2	70	66	31	0	36	58	3	36	88	5	0	83	9	1	84
	2015	76	5	0	71	4	5	85	71	13	0	58	12	14	69	78	2	0	75	2	3	89
Belgium	2000	70	30	0	40	31	28	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	97	2	0	95	0	5	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belize	2000	-	-	-	8	38	32	13	-	-	-	0	57	21	1	-	-	-	16	15	43	28
	2015	-	-	-	5	26	53	8	-	-	-	0	38	45	1	-	-	-	11	9	64	19
Benin	2000	-	-	-	-	9	1	0	-	-	-	-	3	0	0	-	-	-	-	17	3	0
	2015	-	-	-	-	12	2	1	-	-	-	-	5	0	0	-	-	-	-	20	3	1
Bermuda	2000	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-	-
Bhutan	2000	-	-	-	-	40	10	4	-	-	-	-	36	9	1	-	-	-	-	52	12	10
	2015	-	-	-	-	13	45	5	-	-	-	-	23	33	1	-	-	-	-	0	62	10

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Bolivia (Plurinational State of)	2000	8 340	62	38	15	14	33	0.96	-1.26	18	4	16	63	0.60	-1.48	51	21	13	15	0.91	-0.85
	2015	10 725	69	53	20	13	14			27	6	27	40			64	27	6	3		
Bosnia and Herzegovina	2000	3 793	39	95	1	4	1	-0.01	-0.05	93	1	6	1	-0.04	-0.06	98	1	1	0	0.04	-0.02
	2015	3 810	40	95	1	5	0			92	1	7	0			99	1	1	0		
Botswana	2000	1 737	53	56	6	17	21	0.39	-0.29	36	7	15	41	0.34	-0.32	73	4	19	4	0.24	-0.09
	2015	2 262	57	62	6	15	17			42	8	14	36			77	5	16	2		
Brazil	2000	175 786	81	73	1	17	9	0.86	-0.46	36	1	30	34	1.48	-1.55	82	1	14	3	0.59	-0.17
	2015	207 848	86	86	1	11	2			58	1	30	11			91	1	8	0		
British Virgin Islands	2000	21	42	97	0	2	1	0.00	-0.06	-	-	-	-	-	-	-	-	-	-	-	-
	2015	30	46	97	0	3	0			-	-	-	-			-	-	-	-		
Brunei Darussalam	2000	331	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	423	77	96	0	1	3			97	0	2	1			96	0	1	3		
Bulgaria	2000	8 001	69	86	14	0	0	0.01	0.00	84	16	0	0	0.00	0.00	87	13	0	0	0.00	0.00
	2015	7 150	74	86	14	0	0			84	16	0	0			87	13	0	0		
Burkina Faso	2000	11 608	18	10	9	10	71	0.86	-1.56	2	3	10	85	0.65	-1.31	44	37	9	9	0.24	-0.14
	2015	18 106	30	23	24	5	48			12	18	5	65			48	40	5	7		
Burundi	2000	6 767	8	41	7	49	2	0.60	0.04	42	5	50	3	0.60	0.06	34	30	35	2	0.81	-0.06
	2015	11 179	12	50	11	36	3			51	6	39	3			46	40	13	1		
Cabo Verde	2000	439	53	37	4	35	23	1.85	0.32	23	1	45	31	1.85	1.05	50	6	27	17	1.51	0.11
	2015	521	66	65	7	0	28			51	3	0	47			73	9	0	18		
Cambodia	2000	12 198	19	12	1	4	83	2.44	-2.81	4	1	3	92	2.31	-2.76	49	5	4	42	2.61	-2.65
	2015	15 578	21	49	8	3	41			39	7	4	51			88	9	1	3		
Cameroon	2000	15 928	46	40	18	35	7	-0.06	-0.02	26	10	51	13	-0.49	0.08	56	28	15	1	-0.02	0.03
	2015	23 344	54	39	18	36	7			19	7	60	14			56	28	15	1		
Canada	2000	30 702	79	99	0	2	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	35 940	82	99	0	2	0			-	-	-	-			-	-	-	-		
Caribbean Netherlands	2000	14	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	25	75	-	-	-	-			-	-	-	-			-	-	-	-		
Cayman Islands	2000	42	100	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
	2015	60	100	96	0	4	0			NA	NA	NA	NA			96	0	4	0		
Central African Republic	2000	3 726	38	15	9	53	23	0.67	0.06	8	4	53	35	0.05	0.06	26	17	54	4	1.54	0.20
	2015	4 900	40	25	15	36	24			9	4	51	36			49	31	13	6		
Chad	2000	8 343	22	10	5	15	71	-0.02	-0.21	6	2	7	85	-0.23	-0.19	23	15	43	18	0.63	-0.11
	2015	14 037	22	10	6	17	68			3	1	14	82			33	22	29	17		
Channel Islands	2000	149	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	164	31	99	0	2	0			-	-	-	-			-	-	-	-		
Chile	2000	15 170	86	92	0	6	2	0.54	-0.15	67	0	29	3	2.12	-0.16	96	0	2	2	0.28	-0.15
	2015	17 948	90	100	0	0	0			99	0	0	1			100	0	0	0		
China	2000	1 269 975	36	61	4	33	2	0.96	-0.06	52	3	42	4	0.63	-0.07	77	5	18	0	0.64	0.04
	2015	1 376 049	56	75	5	19	2			61	3	33	3			86	6	7	1		
China, Hong Kong Special Administrative Region	2000	6 784	100	97	0	3	0	-0.04	0.00	-	-	-	-	-	-	97	0	3	0	-0.04	0.00
	2015	7 288	100	96	0	4	0			-	-	-	-			96	0	4	0		
China, Macao Special Administrative Region	2000	432	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	588	100	-	-	-	-			-	-	-	-			-	-	-	-		
Colombia	2000	40 404	72	76	8	8	8	0.58	-0.33	51	4	16	29	1.43	-1.05	86	9	5	0	0.18	0.00
	2015	48 229	76	84	9	4	3			72	5	9	14			88	9	2	0		
Comoros	2000	548	28	27	5	68	1	0.49	0.00	22	4	74	1	0.46	0.00	39	7	54	1	0.54	-0.01
	2015	788	28	34	6	59	1			29	5	65	1			47	8	44	1		
Congo	2000	3 109	59	13	25	53	9	0.15	-0.04	6	9	69	17	0.00	0.21	18	37	42	3	0.15	-0.07
	2015	4 620	65	15	30	46	8			6	9	66	20			20	42	36	2		
Cook Islands	2000	18	65	92	0	7	1	0.37	-0.04	-	-	-	-	-	-	-	-	-	-	-	-
	2015	21	75	98	0	2	0			-	-	-	-			-	-	-	-		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Bolivia (Plurinational State of)	2000	15	8	0	7	9	7	22	-	-	-	1	13	3	2	19	9	0	10	8	9	34
	2015	19	8	0	11	9	7	36	-	-	-	1	19	5	4	22	7	0	15	6	8	51
Bosnia and Herzegovina	2000	23	23	0	1	17	28	50	-	-	-	0	25	36	32	12	10	0	1	5	16	78
	2015	23	22	0	1	0	44	51	-	-	-	1	0	63	29	9	8	0	2	0	16	83
Botswana	2000	-	-	-	-	41	4	11	-	-	-	-	31	2	3	-	-	-	-	50	6	18
	2015	-	-	-	-	58	4	0	-	-	-	-	39	2	0	-	-	-	-	71	6	0
Brazil	2000	26	16	0	11	12	20	42	-	-	-	1	20	12	4	29	16	0	13	10	22	50
	2015	39	11	0	27	9	14	64	-	-	-	4	25	25	8	40	9	0	31	6	12	73
British Virgin Islands	2000	-	-	-	-	0	63	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	2	73	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brunei Darussalam	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	1	-	95	-	-	-	-	2	-	96	-	-	-	-	1	-	95
Bulgaria	2000	72	14	0	58	28	-	58	-	-	-	19	65	-	19	81	5	0	76	11	-	76
	2015	49	10	0	39	20	-	66	-	-	-	15	59	-	25	51	3	0	48	6	-	81
Burkina Faso	2000	-	-	-	-	9	1	0	-	-	-	-	2	0	0	-	-	-	-	40	2	2
	2015	-	-	-	-	21	1	0	-	-	-	-	12	0	0	-	-	-	-	43	3	2
Burundi	2000	-	-	-	-	39	1	2	-	-	-	-	41	0	0	-	-	-	-	18	7	9
	2015	-	-	-	-	48	2	1	-	-	-	-	51	0	0	-	-	-	-	31	12	3
Cabo Verde	2000	-	-	-	-	19	9	10	-	-	-	-	23	0	0	-	-	-	-	16	16	18
	2015	-	-	-	-	0	45	20	-	-	-	-	0	50	1	-	-	-	-	0	44	29
Cambodia	2000	-	-	-	-	1	5	7	-	-	-	-	1	1	2	-	-	-	-	1	19	29
	2015	-	-	-	-	0	38	11	-	-	-	-	0	36	3	-	-	-	-	0	44	44
Cameroon	2000	-	-	-	-	34	5	1	-	-	-	-	26	0	0	-	-	-	-	45	10	1
	2015	-	-	-	-	30	8	0	-	-	-	-	18	1	0	-	-	-	-	40	15	1
Canada	2000	73	5	0	68	2	9	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	77	8	0	69	1	14	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caribbean Netherlands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cayman Islands	2000	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-	-
	2015	-	-	-	-	7	70	19	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	7	70	19
Central African Republic	2000	-	-	-	-	15	0	0	-	-	-	-	8	0	0	-	-	-	-	25	1	0
	2015	-	-	-	-	25	0	0	-	-	-	-	9	0	0	-	-	-	-	48	1	0
Chad	2000	-	-	-	-	9	0	0	-	-	-	-	6	0	0	-	-	-	-	21	0	2
	2015	-	-	-	-	9	1	0	-	-	-	-	3	0	0	-	-	-	-	29	2	1
Channel Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	0	17	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chile	2000	27	6	0	21	5	7	80	-	-	-	3	28	28	11	47	2	0	45	1	3	91
	2015	85	5	0	80	1	9	90	-	-	-	20	13	63	22	81	1	0	80	0	2	98
China	2000	29	19	0	10	21	7	32	30	28	0	3	33	10	9	26	2	0	24	0	3	74
	2015	60	20	0	40	30	0	45	42	34	0	8	52	0	9	73	8	0	65	12	1	74
China, Hong Kong Special Administrative Region	2000	17	2	0	15	3	-	94	-	-	-	-	-	-	-	17	2	0	15	3	-	94
	2015	16	2	0	14	4	-	93	-	-	-	-	-	-	-	16	2	0	14	4	-	93
China, Macao Special Administrative Region	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colombia	2000	17	7	0	10	1	12	62	-	-	-	3	3	31	16	16	3	0	13	1	5	80
	2015	20	9	0	11	1	17	67	-	-	-	2	4	56	12	16	3	0	13	0	5	83
Comoros	2000	-	-	-	-	27	0	0	-	-	-	-	22	0	0	-	-	-	-	39	0	0
	2015	-	-	-	-	25	5	4	-	-	-	-	22	3	3	-	-	-	-	32	8	7
Congo	2000	-	-	-	-	10	1	2	-	-	-	-	6	0	0	-	-	-	-	13	2	3
	2015	-	-	-	-	12	2	0	-	-	-	-	5	0	0	-	-	-	-	16	3	1
Cook Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Costa Rica	2000	3 925	59	94	1	4	1	0.20	-0.04	90	1	7	1	0.28	-0.05	97	1	2	1	0.07	-0.03
	2015	4 808	77	97	1	2	0			94	1	4	0			98	1	1	0		
Côte d'Ivoire	2000	16 518	44	22	18	23	36	0.50	-0.84	9	11	21	59	0.25	-0.83	40	29	25	7	0.31	-0.16
	2015	22 702	54	30	24	22	24			13	15	26	47			45	32	19	4		
Croatia	2000	4 428	56	97	2	1	0	0.02	-0.02	96	2	1	1	0.02	-0.04	98	1	1	0	0.02	0.00
	2015	4 240	59	97	2	1	0			96	2	2	0			98	1	0	0		
Cuba	2000	11 117	75	89	5	4	2	0.11	-0.10	80	6	10	5	0.55	-0.26	92	5	2	1	-0.04	-0.04
	2015	11 390	77	91	5	4	0			88	6	5	1			92	5	4	0		
Curaçao	2000	132	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	157	89	99	0	1	0			-	-	-	-			-	-	-	-		
Cyprus	2000	943	69	100	0	0	0	-0.04	0.00	100	0	0	0	-0.09	0.00	100	0	0	0	-0.02	0.00
	2015	1 165	67	99	0	1	0			99	0	1	0			100	0	0	0		
Czech Republic	2000	10 263	74	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	10 543	73	99	1	0	0			99	1	0	0			99	1	0	0		
Democratic People's Republic of Korea	2000	22 840	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	25 155	61	77	4	18	0			68	3	29	0			83	6	12	0		
Democratic Republic of the Congo	2000	48 049	35	22	22	45	10	-0.18	0.12	21	16	49	14	-0.26	0.27	24	34	39	3	-0.09	0.07
	2015	77 267	42	20	21	47	12			18	13	51	18			23	32	41	4		
Denmark	2000	5 338	85	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	5 669	88	100	0	0	0			100	0	0	0			100	0	0	0		
Djibouti	2000	723	77	51	4	29	16	0.03	0.48	13	2	25	60	0.00	1.12	63	5	31	2	0.00	0.33
	2015	888	77	51	4	22	23			13	2	8	77			63	5	26	7		
Dominica	2000	70	65	64	3	16	17	0.92	-0.90	-	-	-	-	-	-	-	-	-	-	-	-
	2015	73	70	78	3	15	4			-	-	-	-			-	-	-	-		
Dominican Republic	2000	8 563	62	79	12	4	5	0.22	-0.10	70	14	7	9	0.23	-0.09	85	11	2	2	0.00	0.00
	2015	10 528	79	83	12	2	3			74	15	4	8			85	11	2	2		
Ecuador	2000	12 629	60	71	8	7	14	1.02	-0.77	53	5	12	29	1.81	-1.40	82	9	3	5	0.47	-0.32
	2015	16 144	64	86	9	1	3			80	8	3	8			89	10	0	0		
Egypt	2000	68 335	43	92	4	2	2	0.05	-0.12	89	5	2	3	0.05	-0.20	97	2	1	0	0.04	0.00
	2015	91 508	43	93	4	3	0			90	5	5	0			97	2	0	0		
El Salvador	2000	5 812	59	82	6	1	11	0.61	-0.61	71	5	2	21	1.07	-1.10	90	6	1	3	0.24	-0.23
	2015	6 127	67	91	7	1	2			87	7	2	5			93	7	0	0		
Equatorial Guinea	2000	531	39	80	8	11	0	-0.38	0.29	80	7	14	0	-0.59	0.34	81	11	8	0	-0.05	0.23
	2015	845	40	75	8	13	4			71	6	18	5			80	11	6	3		
Eritrea	2000	3 535	18	8	4	1	88	0.25	-0.79	2	0	0	98	0.31	-0.62	36	19	5	41	-0.47	-0.52
	2015	5 228	23	11	5	8	76			6	1	4	89			29	15	23	33		
Estonia	2000	1 399	69	99	0	1	0	0.03	0.00	99	0	1	0	0.07	0.00	99	0	0	0	0.02	0.00
	2015	1 313	68	100	0	0	0			100	0	0	0			100	0	0	0		
Ethiopia	2000	66 444	15	3	4	13	80	0.26	-3.51	1	0	9	90	0.22	-3.84	15	25	37	23	0.20	-1.04
	2015	99 391	19	7	7	59	27			4	1	62	32			18	30	44	7		
Falkland Islands (Malvinas)	2000	3	68	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	3	76	100	0	0	0			100	0	0	0			100	0	0	0		
Faroe Islands	2000	46	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	48	42	91	0	9	0			-	-	-	-			-	-	-	-		
Fiji	2000	811	48	80	3	16	1	1.01	-0.03	71	3	25	1	1.63	-0.06	91	3	5	0	0.33	0.00
	2015	892	54	96	4	0	0			95	4	1	0			96	4	0	0		
Finland	2000	5 176	82	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	5 503	84	99	1	0	0			99	1	0	0			99	1	0	0		
France	2000	59 387	76	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	64 395	80	99	1	0	0			99	1	0	0			99	1	0	0		
French Guiana	2000	163	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	269	84	90	0	10	0			-	-	-	-			-	-	-	-		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Costa Rica	2000	-	-	-	1	4	62	29	-	-	-	0	8	76	6	-	-	-	2	1	52	44
	2015	-	-	-	1	0	74	23	-	-	-	0	0	88	6	-	-	-	1	0	70	29
Côte d'Ivoire	2000	-	-	-	-	14	5	4	-	-	-	-	8	1	0	-	-	-	-	21	10	9
	2015	-	-	-	-	18	9	4	-	-	-	-	11	2	0	-	-	-	-	23	15	7
Croatia	2000	60	20	0	39	5	36	56	-	-	-	20	7	60	29	64	10	0	55	3	16	78
	2015	60	20	0	40	5	35	58	-	-	-	20	8	60	29	65	10	0	55	3	16	78
Cuba	2000	32	25	0	8	23	26	40	-	-	-	2	49	18	12	31	22	0	9	15	29	49
	2015	31	22	0	9	20	24	47	-	-	-	3	47	28	14	28	17	0	11	12	23	57
Curaçao	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	80	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	2000	76	24	0	53	47	-	53	-	-	-	9	91	-	9	87	14	0	73	27	-	73
	2015	76	24	0	52	48	-	52	-	-	-	9	90	-	9	86	13	0	73	27	-	73
Czech Republic	2000	87	5	0	82	1	9	88	79	16	0	63	3	28	68	90	2	0	89	1	3	96
	2015	82	5	0	76	1	10	88	75	16	0	59	3	28	68	85	2	0	83	1	3	96
Democratic People's Republic of Korea	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	18	4	55	-	-	-	-	23	6	40	-	-	-	-	15	3	65
Democratic Republic of the Congo	2000	-	-	-	-	19	2	1	-	-	-	-	21	0	0	-	-	-	-	17	5	2
	2015	-	-	-	-	17	3	0	-	-	-	-	17	0	0	-	-	-	-	18	5	0
Denmark	2000	93	5	0	88	0	10	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	93	5	0	88	0	10	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Djibouti	2000	-	-	-	-	36	10	5	-	-	-	-	13	0	0	-	-	-	-	43	13	6
	2015	-	-	-	-	36	10	5	-	-	-	-	13	0	0	-	-	-	-	43	13	6
Dominica	2000	-	-	-	0	14	37	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	0	12	51	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dominican Republic	2000	-	-	-	13	34	19	26	-	-	-	4	50	11	9	-	-	-	18	23	24	37
	2015	-	-	-	10	14	48	21	-	-	-	2	33	36	5	-	-	-	12	9	51	25
Ecuador	2000	42	32	0	10	20	15	36	43	40	0	3	31	12	10	42	27	0	15	13	18	52
	2015	42	27	0	16	6	25	55	57	50	0	6	16	42	22	34	13	0	21	1	15	74
Egypt	2000	53	33	0	20	61	5	27	-	-	-	3	79	7	4	62	19	0	43	36	2	59
	2015	61	17	0	43	12	22	58	-	-	-	26	20	36	34	70	3	0	67	3	3	91
El Salvador	2000	-	-	-	-	40	7	34	-	-	-	-	62	6	3	-	-	-	-	25	8	56
	2015	-	-	-	-	42	14	35	-	-	-	-	71	15	1	-	-	-	-	28	14	52
Equatorial Guinea	2000	-	-	-	-	66	5	9	-	-	-	-	72	5	3	-	-	-	-	58	6	17
	2015	-	-	-	-	61	5	8	-	-	-	-	59	5	7	-	-	-	-	65	6	9
Eritrea	2000	-	-	-	-	3	2	3	-	-	-	-	1	1	0	-	-	-	-	14	8	14
	2015	-	-	-	-	8	2	1	-	-	-	-	5	1	0	-	-	-	-	16	8	5
Estonia	2000	87	11	0	76	17	4	78	74	24	0	50	38	9	51	93	5	0	88	8	2	89
	2015	93	6	0	87	9	3	88	81	18	0	63	27	9	64	99	0	0	98	0	0	99
Ethiopia	2000	-	-	-	-	3	0	0	1	1	0	0	1	0	0	-	-	-	-	14	0	1
	2015	-	-	-	-	4	2	1	4	3	0	1	2	1	1	-	-	-	-	11	6	1
Falkland Islands (Malvinas)	2000	-	-	-	-	99	-	1	-	-	-	-	99	-	1	-	-	-	-	99	-	1
	2015	-	-	-	-	99	-	1	-	-	-	-	99	-	1	-	-	-	-	99	-	1
Faroe Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	0	0	-	0	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fiji	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Finland	2000	89	11	0	78	21	-	78	-	-	-	4	96	-	4	97	3	0	94	5	-	94
	2015	92	8	0	84	16	-	84	-	-	-	20	80	-	20	98	2	0	96	4	-	96
France	2000	88	11	0	77	4	17	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	92	6	0	86	0	12	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
French Guiana	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	58	2	0	56	4	0	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
French Polynesia	2000	237	56	98	0	0	2	-0.10	-0.10	-	-	-	-	-	-	-	-	-	-	-	-
	2015	283	56	97	0	3	0			-	-	-	-			-	-	-	-		
Gabon	2000	1 232	80	39	31	28	2	0.13	0.09	35	21	42	3	-0.15	0.25	40	34	25	1	0.14	0.07
	2015	1 725	87	41	33	23	3			32	20	42	7			42	35	20	3		
Gambia	2000	1 229	48	55	32	7	6	-0.90	-0.36	59	22	9	10	-1.56	-0.57	51	42	5	1	-0.36	-0.10
	2015	1 991	60	42	28	30	1			35	14	50	2			46	37	17	0		
Georgia	2000	4 744	53	97	2	0	1	-0.78	-0.07	97	1	0	2	-1.58	-0.15	96	3	1	0	-0.08	0.00
	2015	4 000	54	85	2	13	0			73	1	26	0			95	3	2	0		
Germany	2000	81 896	73	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	80 689	75	99	1	0	0			99	1	0	0			99	1	0	0		
Ghana	2000	18 825	44	11	45	22	22	0.21	-0.21	6	31	30	32	0.19	-0.08	17	62	12	8	0.09	-0.02
	2015	27 410	54	14	57	10	19			9	45	14	31			19	66	7	8		
Gibraltar	2000	27	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	32	100	-	-	-	-			-	-	-	-			-	-	-	-		
Greece	2000	10 954	73	97	1	1	1	0.16	-0.07	92	2	3	3	0.38	-0.21	98	1	1	0	0.07	-0.03
	2015	10 955	78	99	1	0	0			98	2	0	0			99	1	0	0		
Greenland	2000	56	82	100	0	0	0	-0.02	0.00	100	0	0	0	0.00	0.00	100	0	0	0	-0.02	0.00
	2015	56	86	99	0	0	0			100	0	0	0			99	0	0	0		
Grenada	2000	102	36	94	6	0	0	-1.06	0.24	-	-	-	-	-	-	-	-	-	-	-	-
	2015	107	36	78	5	13	4			-	-	-	-			-	-	-	-		
Guadeloupe	2000	431	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	468	98	99	0	1	0			-	-	-	-			-	-	-	-		
Guam	2000	155	93	89	9	3	0	0.11	0.05	-	-	-	-	-	-	-	-	-	-	-	-
	2015	170	95	90	9	0	1			-	-	-	-			-	-	-	-		
Guatemala	2000	11 689	45	59	8	19	14	0.54	-0.57	43	6	29	22	0.67	-0.82	79	10	7	4	0.13	-0.17
	2015	16 343	52	67	9	18	6			53	7	30	10			81	10	8	1		
Guinea	2000	8 799	31	9	12	51	27	0.86	-0.81	3	4	54	39	0.77	-1.02	22	31	45	2	0.80	-0.04
	2015	12 609	37	22	28	35	15			15	17	45	24			34	47	17	1		
Guinea-Bissau	2000	1 315	37	12	10	42	36	0.63	-1.33	4	2	39	55	0.29	-1.64	26	22	48	4	0.61	-0.13
	2015	1 844	49	21	17	45	16			8	5	57	30			35	31	33	2		
Guyana	2000	742	29	78	8	12	1	0.52	-0.05	75	9	15	2	0.64	-0.04	86	8	5	1	0.22	-0.05
	2015	767	29	86	9	4	1			85	10	4	1			89	8	2	0		
Haiti	2000	8 549	36	17	16	29	38	0.92	-1.25	10	7	30	53	0.77	-1.19	29	32	28	11	0.54	-0.19
	2015	10 711	59	31	31	20	19			22	15	28	35			37	42	14	8		
Holy See	2000	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	1	100	-	-	-	-			-	-	-	-			-	-	-	-		
Honduras	2000	6 243	45	62	7	11	20	1.19	-0.87	50	4	13	34	1.69	-1.38	77	10	10	4	0.48	-0.10
	2015	8 075	55	80	9	5	7			75	6	6	13			84	11	3	2		
Hungary	2000	10 224	65	98	2	0	0	0.00	0.00	99	1	0	0	0.00	0.00	98	2	0	0	0.00	0.00
	2015	9 855	71	98	2	0	0			99	1	0	0			98	2	0	0		
Iceland	2000	281	92	99	1	0	0	0.00	0.00	100	0	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	329	94	99	1	0	0			100	0	0	0			99	1	0	0		
India *	2000	1 053 481	28	22	6	6	66	1.50	-1.74	11	2	5	82	1.55	-1.77	51	18	8	23	0.97	-1.07
	2015	1 311 051	33	44	12	4	40			34	7	3	56			65	23	5	7		
Indonesia	2000	211 540	42	44	9	14	32	1.58	-1.31	28	7	19	45	1.92	-1.64	66	13	7	14	0.73	-0.58
	2015	257 564	54	68	15	5	12			57	14	8	21			77	15	2	5		
Iran (Islamic Republic of)	2000	65 850	64	87	11	1	1	0.07	-0.01	79	17	2	2	-0.01	0.00	92	7	1	0	-0.01	0.00
	2015	79 109	73	88	10	1	1			79	17	3	2			92	7	1	0		
Iraq	2000	23 575	68	75	9	10	5	0.69	-0.35	55	6	23	16	2.08	-1.09	85	11	4	0	0.06	-0.01
	2015	36 423	69	86	10	4	0			86	9	5	0			86	11	3	0		
Ireland	2000	3 842	59	89	7	5	0	0.24	0.00	91	4	5	0	0.26	0.00	87	8	5	0	0.25	0.00
	2015	4 688	63	92	7	1	0			95	5	1	0			91	8	1	0		

*See Box 8 in Section 5

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
French Polynesia	2000	-	-	-	-	2	77	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	0	80	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gabon	2000	-	-	-	-	27	-	12	-	-	-	-	31	-	3	-	-	-	-	26	-	14
	2015	-	-	-	-	23	-	18	-	-	-	-	27	-	5	-	-	-	-	22	-	20
Gambia	2000	-	-	-	-	46	7	2	-	-	-	-	57	1	0	-	-	-	-	36	12	3
	2015	-	-	-	-	29	11	2	-	-	-	-	34	1	0	-	-	-	-	28	16	2
Georgia	2000	-	-	-	0	45	2	50	-	-	-	0	83	3	11	6	6	0	0	12	1	84
	2015	-	-	-	4	41	2	42	-	-	-	0	68	3	2	17	9	0	8	18	1	77
Germany	2000	96	2	0	95	0	3	96	93	5	0	87	0	10	88	98	0	0	98	0	0	99
	2015	95	1	0	94	0	3	96	92	5	0	86	0	10	88	97	0	0	97	0	0	99
Ghana	2000	-	-	-	-	9	1	1	-	-	-	-	6	0	0	-	-	-	-	13	3	2
	2015	-	-	-	-	11	2	1	-	-	-	-	9	0	0	-	-	-	-	12	5	2
Gibraltar	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Greece	2000	73	24	0	49	48	-	49	-	-	-	12	81	-	12	80	18	0	63	35	-	63
	2015	75	24	0	52	47	-	52	-	-	-	12	86	-	12	81	18	0	63	36	-	63
Greenland	2000	93	5	0	88	0	10	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	93	5	0	88	0	9	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grenada	2000	-	-	-	0	45	46	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	0	17	55	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guadeloupe	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	16	12	47	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guam	2000	-	-	-	-	0	24	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	1	23	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guatemala	2000	-	-	-	-	23	4	32	-	-	-	-	29	4	9	-	-	-	-	15	4	60
	2015	-	-	-	-	20	10	37	-	-	-	-	31	13	9	-	-	-	-	10	7	64
Guinea	2000	-	-	-	-	9	0	0	-	-	-	-	3	0	0	-	-	-	-	21	0	1
	2015	-	-	-	-	17	4	1	-	-	-	-	14	1	0	-	-	-	-	22	10	2
Guinea-Bissau	2000	-	-	-	-	9	1	2	-	-	-	-	4	0	0	-	-	-	-	17	3	5
	2015	-	-	-	-	11	8	2	-	-	-	-	7	1	1	-	-	-	-	16	16	3
Guyana	2000	-	-	-	2	45	30	4	-	-	-	1	51	23	2	-	-	-	5	29	47	10
	2015	-	-	-	1	26	58	2	-	-	-	0	32	53	0	-	-	-	4	9	72	8
Haiti	2000	-	-	-	0	15	2	0	-	-	-	0	10	1	0	-	-	-	0	24	3	1
	2015	-	-	-	0	24	6	1	-	-	-	0	21	1	0	-	-	-	0	28	8	1
Holy See	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras	2000	-	-	-	1	22	16	24	-	-	-	0	30	19	1	15	13	0	2	14	13	50
	2015	-	-	-	1	22	23	35	-	-	-	0	38	31	6	15	13	0	2	9	16	58
Hungary	2000	52	24	0	28	48	-	50	-	-	-	10	80	-	18	53	15	0	38	30	-	67
	2015	76	22	0	53	45	-	53	-	-	-	18	80	-	18	83	15	0	67	30	-	67
Iceland	2000	69	4	0	65	0	7	91	-	-	-	1	0	99	1	70	0	0	70	0	0	99
	2015	69	3	0	66	0	6	93	-	-	-	1	0	99	1	70	0	0	70	0	0	99
India	2000	-	-	-	1	4	13	5	9	9	0	0	2	8	0	-	-	-	5	9	26	16
	2015	-	-	-	4	12	23	9	31	30	0	1	15	18	1	-	-	-	9	8	33	25
Indonesia	2000	-	-	-	-	13	31	-	-	-	-	-	12	16	-	-	-	-	-	14	52	-
	2015	-	-	-	-	15	53	-	-	-	-	-	15	42	-	-	-	-	-	14	63	-
Iran (Islamic Republic of)	2000	-	-	-	-	63	0	24	-	-	-	-	68	0	11	-	-	-	-	59	0	32
	2015	-	-	-	-	63	1	24	-	-	-	-	77	1	1	-	-	-	-	58	1	33
Iraq	2000	21	7	0	14	10	44	20	11	11	0	1	15	39	1	25	6	0	20	8	47	29
	2015	32	15	0	17	27	33	25	26	24	0	2	40	42	3	35	12	0	23	21	29	35
Ireland	2000	36	7	0	29	0	30	58	-	-	-	9	0	74	17	44	1	0	43	0	2	85
	2015	70	8	0	62	6	24	62	-	-	-	21	11	63	21	88	3	0	85	3	2	85

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Isle of Man	2000	77	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	88	52	-	-	-	-			-	-	-	-			-	-	-	-		
Israel	2000	6 014	91	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	8 064	92	100	0	0	0			100	0	0	0			100	0	0	0		
Italy	2000	57 147	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	59 798	69	99	0	1	0			99	0	1	0			99	0	1	0		
Jamaica	2000	2 600	52	84	13	2	1	0.11	-0.01	84	11	4	1	0.23	-0.04	84	15	1	1	0.01	0.02
	2015	2 793	55	85	13	1	1			87	11	0	1			84	15	1	1		
Japan	2000	125 715	79	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	126 573	93	100	0	0	0			-	-	-	-			-	-	-	-		
Jordan	2000	4 767	80	99	1	0	0	-0.12	-0.01	98	1	0	1	-0.14	-0.07	99	1	0	0	-0.12	0.00
	2015	7 595	84	97	1	2	0			96	1	3	0			97	1	2	0		
Kazakhstan	2000	14 957	56	97	2	1	0	0.06	0.00	97	1	2	0	0.11	-0.01	97	3	0	0	0.01	0.00
	2015	17 625	53	98	2	0	0			99	1	0	0			97	3	0	0		
Kenya	2000	31 066	20	31	20	32	17	-0.08	-0.32	30	16	34	20	-0.16	-0.34	34	40	24	2	0.10	0.02
	2015	46 050	26	30	21	37	12			28	14	42	15			35	42	20	3		
Kiribati	2000	84	43	30	7	14	49	0.63	-0.94	21	3	22	55	0.76	-0.31	43	12	4	41	0.43	-1.71
	2015	112	44	40	8	17	35			32	4	14	50			49	14	22	15		
Kuwait	2000	1 929	98	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	3 892	98	100	0	0	0			-	-	-	-			-	-	-	-		
Kyrgyzstan	2000	4 955	35	92	3	5	0	0.31	-0.01	92	1	7	0	0.46	0.00	92	6	1	0	0.05	-0.02
	2015	5 940	36	97	3	0	0			99	1	0	0			93	6	1	0		
Lao People's Democratic Republic	2000	5 343	22	28	1	9	62	2.97	-2.66	17	0	9	73	2.85	-2.57	67	3	8	22	1.73	-1.33
	2015	6 802	39	73	3	3	22			60	2	4	35			93	4	1	2		
Latvia	2000	2 371	68	87	1	13	0	0.42	0.00	72	0	27	0	0.76	0.00	93	1	6	0	0.27	0.00
	2015	1 971	67	93	1	6	0			84	1	16	0			97	1	2	0		
Lebanon	2000	3 235	86	75	1	24	0	1.35	-0.01	-	-	-	-	-	-	-	-	-	-	-	-
	2015	5 851	88	95	1	3	0			-	-	-	-			-	-	-	-		
Lesotho	2000	1 856	20	7	4	43	46	2.44	-1.05	4	1	40	54	2.57	-0.96	19	18	54	10	1.81	-0.43
	2015	2 135	27	44	17	9	30			43	7	10	40			46	43	7	4		
Liberia	2000	2 892	44	13	19	13	55	0.25	-0.82	4	12	7	77	0.14	-1.06	25	27	22	26	0.22	-0.21
	2015	4 503	50	17	25	16	42			6	19	14	61			28	31	18	23		
Libya	2000	5 337	76	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	6 278	79	100	0	0	0			-	-	-	-			-	-	-	-		
Liechtenstein	2000	33	15	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	38	14	100	0	0	0			-	-	-	-			-	-	-	-		
Lithuania	2000	3 486	67	85	2	13	0	0.58	0.00	68	2	30	0	1.18	0.00	93	2	5	0	0.30	0.00
	2015	2 878	67	94	2	4	0			86	2	12	0			97	2	1	0		
Luxembourg	2000	436	84	98	2	0	0	-0.01	0.00	99	1	0	0	-0.01	0.00	98	3	0	0	0.00	0.00
	2015	567	90	98	2	0	0			99	1	0	0			97	2	0	0		
Madagascar	2000	15 745	27	5	7	51	38	0.34	0.41	3	4	48	45	0.24	0.67	10	15	58	17	0.41	0.37
	2015	24 235	35	10	14	32	44			6	9	29	55			16	24	37	23		
Malawi	2000	11 193	15	34	19	31	16	0.60	-0.62	33	16	34	18	0.67	-0.71	46	36	16	2	0.19	-0.05
	2015	17 215	16	44	23	27	6			43	20	30	7			49	38	12	2		
Malaysia	2000	23 421	62	97	0	2	2	0.19	-0.08	94	0	2	3	0.30	-0.16	98	0	1	0	0.10	-0.03
	2015	30 331	75	100	0	0	0			99	0	0	1			100	0	0	0		
Maldives	2000	280	28	78	2	3	18	1.18	-1.17	71	1	3	24	1.79	-1.62	95	2	2	0	-0.17	0.00
	2015	364	46	96	2	2	0			98	2	0	0			93	2	5	0		
Mali	2000	11 047	28	19	12	47	22	0.80	-0.90	12	5	54	28	0.63	-1.04	38	30	27	5	0.55	-0.23
	2015	17 600	40	31	21	40	8			22	10	56	13			46	37	16	1		
Malta	2000	387	92	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	419	95	100	0	0	0			100	0	0	0			100	0	0	0		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Isle of Man	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Israel	2000	79	0	0	78	0	1	99	78	3	0	75	0	5	95	79	0	0	79	0	1	100
	2015	93	0	0	93	0	1	99	91	3	0	89	0	5	95	93	0	0	93	0	1	100
Italy	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	95	1	0	94	0	2	97	94	3	0	91	0	5	94	96	0	0	96	0	0	99
Jamaica	2000	-	-	-	6	34	35	15	-	-	-	1	52	30	2	-	-	-	11	17	40	27
	2015	-	-	-	8	45	21	19	-	-	-	3	64	17	6	-	-	-	12	30	25	29
Japan	2000	98	1	37	61	22	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	100	0	22	78	4	18	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jordan	2000	77	22	0	55	1	43	55	-	-	-	3	2	92	3	83	15	0	68	0	31	68
	2015	77	19	0	58	0	39	58	-	-	-	6	0	90	6	82	14	0	68	0	29	68
Kazakhstan	2000	-	-	-	35	51	2	44	-	-	-	9	81	5	11	69	14	0	56	27	0	69
	2015	-	-	-	28	55	8	35	-	-	-	3	89	7	3	67	17	0	50	26	8	62
Kenya	2000	-	-	-	-	25	1	5	-	-	-	-	29	0	1	-	-	-	-	14	5	15
	2015	-	-	-	-	25	2	3	-	-	-	-	27	1	0	-	-	-	-	22	4	9
Kiribati	2000	-	-	-	-	1	20	10	-	-	-	-	0	16	5	-	-	-	-	2	25	16
	2015	-	-	-	-	8	22	10	-	-	-	-	7	20	5	-	-	-	-	8	25	16
Kuwait	2000	100	0	0	100	0	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	100	0	0	100	0	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	2000	-	-	-	-	70	1	20	-	-	-	-	86	0	6	-	-	-	-	43	3	46
	2015	-	-	-	-	83	0	13	-	-	-	-	98	0	1	-	-	-	-	57	1	35
Lao People's Democratic Republic	2000	-	-	-	-	26	1	1	-	-	-	-	17	0	0	-	-	-	-	59	5	3
	2015	-	-	-	-	38	33	1	-	-	-	-	43	17	0	-	-	-	-	32	58	3
Latvia	2000	72	7	0	65	10	4	73	57	9	0	48	14	5	54	78	6	0	73	8	4	82
	2015	78	10	0	68	16	4	73	66	15	0	51	25	5	54	85	8	0	77	12	4	82
Lebanon	2000	16	8	0	9	14	1	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	20	9	0	11	17	1	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lesotho	2000	-	-	-	-	6	0	1	-	-	-	-	4	0	0	-	-	-	-	15	1	2
	2015	-	-	-	-	42	1	1	-	-	-	-	43	0	0	-	-	-	-	42	1	3
Liberia	2000	-	-	-	-	8	4	2	-	-	-	-	3	0	0	-	-	-	-	12	9	4
	2015	-	-	-	-	11	6	0	-	-	-	-	5	0	0	-	-	-	-	14	13	1
Libya	2000	29	19	0	10	30	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	26	16	0	11	23	8	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Liechtenstein	2000	99	1	0	99	0	1	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	99	1	0	99	0	1	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	2000	54	5	0	49	0	10	74	42	11	0	31	0	22	47	60	2	0	58	0	5	88
	2015	61	1	0	60	0	3	91	55	4	0	52	0	8	78	64	0	0	64	0	0	97
Luxembourg	2000	93	1	0	92	3	-	95	87	9	0	77	0	19	80	94	0	0	94	0	-	97
	2015	94	1	0	93	2	-	96	87	9	0	77	0	19	80	94	0	0	94	0	-	97
Madagascar	2000	-	-	-	-	4	1	0	-	-	-	-	2	0	0	-	-	-	-	7	2	0
	2015	-	-	-	-	7	2	0	-	-	-	-	6	0	0	-	-	-	-	10	5	1
Malawi	2000	-	-	-	-	32	1	1	-	-	-	-	31	0	1	-	-	-	-	39	5	2
	2015	-	-	-	-	40	2	2	-	-	-	-	41	1	1	-	-	-	-	35	8	5
Malaysia	2000	78	49	0	29	31	35	31	-	-	-	11	55	27	12	-	-	-	41	17	39	42
	2015	82	49	0	33	29	36	35	-	-	-	11	60	27	12	-	-	-	41	18	39	42
Maldives	2000	-	-	-	-	9	38	31	-	-	-	-	12	53	6	-	-	-	-	0	1	95
	2015	-	-	-	-	13	29	54	-	-	-	-	24	53	22	-	-	-	-	0	1	92
Mali	2000	-	-	-	-	16	1	3	-	-	-	-	10	0	2	-	-	-	-	31	2	5
	2015	-	-	-	-	28	2	1	-	-	-	-	21	1	0	-	-	-	-	40	4	2
Malta	2000	93	0	0	93	0	-	100	93	0	0	93	0	-	100	93	0	0	93	0	-	100
	2015	93	0	0	93	0	-	100	93	0	0	93	0	-	100	93	0	0	93	0	-	100

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Marshall Islands	2000	52	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	53	73	87	0	2	11			66	0	4	30			95	0	2	4		
Martinique	2000	387	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	396	89	99	0	1	0			-	-	-	-			-	-	-	-		
Mauritania	2000	2 711	49	23	7	21	49	1.42	-1.25	7	3	14	76	0.66	-1.06	40	10	29	21	1.54	-0.72
	2015	4 068	60	45	12	13	30			17	6	16	61			63	17	11	10		
Mauritius	2000	1 185	43	91	6	2	0	0.12	0.00	90	6	4	0	0.19	0.01	93	6	1	0	0.04	0.00
	2015	1 273	40	93	6	0	0			93	7	1	0			94	6	0	0		
Mayotte	2000	150	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	240	47	77	0	23	0			-	-	-	-			-	-	-	-		
Mexico	2000	102 809	75	76	6	7	10	0.86	-0.59	50	5	16	29	2.02	-1.54	85	7	4	4	0.42	-0.24
	2015	127 017	79	89	7	2	2			81	8	6	6			91	7	1	1		
Micronesia (Federated States of)	2000	107	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	104	22	-	-	-	-			-	-	-	-			-	-	-	-		
Monaco	2000	32	100	100	0	0	0	0.00	0.00	NA	NA	NA	NA	NA	NA	100	0	0	0	0.00	0.00
	2015	38	100	100	0	0	0			NA	NA	NA	NA			100	0	0	0		
Mongolia	2000	2 397	57	48	26	11	16	0.75	-0.39	26	18	20	35	0.97	-0.28	64	31	4	1	0.14	0.04
	2015	2 959	72	59	31	0	10			41	28	0	31			66	32	0	1		
Montenegro	2000	614	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	626	64	96	2	2	0			92	2	6	0			98	2	0	0		
Montserrat	2000	5	2	80	9	7	4	0.58	-0.25	-	-	-	-	-	-	-	-	-	-	-	-
	2015	5	9	89	11	1	0			-	-	-	-			-	-	-	-		
Morocco	2000	28 951	53	69	6	1	24	0.99	-1.11	47	3	0	50	1.82	-2.06	87	9	1	2	0.13	-0.12
	2015	34 378	60	83	8	1	8			75	5	2	19			89	10	1	0		
Mozambique	2000	18 265	29	12	2	29	57	0.77	-1.38	3	1	26	70	0.62	-1.54	34	6	36	24	0.87	-0.75
	2015	27 978	32	24	5	36	36			12	3	38	47			47	9	31	12		
Myanmar	2000	47 670	27	70	12	8	11	-0.33	-0.44	65	11	9	15	-0.42	-0.53	82	13	3	2	-0.38	-0.08
	2015	53 897	34	65	11	20	5			59	10	25	7			76	12	11	0		
Namibia	2000	1 898	32	28	9	7	56	0.37	-0.39	14	3	8	75	0.08	0.05	58	22	5	15	-0.20	0.33
	2015	2 459	47	34	11	5	50			15	3	5	76			55	21	4	20		
Nauru	2000	10	100	66	31	3	1	-0.01	0.11	NA	NA	NA	NA	NA	NA	66	31	3	1	-0.01	0.11
	2015	10	100	66	31	1	3			NA	NA	NA	NA			66	31	1	3		
Nepal	2000	23 740	13	19	9	8	65	1.80	-2.32	16	5	8	71	1.93	-2.40	42	32	6	21	0.72	-1.02
	2015	28 514	19	46	19	5	30			45	14	6	35			52	40	2	6		
Netherlands	2000	15 894	77	98	2	0	0	-0.02	0.00	100	0	0	0	0.00	0.00	98	3	0	0	0.00	0.00
	2015	16 925	90	98	2	0	0			100	0	0	0			98	3	0	0		
New Caledonia	2000	210	62	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	263	70	100	0	0	0			-	-	-	-			-	-	-	-		
New Zealand	2000	3 858	86	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	4 529	86	100	0	0	0			100	0	0	0			100	0	0	0		
Nicaragua	2000	5 027	55	60	2	21	16	1.06	-0.60	45	2	23	30	1.18	-0.97	73	3	20	4	0.85	-0.22
	2015	6 082	59	76	3	14	7			63	2	20	15			86	3	10	1		
Niger	2000	11 225	16	6	4	9	82	0.46	-0.68	2	1	4	93	0.25	-0.54	26	17	35	23	1.19	-0.68
	2015	19 899	19	13	8	8	71			6	3	6	85			44	28	16	13		
Nigeria	2000	122 877	35	36	20	20	23	-0.26	0.19	35	13	23	29	-0.53	0.41	39	35	16	10	-0.03	0.30
	2015	182 202	48	33	22	20	26			27	10	28	36			39	35	12	14		
Niue	2000	2	33	100	0	0	0	-0.22	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	2	43	97	0	3	0			-	-	-	-			-	-	-	-		
Northern Mariana Islands	2000	68	90	74	18	8	0	0.34	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	55	89	79	19	2	0			-	-	-	-			-	-	-	-		
Norway	2000	4 492	76	98	2	0	0	0.00	0.00	98	2	0	0	0.00	0.00	98	2	0	0	0.00	0.00
	2015	5 211	80	98	2	0	0			98	2	0	0			98	2	0	0		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Marshall Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	15	28	44	-	-	-	-	29	36	0	-	-	-	-	9	25	60
Martinique	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	1	52	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mauritania	2000	-	-	-	-	11	10	1	-	-	-	-	4	3	0	-	-	-	-	18	19	3
	2015	-	-	-	-	30	12	2	-	-	-	-	15	3	0	-	-	-	-	41	19	4
Mauritius	2000	-	-	-	10	67	6	18	-	-	-	1	80	8	2	-	-	-	23	50	4	39
	2015	-	-	-	8	66	6	21	-	-	-	2	80	8	5	-	-	-	17	44	4	46
Mayotte	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	23	35	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	2000	19	9	0	11	5	13	59	-	-	-	3	10	23	18	19	6	0	13	3	9	73
	2015	45	8	0	37	3	13	72	-	-	-	16	13	36	31	46	4	0	42	1	7	83
Micronesia (Federated States of)	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monaco	2000	100	0	0	100	0	-	100	NA	NA	NA	NA	NA	NA	NA	100	0	0	100	0	-	100
	2015	100	0	0	100	0	-	100	NA	NA	NA	NA	NA	NA	NA	100	0	0	100	0	-	100
Mongolia	2000	-	-	-	-	33	0	15	-	-	-	-	25	0	1	-	-	-	-	37	0	27
	2015	-	-	-	-	46	0	13	-	-	-	-	39	0	2	-	-	-	-	48	0	18
Montenegro	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	13	2	51	44	-	-	-	4	4	73	15	36	19	0	17	0	38	60
Montserrat	2000	-	-	-	13	2	65	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	13	11	65	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morocco	2000	31	13	0	18	18	9	42	-	-	-	0	31	14	2	38	6	0	32	6	5	76
	2015	38	17	0	21	10	24	49	-	-	-	0	22	49	3	39	5	0	34	2	8	79
Mozambique	2000	-	-	-	-	9	1	1	3	3	0	0	3	0	0	-	-	-	-	26	5	4
	2015	-	-	-	-	18	5	1	12	12	0	0	12	0	0	-	-	-	-	30	15	2
Myanmar	2000	-	-	-	-	60	8	2	-	-	-	-	59	6	0	-	-	-	-	62	13	7
	2015	-	-	-	-	56	9	0	-	-	-	-	56	3	0	-	-	-	-	56	20	0
Namibia	2000	-	-	-	-	6	1	22	-	-	-	-	6	0	8	-	-	-	-	6	3	49
	2015	-	-	-	-	7	1	26	-	-	-	-	9	2	5	-	-	-	-	5	0	50
Nauru	2000	-	-	-	-	30	20	16	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	30	20	16
	2015	-	-	-	-	30	20	16	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	30	20	16
Nepal	2000	-	-	-	-	9	8	2	-	-	-	-	10	6	0	-	-	-	-	8	21	13
	2015	-	-	-	-	9	33	5	-	-	-	-	10	33	2	-	-	-	-	3	34	15
Netherlands	2000	97	1	0	97	0	1	97	97	3	0	94	0	6	94	98	0	0	98	0	0	98
	2015	97	0	0	97	0	1	97	97	3	0	94	0	6	94	98	0	0	98	0	0	98
New Caledonia	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Zealand	2000	75	10	0	66	7	12	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	76	9	0	67	6	12	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nicaragua	2000	-	-	-	5	41	4	15	-	-	-	0	44	1	0	-	-	-	10	39	6	28
	2015	-	-	-	8	43	10	23	-	-	-	0	59	3	1	-	-	-	13	32	14	39
Niger	2000	4	4	0	0	5	0	1	2	2	0	0	2	0	0	15	14	0	1	22	1	3
	2015	9	8	0	0	11	2	0	5	5	0	0	5	0	0	24	23	0	1	34	8	2
Nigeria	2000	-	-	-	-	31	2	3	-	-	-	-	34	0	1	-	-	-	-	28	5	6
	2015	-	-	-	-	18	9	5	-	-	-	-	21	4	2	-	-	-	-	17	14	8
Niue	2000	-	-	-	-	15	78	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	12	78	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Mariana Islands	2000	-	-	-	-	0	38	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	1	37	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	2000	76	18	1	56	1	19	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	78	14	2	63	2	14	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Oman	2000	2 239	72	88	1	0	11	0.75	-0.75	76	1	0	23	1.54	-1.55	93	1	0	6	0.43	-0.43
	2015	4 491	78	99	1	0	0			99	1	0	0			99	1	0	0		
Pakistan	2000	138 250	33	32	4	23	41	1.77	-1.99	14	3	24	59	2.26	-2.67	67	7	20	6	0.50	-0.42
	2015	188 925	39	58	8	22	12			48	9	24	19			74	8	18	0		
Palau	2000	19	70	85	0	15	0	1.02	0.00	67	0	33	0	2.20	0.00	92	0	8	0	0.52	0.00
	2015	21	87	100	0	0	0			100	0	0	0			100	0	0	0		
Panama	2000	3 029	62	64	6	22	8	0.85	-0.28	45	4	34	17	0.96	-0.49	76	7	15	2	0.66	-0.11
	2015	3 929	67	77	7	12	3			59	6	26	9			86	8	6	0		
Papua New Guinea	2000	5 374	13	19	3	65	13	-0.01	0.00	13	3	70	14	0.00	0.00	55	9	32	4	0.00	0.00
	2015	7 619	13	19	3	65	13			13	3	70	14			55	9	32	4		
Paraguay	2000	5 303	55	72	0	27	1	1.29	-0.04	52	0	47	1	1.95	-0.07	88	0	11	0	0.66	-0.01
	2015	6 639	60	91	0	8	0			81	0	19	0			98	0	1	0		
Peru	2000	25 915	73	62	8	11	19	0.94	-0.79	25	2	20	53	2.18	-2.15	76	10	7	7	0.36	-0.20
	2015	31 377	79	76	9	7	7			58	4	17	21			81	11	4	4		
Philippines	2000	77 932	48	67	15	7	11	0.53	-0.34	59	14	11	16	0.85	-0.52	75	16	3	5	0.23	-0.18
	2015	100 699	44	75	17	3	6			72	16	3	8			79	17	2	3		
Poland	2000	38 486	62	87	1	12	0	0.74	0.00	76	1	23	0	1.48	0.00	94	1	5	0	0.29	0.00
	2015	38 612	61	98	1	1	0			98	1	1	0			98	1	1	0		
Portugal	2000	10 279	54	97	0	2	0	0.14	0.00	96	0	4	0	0.24	0.00	98	0	1	0	0.06	0.00
	2015	10 350	63	99	0	0	0			100	0	0	0			99	0	0	0		
Puerto Rico	2000	3 797	94	97	0	3	0	0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	3 683	94	97	0	3	0			-	-	-	-			-	-	-	-		
Qatar	2000	593	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	2 235	99	100	0	0	0			-	-	-	-			-	-	-	-		
Republic of Korea	2000	46 206	80	100	0	0	0	-0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	50 293	82	100	0	0	0			-	-	-	-			-	-	-	-		
Republic of Moldova	2000	4 201	46	72	7	21	0	0.42	0.01	60	6	34	0	0.66	0.02	86	9	5	0	0.16	0.00
	2015	4 069	45	78	8	14	0			70	6	23	0			89	9	2	0		
Réunion	2000	737	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	861	95	99	0	1	0			-	-	-	-			-	-	-	-		
Romania	2000	22 128	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	19 511	55	82	0	18	0			68	0	31	0			93	0	7	0		
Russian Federation	2000	146 401	73	84	0	16	0	0.33	0.00	55	0	45	0	1.41	0.00	94	0	6	0	-0.07	0.00
	2015	143 457	74	89	0	11	0			76	0	24	0			93	0	7	0		
Rwanda	2000	8 022	15	44	9	42	4	1.21	-0.16	42	6	47	5	1.50	-0.18	57	27	14	2	-0.01	0.02
	2015	11 610	29	62	14	22	2			64	9	25	2			57	27	14	2		
Saint Helena	2000	5	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	4	39	100	0	0	0			-	-	-	-			-	-	-	-		
Saint Kitts and Nevis	2000	46	33	85	1	10	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	56	32	-	-	-	-			-	-	-	-			-	-	-	-		
Saint Lucia	2000	157	28	79	7	3	11	0.81	-0.67	80	7	2	11	0.80	-0.76	75	8	7	9	0.73	-0.34
	2015	185	19	91	8	0	1			92	8	0	0			86	9	0	4		
Saint Pierre and Miquelon	2000	6	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	6	90	-	-	-	-			-	-	-	-			-	-	-	-		
Saint Vincent and the Grenadines	2000	108	45	71	2	24	3	1.09	0.05	-	-	-	-	-	-	-	-	-	-	-	-
	2015	109	51	87	3	6	3			-	-	-	-			-	-	-	-		
Samoa	2000	175	22	99	0	1	0	-0.14	0.00	98	0	1	0	-0.14	0.00	99	0	1	0	-0.09	0.02
	2015	193	19	97	0	3	0			96	0	4	0			98	0	2	0		
San Marino	2000	27	93	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	32	94	100	0	0	0			-	-	-	-			-	-	-	-		
Sao Tome and Principe	2000	137	53	21	3	5	71	1.28	-1.39	15	3	4	78	0.88	-0.99	26	4	6	64	1.36	-1.44
	2015	190	65	40	6	4	50			28	6	3	63			47	6	4	43		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Oman	2000	-	-	-	9	0	79	9	-	-	-	1	0	75	1	-	-	-	13	0	80	13
	2015	-	-	-	10	5	85	10	-	-	-	1	10	88	1	-	-	-	13	3	84	13
Pakistan	2000	-	-	-	-	0	14	17	-	-	-	-	0	11	3	-	-	-	-	1	20	46
	2015	-	-	-	-	8	27	23	-	-	-	-	11	33	4	-	-	-	-	3	17	54
Palau	2000	17	17	0	0	0	34	51	-	-	-	0	0	55	12	12	12	0	0	0	24	68
	2015	20	20	0	0	0	39	61	-	-	-	0	0	88	12	16	16	0	0	0	32	68
Panama	2000	-	-	-	5	18	19	27	-	-	-	0	29	14	2	25	17	0	8	12	23	41
	2015	-	-	-	6	15	31	31	-	-	-	1	28	27	4	29	21	0	8	8	33	44
Papua New Guinea	2000	-	-	-	2	12	4	3	-	-	-	0	11	1	1	-	-	-	11	14	21	20
	2015	-	-	-	2	12	4	3	-	-	-	0	11	1	1	-	-	-	11	14	21	20
Paraguay	2000	-	-	-	1	44	14	14	-	-	-	0	30	16	6	-	-	-	2	56	12	21
	2015	-	-	-	1	38	45	9	-	-	-	0	54	27	0	-	-	-	1	27	57	15
Peru	2000	15	6	0	9	2	11	49	-	-	-	1	1	20	5	18	5	0	13	2	8	66
	2015	30	7	0	23	6	8	62	-	-	-	5	14	31	13	35	3	0	31	4	3	75
Philippines	2000	-	-	-	-	10	54	4	-	-	-	-	19	39	2	-	-	-	-	0	69	6
	2015	-	-	-	-	6	67	2	-	-	-	-	7	63	2	-	-	-	-	5	72	2
Poland	2000	71	15	0	56	-	30	57	-	-	-	14	0	62	14	87	5	0	82	0	10	83
	2015	77	21	0	56	9	33	56	-	-	-	14	17	67	14	91	7	0	83	4	11	83
Portugal	2000	60	19	0	40	4	34	59	-	-	-	21	6	59	31	65	8	0	56	3	14	82
	2015	62	18	0	44	6	30	63	-	-	-	21	9	59	31	65	9	0	56	4	14	82
Puerto Rico	2000	32	1	0	31	3	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	32	2	0	31	3	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	88	12	0	77	23	-	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Korea	2000	86	13	0	73	0	26	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	98	1	0	97	3	0	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Moldova	2000	-	-	-	-	33	6	33	-	-	-	-	54	3	3	-	-	-	-	8	10	68
	2015	-	-	-	-	26	22	30	-	-	-	-	40	29	1	-	-	-	-	10	14	65
Réunion	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	5	52	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Romania	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	57	18	0	39	31	4	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russian Federation	2000	-	-	-	-	11	3	70	-	-	-	-	26	5	24	-	-	-	-	5	2	87
	2015	-	-	-	-	11	3	74	-	-	-	-	29	5	41	-	-	-	-	5	2	86
Rwanda	2000	-	-	-	0	43	1	0	-	-	-	0	42	0	0	-	-	-	1	51	5	2
	2015	-	-	-	1	61	0	2	-	-	-	0	64	0	0	-	-	-	3	52	1	4
Saint Helena	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	0	48	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Kitts and Nevis	2000	-	-	-	-	10	75	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Lucia	2000	-	-	-	3	48	25	6	-	-	-	2	54	22	4	-	-	-	5	32	33	11
	2015	-	-	-	2	12	75	5	-	-	-	2	14	75	3	-	-	-	4	2	74	10
Saint Pierre and Miquelon	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Vincent and the Grenadines	2000	-	-	-	-	21	48	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	16	64	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Samoa	2000	-	-	-	-	15	83	0	-	-	-	-	17	82	0	-	-	-	-	9	90	0
	2015	-	-	-	-	10	87	0	-	-	-	-	10	86	0	-	-	-	-	7	91	0
San Marino	2000	78	8	0	70	0	15	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	78	8	0	70	0	15	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	2000	-	-	-	-	4	13	4	-	-	-	-	4	7	3	-	-	-	-	5	18	4
	2015	-	-	-	-	24	3	13	-	-	-	-	20	1	7	-	-	-	-	27	4	16

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Saudi Arabia	2000	21 392	80	98	0	2	0	0.12	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	31 540	83	100	0	0	0			-	-	-	-			-	-	-	-		
Senegal	2000	9 861	40	39	12	25	24	0.66	-0.60	25	6	32	38	0.68	-0.83	59	21	16	4	0.44	-0.13
	2015	15 129	44	48	15	22	15			35	8	31	25			66	23	9	2		
Serbia	2000	9 463	53	98	1	1	0	-0.19	0.00	97	1	1	0	-0.43	0.01	98	1	1	0	-0.01	-0.01
	2015	8 851	56	95	1	4	0			91	1	8	0			98	1	1	0		
Seychelles	2000	81	50	94	0	4	1	0.39	-0.09	-	-	-	-	-	-	-	-	-	-	-	-
	2015	96	54	100	0	0	0			-	-	-	-			-	-	-	-		
Sierra Leone	2000	4 061	36	10	23	41	26	0.30	-0.50	4	13	46	38	0.28	-0.70	21	42	32	6	0.21	0.03
	2015	6 453	40	15	34	32	19			8	25	39	27			24	48	22	6		
Singapore	2000	3 918	100	100	0	0	0	0.00	0.00	NA	NA	NA	NA	NA	NA	100	0	0	0	0.00	0.00
	2015	5 604	100	100	0	0	0			NA	NA	NA	NA			100	0	0	0		
Sint Maarten (Dutch part)	2000	32	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	39	100	99	0	1	0			-	-	-	-			-	-	-	-		
Slovakia	2000	5 386	56	99	1	0	0	0.01	0.00	98	2	0	0	0.01	0.00	99	1	0	0	0.00	0.00
	2015	5 426	54	99	1	0	0			98	2	0	0			99	1	0	0		
Slovenia	2000	1 989	51	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	2 068	50	99	1	0	0			99	1	0	0			99	1	0	0		
Solomon Islands	2000	412	16	21	3	13	63	0.69	-1.47	13	2	12	73	0.36	-1.53	62	12	17	9	0.91	0.02
	2015	584	22	31	5	23	41			18	2	29	50			76	15	0	9		
Somalia	2000	7 385	33	22	14	6	58	-0.42	-1.23	9	7	4	80	-0.04	-1.33	50	28	10	12	-1.43	-0.34
	2015	10 787	40	16	11	34	39			8	7	25	60			28	16	49	7		
South Africa	2000	44 897	57	59	13	15	13	0.92	-0.69	45	6	24	26	1.61	-1.37	71	19	8	3	0.33	-0.13
	2015	54 490	65	73	16	8	2			69	10	17	5			76	20	4	1		
South Sudan	2000	6 693	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	12 340	19	10	9	20	61			6	7	17	70			28	19	31	22		
Spain	2000	40 750	76	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	46 122	80	100	0	0	0			100	0	0	0			100	0	0	0		
Sri Lanka	2000	18 784	18	85	3	12	0	0.59	0.18	85	2	14	0	0.71	0.19	89	7	4	0	0.03	0.10
	2015	20 715	18	94	3	0	3			95	2	0	3			89	7	2	2		
Sudan	2000	28 080	32	21	5	23	51	0.91	-1.62	11	3	22	64	0.78	-1.70	41	9	26	24	1.08	-1.36
	2015	40 235	34	35	9	30	27			23	6	32	38			58	13	26	4		
Suriname	2000	481	66	81	10	2	8	-0.11	-0.08	63	11	3	23	-0.14	-0.30	90	9	1	0	-0.09	0.02
	2015	543	66	79	10	5	6			61	11	10	18			88	9	2	0		
Swaziland	2000	1 064	23	49	21	7	23	0.59	-0.82	47	17	7	29	0.75	-1.04	57	35	6	2	0.05	-0.11
	2015	1 287	21	58	24	7	11			58	21	8	14			58	35	6	1		
Sweden	2000	8 872	84	99	1	0	0	0.00	0.00	100	0	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	9 779	86	99	1	0	0			100	0	0	0			99	1	0	0		
Switzerland	2000	7 166	73	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	8 299	74	100	0	0	0			100	0	0	0			100	0	0	0		
Syrian Arab Republic	2000	16 354	52	93	4	1	2	-0.01	-0.07	90	5	1	4	-0.06	-0.16	96	4	1	0	-0.01	0.02
	2015	18 502	58	93	4	2	1			89	5	4	1			96	4	0	0		
Tajikistan	2000	6 186	26	90	3	6	1	0.37	-0.09	89	2	7	2	0.47	-0.10	92	5	2	1	0.12	-0.06
	2015	8 482	27	95	3	1	0			96	2	1	0			94	5	1	0		
Thailand	2000	62 693	31	95	4	0	1	0.01	-0.05	95	3	0	1	0.06	-0.06	94	6	0	0	0.00	-0.02
	2015	67 959	50	95	5	0	0			96	3	0	0			94	6	0	0		
The former Yugoslav Republic of Macedonia	2000	2 012	59	90	3	7	0	0.07	0.04	85	5	10	0	-0.16	0.10	93	3	4	0	0.26	0.00
	2015	2 078	57	91	4	5	1			83	4	11	2			97	3	0	0		
Timor-Leste	2000	847	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	1 185	33	44	10	22	24			30	7	30	33			73	15	7	5		
Togo	2000	4 875	33	11	19	12	58	0.20	-0.46	4	8	14	74	0.01	0.04	25	42	9	24	0.24	-0.61
	2015	7 305	40	14	24	11	51			5	8	13	75			28	49	9	15		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Saudi Arabia	2000	64	34	0	29	68	1	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	84	16	0	69	30	1	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Senegal	2000	18	14	0	3	13	18	7	16	15	0	1	15	8	1	20	13	0	7	11	33	14
	2015	24	21	0	3	24	19	5	22	22	0	0	22	13	0	24	18	0	6	27	27	12
Serbia	2000	29	23	0	6	24	22	51	-	-	-	2	52	31	14	17	7	0	10	0	14	83
	2015	24	20	0	4	1	38	55	-	-	-	2	0	71	20	14	7	0	6	2	12	83
Seychelles	2000	-	-	-	-	2	84	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	1	82	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sierra Leone	2000	-	-	-	-	9	1	0	-	-	-	-	4	0	0	-	-	-	-	18	2	1
	2015	-	-	-	-	13	1	0	-	-	-	-	8	0	0	-	-	-	-	20	4	0
Singapore	2000	100	0	0	100	0	-	100	NA	NA	NA	NA	NA	NA	NA	100	0	0	100	0	-	100
	2015	100	0	0	100	0	-	100	NA	NA	NA	NA	NA	NA	NA	100	0	0	100	0	-	100
Sint Maarten (Dutch part)	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	0	89	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Slovakia	2000	82	15	0	67	4	26	69	75	22	0	53	5	39	54	88	9	0	79	3	16	81
	2015	82	15	0	67	4	26	69	75	22	0	53	5	39	54	88	9	0	79	3	16	81
Slovenia	2000	74	21	0	53	0	41	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	76	23	0	52	16	31	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solomon Islands	2000	-	-	-	-	10	11	-	-	-	-	-	9	4	-	-	-	-	-	15	47	-
	2015	-	-	-	-	19	13	-	-	-	-	-	16	3	-	-	-	-	-	29	47	-
Somalia	2000	20	19	0	0	22	0	0	8	8	0	0	8	0	0	43	43	0	0	49	1	0
	2015	14	14	0	0	16	0	0	7	7	0	0	8	0	0	24	24	0	0	28	0	0
South Africa	2000	-	-	-	-	20	2	37	-	-	-	-	37	1	6	-	-	-	-	8	3	59
	2015	-	-	-	-	24	3	47	-	-	-	-	60	5	4	-	-	-	-	6	2	68
South Sudan	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	10	0	0	-	-	-	-	6	0	0	-	-	-	-	27	0	0
Spain	2000	94	2	0	92	0	3	97	93	3	0	90	0	5	94	94	1	0	93	0	2	98
	2015	97	0	0	97	0	0	100	98	0	0	98	0	0	100	97	0	0	97	0	0	100
Sri Lanka	2000	-	-	-	-	78	5	2	-	-	-	-	80	4	0	-	-	-	-	70	10	9
	2015	-	-	-	-	87	5	2	-	-	-	-	90	4	0	-	-	-	-	71	10	9
Sudan	2000	-	-	-	-	20	1	0	-	-	-	-	11	0	0	-	-	-	-	38	3	1
	2015	-	-	-	-	29	5	1	-	-	-	-	22	1	0	-	-	-	-	43	12	2
Suriname	2000	-	-	-	0	15	65	1	-	-	-	0	25	37	1	-	-	-	0	10	79	0
	2015	-	-	-	0	13	65	1	-	-	-	0	23	37	1	-	-	-	0	8	79	1
Swaziland	2000	-	-	-	3	39	4	6	-	-	-	1	42	2	2	-	-	-	9	31	8	18
	2015	-	-	-	3	48	4	7	-	-	-	1	54	2	2	-	-	-	11	28	8	22
Sweden	2000	91	8	0	83	3	14	83	86	13	0	73	2	24	73	92	7	0	85	3	12	85
	2015	92	7	0	85	2	12	85	87	12	0	75	1	24	75	93	6	0	87	2	10	87
Switzerland	2000	98	2	0	96	0	4	96	98	2	0	96	0	3	96	98	2	0	96	0	4	96
	2015	99	1	0	98	0	2	98	96	3	0	93	0	7	93	100	0	0	100	0	0	100
Syrian Arab Republic	2000	-	-	-	-	19	6	68	-	-	-	-	37	10	43	-	-	-	-	2	1	92
	2015	-	-	-	-	17	5	71	-	-	-	-	36	10	43	-	-	-	-	2	1	92
Tajikistan	2000	-	-	-	-	76	1	13	-	-	-	-	85	1	3	-	-	-	-	50	2	40
	2015	-	-	-	-	80	0	15	-	-	-	-	96	0	0	-	-	-	-	40	0	54
Thailand	2000	-	-	-	-	0	88	7	-	-	-	-	0	90	6	-	-	-	-	0	85	8
	2015	-	-	-	-	3	85	7	-	-	-	-	4	88	4	-	-	-	-	2	83	9
The former Yugoslav Republic of Macedonia	2000	-	-	-	-	2	33	55	-	-	-	-	1	57	27	-	-	-	-	2	16	75
	2015	-	-	-	-	8	12	71	-	-	-	-	19	27	36	-	-	-	-	0	0	97
Timor-Leste	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	23	11	9	-	-	-	-	20	4	7	-	-	-	-	31	26	15
Togo	2000	-	-	-	-	9	2	0	-	-	-	-	4	0	0	-	-	-	-	18	6	0
	2015	-	-	-	-	8	6	0	-	-	-	-	4	1	0	-	-	-	-	14	14	0

ANNEX 4 National sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
Tokelau	2000	2	0	77	4	19	0	1.07	0.00	77	4	19	0	1.07	0.00	NA	NA	NA	NA	NA	NA
	2015	1	0	93	5	2	0			93	5	2	0			NA	NA	NA	NA		
Tonga	2000	98	23	89	1	10	0	0.32	0.00	86	1	13	0	0.45	0.00	99	1	0	0	-0.15	0.00
	2015	106	24	93	1	6	0			92	1	6	0			97	1	3	0		
Trinidad and Tobago	2000	1 268	11	91	7	2	0	0.11	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	1 360	8	92	7	0	0			-	-	-	-			-	-	-	-		
Tunisia	2000	9 699	63	80	4	5	11	0.85	-0.66	56	7	8	28	1.78	-1.72	94	2	3	1	0.25	-0.04
	2015	11 254	67	93	5	1	1			83	10	4	3			98	2	0	0		
Turkey	2000	63 240	65	83	1	16	1	0.92	-0.01	70	2	27	1	1.28	0.01	90	1	9	0	0.63	-0.02
	2015	78 666	73	96	1	2	0			89	3	7	1			99	1	0	0		
Turkmenistan	2000	4 501	46	95	3	1	1	0.09	-0.04	96	1	2	1	0.16	-0.05	94	6	0	0	0.04	-0.02
	2015	5 374	50	97	3	0	0			99	1	0	0			94	6	0	0		
Turks and Caicos Islands	2000	19	85	81	0	17	3	0.47	-0.17	-	-	-	-	-	-	-	-	-	-	-	-
	2015	34	92	88	0	12	0			-	-	-	-			-	-	-	-		
Tuvalu	2000	9	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	10	60	91	0	1	7			91	0	0	9			92	0	2	6		
Uganda	2000	23 758	12	15	11	58	15	0.25	-0.62	14	7	62	17	0.25	-0.69	29	43	26	2	-0.03	0.01
	2015	39 032	16	19	14	60	6			17	9	67	7			28	43	27	2		
Ukraine	2000	48 746	67	95	3	3	0	0.09	0.00	90	4	7	0	0.20	-0.01	97	2	1	0	0.02	0.00
	2015	44 824	70	96	3	2	0			93	4	4	0			97	2	1	0		
United Arab Emirates	2000	3 050	80	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	9 157	86	100	0	0	0			100	0	0	0			100	0	0	0		
United Kingdom	2000	58 867	79	99	1	0	0	0.00	0.00	99	0	0	0	0.00	0.00	99	1	0	0	0.00	0.00
	2015	64 716	83	99	1	0	0			99	0	0	0			99	1	0	0		
United Republic of Tanzania	2000	33 992	22	7	3	81	10	1.13	0.11	5	1	82	12	0.81	0.27	12	10	76	2	1.71	-0.05
	2015	53 470	32	24	13	52	11			17	4	63	16			37	34	27	2		
United States Virgin Islands	2000	109	93	96	0	4	0	0.08	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	106	95	98	0	2	0			-	-	-	-			-	-	-	-		
United States of America	2000	282 896	79	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00	100	0	0	0	0.00	0.00
	2015	321 774	82	100	0	0	0			100	0	0	0			100	0	0	0		
Uruguay	2000	3 321	92	94	3	1	2	0.10	-0.07	85	2	8	5	0.65	-0.31	95	3	1	1	0.05	-0.05
	2015	3 432	95	96	3	1	1			95	2	2	1			96	3	1	1		
Uzbekistan	2000	24 518	37	89	0	11	0	0.71	0.00	85	0	15	0	1.01	-0.01	97	0	3	0	0.21	0.00
	2015	29 893	36	100	0	0	0			100	0	0	0			100	0	0	0		
Vanuatu	2000	185	22	53	17	28	2	0.03	-0.01	51	13	34	2	0.00	-0.03	61	32	7	0	0.00	0.07
	2015	265	26	53	18	27	2			51	13	34	2			61	32	6	1		
Venezuela (Bolivarian Republic of)	2000	24 481	88	87	0	3	9	0.51	-0.30	52	0	7	41	1.32	-1.01	92	0	3	5	0.38	-0.19
	2015	31 108	89	95	0	0	5			72	0	2	26			98	0	0	2		
Viet Nam	2000	80 286	24	53	3	26	18	1.66	-0.93	44	3	32	22	1.84	-1.12	82	4	9	5	0.59	-0.23
	2015	93 448	34	78	4	14	4			72	4	19	5			91	4	3	2		
Wallis and Futuna Islands	2000	14	0	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA
	2015	13	0	99	0	0	1			99	0	0	1			NA	NA	NA	NA		
West Bank and Gaza Strip	2000	3 224	72	94	4	2	1	0.11	-0.02	97	0	3	1	0.15	0.02	93	5	1	0	0.10	-0.03
	2015	4 668	75	96	4	0	0			99	0	0	1			95	5	0	0		
Western Sahara	2000	306	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	573	81	-	-	-	-			-	-	-	-			-	-	-	-		
Yemen	2000	17 795	26	41	3	26	30	1.23	-0.65	26	3	32	39	1.17	-0.59	84	3	9	5	0.41	-0.23
	2015	26 832	35	60	4	16	20			44	5	22	30			90	3	6	1		
Zambia	2000	10 585	35	26	10	40	24	0.34	-0.60	13	4	47	36	0.40	-0.71	51	21	26	2	-0.13	-0.09
	2015	16 212	41	31	12	41	15			19	7	50	25			49	20	30	1		
Zimbabwe	2000	12 500	34	42	25	3	29	-0.21	-0.19	36	17	5	42	-0.30	-0.21	54	41	1	4	0.02	-0.26
	2015	15 603	32	39	24	11	26			31	15	15	39			54	42	4	0		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Tokelau	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA
Tonga	2000	-	-	-	-	9	80	0	-	-	-	-	9	77	0	-	-	-	-	9	90	0
	2015	-	-	-	-	14	80	0	-	-	-	-	16	77	0	-	-	-	-	7	90	0
Trinidad and Tobago	2000	-	-	-	15	24	43	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	11	7	68	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tunisia	2000	58	18	0	40	6	29	45	-	-	-	4	16	36	5	74	12	0	62	1	23	71
	2015	73	18	0	56	24	12	58	-	-	-	7	56	20	7	89	6	0	82	6	7	85
Turkey	2000	23	7	0	16	14	-	69	-	-	-	7	38	-	32	43	0	0	43	0	-	90
	2015	44	7	0	37	15	-	81	-	-	-	19	47	-	42	48	2	0	46	3	-	96
Turkmenistan	2000	-	-	-	-	73	1	21	-	-	-	-	96	0	0	-	-	-	-	46	2	45
	2015	-	-	-	-	69	1	26	-	-	-	-	96	1	1	-	-	-	-	44	1	50
Turks and Caicos Islands	2000	-	-	-	0	10	61	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	0	17	61	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuvalu	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	9	9	0	0	10	8	73	14	14	0	0	13	15	63	6	6	0	0	7	4	81
Uganda	2000	-	-	-	0	15	1	0	-	-	-	0	13	0	0	-	-	-	0	25	2	1
	2015	-	-	-	0	18	1	0	-	-	-	0	17	0	0	-	-	-	0	25	2	1
Ukraine	2000	-	-	-	-	34	3	58	-	-	-	-	70	3	17	-	-	-	-	16	4	78
	2015	-	-	-	-	42	1	53	-	-	-	-	87	3	3	-	-	-	-	23	0	75
United Arab Emirates	2000	93	7	0	86	2	11	87	81	18	0	63	6	31	63	95	4	0	92	1	6	93
	2015	93	6	0	88	2	10	88	81	18	0	63	6	31	63	95	4	0	92	1	6	93
United Kingdom	2000	97	2	0	96	3	-	96	92	8	0	84	0	16	84	99	0	0	99	0	-	99
	2015	98	1	0	96	3	-	96	92	8	0	84	0	16	84	99	0	0	99	0	-	99
United Republic of Tanzania	2000	-	-	-	1	3	1	2	-	-	-	0	4	0	0	-	-	-	4	2	4	6
	2015	-	-	-	0	21	2	1	-	-	-	0	17	0	0	-	-	-	1	32	4	1
United States Virgin Islands	2000	-	-	-	-	0	45	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	0	49	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United States of America	2000	89	10	0	79	0	20	80	-	-	-	31	0	69	31	95	3	0	92	0	7	93
	2015	89	9	0	81	0	18	82	-	-	-	30	0	69	31	95	3	0	92	0	7	93
Uruguay	2000	62	20	0	41	-	41	54	-	-	-	0	0	85	0	63	18	0	45	0	37	58
	2015	64	19	0	45	2	35	58	-	-	-	3	7	85	3	64	17	0	47	2	33	61
Uzbekistan	2000	-	-	-	-	78	0	11	-	-	-	-	85	0	0	-	-	-	-	67	1	29
	2015	-	-	-	-	83	0	16	-	-	-	-	100	0	0	-	-	-	-	55	1	45
Vanuatu	2000	-	-	-	-	32	14	7	-	-	-	-	41	3	7	-	-	-	-	6	46	9
	2015	-	-	-	-	30	16	8	-	-	-	-	41	3	7	-	-	-	-	6	46	9
Venezuela (Bolivarian Republic of)	2000	17	11	0	7	4	18	66	-	-	-	1	9	32	12	17	10	0	7	3	16	73
	2015	19	12	0	7	2	22	71	-	-	-	1	7	56	9	17	10	0	8	1	18	79
Viet Nam	2000	-	-	-	-	34	18	1	-	-	-	-	36	7	1	-	-	-	-	27	52	3
	2015	-	-	-	-	13	64	1	-	-	-	-	20	51	1	-	-	-	-	0	88	2
Wallis and Futuna Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA
West Bank and Gaza Strip	2000	58	25	0	32	0	51	44	-	-	-	7	0	87	10	61	19	0	42	0	37	56
	2015	60	23	0	38	16	29	51	-	-	-	8	32	57	10	63	16	0	47	11	21	63
Western Sahara	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yemen	2000	-	-	-	3	26	7	8	-	-	-	0	24	3	0	53	26	0	27	34	18	32
	2015	-	-	-	8	9	25	27	-	-	-	0	10	27	6	67	12	0	56	5	18	67
Zambia	2000	-	-	-	-	16	1	9	-	-	-	-	12	0	1	-	-	-	-	24	2	25
	2015	-	-	-	-	21	3	7	-	-	-	-	18	1	0	-	-	-	-	25	8	16
Zimbabwe	2000	-	-	-	-	22	0	20	-	-	-	-	32	0	3	-	-	-	-	6	0	48
	2015	-	-	-	-	20	3	16	-	-	-	-	29	1	1	-	-	-	-	5	6	43

ANNEX 5
National hygiene estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL			RURAL			URBAN		
				Basic	Limited (without water or soap)	No facility	Basic	Limited (without water or soap)	No facility	Basic	Limited (without water or soap)	No facility
Afghanistan	2015	32 527	27	38	34	28	29	38	33	64	23	13
Algeria	2015	39 667	71	84	8	9	73	13	14	88	6	6
Angola	2015	25 022	44	25	12	63	15	12	73	37	13	50
Armenia	2015	3 018	63	87	2	11	77	0	23	93	3	4
Bangladesh	2015	160 996	34	40	45	15	31	51	18	58	32	10
Barbados	2015	284	31	-	-	-	86	1	13	90	3	7
Belize	2015	359	44	87	8	5	86	8	5	88	7	5
Benin	2015	10 880	44	10	15	75	6	16	79	16	15	70
Bhutan	2015	775	39	-	-	13	-	-	15	-	-	11
Bosnia and Herzegovina	2015	3 810	40	97	2	1	96	2	2	98	1	1
Burkina Faso	2015	18 106	30	12	58	30	7	58	35	23	58	19
Cambodia	2015	15 578	21	66	13	22	60	15	26	88	5	7
Cameroon	2015	23 344	54	3	13	84	1	11	89	4	15	81
Chad	2015	14 037	22	6	18	76	2	18	79	18	19	63
Comoros	2015	788	28	16	35	49	15	33	52	18	42	40
Costa Rica	2015	4 808	77	84	10	6	83	12	5	84	10	6
Côte d'Ivoire	2015	22 702	54	20	33	47	10	37	53	28	30	42
Cuba	2015	11 390	77	85	10	5	76	12	12	88	9	3
Democratic Republic of the Congo	2015	77 267	42	4	11	84	2	11	87	7	12	81
Dominican Republic	2015	10 528	79	55	16	29	42	16	42	58	16	26
Ecuador	2015	16 144	64	85	14	1	76	22	2	91	9	0
Egypt	2015	91 508	43	88	11	1	85	14	0	92	6	2
El Salvador	2015	6 127	67	90	7	3	86	10	4	92	5	2
Equatorial Guinea	2015	845	40	23	23	54	20	24	56	26	21	53
Ethiopia	2015	99 391	19	1	1	98	0	1	99	5	2	93
Gambia	2015	1 991	60	8	15	77	1	13	85	12	16	72
Ghana	2015	27 410	54	19	26	55	11	24	65	25	28	47
Guatemala	2015	16 343	52	77	21	3	70	27	3	83	14	2
Guinea	2015	12 609	37	9	38	53	7	37	56	12	40	48
Guinea-Bissau	2015	1 844	49	7	5	88	5	4	92	9	6	85
Guyana	2015	767	29	77	11	12	78	12	10	75	9	16
Haiti	2015	10 711	59	26	42	32	17	46	37	31	39	29
Honduras	2015	8 075	55	84	10	6	80	15	5	87	6	7
Indonesia	2015	257 564	54	77	6	18	66	8	26	86	4	11
Iraq	2015	36 423	69	91	4	5	81	7	12	95	2	2
Jamaica	2015	2 793	55	66	16	17	63	19	18	69	14	16

"-" = no estimate. For JMP estimation methods see Annex 1. For unrounded estimates see www.washdata.org.

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL			RURAL			URBAN		
				Basic	Limited (without water or soap)	No facility	Basic	Limited (without water or soap)	No facility	Basic	Limited (without water or soap)	No facility
Kazakhstan	2015	17 625	53	96	1	3	97	1	2	96	1	3
Kenya	2015	46 050	26	14	16	70	10	16	74	26	17	57
Kyrgyzstan	2015	5 940	36	89	9	2	87	11	2	93	5	1
Lesotho	2015	2 135	27	2	3	95	1	2	98	6	5	89
Liberia	2015	4 503	50	1	1	97	1	1	98	2	1	97
Madagascar	2015	24 235	35	51	23	26	40	27	33	69	15	15
Malawi	2015	17 215	16	10	75	15	8	75	17	18	76	7
Mali	2015	17 600	40	16	13	71	16	6	79	18	23	59
Mauritania	2015	4 068	60	17	26	58	10	23	67	22	27	51
Mexico	2015	127 017	79	88	9	3	80	15	5	90	8	2
Mongolia	2015	2 959	72	72	7	21	49	10	41	81	6	12
Mozambique	2015	27 978	32	12	33	55	8	37	55	21	24	55
Myanmar	2015	53 897	34	80	14	6	74	19	7	92	5	3
Namibia	2015	2 459	47	44	44	12	27	58	15	62	28	9
Nepal	2015	28 514	19	57	42	1	52	47	1	80	19	1
Nigeria	2015	182 202	48	13	24	63	7	27	66	19	20	60
Pakistan	2015	188 925	39	60	31	8	46	43	11	83	12	5
Republic of Moldova	2015	4 069	45	87	6	6	82	10	8	93	2	4
Rwanda	2015	11 610	29	5	9	86	2	9	88	13	7	80
Saint Lucia	2015	185	19	87	8	5	87	8	5	88	7	5
Sao Tome and Principe	2015	190	65	42	14	44	47	17	36	39	13	48
Senegal	2015	15 129	44	15	15	69	10	14	76	23	17	60
Somalia	2015	10 787	40	10	34	56	8	35	57	12	34	54
Sudan	2015	40 235	34	23	19	57	19	21	60	32	16	52
Swaziland	2015	1 287	21	23	32	45	17	33	50	48	27	26
Tajikistan	2015	8 482	27	73	20	7	67	24	10	88	10	2
Togo	2015	7 305	40	10	12	78	4	11	85	20	13	66
Tunisia	2015	11 254	67	86	8	6	67	18	15	96	3	2
Turkmenistan	2015	5 374	50	98	1	2	97	1	3	99	1	1
Uganda	2015	39 032	16	8	22	71	6	22	72	15	21	64
United Republic of Tanzania	2015	53 470	32	48	35	17	40	40	19	63	25	12
Viet Nam	2015	93 448	34	86	13	2	82	16	2	93	7	1
Yemen	2015	26 832	35	49	26	25	38	29	33	71	20	9
Zambia	2015	16 212	41	14	28	59	5	24	71	26	33	41
Zimbabwe	2015	15 603	32	31	47	22	24	52	25	46	38	16

ANNEX 6
Inequalities in basic services

INEQUALITIES IN USE OF BASIC SERVICE: SUB-NATIONAL REGIONS			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Survey	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Afghanistan	MICS11	Lowest region	24	1	11	4	21	1	22	1	6	7	10
	MICS11	Highest region	71	5	48	33	52	9	72	50	61	36	84
Angola	MIS11	Lowest region	25	5	2	0	12	2	0	2	4	1	30
	MIS11*	Highest region	76	39	35	40	71	34	26	85	55	31	91
Armenia	DHS10	Lowest region	97	0	0	0	61	0	0	0	67	0	0
	DHS10	Highest region	100	1	3	0	100	8	39	0	98	20	32
Azerbaijan	DHS06	Lowest region	64	0	0	0	53	1	1	0	-	-	-
	DHS06	Highest region	99	13	6	29	95	13	43	2	-	-	-
Bangladesh	MICS13	Lowest region	90	0	0	0	52	7	10	1	38	20	2
	MICS13	Highest region	100	4	2	5	59	28	40	16	57	53	34
Barbados	MICS12	Lowest region	99	0	0	0	94	2	0	0	43	49	0
	MICS12	Highest region	100	0	1	0	98	5	1	1	51	55	3
Belarus	MICS12	Lowest region	99	0	0	0	93	1	0	0	-	-	-
	MICS12	Highest region	100	0	1	0	99	7	5	0	-	-	-
Belize	MICS11	Lowest region	96	0	0	0	83	6	0	0	17	34	2
	MICS11	Highest region	100	1	3	2	94	13	5	10	60	73	12
Benin	DHS12	Lowest region	52	0	1	0	2	3	3	6	1	8	49
	DHS12	Highest region	99	9	41	12	40	45	24	89	26	50	79
Bhutan	MICS10	Lowest region	68	0	0	0	31	2	8	0	49	1	0
	MICS10	Highest region	100	3	9	21	80	16	62	6	94	51	24
Bolivia (Plurinational State of)	DHS08	Lowest region	55	0	2	1	-	-	-	-	-	-	-
	DHS08	Highest region	95	1	35	14	-	-	-	-	-	-	-
Bosnia and Herzegovina	MICS12	Lowest region	88	0	0	0	89	0	0	0	73	13	0
	MICS12	Highest region	99	11	0	0	100	1	10	0	86	27	5
Burkina Faso	DHS10	Lowest region	46	6	2	0	3	2	0	11	2	60	0
	DHS10	Highest region	92	23	38	26	62	25	24	93	32	97	21
Burundi	MIS12	Lowest region	56	6	0	2	39	5	5	1	-	-	-
	MIS12	Highest region	92	26	23	8	87	54	53	5	-	-	-
Cambodia	DHS14	Lowest region	53	0	0	1	25	3	0	4	30	1	0
	DHS14	Highest region	96	1	43	27	87	15	9	69	98	39	60
Cameroon	DHS11	Lowest region	41	3	1	0	26	3	3	0	-	-	-
	DHS11	Highest region	93	14	43	22	70	39	57	22	-	-	-
Central African Republic	MICS12	Lowest region	20	5	3	0	0	0	28	1	0	0	43
	MICS12	Highest region	78	31	64	12	11	8	96	68	44	15	100
Chad	MICS10	Lowest region	9	4	1	0	2	0	5	5	0	3	11
	MICS10	Highest region	95	26	81	25	43	31	33	88	62	51	86
Colombia	DHS10	Lowest region	86	0	0	0	78	6	0	0	-	-	-
	DHS10	Highest region	100	0	8	11	92	14	3	13	-	-	-
Comoros	DHS12	Lowest region	81	3	6	0	21	1	47	0	6	30	19
	DHS12	Highest region	87	10	10	2	39	16	77	3	26	57	64
Congo	DHS12	Lowest region	13	3	3	0	1	2	37	1	-	-	-
	DHS12	Highest region	80	23	47	45	17	44	85	48	-	-	-
Costa Rica	MICS11	Lowest region	95	0	0	0	93	2	1	0	34	48	0
	MICS11	Highest region	100	0	3	1	96	5	3	0	51	65	3
Côte d'Ivoire	DHS12	Lowest region	47	1	1	0	8	11	7	1	3	22	23
	DHS12	Highest region	97	17	43	9	48	42	51	61	37	56	71
Democratic Republic of the Congo	DHS14	Lowest region	13	7	1	0	3	5	12	2	1	1	60
	DHS14	Highest region	92	28	67	21	41	43	87	28	18	32	99

* IIMS15/MIS11
"-" = no estimate. For unrounded estimates see www.washdata.org.

INEQUALITIES IN USE OF BASIC SERVICE: WEALTH QUINTILES			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Year	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Afghanistan	2011	Poorest	39	5	36	19	19	1	40	40	28	23	50
	2011	Richest	84	2	10	4	56	9	34	1	67	18	15
Angola	2011	Poorest	15	9	8	68	6	0	13	81	-	-	-
	2011	Richest	80	19	1	0	98	0	2	0	-	-	-
Armenia	2010	Poorest	98	0	2	0	80	4	16	0	70	8	22
	2010	Richest	100	0	0	0	99	1	0	0	97	3	0
Azerbaijan	2006	Poorest	69	10	5	16	68	6	25	1	-	-	-
	2006	Richest	98	1	1	1	92	4	4	0	-	-	-
Bangladesh	2013	Poorest	93	3	1	2	32	21	36	12	25	49	26
	2013	Richest	99	0	0	1	80	16	4	0	75	17	9
Barbados	2012	Poorest	99	0	1	0	93	5	1	2	49	45	6
	2012	Richest	100	0	0	0	98	2	0	0	41	58	0
Belarus	2012	Poorest	99	0	1	0	91	4	6	0	-	-	-
	2012	Richest	100	0	0	0	99	1	0	0	-	-	-
Belize	2011	Poorest	95	1	3	2	74	15	4	7	28	62	11
	2011	Richest	100	0	0	0	98	2	0	0	36	59	5
Benin	2012	Poorest	56	9	26	10	1	2	4	93	5	29	65
	2012	Richest	93	1	6	0	50	33	11	6	25	22	53
Bhutan	2010	Poorest	91	1	4	4	38	2	53	7	72	26	2
	2010	Richest	100	0	0	0	92	6	2	0	89	11	0
Bolivia (Plurinational State of)	2008	Poorest	60	0	20	20	15	1	15	69	-	-	-
	2008	Richest	100	0	0	0	83	11	5	1	-	-	-
Bosnia and Herzegovina	2012	Poorest	98	1	1	0	83	2	14	0	78	18	4
	2012	Richest	100	0	0	0	99	0	1	0	71	29	0
Burkina Faso	2010	Poorest	50	13	21	16	3	3	4	90	9	80	10
	2010	Richest	89	6	5	0	50	33	6	10	28	67	5
Burundi	2012	Poorest	56	20	17	7	55	11	27	7	-	-	-
	2012	Richest	78	13	8	1	63	25	11	1	-	-	-
Cambodia	2014	Poorest	61	0	18	21	14	5	1	80	49	24	27
	2014	Richest	95	0	2	3	91	6	1	2	91	6	4
Cameroon	2011	Poorest	34	9	39	19	23	2	49	26	-	-	-
	2011	Richest	91	5	3	1	69	26	4	0	-	-	-
Central African Republic	2012	Poorest	37	16	38	9	1	0	41	58	6	5	90
	2012	Richest	67	23	9	0	12	7	79	1	34	6	60
Chad	2010	Poorest	20	15	61	5	2	1	10	88	14	35	50
	2010	Richest	74	11	13	2	37	20	29	14	54	20	25
Colombia	2010	Poorest	70	0	10	19	62	10	3	25	-	-	-
	2010	Richest	100	0	0	0	98	2	0	0	-	-	-
Comoros	2012	Poorest	69	15	13	2	24	9	66	1	14	41	45
	2012	Richest	93	2	5	0	53	6	41	0	27	42	31
Congo	2012	Poorest	22	8	40	29	2	2	68	28	-	-	-
	2012	Richest	85	12	3	0	35	44	21	0	-	-	-
Costa Rica	2011	Poorest	96	0	2	0	88	8	5	0	47	51	3
	2011	Richest	100	0	0	0	97	1	2	0	24	75	1
Côte d'Ivoire	2012	Poorest	50	8	30	12	2	7	17	73	4	47	49
	2012	Richest	96	3	1	0	68	25	6	1	44	32	24
Democratic Republic of the Congo	2014	Poorest	17	9	61	14	15	16	45	24	1	8	92
	2014	Richest	82	12	5	1	26	40	32	1	15	18	67

ANNEX 6 Inequalities in basic services

INEQUALITIES IN USE OF BASIC SERVICE: SUB-NATIONAL REGIONS			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Survey	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Dominican Republic	MICS14	Lowest region	93	0	0	0	70	9	0	1	34	13	16
	MICS14	Highest region	99	2	2	4	89	23	4	12	68	22	45
Egypt	DHS08	Lowest region	93	0	0	0	89	1	0	0	-	-	-
	DHS08	Highest region	100	6	1	1	99	10	0	1	-	-	-
El Salvador	MICS14	Lowest region	92	0	0	0	81	7	1	0	89	6	1
	MICS14	Highest region	99	2	6	1	92	14	1	5	93	10	2
Ethiopia	DHS11	Lowest region	25	6	0	0	6	3	6	6	0	0	89
	DHS11	Highest region	94	29	38	44	26	49	67	80	9	5	99
Gabon	DHS12	Lowest region	53	4	1	0	8	4	13	0	-	-	-
	DHS12	Highest region	94	27	13	19	49	36	89	12	-	-	-
Ghana	MICS11	Lowest region	47	3	0	1	3	7	1	6	2	5	57
	MICS11	Highest region	96	33	19	28	28	64	35	89	14	36	93
Guinea	DHS12	Lowest region	39	1	1	0	11	8	9	0	1	1	41
	DHS12	Highest region	91	21	24	28	38	53	65	46	20	48	98
Guinea-Bissau	MICS14	Lowest region	35	1	3	0	13	11	19	1	0	0	41
	MICS14	Highest region	93	11	61	2	35	46	44	44	41	27	100
Guyana	MICS14	Lowest region	42	0	0	0	33	3	1	0	54	5	2
	MICS14	Highest region	100	3	51	35	96	30	30	22	92	26	29
Haiti	DHS12	Lowest region	28	4	6	0	4	10	11	8	27	16	25
	DHS12	Highest region	91	17	59	4	36	77	39	50	44	34	56
Honduras	DHS12	Lowest region	72	0	0	0	20	5	2	2	52	6	0
	DHS12	Highest region	99	2	18	8	83	15	27	42	93	46	5
Indonesia	DHS12	Lowest region	58	0	3	0	46	2	0	0	34	2	4
	DHS12	Highest region	97	3	33	28	85	27	25	37	91	19	62
Iraq	MICS11	Lowest region	74	0	0	0	84	1	0	0	63	0	0
	MICS11	Highest region	100	25	3	10	99	7	7	6	99	26	16
Jamaica	MICS11	Lowest region	91	0	0	0	84	11	1	0	60	24	5
	MICS11	Highest region	100	3	4	1	88	15	1	0	70	31	9
Jordan	DHS12	Lowest region	100	0	0	0	100	0	0	0	-	-	-
	DHS12	Highest region	100	0	0	0	100	0	0	0	-	-	-
Kazakhstan	MICS11	Lowest region	88	0	0	0	87	1	0	0	-	-	-
	MICS11	Highest region	100	4	8	7	99	8	12	0	-	-	-
Kenya	DHS09	Lowest region	42	1	1	0	8	13	5	0	-	-	-
	DHS09	Highest region	98	29	22	37	47	48	53	65	-	-	-
Kyrgyzstan	MICS14	Lowest region	59	0	0	0	87	0	0	0	91	0	0
	MICS14	Highest region	100	2	7	37	100	13	1	0	99	8	9
Lao People's Democratic Republic	MICS12	Lowest region	52	0	0	0	21	1	0	1	-	-	-
	MICS12	Highest region	98	4	40	22	94	4	13	77	-	-	-
Lesotho	DHS09	Lowest region	57	5	13	0	15	3	6	15	-	-	-
	DHS09	Highest region	79	16	38	4	36	19	43	75	-	-	-
Liberia	MIS11	Lowest region	56	2	5	0	1	11	23	20	-	-	-
	MIS11	Highest region	76	10	16	32	4	29	47	61	-	-	-
Madagascar	AIS13	Lowest region	28	0	30	8	1	2	4	30	-	-	-
	AIS13	Highest region	45	1	47	42	8	11	51	93	-	-	-
Malawi	MICS14	Lowest region	51	25	5	2	28	15	10	4	3	5	85
	MICS14	Highest region	63	36	14	5	59	28	51	6	6	9	92
Mali	DHS13	Lowest region	54	2	1	0	13	11	9	0	6	14	53
	DHS13	Highest region	96	4	42	10	47	43	58	38	28	19	79
Mauritania	MICS11	Lowest region	29	3	0	0	6	2	3	5	9	6	4
	MICS11	Highest region	97	67	63	5	73	26	35	88	60	47	81
Mongolia	MICS14	Lowest region	74	6	0	0	45	17	0	0	77	3	3
	MICS14	Highest region	94	14	5	16	80	26	29	9	94	11	12

INEQUALITIES IN USE OF BASIC SERVICE: WEALTH QUINTILES			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Year	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Dominican Republic	2014	Poorest	93	2	2	3	58	30	3	9	28	23	49
	2014	Richest	99	0	0	0	98	1	1	0	85	9	6
Egypt	2008	Poorest	99	1	0	0	88	10	0	2	-	-	-
	2008	Richest	100	0	0	0	100	0	0	0	-	-	-
El Salvador	2014	Poorest	86	2	9	2	65	23	2	9	84	13	2
	2014	Richest	99	0	0	0	98	2	0	0	95	4	1
Ethiopia	2011	Poorest	16	17	44	22	4	1	43	51	0	0	100
	2011	Richest	76	13	7	4	19	26	42	14	5	3	93
Gabon	2012	Poorest	55	19	7	19	4	7	83	6	-	-	-
	2012	Richest	96	2	2	0	88	9	4	0	-	-	-
Ghana	2011	Poorest	38	17	12	33	7	17	18	59	5	9	86
	2011	Richest	97	2	0	0	40	52	6	2	11	37	52
Guinea	2012	Poorest	51	11	21	16	4	5	56	35	2	40	59
	2012	Richest	91	8	1	0	44	47	9	0	25	31	44
Guinea-Bissau	2014	Poorest	46	4	49	0	13	11	23	53	5	7	87
	2014	Richest	91	3	6	0	53	30	17	0	17	10	73
Guyana	2014	Poorest	81	1	10	9	70	15	12	3	66	20	14
	2014	Richest	100	0	0	0	96	3	0	0	93	2	5
Haiti	2012	Poorest	22	13	62	3	11	8	31	50	23	26	51
	2012	Richest	92	5	3	0	62	33	4	1	54	20	26
Honduras	2012	Poorest	81	2	15	2	56	8	10	27	77	20	2
	2012	Richest	100	0	0	0	87	10	3	0	94	5	2
Indonesia	2012	Poorest	63	1	27	9	34	18	11	37	47	12	41
	2012	Richest	95	0	5	0	96	2	0	2	96	1	2
Iraq	2011	Poorest	86	5	1	8	86	4	7	4	76	11	14
	2011	Richest	100	0	0	0	98	2	0	0	98	2	0
Jamaica	2011	Poorest	89	3	6	2	76	21	2	1	57	36	8
	2011	Richest	98	1	1	0	99	1	0	0	79	18	3
Jordan	2012	Poorest	100	0	0	0	99	1	0	0	-	-	-
	2012	Richest	100	0	0	0	100	0	0	0	-	-	-
Kazakhstan	2011	Poorest	90	3	4	2	96	3	1	0	-	-	-
	2011	Richest	99	0	0	0	99	1	0	0	-	-	-
Kenya	2009	Poorest	31	13	15	41	8	9	36	47	-	-	-
	2009	Richest	89	2	4	5	44	42	14	0	-	-	-
Kyrgyzstan	2014	Poorest	71	1	3	25	98	2	0	0	88	10	2
	2014	Richest	100	0	0	0	97	3	0	0	98	1	1
Lao People's Democratic Republic	2012	Poorest	64	1	18	17	23	1	6	70	-	-	-
	2012	Richest	96	0	3	1	96	2	0	1	-	-	-
Lesotho	2009	Poorest	53	8	39	1	12	1	7	81	-	-	-
	2009	Richest	87	6	6	0	46	20	31	2	-	-	-
Liberia	2011	Poorest	47	3	12	39	1	9	16	73	-	-	-
	2011	Richest	81	6	12	0	9	32	42	17	-	-	-
Madagascar	2013	Poorest	20	1	40	39	1	2	16	80	-	-	-
	2013	Richest	71	1	21	6	14	17	53	15	-	-	-
Malawi	2014	Poorest	48	33	15	3	29	21	36	13	2	6	93
	2014	Richest	78	18	3	1	56	27	17	0	13	10	76
Mali	2013	Poorest	45	2	52	2	9	6	60	24	4	16	80
	2013	Richest	93	3	4	0	51	40	9	0	26	17	57
Mauritania	2011	Poorest	24	19	54	3	5	1	8	86	15	23	62
	2011	Richest	91	8	1	0	69	21	9	1	56	31	13
Mongolia	2014	Poorest	68	13	5	14	53	25	16	6	72	15	13
	2014	Richest	100	0	0	0	99	1	0	0	99	0	0

ANNEX 6 Inequalities in basic services

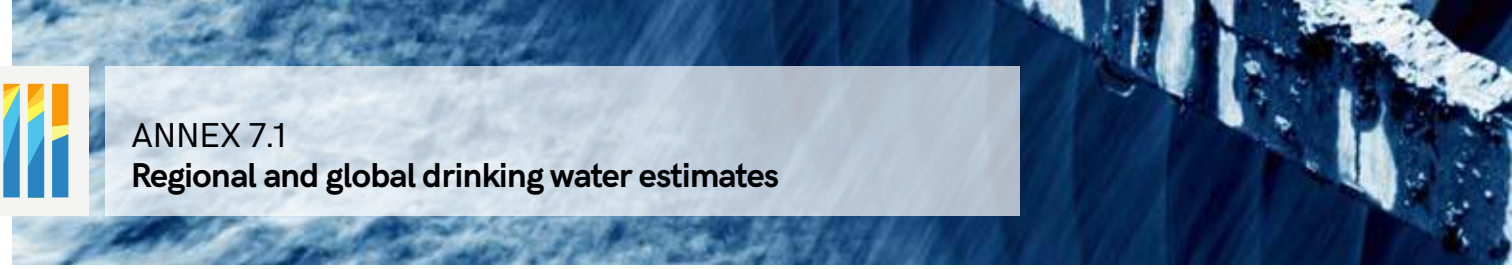
INEQUALITIES IN USE OF BASIC SERVICE: SUB-NATIONAL REGIONS			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Survey	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Montenegro	MICS13	Lowest region	96	0	0	0	88	0	0	0	-	-	-
	MICS13	Highest region	100	3	1	0	99	1	11	0	-	-	-
Mozambique	DHS11	Lowest region	19	0	1	0	7	0	10	1	2	4	4
	DHS11	Highest region	99	17	53	30	78	12	66	72	37	90	93
Namibia	DHS13	Lowest region	53	1	0	0	14	1	1	12	19	17	0
	DHS13	Highest region	98	13	29	25	64	30	12	83	73	72	38
Nepal	MICS14	Lowest region	64	0	0	0	37	2	0	4	40	14	0
	MICS14	Highest region	99	18	18	11	85	26	7	58	84	58	8
Niger	DHS12	Lowest region	36	3	1	0	3	1	3	6	-	-	-
	DHS12	Highest region	95	35	55	6	34	50	11	82	-	-	-
Nigeria	DHS13	Lowest region	48	3	5	6	20	7	5	15	2	13	35
	DHS13	Highest region	83	14	37	28	46	43	28	56	33	53	74
Pakistan	DHS13	Lowest region	60	1	1	0	51	1	3	1	20	8	2
	DHS13	Highest region	98	17	17	17	93	12	14	29	89	69	11
Panama	MICS13	Lowest region	47	0	0	0	1	0	0	0	-	-	-
	MICS13	Highest region	100	1	41	53	95	12	55	56	-	-	-
Peru	DHS12	Lowest region	58	0	1	0	49	3	2	1	-	-	-
	DHS12	Highest region	98	7	25	22	88	20	27	32	-	-	-
Philippines	DHS13	Lowest region	62	0	0	0	22	11	1	1	-	-	-
	DHS13	Highest region	100	5	31	2	86	31	22	39	-	-	-
Republic of Moldova	MICS12	Lowest region	77	0	1	0	63	6	1	0	68	22	1
	MICS12	Highest region	98	2	21	0	86	13	30	0	74	30	4
Rwanda	MIS13	Lowest region	44	10	2	1	46	7	16	1	-	-	-
	MIS13	Highest region	87	29	19	16	56	37	42	2	-	-	-
Saint Lucia	MICS12	Lowest region	-	-	-	-	-	-	-	-	-	-	-
	MICS12	Highest region	-	-	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	MICS14	Lowest region	66	8	1	2	30	3	0	41	38	9	29
	MICS14	Highest region	86	13	14	12	53	9	2	65	51	20	49
Senegal	DHS13	Lowest region	11	0	2	0	13	1	1	0	1	1	52
	DHS13	Highest region	96	16	88	4	63	41	70	56	22	28	96
Serbia	MICS14	Lowest region	98	1	0	0	94	0	1	0	-	-	-
	MICS14	Highest region	99	2	1	0	99	1	5	0	-	-	-
Sierra Leone	DHS13	Lowest region	38	4	5	2	7	34	14	8	2	11	55
	DHS13	Highest region	72	21	29	28	28	50	45	39	26	20	86
Sudan	MICS14	Lowest region	31	1	3	0	10	1	3	2	2	1	4
	MICS14	Highest region	95	36	49	0	79	19	69	45	55	73	97
Suriname	MICS11	Lowest region	64	0	0	0	25	2	1	0	19	20	2
	MICS11	Highest region	100	0	6	33	96	24	11	54	39	73	41
Swaziland	MICS14	Lowest region	52	2	7	11	51	20	4	4	9	13	47
	MICS14	Highest region	80	9	16	24	56	41	13	25	37	29	78
Thailand	MICS13	Lowest region	94	0	0	0	95	1	0	0	-	-	-
	MICS13	Highest region	100	0	5	3	99	5	1	1	-	-	-
The former Yugoslav Republic of Macedonia	MICS11	Lowest region	98	0	0	0	81	1	0	0	-	-	-
	MICS11	Highest region	100	1	2	0	98	4	17	3	-	-	-
Timor-Leste	DHS10	Lowest region	37	1	1	0	20	4	1	5	-	-	-
	DHS10	Highest region	97	12	57	9	74	20	57	69	-	-	-
Togo	MICS10	Lowest region	31	2	7	0	3	6	2	6	3	9	49
	MICS10	Highest region	92	9	42	42	30	58	17	84	10	41	88
Tunisia	MICS12	Lowest region	76	0	0	0	77	1	0	0	44	3	0
	MICS12	Highest region	100	22	14	0	97	8	7	18	94	48	26
Uganda	DHS11	Lowest region	26	3	0	0	2	3	18	0	0	8	34
	DHS11	Highest region	91	47	34	26	39	51	86	66	27	42	91

INEQUALITIES IN USE OF BASIC SERVICE: WEALTH QUINTILES			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Year	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Montenegro	2013	Poorest	97	1	2	0	86	2	11	0	-	-	-
	2013	Richest	99	1	0	0	99	0	0	0	-	-	-
Mozambique	2011	Poorest	22	10	46	22	8	1	28	62	3	44	53
	2011	Richest	91	3	5	1	67	10	21	3	31	22	48
Namibia	2013	Poorest	51	14	20	15	4	2	2	92	18	62	20
	2013	Richest	100	0	0	0	87	10	2	0	80	16	3
Nepal	2014	Poorest	76	7	11	5	73	4	2	21	50	48	3
	2014	Richest	98	1	1	0	71	28	1	1	92	6	1
Niger	2012	Poorest	41	21	37	1	3	2	7	88	-	-	-
	2012	Richest	72	13	14	1	36	29	7	28	-	-	-
Nigeria	2013	Poorest	30	6	43	21	19	4	26	51	2	46	52
	2013	Richest	89	6	3	2	54	35	5	6	36	31	33
Pakistan	2013	Poorest	79	9	8	3	18	7	11	64	16	73	11
	2013	Richest	98	1	0	0	93	3	3	0	94	3	3
Panama	2013	Poorest	87	0	10	3	71	12	7	10	-	-	-
	2013	Richest	100	0	0	0	99	1	0	0	-	-	-
Peru	2012	Poorest	71	2	16	11	45	2	24	28	-	-	-
	2012	Richest	100	0	0	0	98	1	0	0	-	-	-
Philippines	2013	Poorest	80	3	17	1	45	23	9	22	-	-	-
	2013	Richest	99	1	0	0	93	7	0	0	-	-	-
Republic of Moldova	2012	Poorest	72	2	26	0	53	8	39	1	69	26	5
	2012	Richest	96	1	3	0	90	7	3	0	73	26	1
Rwanda	2013	Poorest	50	24	18	8	35	13	48	5	-	-	-
	2013	Richest	79	15	4	2	64	27	9	0	-	-	-
Saint Lucia	2012	Poorest	97	0	2	0	72	20	1	7	49	42	9
	2012	Richest	99	0	1	0	99	1	0	0	38	62	0
Sao Tome and Principe	2014	Poorest	78	12	3	6	13	5	2	80	25	20	55
	2014	Richest	92	6	1	1	82	5	1	12	65	9	26
Senegal	2013	Poorest	43	10	46	1	7	2	30	61	4	7	89
	2013	Richest	97	0	2	0	79	19	2	0	27	26	47
Serbia	2014	Poorest	97	1	2	0	90	2	8	1	-	-	-
	2014	Richest	99	1	0	0	100	0	0	0	-	-	-
Sierra Leone	2013	Poorest	35	3	32	30	3	24	37	36	2	19	79
	2013	Richest	76	19	4	2	30	55	13	2	26	16	57
Sudan	2014	Poorest	36	24	40	0	7	1	38	54	21	17	62
	2014	Richest	96	1	3	0	78	13	8	0	50	19	30
Suriname	2011	Poorest	83	0	3	13	46	21	10	22	30	39	32
	2011	Richest	100	0	0	0	96	4	0	0	21	74	5
Swaziland	2014	Poorest	41	11	18	30	40	15	11	34	4	14	83
	2014	Richest	98	1	0	1	55	40	4	1	56	27	18
Thailand	2013	Poorest	97	0	1	3	94	4	1	1	-	-	-
	2013	Richest	100	0	0	0	99	1	0	0	-	-	-
The former Yugoslav Republic of Macedonia	2011	Poorest	98	0	1	0	76	5	17	3	-	-	-
	2011	Richest	100	0	0	0	100	0	0	0	-	-	-
Timor-Leste	2010	Poorest	39	7	50	4	14	2	24	60	-	-	-
	2010	Richest	91	1	8	0	80	15	3	3	-	-	-
Togo	2010	Poorest	19	4	39	38	0	2	12	86	2	14	84
	2010	Richest	89	3	8	0	45	41	7	7	13	37	49
Tunisia	2012	Poorest	82	9	9	0	77	6	6	11	54	26	20
	2012	Richest	99	1	0	0	99	0	0	0	90	9	1
Uganda	2011	Poorest	35	37	13	15	6	5	58	31	3	18	79
	2011	Richest	72	14	9	5	40	34	26	0	22	27	51

ANNEX 6 Inequalities in basic services

INEQUALITIES IN USE OF BASIC SERVICE: SUB-NATIONAL REGIONS			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Survey	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Ukraine	MICS12	Lowest region	98	0	0	0	94	1	0	0	-	-	-
	MICS12	Highest region	100	1	1	0	99	3	4	0	-	-	-
United Republic of Tanzania	AIS12	Lowest region	20	1	0	0	3	0	5	0	-	-	-
	AIS12	Highest region	96	22	66	40	81	38	87	54	-	-	-
Viet Nam	MICS14	Lowest region	84	0	0	0	54	2	2	0	73	5	0
	MICS14	Highest region	99	0	16	7	94	5	41	22	95	25	3
West Bank and Gaza Strip	MICS14	Lowest region	99	0	0	0	98	1	0	0	-	-	-
	MICS14	Highest region	99	0	0	0	99	2	1	0	-	-	-
Zambia	DHS07	Lowest region	15	0	14	2	4	1	11	5	-	-	-
	DHS07	Highest region	83	7	67	46	47	44	81	64	-	-	-
Zimbabwe	MICS14	Lowest region	47	0	1	0	20	9	1	0	26	29	0
	MICS14	Highest region	99	22	27	14	55	59	22	70	67	64	16

INEQUALITIES IN USE OF BASIC SERVICE: WEALTH QUINTILES			DRINKING WATER				SANITATION				HYGIENE		
COUNTRY, AREA OR TERRITORY	Year	Group	At least basic	Limited	Unimproved	Surface water	At least basic	Limited	Unimproved	Open defecation	Basic	Limited	No facility
Ukraine	2012	Poorest	98	1	2	0	96	2	3	0	-	-	-
	2012	Richest	99	1	0	0	99	1	0	0	-	-	-
United Republic of Tanzania	2012	Poorest	22	11	40	28	2	0	59	39	-	-	-
	2012	Richest	85	5	7	3	47	30	23	0	-	-	-
Viet Nam	2014	Poorest	80	0	17	3	37	5	35	23	65	31	4
	2014	Richest	100	0	0	0	98	1	1	0	98	2	0
West Bank and Gaza Strip	2014	Poorest	99	1	0	0	97	3	1	0	-	-	-
	2014	Richest	100	0	0	0	100	0	0	0	-	-	-
Zambia	2007	Poorest	13	2	54	31	7	4	37	51	-	-	-
	2007	Richest	89	1	10	0	68	24	8	0	-	-	-
Zimbabwe	2014	Poorest	38	15	31	16	9	8	10	73	11	65	24
	2014	Richest	96	3	0	0	58	42	0	0	65	34	1



ANNEX 7.1
Regional and global drinking water estimates

REGION	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (>30 mins)	Unimproved	Surface water	Annual rate of change in basic
SDG REGIONS																		
Australia and New Zealand	2000	22 965	87	100	0	0	0	0.01	99	0	0	0	0.05	100	0	0	0	0.01
	2015	28 497	89	100	0	0	0		100	0	0	0		100	0	0	0	
Central Asia and Southern Asia	2000	1 507 050	29	82	3	12	2	0.40	78	4	15	3	0.53	94	2	4	0	0.00
	2015	1 890 288	35	88	4	6	1		86	5	8	2		94	2	4	0	
Eastern Asia and South-eastern Asia	2000	2 022 463	41	80	1	16	4	0.97	68	1	25	6	1.58	96	1	2	0	-0.02
	2015	2 245 777	57	94	1	4	1		92	2	5	2		96	1	3	0	
Latin America and the Caribbean	2000	526 890	75	90	1	6	3	0.38	71	2	16	10	0.97	97	0	3	0	0.14
	2015	634 387	80	96	1	2	1		86	2	6	6		99	0	1	0	
Northern America and Europe	2000	1 040 132	73	99	0	1	0	0.02	96	1	3	0	0.05	99	0	0	0	0.00
	2015	1 096 280	76	99	0	1	0		97	0	2	0		99	0	0	0	
Oceania excluding Australia and New Zealand	2000	8 102	24	55	1	15	29	-0.21	44	1	18	37	-0.24	92	1	5	1	-0.01
	2015	10 834	23	52	1	16	31		40	1	19	40		92	2	4	2	
Sub-Saharan Africa	2000	642 172	31	45	10	27	19	0.88	29	10	34	26	0.88	78	8	9	4	0.25
	2015	962 287	38	58	14	19	10		43	16	27	14		82	10	7	2	
Western Asia and Northern Africa	2000	356 848	56	85	4	10	2	0.40	71	6	18	5	0.75	95	2	3	0	0.06
	2015	481 123	61	91	6	2	2		83	9	4	4		96	3	1	0	
OTHER REGIONAL GROUPINGS																		
Least Developed Countries	2000	665 011	24	51	8	26	15	0.72	43	8	30	18	0.64	77	9	11	4	0.38
	2015	954 920	32	62	13	17	8		52	15	22	11		83	10	6	1	
Landlocked Developing Countries	2000	334 480	26	51	9	25	15	0.74	39	10	32	20	0.84	85	6	7	2	0.20
	2015	477 981	29	62	15	16	7		51	18	22	10		88	8	3	1	
Small Island Developing States	2000	55 743	55	81	3	9	8	0.10	63	5	16	17	0.01	95	2	2	1	-0.07
	2015	66 594	62	82	3	9	6		63	4	19	14		94	2	4	0	
WORLD	2000	6 126 622	47	81	3	12	4	0.49	69	4	20	7	0.79	95	1	3	1	0.00
	2015	7 349 472	54	89	4	6	2		80	6	10	4		95	2	2	0	

"-" = no estimate. For JMP estimation methods see Annex 1. For unrounded estimates see www.washdata.org.

REGION	Year	NATIONAL						RURAL						URBAN					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
SDG REGIONS																			
Australia and New Zealand	2000	-	97	92	-	87	13	-	89	90	-	67	33	92	98	92	96	90	10
	2015	-	98	96	-	93	7	-	91	96	-	87	13	97	99	97	100	94	6
Central Asia and Southern Asia	2000	46	47	76	61	41	45	38	38	73	60	28	54	66	70	86	66	72	24
	2015	57	63	81	60	42	50	55	55	78	60	29	61	61	78	87	61	67	28
Eastern Asia and South-eastern Asia	2000	-	65	-	-	47	34	-	46	-	-	24	45	93	93	-	93	80	17
	2015	-	87	-	-	68	28	-	85	-	-	49	45	89	89	-	93	82	15
Latin America and the Caribbean	2000	61	82	72	61	83	8	-	53	56	-	54	19	77	91	77	92	93	4
	2015	65	93	74	65	91	6	-	79	61	-	72	16	77	97	77	93	96	3
Northern America and Europe	2000	89	91	-	96	94	5	-	78	-	-	82	15	-	96	99	-	98	2
	2015	94	94	98	98	95	4	-	90	-	-	89	8	96	96	99	100	98	2
Oceania excluding Australia and New Zealand	2000	-	39	49	-	38	19	-	28	-	-	24	21	-	73	85	-	81	13
	2015	-	35	-	-	36	17	-	24	-	-	22	19	-	73	86	-	82	12
Sub-Saharan Africa	2000	18	18	42	34	30	24	-	6	32	-	13	26	44	44	66	69	67	20
	2015	24	24	54	42	32	39	-	10	46	-	17	41	46	46	66	72	56	35
Western Asia and Northern Africa	2000	-	75	65	-	75	14	-	56	54	-	56	21	-	89	73	-	89	8
	2015	-	82	78	-	83	13	-	69	68	-	70	21	-	90	84	-	91	8
OTHER REGIONAL GROUPINGS																			
Least Developed Countries	2000	25	25	46	31	21	39	18	18	42	27	10	41	46	47	60	46	52	33
	2015	33	34	58	37	29	46	25	25	55	29	15	52	53	55	63	53	59	34
Landlocked Developing Countries	2000	25	25	49	35	33	26	12	12	41	24	17	31	64	64	69	66	78	13
	2015	33	33	63	34	39	38	18	18	59	20	24	45	68	68	73	69	77	19
Small Island Developing States	2000	-	65	67	-	66	17	-	43	55	-	43	25	-	83	77	-	85	11
	2015	-	67	72	-	64	21	-	46	55	-	42	25	-	80	82	-	78	18
WORLD	2000	61	62	73	69	57	27	41	41	62	52	32	40	85	86	85	90	85	12
	2015	71	74	79	73	64	28	55	60	72	55	41	45	85	86	85	89	83	14

ANNEX 7.2
Regional and global sanitation estimates

REGION	Year	Population (thousands)	% urban	NATIONAL						RURAL						URBAN					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in basic	Annual rate of change in open defecation
SDG REGIONS																					
Australia and New Zealand	2000	22 965	87	100	0	0	0	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2015	28 497	89	100	0	0	0			-	-	-	-			-	-	-	-		
Central Asia and Southern Asia	2000	1 507 050	29	29	7	11	53	1.39	-1.56	17	3	12	68	1.52	-1.69	58	15	10	17	0.73	-0.79
	2015	1 890 288	35	50	12	8	30			40	8	9	43			69	19	7	5		
Eastern Asia and South-eastern Asia	2000	2 022 463	41	64	4	25	7	0.87	-0.25	52	4	34	10	0.76	-0.29	81	6	12	2	0.44	-0.06
	2015	2 245 777	57	77	6	14	3			64	6	25	6			87	6	5	1		
Latin America and the Caribbean	2000	526 890	75	75	4	11	10	0.70	-0.44	47	3	20	29	1.41	-1.21	84	4	8	3	0.38	-0.15
	2015	634 387	80	86	5	6	3			68	5	15	11			90	5	4	1		
Northern America and Europe	2000	1 040 132	73	96	1	4	0	0.10	0.00	89	1	10	0	0.32	-0.01	98	1	1	0	0.01	0.00
	2015	1 096 280	76	97	1	2	0			94	1	5	0			98	1	1	0		
Oceania excluding Australia and New Zealand	2000	8 102	24	36	4	47	13	-0.03	-0.05	24	3	57	16	-0.04	-0.07	74	9	15	3	0.08	-0.01
	2015	10 834	23	36	4	48	12			24	3	58	15			75	9	14	3		
Sub-Saharan Africa	2000	642 172	31	25	14	29	32	0.23	-0.59	18	8	31	42	0.12	-0.66	39	29	24	9	0.16	-0.06
	2015	962 287	38	28	18	31	23			20	9	38	32			41	32	19	8		
Western Asia and Northern Africa	2000	356 848	56	78	4	8	9	0.51	-0.35	64	4	13	19	0.70	-0.61	89	4	5	2	0.26	-0.09
	2015	481 123	61	86	5	5	4			74	5	10	10			93	4	2	0		
OTHER REGIONAL GROUPINGS																					
Least Developed Countries	2000	665 011	24	23	10	32	35	0.65	-1.03	17	6	33	43	0.58	-1.10	39	21	29	11	0.48	-0.39
	2015	954 920	32	32	15	33	20			26	9	38	27			46	27	22	5		
Landlocked Developing Countries	2000	334 480	26	34	7	22	37	0.40	-1.09	25	4	23	47	0.46	-1.33	60	17	17	7	0.02	-0.25
	2015	477 981	29	40	11	28	20			32	6	34	27			60	22	15	3		
Small Island Developing States	2000	55 743	55	66	8	16	11	0.13	-0.25	45	7	27	21	0.19	-0.43	83	8	7	2	-0.16	0.00
	2015	66 594	62	68	10	15	7			48	8	30	15			80	12	6	2		
WORLD	2000	6 126 622	47	59	5	16	20	0.63	-0.53	40	4	23	34	0.71	-0.65	80	7	8	4	0.20	-0.16
	2015	7 349 472	54	68	8	12	12			50	7	19	24			83	9	5	2		

"-" = no estimate. For JMP estimation methods see Annex 1. For unrounded estimates see www.washdata.org.

REGION	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)							Proportion of population using improved sanitation facilities (excluding shared)						
		Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
SDG REGIONS																						
Australia and New Zealand	2000	61	-	-	61	11	2	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	68	-	-	68	11	2	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central Asia and Southern Asia	2000	-	-	-	2	11	11	7	12	11	-	0	9	7	1	-	-	-	6	16	21	21
	2015	-	-	-	3	19	20	11	28	28	-	0	21	17	2	-	-	-	8	16	25	28
Eastern Asia and South-eastern Asia	2000	33	20	-	13	20	16	28	30	26	-	4	30	14	8	25	-	-	25	6	18	56
	2015	55	24	-	32	23	17	37	42	35	-	7	40	16	8	50	-	-	50	11	17	59
Latin America and the Caribbean	2000	10	-	-	10	11	17	47	-	-	-	2	20	18	9	12	-	-	12	8	16	60
	2015	22	-	-	22	9	17	60	-	-	-	5	22	32	14	27	-	-	27	5	13	72
Northern America and Europe	2000	74	-	-	74	6	10	79	42	-	-	42	16	28	45	86	-	-	86	3	4	91
	2015	78	-	-	78	5	10	82	47	-	-	47	14	29	50	87	-	-	87	3	4	92
Oceania excluding Australia and New Zealand	2000	-	-	-	3	15	13	7	-	-	-	1	16	7	2	-	-	-	12	14	34	26
	2015	-	-	-	3	16	13	7	-	-	-	1	16	6	2	-	-	-	12	15	34	26
Sub-Saharan Africa	2000	-	-	-	-	18	2	5	-	-	-	-	17	0	1	-	-	-	-	21	5	13
	2015	-	-	-	-	18	5	5	-	-	-	-	18	2	1	-	-	-	-	20	10	11
Western Asia and Northern Africa	2000	22	-	-	22	27	9	42	-	-	-	5	40	10	13	36	-	-	36	16	8	65
	2015	34	-	-	34	16	13	56	-	-	-	14	27	23	24	46	-	-	46	10	7	76
OTHER REGIONAL GROUPINGS																						
Least Developed Countries	2000	-	-	-	-	17	4	2	-	-	-	-	15	2	0	-	-	-	-	23	10	6
	2015	-	-	-	-	22	7	3	14	14	-	-	21	5	1	-	-	-	-	27	13	7
Landlocked Developing Countries	2000	-	-	-	5	24	2	8	-	-	-	1	23	1	1	-	-	-	18	27	4	28
	2015	-	-	-	4	28	5	7	-	-	-	-	28	4	1	-	-	-	13	28	9	23
Small Island Developing States	2000	-	-	-	14	21	16	29	-	-	-	2	28	12	5	23	-	-	23	15	20	48
	2015	-	-	-	14	18	21	29	-	-	-	2	26	17	5	-	-	-	22	13	24	44
WORLD	2000	29	-	-	18	15	12	32	24	19	-	5	20	11	8	34	-	-	34	9	13	58
	2015	39	13	-	27	17	15	36	35	28	-	7	26	16	9	43	-	-	43	10	14	60

ANNEX 7.3
Regional hygiene estimates

REGION	Year	Population (thousands)	% urban	NATIONAL			RURAL			URBAN		
				Basic	Limited (without water or soap)	No facility	Basic	Limited (without water or soap)	No facility	Basic	Limited (without water or soap)	No facility
SDG REGIONS												
Australia and New Zealand	2015	28 497	89	-	-	-	-	-	-	-	-	-
Central Asia and Southern Asia	2015	1 890 288	35	-	-	-	-	-	-	-	-	-
Eastern Asia and South-eastern Asia	2015	2 245 777	57	-	-	-	-	-	-	-	-	-
Latin America and the Caribbean	2015	634 387	80	-	-	-	-	-	-	-	-	-
Northern America and Europe	2015	1 096 280	76	-	-	-	-	-	-	-	-	-
Oceania excluding Australia and New Zealand	2015	10 834	23	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	2015	962 287	38	15	22	63	10	23	67	24	20	55
Western Asia and Northern Africa	2015	481 123	61	76	11	13	61	18	22	-	-	-
OTHER REGIONAL GROUPINGS												
Least Developed Countries	2015	954 920	32	27	26	47	22	28	51	39	21	40
Landlocked Developing Countries	2015	477 981	29	32	20	48	24	22	54	52	15	32
Small Island Developing States	2015	66 594	62	56	20	24	42	25	33	65	17	19
WORLD	2015	7 349 472	54	-	-	-	-	-	-	-	-	-

"-" = no estimate, NA = data not applicable. For JMP estimation methods see Annex X. For unrounded estimates see www.washdata.org.

UN WATER

UN-Water is the United Nations (UN) inter-agency coordination mechanism for freshwater related issues, including sanitation. It was formally established in 2003 building on a long history of collaboration in the UN family. UN-Water is comprised of UN entities with a focus on, or interest in, water related issues as Members and other non-UN international organizations as Partners.

The main purpose of UN-Water is to complement and add value to existing programmes and projects by facilitating synergies and joint efforts, so as to maximize system-wide coordinated action and coherence. By doing so, UN-Water seeks to increase the effectiveness of the support provided to Member States in their efforts towards achieving international agreements on water.

PERIODIC REPORTS:

World Water Development Report (WWDR) is the reference publication of the UN system on the status of the freshwater resource. The Report is the result of the strong collaboration among UN-Water Members and Partners and it represents the coherent and integrated response of the UN system to freshwater-related issues and emerging challenges. The report production coordinated by the World Water Assessment Programme and the theme is harmonized with the theme of World Water Day (22 March). From 2003 to 2012, the WWDR was released every three years and from 2014 the Report is released annually to provide the most up to date and factual information of how water-related challenges are addressed around the world.

- ✓ Strategic outlook
- ✓ State, uses and management of water resources
- ✓ Global
- ✓ Regional assessments
- ✓ Triennial (2003-2012)
- ✓ Annual (from 2014)
- ✓ Links to the theme of World Water Day (22 March)

UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) is produced by the World Health Organization (WHO) on behalf of UN-Water. It provides a global update on the policy frameworks, institutional arrangements, human resource base, and international and national finance streams in support of sanitation and drinking water. It is a substantive input into the activities of Sanitation and Water for All (SWA).

- ✓ Strategic outlook
- ✓ Water supply and sanitation
- ✓ Global
- ✓ Regional assessments
- ✓ Biennial (since 2008)

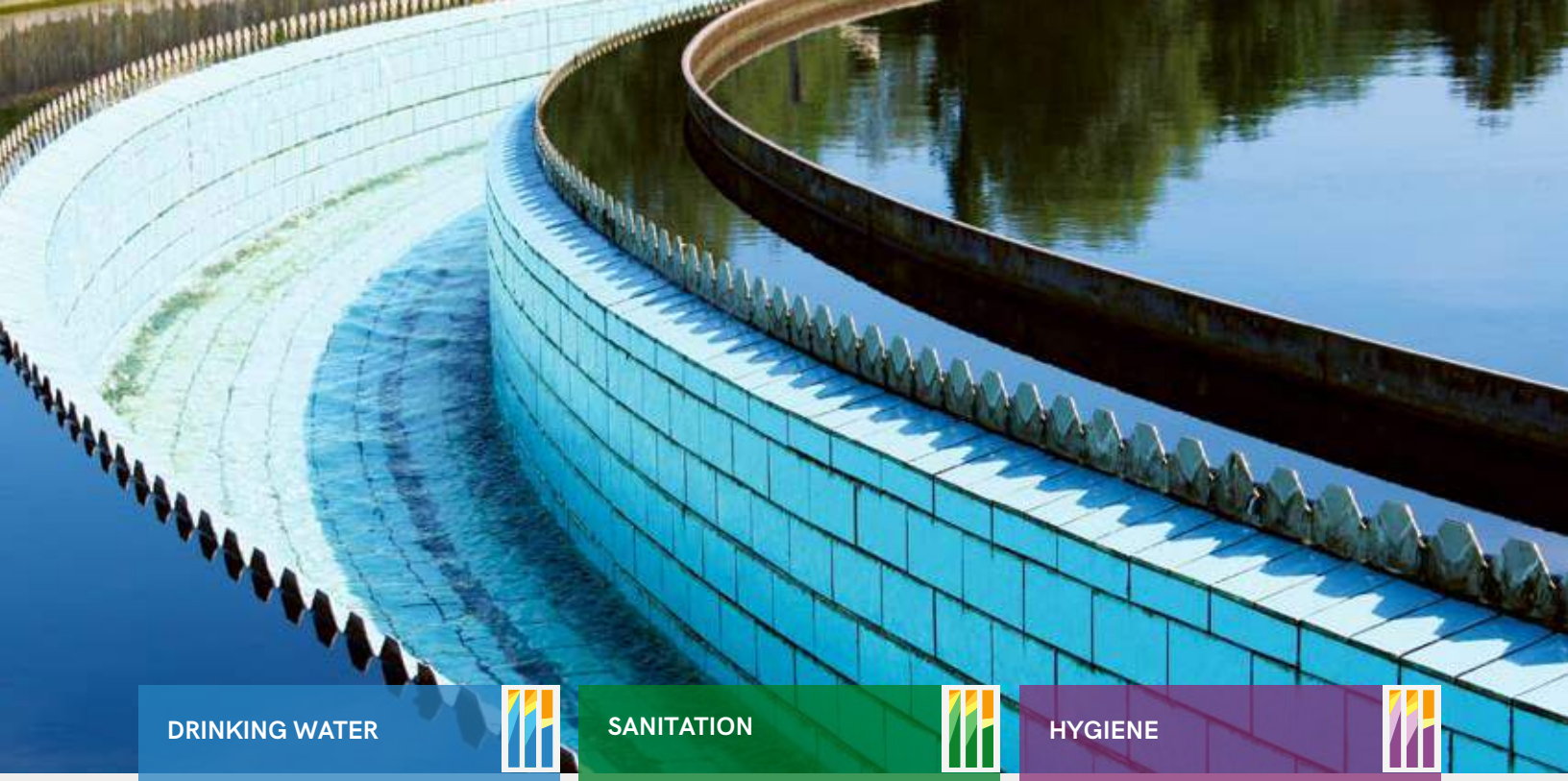
The progress report of the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) is affiliated with UN-Water and presents the results of the global monitoring of progress towards access to safe drinking-water, and adequate sanitation and hygiene. Monitoring draws on the findings of household surveys and censuses usually supported by national statistics bureaus in accordance with international criteria and increasingly draws on national administrative and regulatory datasets.

- ✓ Status and trends
- ✓ Water supply and sanitation
- ✓ Global
- ✓ Regional and national assessments
- ✓ Biennial updates (1990-2012, 2017 onwards)
- ✓ Annual updates (2013-2015)

UN-WATER PLANNED PUBLICATIONS 2017-2018

- Update of UN-Water Policy Brief on Water and Climate Change
- UN-Water Policy Brief on the Water Conventions
- UN-Water Analytical Brief on Water Efficiency
- SDG 6 Synthesis Report 2018 on Water and Sanitation

More Information on UN-Water Reports at www.unwater.org/publications



DRINKING WATER

In 2015,

- 71 per cent of the global population (5.2 billion people) used a **safely managed** drinking water service; that is, one located on premises, available when needed and free from contamination.
- Eight out of ten people (5.8 billion) used improved sources with **water available when needed**.
- Three out of four people (5.4 billion) used improved sources **located on premises**.
- Three out of four people (5.4 billion) used improved sources **free from contamination**.
- 844 million people still lacked even a **basic** drinking water service.
- 263 million people spent over 30 minutes per round trip to collect water from an improved source (a **limited** drinking water service).
- 159 million people still collected drinking water directly from **surface water** sources, 58% lived in sub-Saharan Africa.

SANITATION

In 2015,

- 39 per cent of the global population (2.9 billion people) used a **safely managed** sanitation service; that is, excreta safely disposed of in situ or treated off-site.
- 27 per cent of the global population (1.9 billion people) used private sanitation facilities connected to sewers from which **wastewater was treated**.
- 13 per cent of the global population (0.9 billion people) used toilets or latrines where excreta were **disposed of in situ**.
- Available data were insufficient to make a global estimate of the proportion of population using septic tanks and latrines from which excreta are **emptied and treated off-site**.
- 2.3 billion people still lacked even a **basic** sanitation service.
- 600 million people used a **limited** sanitation service.
- 892 million people worldwide still practised **open defecation**.

HYGIENE

In 2015,

- 70 countries had comparable data available on handwashing with soap and water, representing 30 per cent of the global population.
- Coverage of **basic handwashing** facilities with soap and water varied from 15 per cent in sub-Saharan Africa to 76 per cent in Western Asia and Northern Africa, but data are currently insufficient to produce a global estimate, or estimates for other SDG regions.
- In Least Developed Countries, 27 per cent of the population had basic handwashing facilities with soap and water, while 26 per cent had handwashing facilities lacking soap or water. The remaining 47 per cent had no facility.
- In sub-Saharan Africa, three out of five people with basic handwashing facilities (89 million people) lived in urban areas.
- Many high-income countries lacked sufficient data to estimate the population with basic handwashing facilities.

JMP website: www.washdata.org

World Health Organization

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