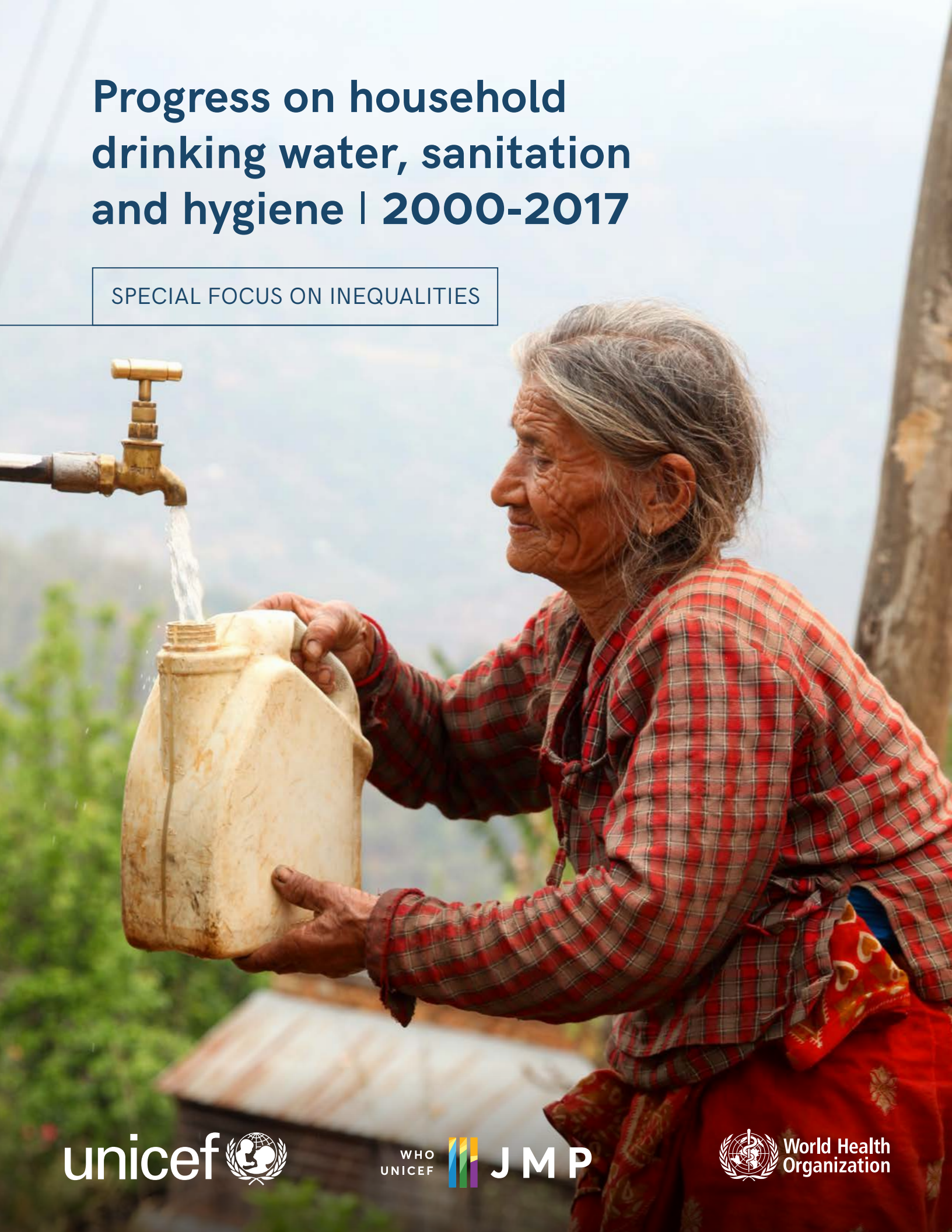
Progress on household drinking water, sanitation and hygiene | 2000-2017

SPECIAL FOCUS ON INEQUALITIES



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Special focus on inequalities

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Table of contents

1. **Highlights**

Leave no one behind

The World Health Organization and United Nations Children's Fund (WHO/UNICEF) Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) produces internationally comparable estimates of progress on drinking water, sanitation and hygiene (WASH) and is responsible for global monitoring of the Sustainable Development Goal (SDG) targets related to WASH. The JMP has recently published global baseline reports on WASH in schools (2018) and WASH in health care facilities (2019). This report presents updated national, regional and global estimates for WASH in households for the period 2000-2017.

The 2030 Agenda for Sustainable Development commits UN member states to take bold and transformative steps to 'shift the world onto a sustainable and resilient path', 'realize the human rights of all', 'end poverty in all its forms', and ensure 'no one will be left behind'. The UN General Assembly will conduct its first quadrennial review of progress in September 2019. This report assesses progress in reducing inequalities in household WASH services and identifies the populations most at risk of being 'left behind'.

DRINKING WATER

2000-2017

- The population using safely managed services increased from 61% to 71%.
- Coverage of safely managed services increased in all SDG regions with estimates available. It rose from 25% to 35% in Least Developed Countries.
- Rural coverage of safely managed services increased from 39% to 53%. The gap between urban and rural areas decreased from 47 to 32 percentage points.
- 1.8 billion people gained access to at least basic services. The population lacking basic services decreased from 1.1 billion to 785 million and the number of people collecting water directly from surface water sources decreased from 256 to 144 million
- 20 out of 86 countries with disaggregated data succeeded in halving the gap in basic service coverage between the richest and poorest wealth quintiles.

In 2017

- 117 countries (and four out of eight SDG regions) had estimates for safely managed services, representing 38% of the global population.
- 5.3 billion people used safely managed services. An additional 1.4 billion used at least basic services. 206 million people used limited services, 435 million used unimproved sources, and 144 million still used surface water.
- Eight out of ten people still lacking even basic services lived in rural areas. Nearly half lived in Least Developed Countries.
- In 24 out of 90 countries with disaggregated data, basic water coverage among the richest wealth quintile was at least twice as high as coverage among the poorest quintile.
- 80 countries had >99% basic water coverage. One in three countries with <99% were on track to achieve 'nearly universal' coverage by 2030.

Seven out of ten people used safely managed drinking water services in 2017

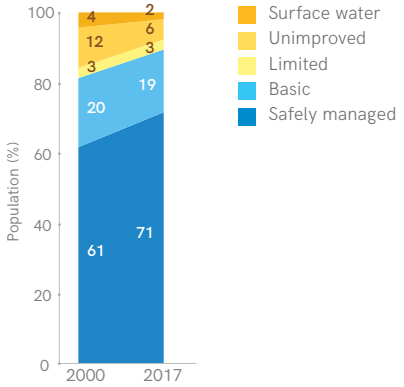


FIGURE 1 Global drinking water coverage, 2000-2017 (%)

Four SDG regions had estimates for safely managed drinking water in 2017

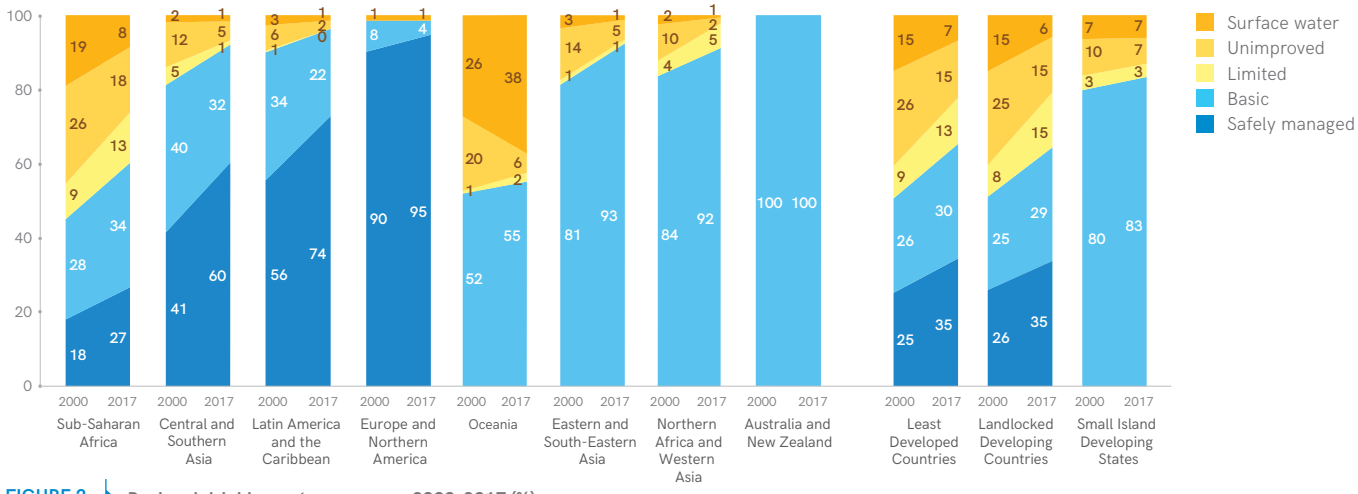


FIGURE 2 Regional drinking water coverage, 2000-2017 (%)

In 2017, 117 countries[1] had estimates for safely managed drinking water services

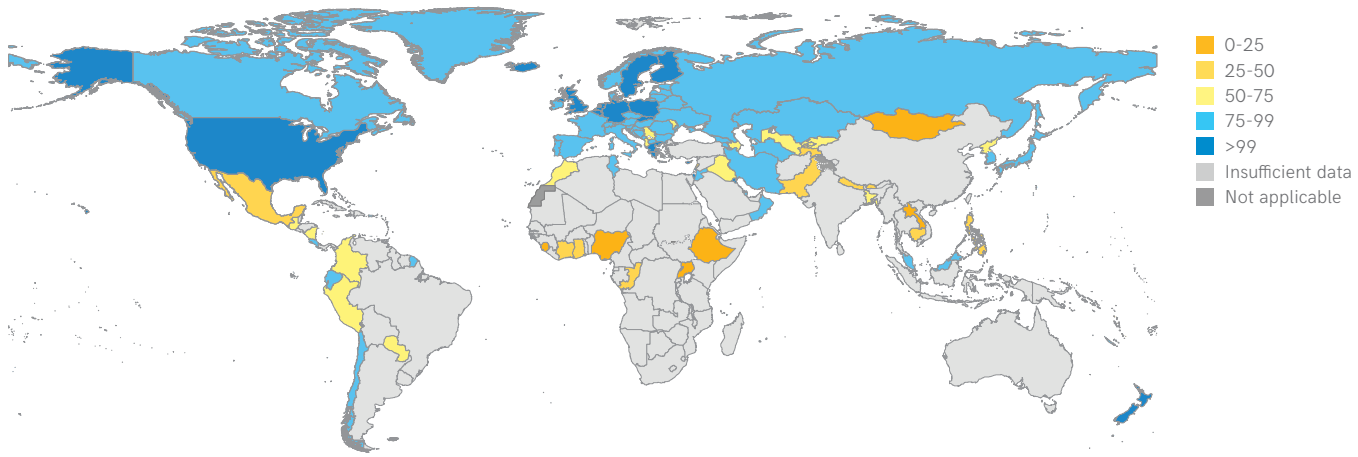


FIGURE 3 Proportion of population using safely managed drinking water services, 2017 (%)

[1] 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

2000-2017

- The population using safely managed services increased from 28% to 45%.
- Coverage of safely managed services increased in all SDG regions with estimates available.
- Rural coverage of safely managed services increased from 22% to 43%, while the gap between urban and rural areas decreased from 14 to 5 percentage points.
- 2.1 billion people gained access to at least basic services and the population lacking basic services decreased from 2.7 billion to 2 billion
- The population practising open defecation halved from 1.3 billion to 673 million. 23 countries reduced open defecation rates below 1% and were classed as reaching 'near elimination'.
- 9 out of 86 countries with disaggregated data succeeded in halving the gap in basic service coverage between the richest and poorest wealth quintiles.

In 2017

- 92 countries (and six out of eight SDG regions) had estimates for safely managed services, representing 54% of the global population.
- 3.4 billion people used safely managed services. An additional 2.2 billion used at least basic services. 627 million people used limited services, 701 million used unimproved facilities, and 673 million still practised open defecation.
- Seven out of ten people who still lacked even basic services lived in rural areas. One third lived in Least Developed Countries.
- In 48 out of 90 countries with disaggregated data, basic service coverage among the richest wealth quintile was at least twice as high as coverage among the poorest quintile.
- 51 countries had >99% basic sanitation coverage. One in four countries with <99% were on track to achieve 'nearly universal' coverage by 2030.
- Fewer than one in three 'high burden' countries with >5% open defecation were on track to achieve 'near elimination' (<1%) of open defecation by 2030.
- Only one in five countries with >1% open defecation were on track to achieve 'near elimination' of open defecation among poorest rural wealth quintile by 2030.

Four out of ten people used safely managed sanitation services in 2017

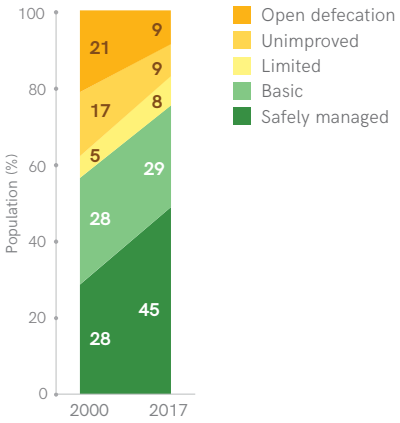


FIGURE 4 Global sanitation coverage, 2000-2017 (%)

Six SDG regions had estimates for safely managed sanitation services in 2017

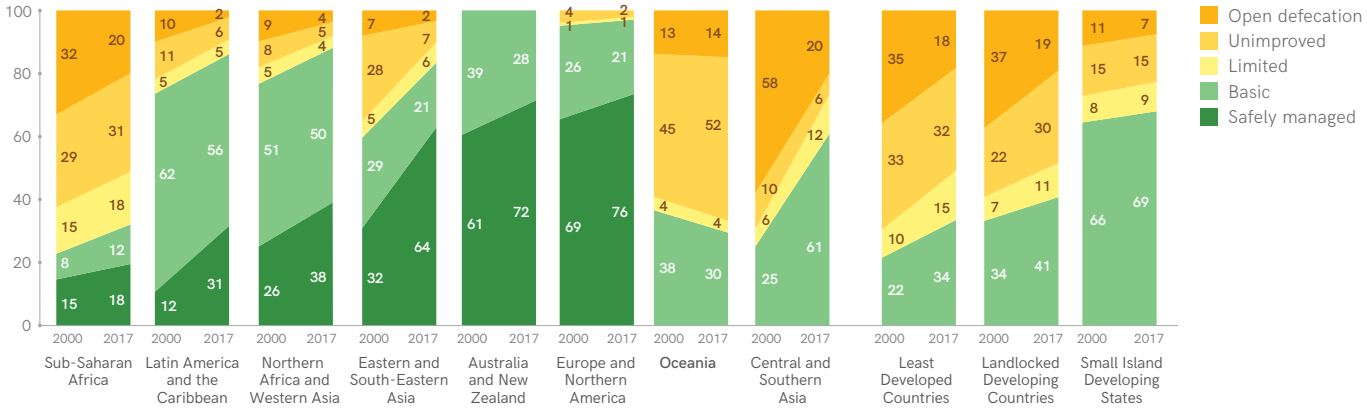


FIGURE 5 Regional sanitation coverage, 2000-2017 (%)

In 2017, 96 countries had estimates for safely managed sanitation

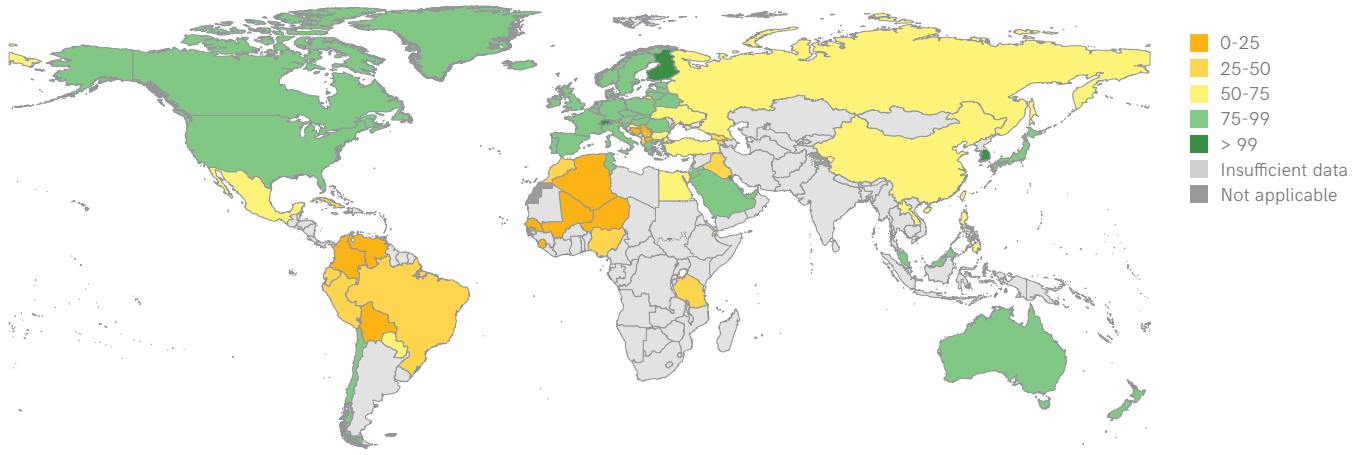


FIGURE 6 Proportion of population using safely managed sanitation services, 2017 (%)

HYGIENE

In 2017[2]

- 60% of the global population had basic handwashing facilities with soap and water available at home.
- 78 countries (and three out of eight SDG regions) had estimates for basic handwashing facilities, representing 52% of the global population. Many high income countries lacked data on hygiene.
- 3 billion people still lacked basic handwashing facilities at home: 1.6 billion had limited facilities lacking soap or water, and 1.4 billion had no facility at all.
- Nearly three quarters of the population of Least Developed Countries lacked handwashing facilities with soap and water.
- In 51 out of 82 countries with disaggregated data, basic handwashing coverage among the richest wealth quintile was at least twice as high as coverage among the poorest quintile.

[2] Insufficient data were available to estimate regional and global trends for hygiene.

Three out of five people had basic handwashing facilities in 2017

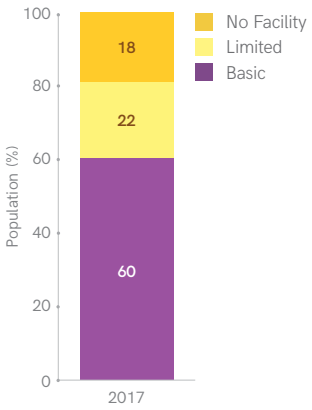


FIGURE 7 Global handwashing coverage, 2017 (%)

Three SDG regions had estimates available for basic handwashing facilities in 2017

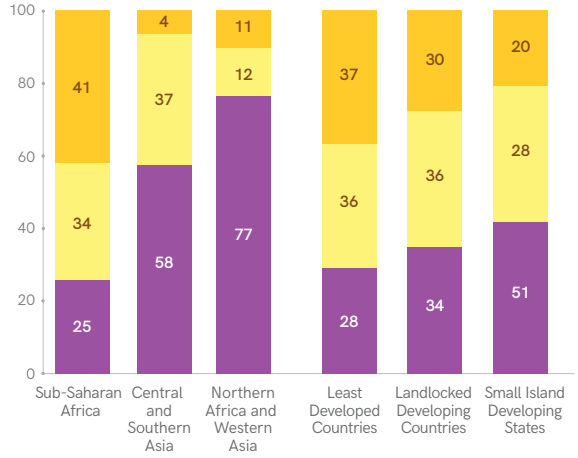


FIGURE 8 Regional handwashing coverage, 2017 (%)

In 2017, 78 countries had estimates for basic handwashing facilities

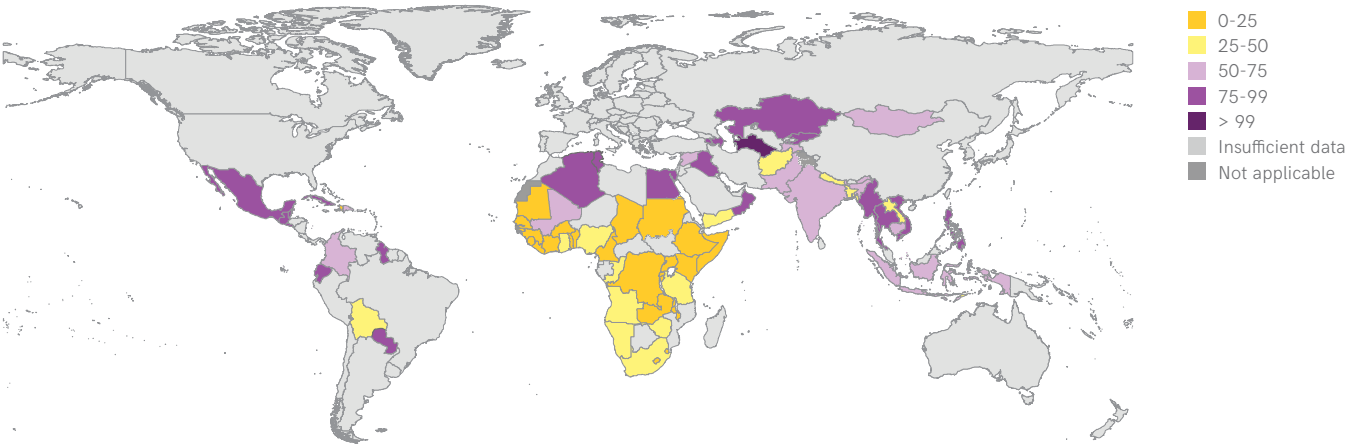


FIGURE 9 Proportion of population with basic handwashing facilities at home, 2017 (%)

Central and South Asia achieved the largest reduction in open defecation since 2000

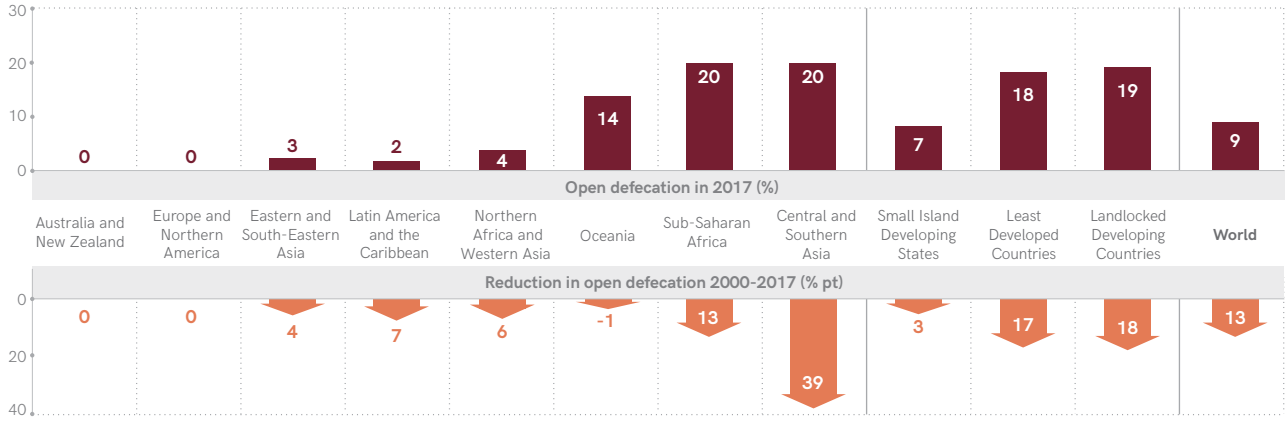


FIGURE 10 Proportion of population practising open defecation in 2017, and percentage point change, 2000-2017 (%)

2. Introduction

The World Health Organization and United Nations Children's Fund (WHO/UNICEF) Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) produces internationally comparable estimates of national, regional and global progress on drinking water, sanitation and hygiene (WASH) and is responsible for global monitoring of the Sustainable Development Goal (SDG) targets related to WASH. The JMP uses service ladders to track the progressive reduction of inequalities in levels of service between and within countries. This report presents updated national, regional and global estimates for WASH in households for the period 2000-2017.

The 2030 agenda: Leave no one behind

Transforming our world: The 2030 Agenda for Sustainable Development[3] is described as a plan of action for people, planet and prosperity. It comprises 17 Sustainable Development Goals and 169 global targets. These are integrated and indivisible to balance the social, economic and environmental dimensions of sustainable development. The 2030 Agenda commits UN member states to take bold and transformative steps to 'shift the world onto a sustainable and resilient path', seeks to realize the human rights of all, to achieve gender equality and the empowerment of women and girls, and ensure 'no one will be left behind'. It is an ambitious universal agenda to be implemented by all countries and stakeholders in partnership.

The SDG goals include several targets that aim to progressively reduce inequalities related to WASH (Table 1). Goal 1 aims to 'end poverty in all its forms everywhere' and includes a target for universal access to basic services (1.4). Goal 6 aims to 'ensure availability and sustainable management of water and sanitation for all' and includes targets for universal access to safe drinking water (6.1), sanitation and hygiene (6.2). Goal 4 aims to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. It includes targets for upgrading education facilities to provide safe and inclusive learning environments, including basic drinking water,

[3] Transforming Our World: The 2030 Agenda for Sustainable Development, United Nations General Assembly Resolution, A/RES/70/1, 21 October 2015 <https://sustainabledevelopment.un.org/post2015/transformingourworld>

	SDG global targets	SDG global indicators
6 CLEAN WATER AND SANITATION	**6.1** By 2030, achieve universal and equitable access to safe and affordable driking water for all	**6.1.1** Proportion of 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** Proportion of population using a) safely managed sanitation services and b) a hand-washing facility with soap and water
1 NO POVERTY	**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** Proportion of population living in households with access to basic services (including access to basic drinking water, basic sanitation and basic handwashing facilities)
4 QUALITY EDUCATION	**4.a** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	**4.a.1** Proportion of schools with access to… (e) basic drinking water, (f) single-sex basic sanitation facilities, and (g) basic handwashing facilities
3 GOOD HEALTH AND WELL-BEING	**3.8** Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality and affordable essential medicines and vaccines for all	[Proportion of health care facilities with basic WASH services]

TABLE 1 **SDG global targets and indicators related to WASH**

sanitation and hygiene (4.a.1). Goal 3 aims to 'ensure healthy lives and promote well-being for all at all ages'. It includes a target for achieving universal health coverage (3.8) which focuses on access to quality essential health care services and implies that all health care facilities should have basic WASH services.

The JMP has recently established global baseline estimates for WASH in schools and WASH in health care facilities (Box 1). This report provides an update on progress in reducing inequalities in WASH services at the household level between 2000 and 2017. It follows on and supersedes the 2017 report Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines[4].

Localizing the SDGs: Setting national targets

The 2030 Agenda states that the SDGs and targets are 'integrated and indivisible, global in nature and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities'. The global targets are considered aspirational, with each government setting its own national targets 'guided by the global level of ambition but taking account of national circumstances'[3] and 'building on existing commitments and in accordance with international human rights standards for the benefit of all'[5]. Governments are expected to localize the global SDG targets related to WASH and set their own national targets for progressively reducing inequalities in services.

[4] Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines. Geneva: World Health Organization and United Nations Children's Fund, July 2017 <https://washdata.org/report/jmp-2017-report-final>

[5] United Nations, Transforming Our World: The 2030 Agenda for Sustainable Development, UN General Assembly Resolution A/RES/70/1, 21 October 2015 (Paragraph 55), <https://sustainabledevelopment.un.org/post2015/transformingourworld>

To track progress in reducing inequalities, the 2030 Agenda specifies that 'SDG indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographic location or other characteristics'. Governments are expected to determine the most relevant dimensions of inequality in WASH services and develop mechanisms to identify and monitor the situation of disadvantaged groups. 'Leave no one behind' implies that in addition to tracking overall rates of progress on WASH services governments should also focus on closing the gaps in services between disadvantaged groups and the rest of the population (Figure 11).

This report assesses national, regional and global progress in reducing inequalities in WASH services at the household level. It focuses on the following longstanding WASH sector objectives, which are reflected in the global SDG targets and indicators related to WASH:

1. Ending open defecation
2. Reducing inequalities in basic water, sanitation and hygiene services
3. Reducing inequalities in safely managed water and sanitation services

Achieving universal targets requires faster progress among disadvantaged groups

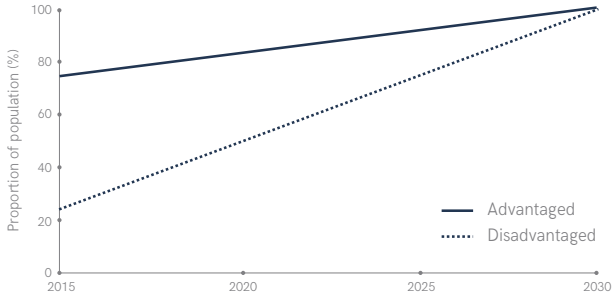
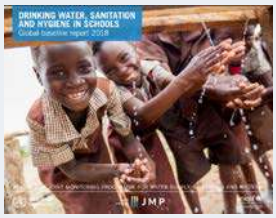


FIGURE 11 **Illustration of progressive reduction of inequalities between advantaged and disadvantaged groups**

Box 1: **JMP global baseline estimates for WASH in schools and health care facilities**



In 2016

- **69%** of schools **had basic drinking water services**
- **66%** of schools had **basic sanitation services**
- **53%** of schools had **basic hygiene services**

In 2016

- **74%** of health care facilities had **basic water services**
- **21%** of health care facilities had **no sanitation service**
- **16%** of health care facilities had **no hygiene service**
- **27%** of health care facilities in Least Developed Countries had **basic health care waste management services**
- Only **four countries** had sufficient data to estimate **basic environmental cleaning services** in health care facilities

Reducing inequalities: Metrics for assessing progress

The JMP has established several metrics for assessing progress in reducing inequalities in WASH, which are used throughout this report (Box 2). Since the 2017 progress update, the JMP global database on inequalities has been substantially expanded. It now includes service level and facility type estimates disaggregated by wealth quintile[6] and sub-national region for nearly 100 countries, enabling further analysis of trends in inequalities within countries. Box 3 summarizes the main dimensions of inequality that should be considered in national or sub-national WASH monitoring systems.

The JMP is also responsible for assessing the achievement of international targets at national, regional and global levels. Full realization of the SDG targets, which aim to 'end' open defection and achieve 'universal access' to WASH 'for all', will be a challenge for all countries. While JMP estimates are based on the best available national data, there are inherent uncertainties in all national statistics.

For this reason, the JMP now classifies countries estimated to have achieved >99% service coverage as 'nearly universal' and countries estimated to have achieved <1% open defecation as 'near elimination'. Furthermore, the JMP recognizes that the situation of small populations (such as ethnic minorities and indigenous groups) is not always reflected in disaggregated national statistics. It recommends that all countries take steps to identify locally disadvantaged groups and establish alternative mechanisms for collecting data to ensure they are not left behind.

[6] The JMP wealth quintile estimates for WASH are calculated using a customized wealth index that excludes WASH variables.

Box 2: **JMP metrics for assessing progress in reducing inequalities in WASH**

Service levels: The JMP uses ladders for global monitoring of inequalities in service levels. The service ladders have been updated for SDG monitoring and include information on both the types of facilities people use and the levels of service provided. They are used in this report to visualize both status and trends in inequalities in service levels at global, regional, national and sub-national levels. For example, Chart A shows global trends in rural sanitation between 2000 and 2017.

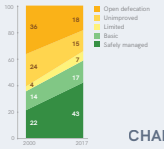


CHART A

Coverage vs population: Estimates can be expressed as either the proportion of the population with WASH services or the number of people with services, and these metrics are used interchangeably in JMP reports. While service coverage is a useful metric for comparing progress between and within countries, it is equally important to consider the total number of people served. This is particularly important in countries experiencing rapid population growth where large numbers of people are gaining access, but service coverage may be stagnating or decreasing. For example, Chart B shows the change in the absolute numbers of people with each level of water service in urban areas in 2000 and 2017.

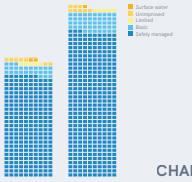


CHART B

Coverage gaps: The JMP uses various charts to visualize inequalities in coverage between and within countries. 'Equity plots' are used in this report to visualize inequalities in open defecation and basic WASH services, which underlie global, regional and national averages. A small number of countries have disaggregated data available on inequalities in service levels. The most commonly available disaggregations in national data sources are by residence (rural/urban), sub-national region (state/province/district) and wealth quintiles (poorest, poor, middle, rich, richest). For example, Chart C shows global, regional and national coverage of basic hygiene facilities alongside sub-national inequalities within Yemen.

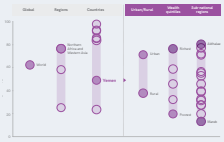


CHART C

Trends in coverage gaps: The JMP database on inequalities now includes estimates of trends in service levels and facility types by wealth quintile, which enables comparison of the relative rates of progress by different wealth groups over time. This report includes analysis of rates of progress among the richest and the poorest quintiles and whether the 'gap' in service coverage is increasing or decreasing in those countries where disaggregated sub-national data are available. For example, Chart D shows changes in the gap in basic water coverage between the richest and poorest rural quintiles in the Plurinational State of Bolivia and Haiti between 2000 and 2017.

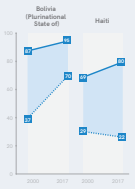


CHART D

Progress towards target coverage: The JMP is also responsible for assessing the achievement of international targets at national, regional and global levels. The global SDG targets aim to 'end' open defection and achieve 'universal access' to WASH 'for all'. Based on current coverage and annual rates of change since 2000, the JMP classifies countries as being on or off track to achieve >99% service coverage or <1% open defecation by 2030. For example, Chart E shows current and required rates of progress to achieve 'near elimination' of open defecation by 2030.

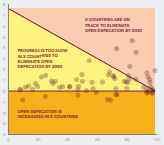


CHART E

Box 3: **Dimensions of inequality in WASH services**

The human rights to safe water and sanitation prohibit discrimination on the grounds of 'race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, disability or other status'. Where disaggregated data are available, it is possible to identify evidence of discrimination based on geographic, socio-economic or individual characteristics, but the combination of factors that prevents people from accessing WASH services is often highly context specific.

Geographic location
Most data sources in the JMP global database disaggregate rural and urban areas, but national definitions vary, and may not be directly comparable. Some sources also disaggregate sub-national regions at the first or second administrative level, but boundaries change, making it difficult to analyse trends. Very few sources routinely distinguish peri-urban area or informal settlements. Specific geographic areas may be classed as remote or affected by conflict/disaster/diseases, but definitions vary, and data are more likely to be unavailable for these areas.

Socio-economic groups
Household surveys often divide the population into wealth quintiles based on income or assets, but water and sanitation should ideally be excluded from the wealth index when analysing inequalities in WASH. Household survey data are often disaggregated by the level of education of the household head, by ethnicity, religion or language and by migratory status, but these may not be the most relevant stratifiers for analysing inequalities in WASH services.

Individual characteristics
WASH data are typically collected at the household level, which means it is not possible to routinely analyse intra-household inequalities. However, many household surveys collect information on the time spent collecting water and whether sanitation facilities are shared with other households, both of which disproportionately affect women and girls, older people, and those with disabilities. Some surveys now record the age and sex of the individual primarily responsible for water collection and ask women and girls additional questions about specific needs relating to menstrual hygiene management.

3. **Eliminating open defecation**

Ending open defecation has been identified as a top priority for reducing global inequalities in WASH. It is explicitly referenced in SDG target 6.2 and closely associated with wider efforts to end extreme poverty by 2030. Since 2000, the global rate of open defecation has decreased from 21% to 9% (0.7 percentage points per year). The 673 million people still practising open defecation in 2017 were increasingly concentrated in a small number of countries, and these will need to be the primary focus of efforts to end open defecation by 2030.

Between 2000 and 2017, the number of countries where at least 1% of the population practised open defecation decreased from 108 to 81, while the number of 'high burden' countries with rates of more than 5% decreased from 79 to 61. In 2017, these 61 'high burden' countries were home to a combined population of 3.2 billion (Figure 12).

Between 2000 and 2017, open defecation rates declined in all SDG regions except Oceania. While Europe and North America and Australia and New Zealand have already achieved 'near elimination' (<1%), in all other SDG regions at least 1% of the population still practised open defecation in 2017. Figure 13 shows how national rates of open defecation have changed between 2000 and 2017. The largest reductions in each SDG region were recorded by Ethiopia, Nepal, Cambodia, Sudan, Kiribati and the Plurinational State of Bolivia, but the chart also shows that countries with similar starting points have achieved very different rates of reduction. Countries that had already reduced open defecation below 25% by 2000 generally progressed more slowly, reflecting the challenges associated with fully realizing the target of 'elimination'.

In 61 high burden countries more than 5% of the population practised open defecation in 2017

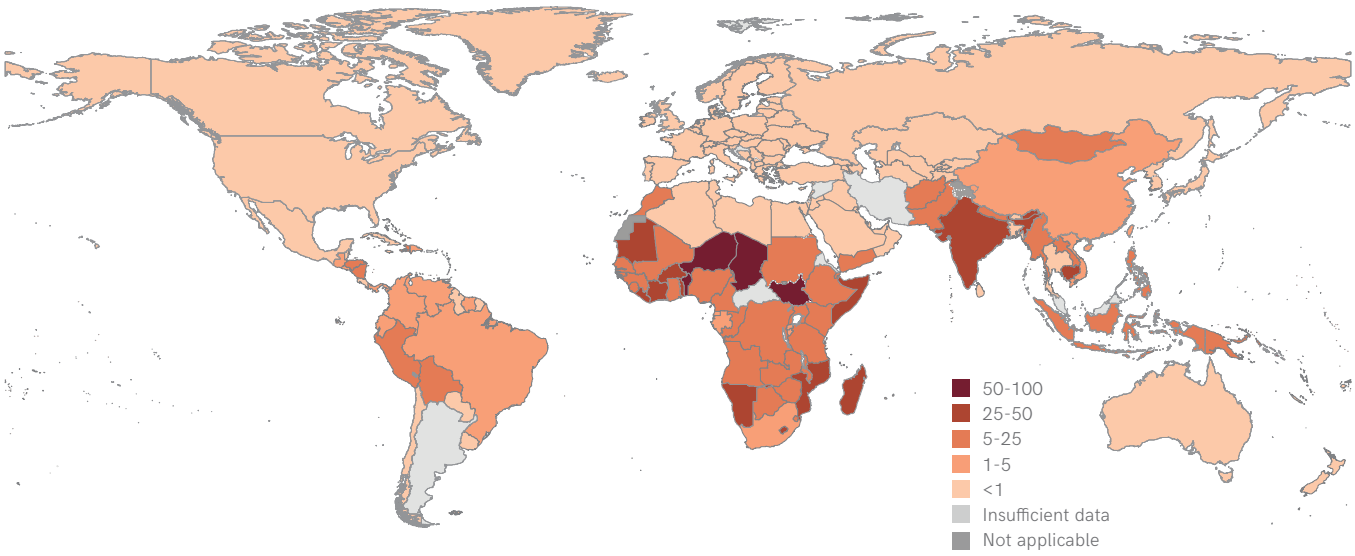


FIGURE 12 Proportion of population practising open defecation, 2017 (%)

Rates of reduction in open defecation vary widely between countries in SDG regions

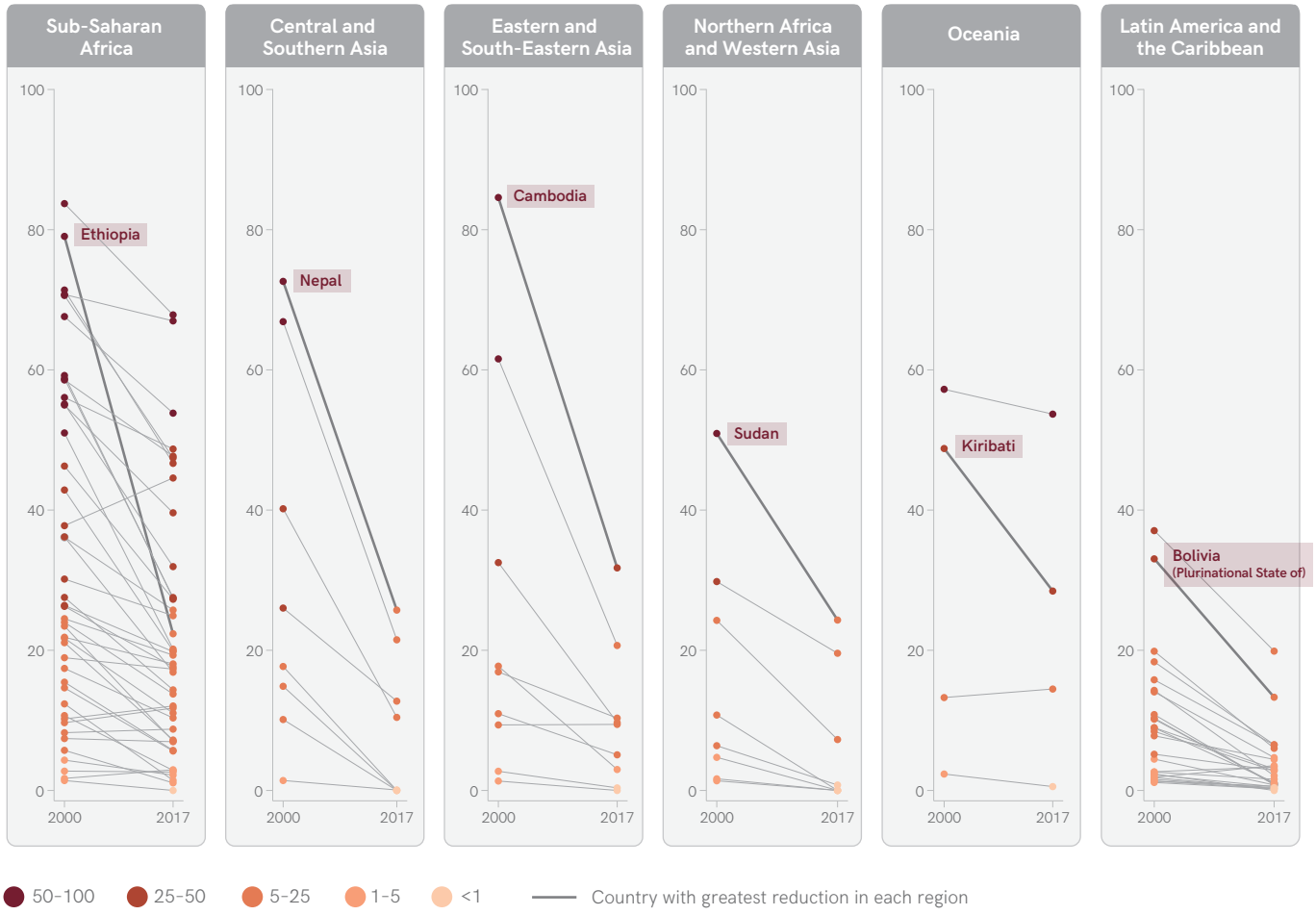
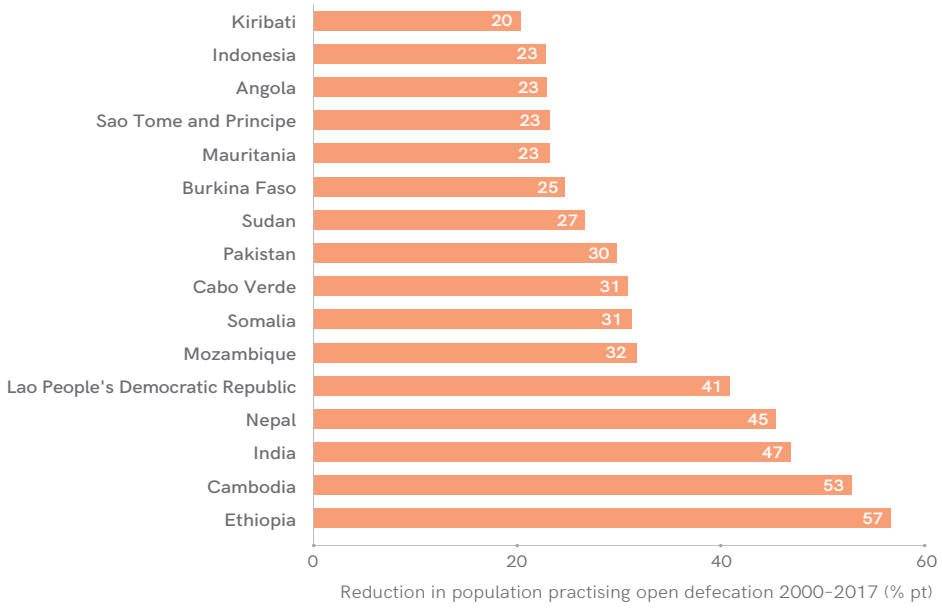


FIGURE 13 Proportion of population practising open defecation, by country and SDG region, 2000-2017 (%)

Since 2000, 16 countries have reduced open defecation by more than 20 percentage points

FIGURE 14 Percentage point decrease in proportion of population practising open defecation, 2000-2017 (%)

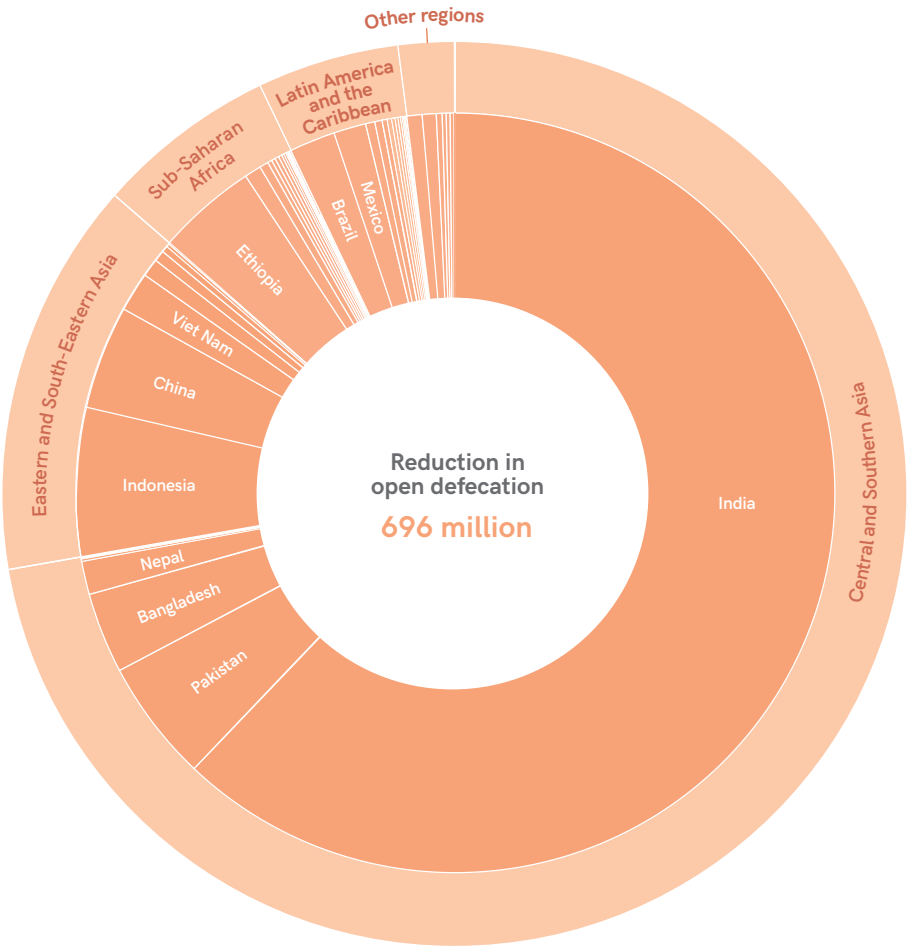


A total of 16 countries reduced open defecation by over 20 percentage points, including five countries by over 33 percentage points, and two countries by over 50 percentage points (Figure 14). Since 2000, one third of the population of Nepal and the Lao People's Democratic Republic, over half of the population of Cambodia and Ethiopia, and nearly half of the population of India have stopped practising open defecation. This not only represents a significant reduction in inequality but also a transformational shift in social norms and public health in those countries.

Between 2000 and 2017, 91 countries reduced open defecation by a combined total of 696 million people with Central and Southern Asia accounted for three quarters of this reduction (Figure 15). However, over the same period, 39 countries recorded increases, totaling 49 million people. Most of these countries were in Sub-Saharan Africa, which has experienced rapid population growth since 2000.

The net reduction in the global population practising open defecation decreased by 647 million between 2000 and 2017. Countries in Central and South Asia recorded the largest net reduction of 496 million. Eastern and South Eastern Asia and Latin America and the Caribbean achieved net reductions of 97 million and 36 million respectively, while Sub-Saharan Africa reduced open defecation by 5 million people.

Central and Southern Asia accounts for nearly three quarters of the reduction in the population practising open defecation



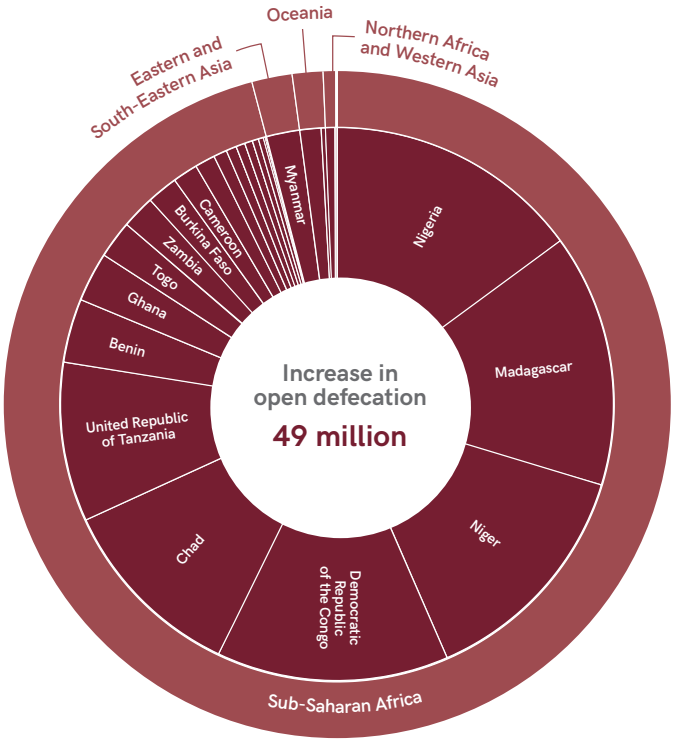


FIGURE 15 Change in number of people practising open defecation, by country and region, 2000-2017 (millions)

Box 4: **Different metrics for open defecation**

The JMP calculates the proportion of the population practising open defecation based on responses to household surveys, which typically ask, 'What type of sanitation facility do members of your household mainly use?' The concept of 'Open Defecation Free' (ODF) communities implies that every member of every household uses hygienic sanitation facilities all the time, but very few countries have nationally representative data on the behaviour of individual household members. In the recent WASH NORM survey in Nigeria, 76% of households reported at least one household member using some kind of sanitation facility, but only 61% reported all members using sanitation facilities, and just 16% reported all members of all households in their community using facilities (Figure 16). A similar pattern is observed in data from other countries which show the proportion of the population living in clusters where at least one other household practises open defecation is often much higher than the proportion of the population practising open defecation themselves (Figure 17).

Sanitation coverage is lower when considering everyone in the household or everyone in the community

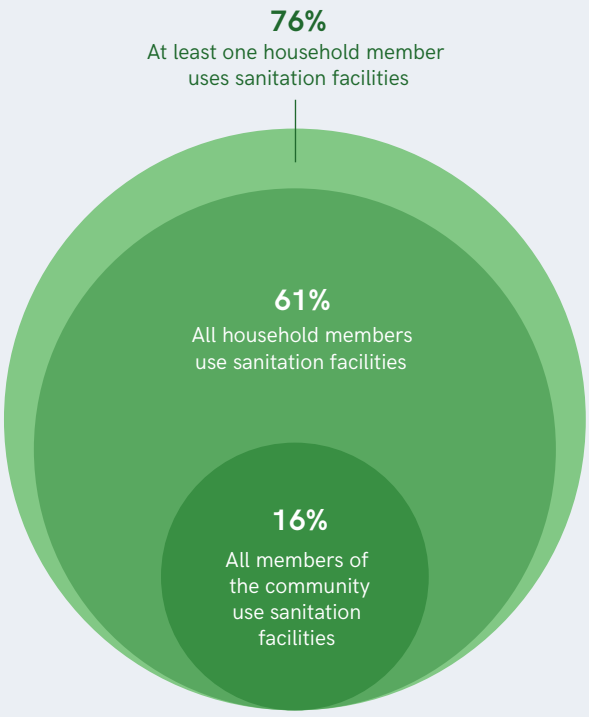


FIGURE 16 **Use of sanitation facilities by at least one household member, all household members, and all community members, Nigeria WASH NORM Survey, 2018 (%)**

Note: 'Community' estimated based on a proxy of census enumeration area

Many people live in communities where at least one household still practises open defecation

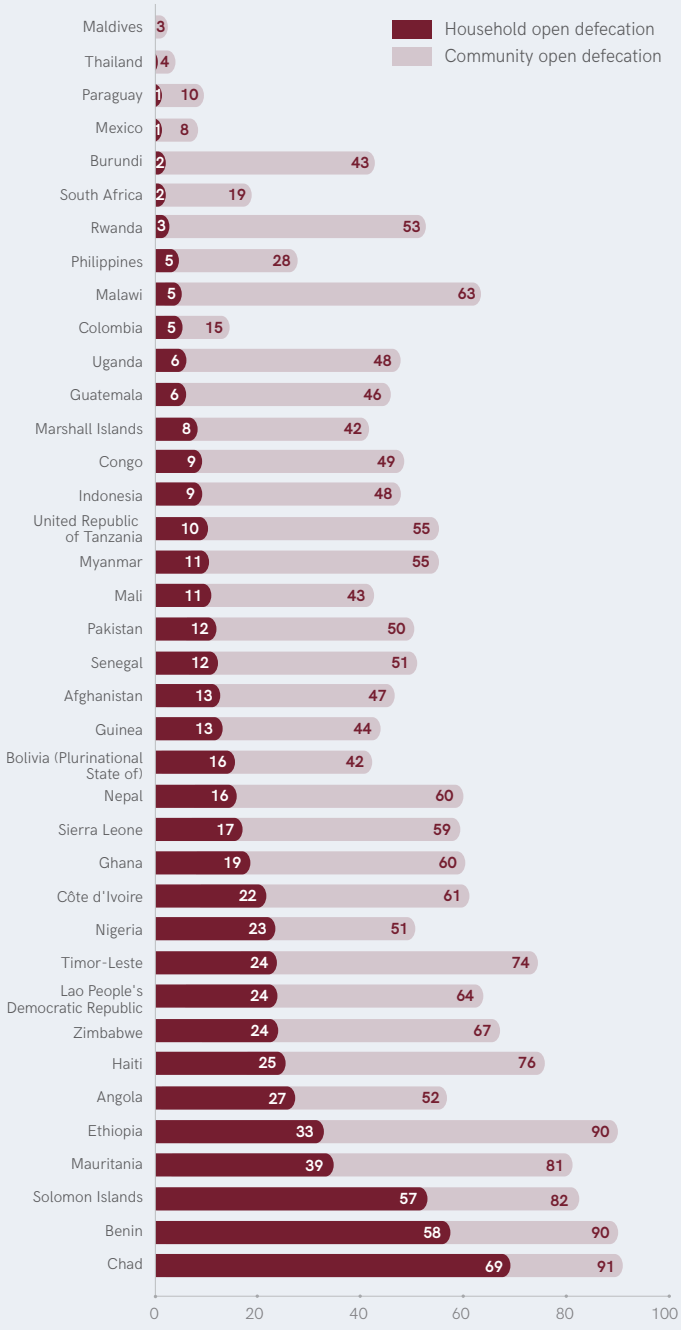


FIGURE 17 **Proportion of population practising open defecation and proportion living in communities where at least one household practises open defecation, selected national households surveys, 2015-2018 (%)**

National sanitation programmes use different definitions and criteria for judging whether communities should be declared 'ODF'. In addition to eliminating the practice of open defecation in the entire community, they may require that both household and institutional latrines are hygienic and offer privacy, or that a handwashing facility is nearby, with water and soap available. Sometimes, more stringent criteria are applied relating to the safe containment of faeces, storage of drinking water, disposal of grey water, management of solid waste, and disposal of child faeces.

Child faeces are highly infective. Information on disposal methods is often collected in household surveys and reported separately to statistics on open defecation (Figure 18). Practices vary across countries, but the most appropriate methods of disposal are depositing or rinsing the child's stools into an improved toilet, or burying them. Co-disposal of child faeces with solid waste is generally not considered appropriate, unless solid waste management systems effectively minimize the risk of humans being exposed to

Child faeces are often disposed of in toilets or latrines, or with solid waste

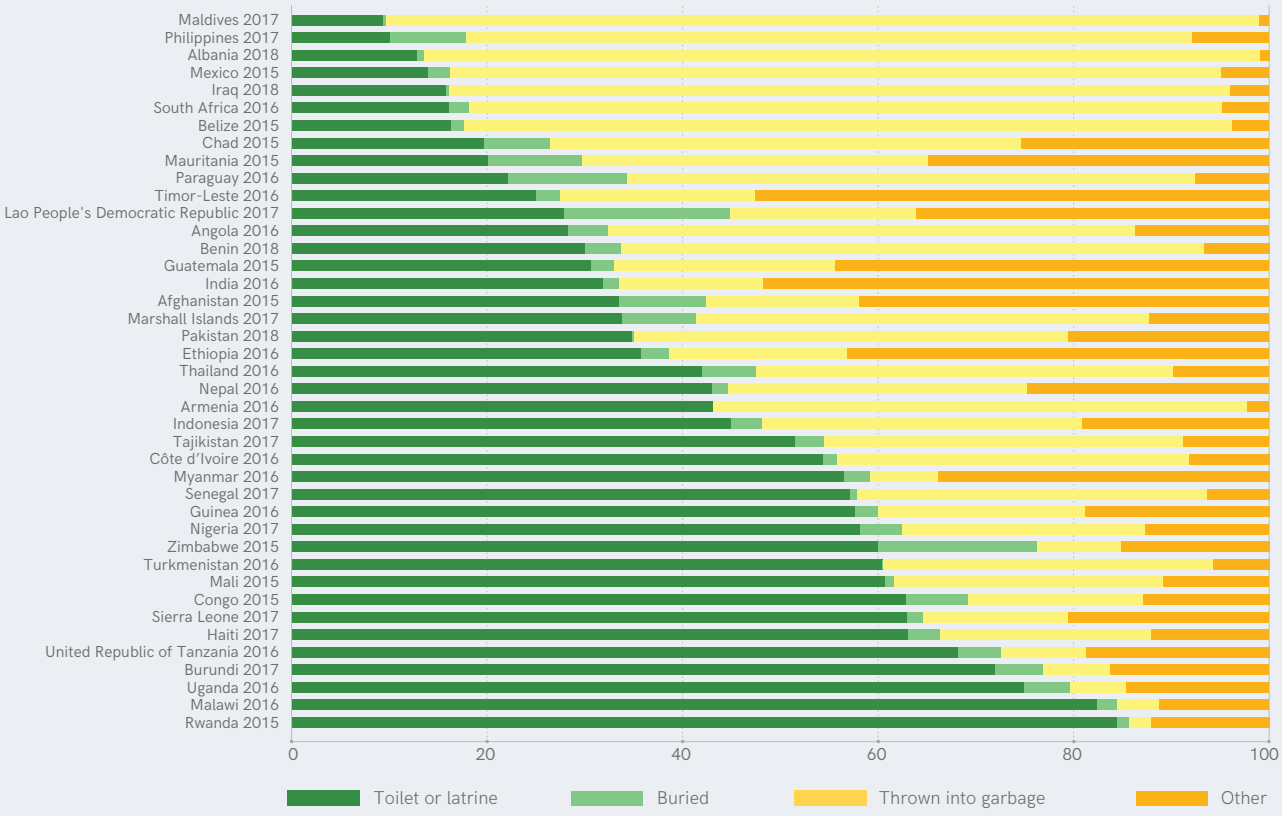


FIGURE 18 **Methods of child faeces disposal among populations with children under five, by country (%)**

In 2017, open defecation was still practised by 18% of the rural population and 1% of the urban population. Nine out of ten open defecators lived in rural areas, and poorer people were much more likely to practise open defecation. Figure 19 shows the current open defecation status among countries with >1% of the population practising open defecation in 2017, and the percentage point change per year between 2000 and 2017. Assuming current rates of progress continue, less than half are on track to achieve 'near elimination' of open defecation (<1%) nationally by 2030.

Even fewer countries are on track in rural areas, and just one in five are on track to eliminate open defecation among the poorest rural wealth quintile. Efforts to end open defecation by 2030 will therefore need to be targeted primarily at rural populations and particularly at the rural poor. Nepal is one of the few countries which is on track to achieve 'near elimination' among the poorest in rural areas where open defecation has been reduced by 4.6 percentage points per year since 2000.

Few countries are on track to achieve 'near elimination' of open defecation in rural areas and among the poorest by 2030

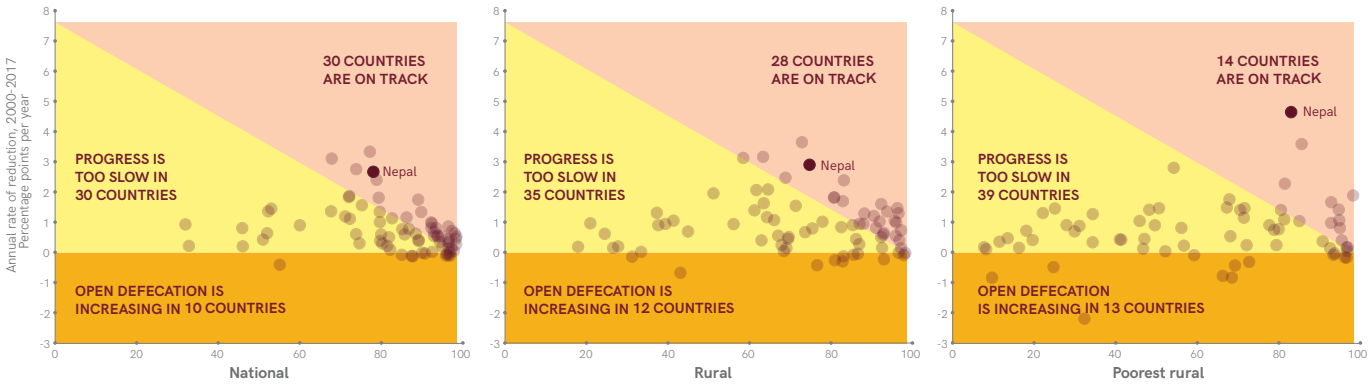


FIGURE 19 Progress towards elimination of open defecation by national, rural and poorest rural wealth quintile (2000-2017), among countries with >1% open defecation in 2017

Note: Includes countries with trend data available and with >1% national (n=76), rural (n=75) and poorest rural (n=66) practising open defecation in 2017

Viet Nam has made rapid progress towards eliminating open defecation but the poorest in rural areas still lag behind

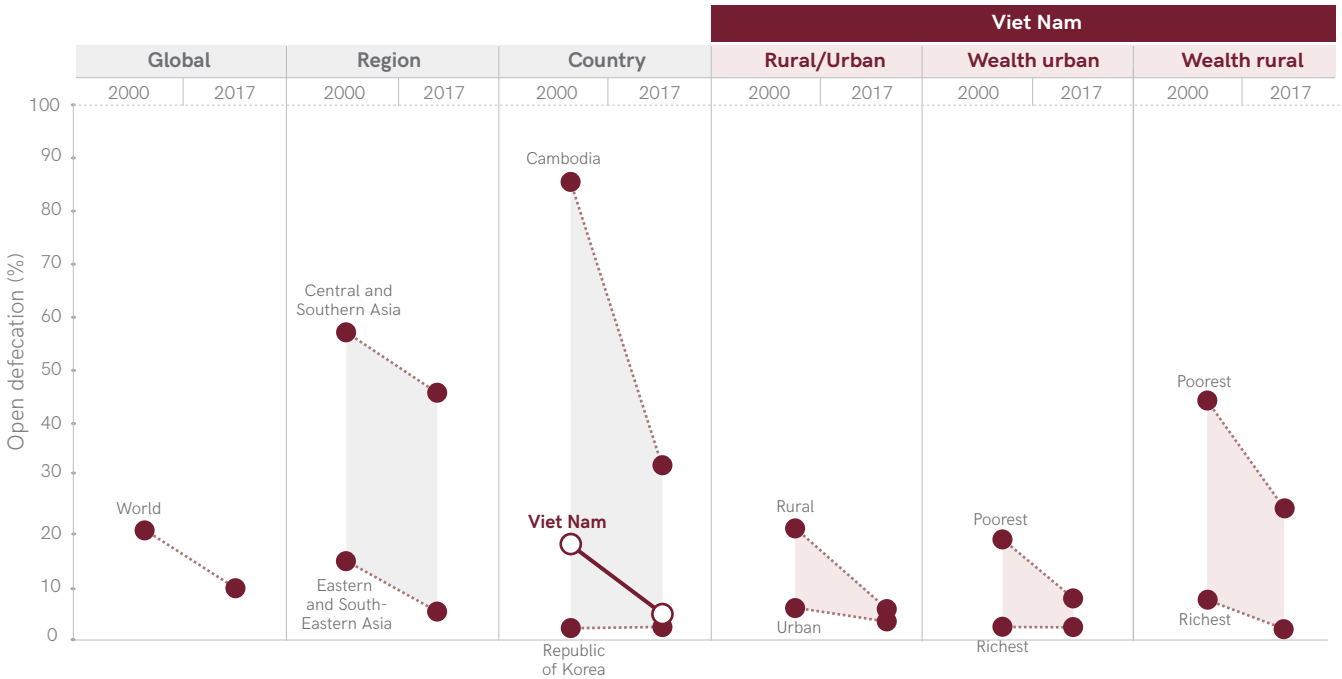


FIGURE 20 Inequalities in open defecation rates in Viet Nam and Eastern and South-Eastern Asia, 2000 and 2017 (%)

Some countries have made good progress in reducing inequalities in open defecation, as illustrated in Figure 20. Between 2000 and 2017, open defecation rates decreased from 21% to 9% globally and from 7% to 2% in Eastern and South-Eastern Asia. Over the same period, Viet Nam not only reduced national rates of open defecation from 18% to 3% but also significantly reduced the 'gap' in open defecation between urban and rural areas and between the richest and poorest wealth quintiles in urban areas. But while substantial progress has also been made in rural areas, there was still a 24 percentage point gap between the richest and poorest in 2017. Figure 21 compares the current annual rate of reduction and the required rate of reduction to achieve <1% open defecation by 2030, among the 54 'high burden' countries with trend data available from 2000-2017. It shows that less than one in three countries are on track to achieve <1% open defecation. Furthermore, if current trends continue, more than half of these countries are expected to have more than 5% open defecation in 2030 and ten countries are expected to have open defecation rates of more than 25%.

At current rates of reduction, over half of high burden countries will still have >5% open defecation in 2030

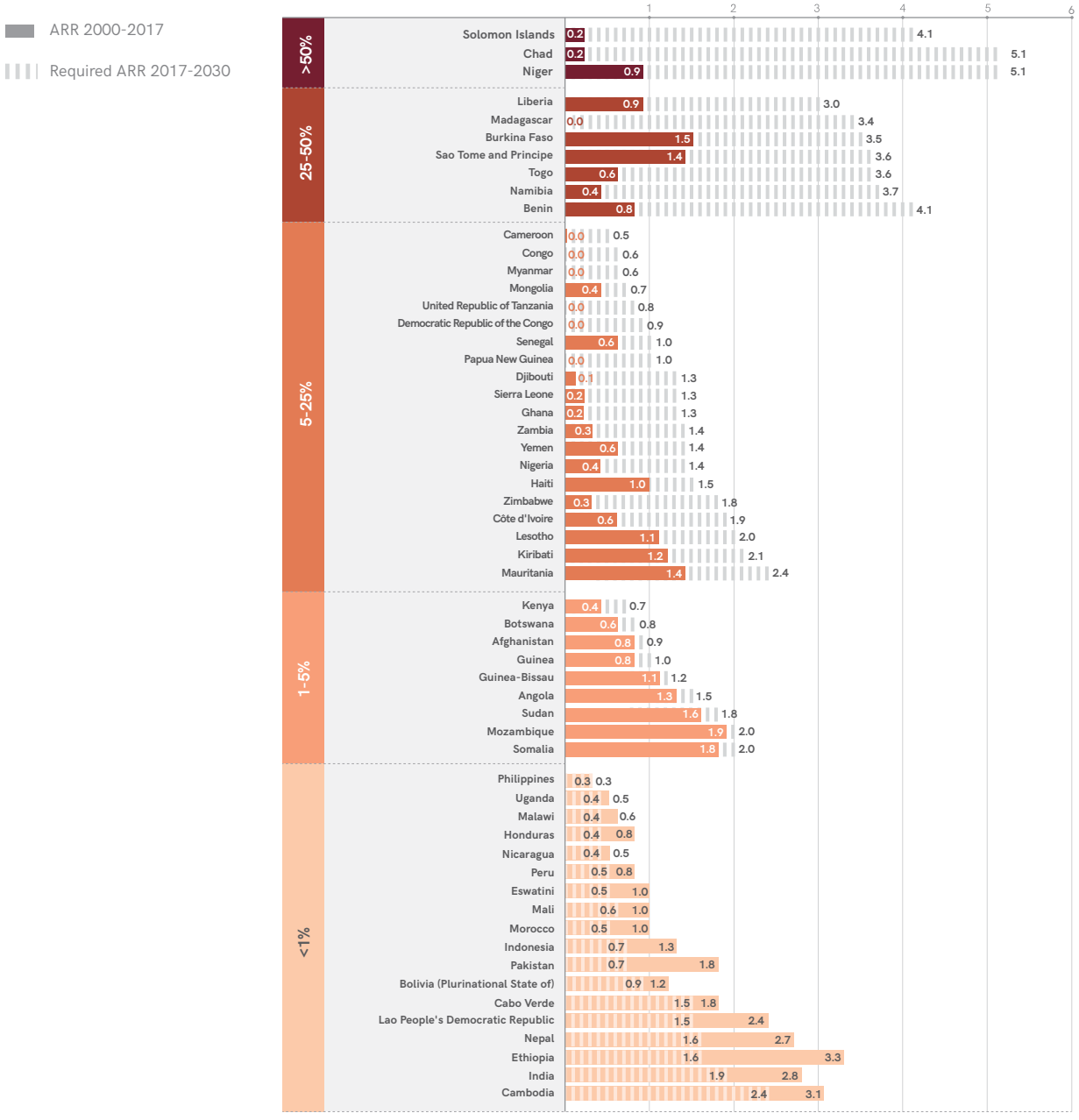


FIGURE 21 Current and required rate of reduction in open defecation, and projected open defecation rates in 2030 (%)

Box 5: **Capturing changes in the annual rate of progress in rural India**

The primary purpose of global monitoring is to produce internationally comparable estimates based on national data sources. The JMP uses a simple linear regression to calculate consistent estimates using all data points available. An expert review at the start of the SDG period concluded that most countries did not have enough data points to justify the use of alternative non-linear methods. Also, while non-linear methods are potentially more sensitive to short-term changes, they are less reliable for projecting long-term trends. For the purposes of global monitoring, the JMP therefore continues to use linear regression and applies the same methodology for all countries of the world[7].

[7] See World Health Organization and United Nations Children's Fund Joint Monitoring Programme (JMP), JMP Methodology: 2017 update & SDG baselines, WHO and UNICEF, Geneva, 2017, <https://washdata.org/report/jmp-methodology-2017-update>.

In 2014, the Government of India launched the Swachh Bharat Mission (SBM) to end open defecation. This nation-wide sanitation drive implemented in campaign mode has led to a rapid reduction in rural areas of the country, as reflected in more recent household surveys, such as QCI17, NSS18, NARSS18 and NARSS19. The JMP method is less well suited to capturing short-term changes brought about by rapid increases or decreases in service coverage. Figure 22 shows that estimates of trends in rural open defecation based on linear regression restricted to data collected since the launch of the SBM in 2014 (orange line = 35% in 2017) would differ from the standard JMP linear regression which uses all available data points since 2000 (red line = 36% in 2017). Between 2000 and 2014, open defecation decreased by approximately three percentage points per year, while data from 2015-2019 show a reduction of over 12 percentage points per year. These recent changes will be better reflected in future JMP reports.

Linear estimates may not reflect rapid increases or decreases in coverage

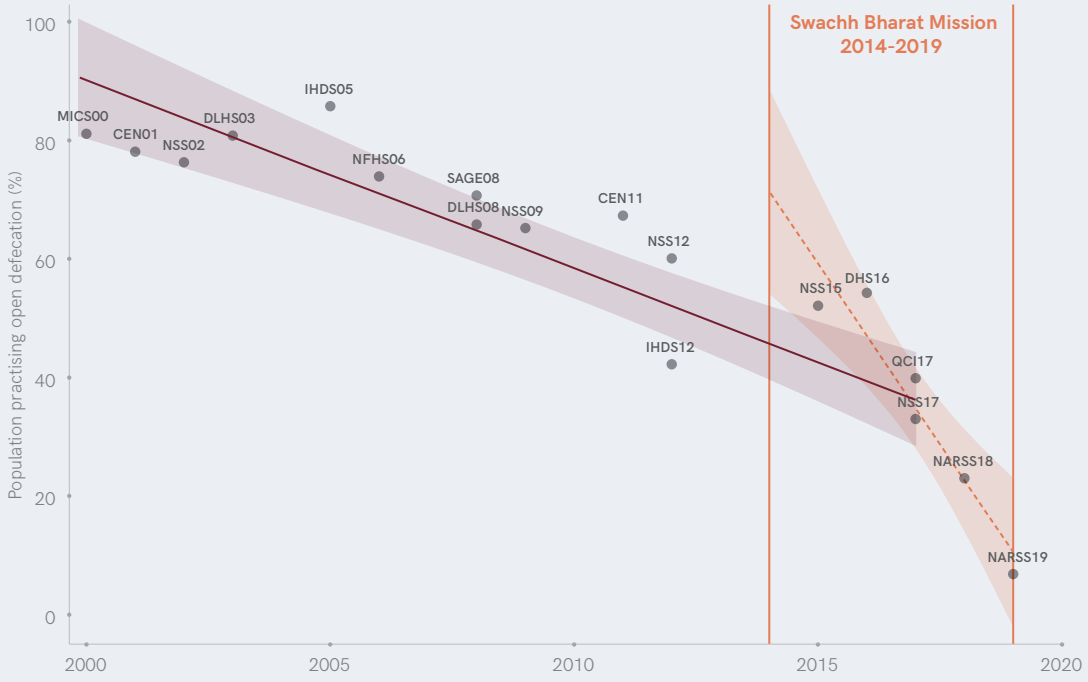


FIGURE 22 Estimating the population practising open defecation in rural India, 2000-2017 (%)

4. Reducing inequalities in basic services

SDG 1 seeks to 'end poverty in all its forms everywhere' and target 1.4 aims to achieve 'universal access to basic services'. Extending access to basic drinking water, sanitation and hygiene remains the immediate priority for many low and middle-income countries and represents an essential step towards achieving SDG targets 6.1 and 6.2, which aim for 'safely managed services'. For this reason, the JMP continues to track the population using basic services, as well as lower rungs on the WASH service ladders.

Since 2000, billions of people have gained access to basic drinking water, sanitation and hygiene services, but many countries still have a long way to go to fully realize the SDG ambition to achieve 'universal' access 'for all' and to 'leave no one behind'. The JMP database on inequalities now includes estimates disaggregated by rural-urban, sub-national region and wealth quintile for nearly 100 countries, enabling comparison of the progress made by different countries in reducing sub-national inequalities in basic WASH services. The JMP classifies countries and populations estimated to have achieved >99% coverage as 'nearly universal', recognizing the limitations of national statistics for identifying small unserved populations.

DRINKING WATER

In 2017, 90% of the world's population (6.8 billion people) used at least basic drinking water services, rising from 82% (5 billion people) in 2000. If current trends continue, global coverage will be around 96% in 2030, falling short of universal access. Between 2000 and 2017, urban coverage increased slightly from 95% to 97%, whereas rural coverage increased from 69% to 81%, reducing the urban-rural coverage 'gap' by 10 percentage points. By 2017, a total of 80 countries had achieved >99% coverage, and were therefore classified as having 'nearly universal' coverage (Figure 23), compared with 55 countries in 2000.

Between 2000 and 2017, use of at least basic services increased in all eight SDG regions and coverage in three regions increased by over ten percentage points (Figure 24). The greatest increase was recorded in Sub-Saharan Africa, where a quarter of the current population has gained access to at least basic drinking water since 2000. Oceania had the lowest baseline coverage in 2000, and recorded the smallest increase among regions with less than 99% coverage.

In 2017, 80 countries had achieved 'nearly universal' coverage of at least basic drinking water services

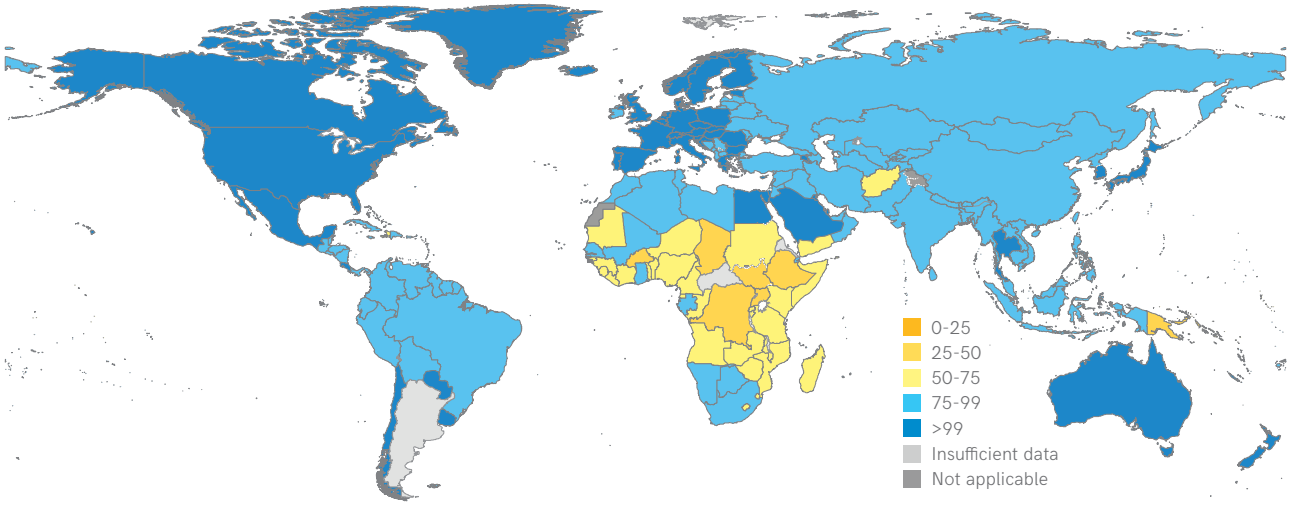


FIGURE 23 Proportion of population using at least basic drinking water services, 2017 (%)

Three SDG regions increased use of at least basic water services by >10 percentage points between 2000 and 2017

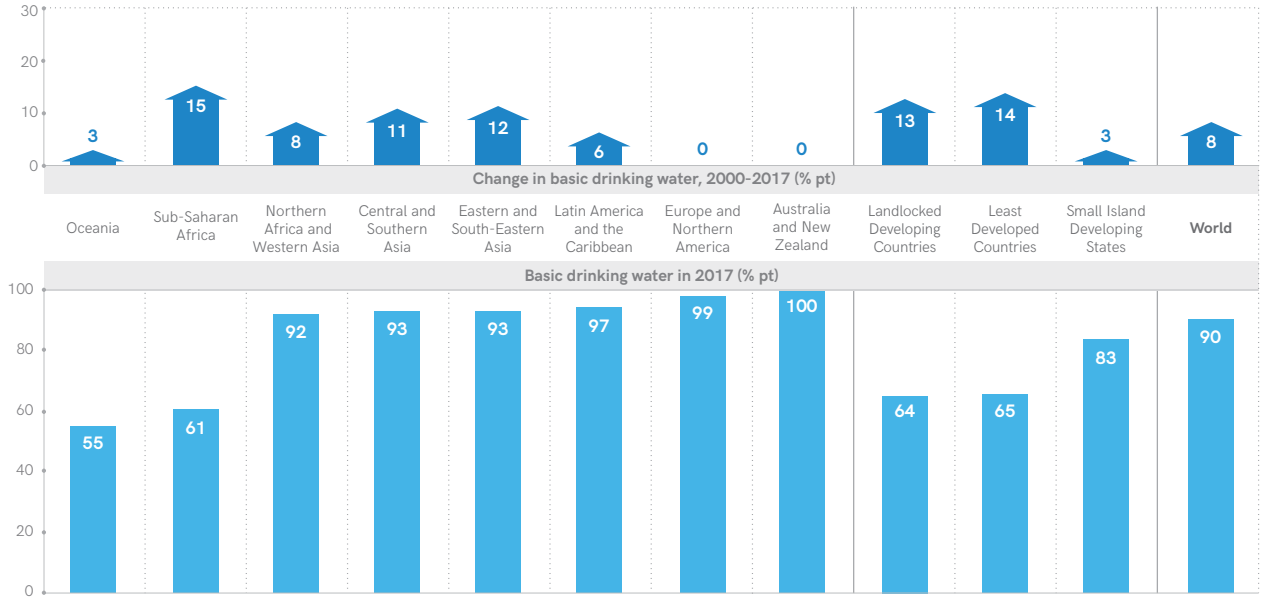
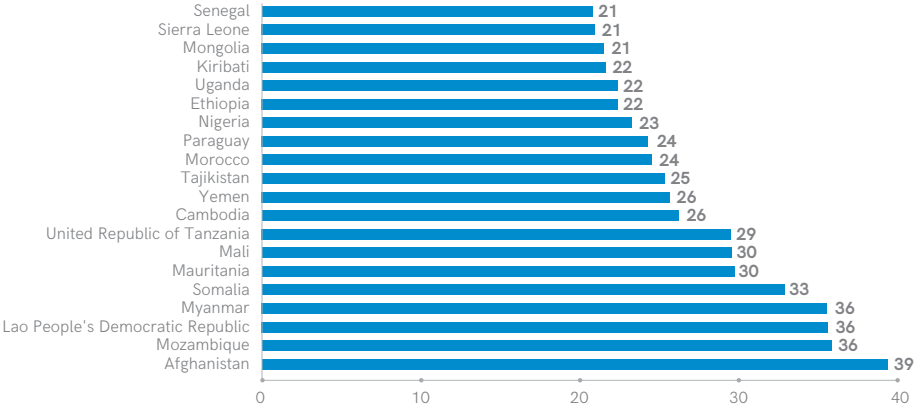


FIGURE 24 Proportion of population using at least basic drinking water services in 2017, and percentage point change 2000-2017, by region (%)

20 countries have increased use of basic water services by >20 percentage points since 2000

FIGURE 25 Percentage point increase in proportion of population using at least basic drinking water services, 2000-2017 (%)



Since 2000, 328 million people have gained access in Sub-Saharan Africa, while 570 million and 476 million people have gained access in Central and Southern Asia and Eastern and South Eastern Asia respectively. Between 2000 and 2017, one in seven people living in Least Developed Countries gained access to basic drinking water services.

Since 2000, 20 countries worldwide have increased coverage by over 20 percentage points (Figure 25). The majority had less than 50% coverage in 2000, and half of them are in Sub-Saharan Africa. In 11 countries, coverage has increased by at least 25 percentage points, which means one in four people have gained access to at least basic drinking water services since 2000.

The proportion of the global population lacking at least basic drinking water has halved, from 19% in 2000 to 10% in 2017, and decreased in all SDG regions. In 2017, nine out of ten of the 785 million people who still used limited services, unimproved sources or surface water lived in three regions: Sub-Saharan Africa (400 million), Eastern and South-Eastern Asia (161 million), and Central and South Asia (145 million). More than half of the 144 million people who still collected water directly from rivers, lakes and ponds lived in Sub-Saharan Africa (Figure 26).

Figure 26 shows that Eastern and South-Eastern Asia recorded the greatest reduction in the absolute number of people without basic water services (216 million), followed by Central and South Asia (139 million). However, in Sub-Saharan Africa (and in Oceania) the total number of people without services has actually increased. In Sub-Saharan Africa the number of people using surface water decreased by one third, but the number using unimproved sources remained unchanged, and the number using limited services with a round trip for water collection exceeding 30 minutes more than doubled. Previous JMP analysis has shown that the burden of collecting water from sources located off-premises falls primarily on women and girls (Box 6).

The population using limited water services in Least Developed Countries doubled between 2000 and 2017

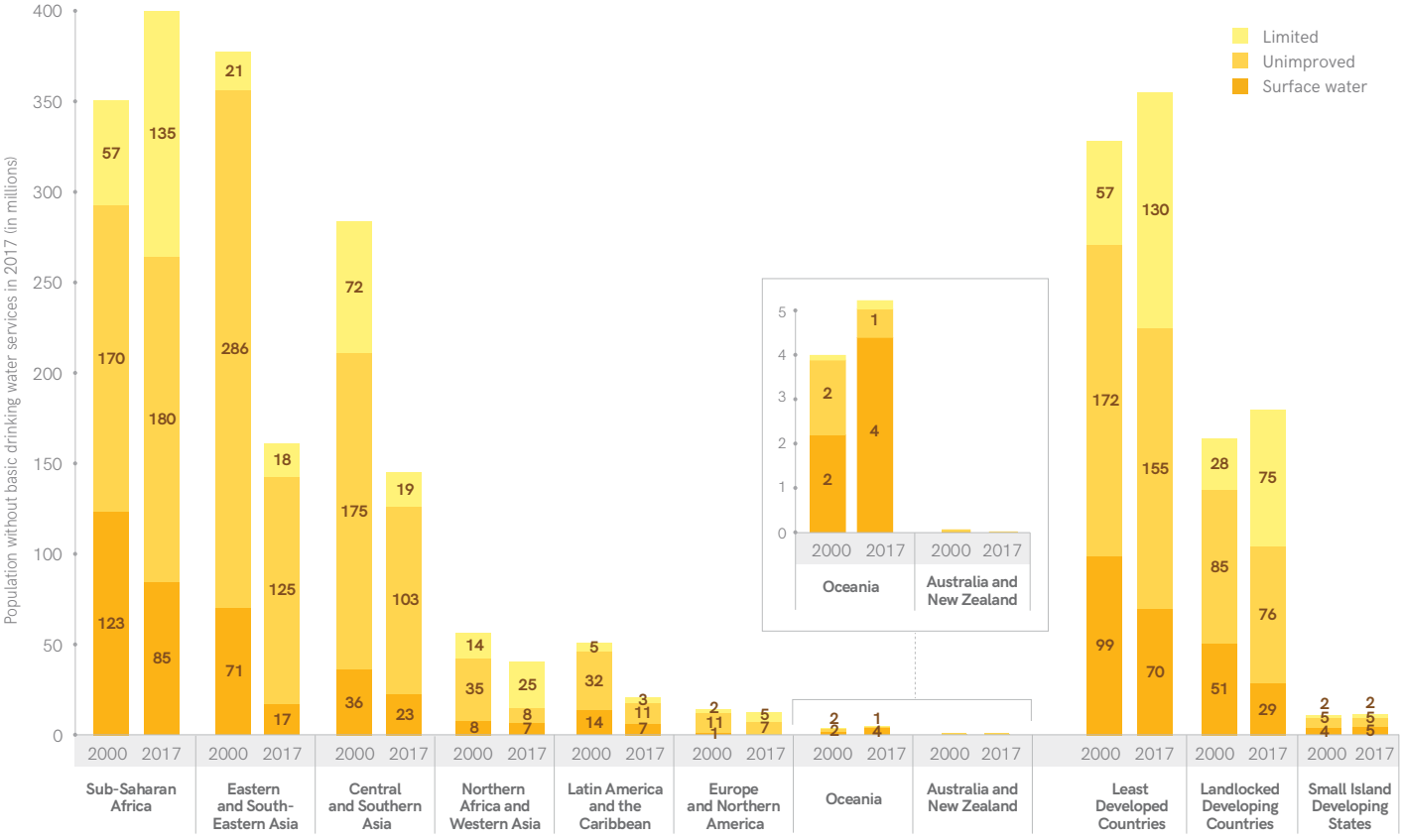


FIGURE 26 Population with limited, unimproved and no drinking water service in 2000 and 2017, by region (millions)

Box 6: **Assessing inequalities in the burden of water collection**

The JMP service ladders highlight inequalities in the accessibility of water services by distinguishing between improved sources located on and off-premises and, for the latter, between sources for which a round trip to collect water takes up to 30 minutes ('basic service') and over 30 minutes ('limited service'). National data for 2017 show that while most of the global population reported using improved sources located on premises (75%) or within 30 minutes (90%), 3% (207 million) still used sources where water collection exceeded 30 minutes. Two thirds (135 million) of these people lived in countries in Sub-Saharan Africa but six out of eight SDG regions contained at least one country where >10% of the population used limited water services in 2017.

In depth JMP analysis for the report *The World's Women 2015: Trends and statistics*[8] confirmed that the burden of water collection falls disproportionately on women. In 53 out of 73 of countries with data available from multiple indicator cluster surveys (MICS) and demographic and health surveys (DHS), over half of households using sources located off premises relied on women to collect water. In a few countries (for example, Mongolia), men are primarily responsible, and in 14 countries the burden also falls on children, with a boy or girl under 15 primarily responsible in at least one in ten households.

[8] The World's Women 2015: Trends and Statistics. New York: United Nations, Department of Economic and Social Affairs, Statistics Division, 2015. <https://unstats.un.org/unsd/gender/downloads/WorldsWomen2015_report.pdf>

New household survey questions not only identify the individual primarily responsible for water collection but also assess the amount of time spent collecting drinking water. In Sierra Leone, for example, more than one in four households spend over 30 minutes per day collecting water and three out of five households rely on women, while one in seven rely on girls (Figure 27). The average collection time for women and girls is approximately 25 minutes 25 minutes per household per day, which equates to over 175 million hours each year in Sierra Leone alone[9].

[9] Estimates relate only to the person primarily responsible for water collection, and are based on the average number of trips and the average household size.

In Sierra Leone, one in four households spend over 30 minutes per day collecting water, and in three out of four the burden falls primarily on women and girls

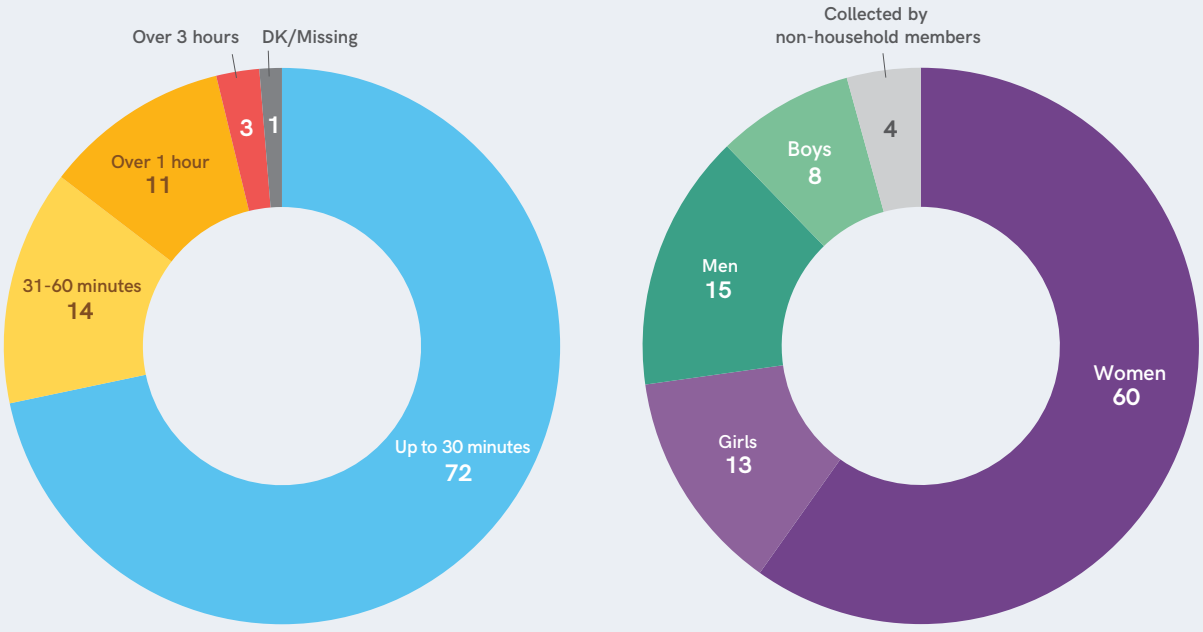


FIGURE 27 Drinking water collection among households using sources located off-premises in Sierra Leone, 2017 (%)

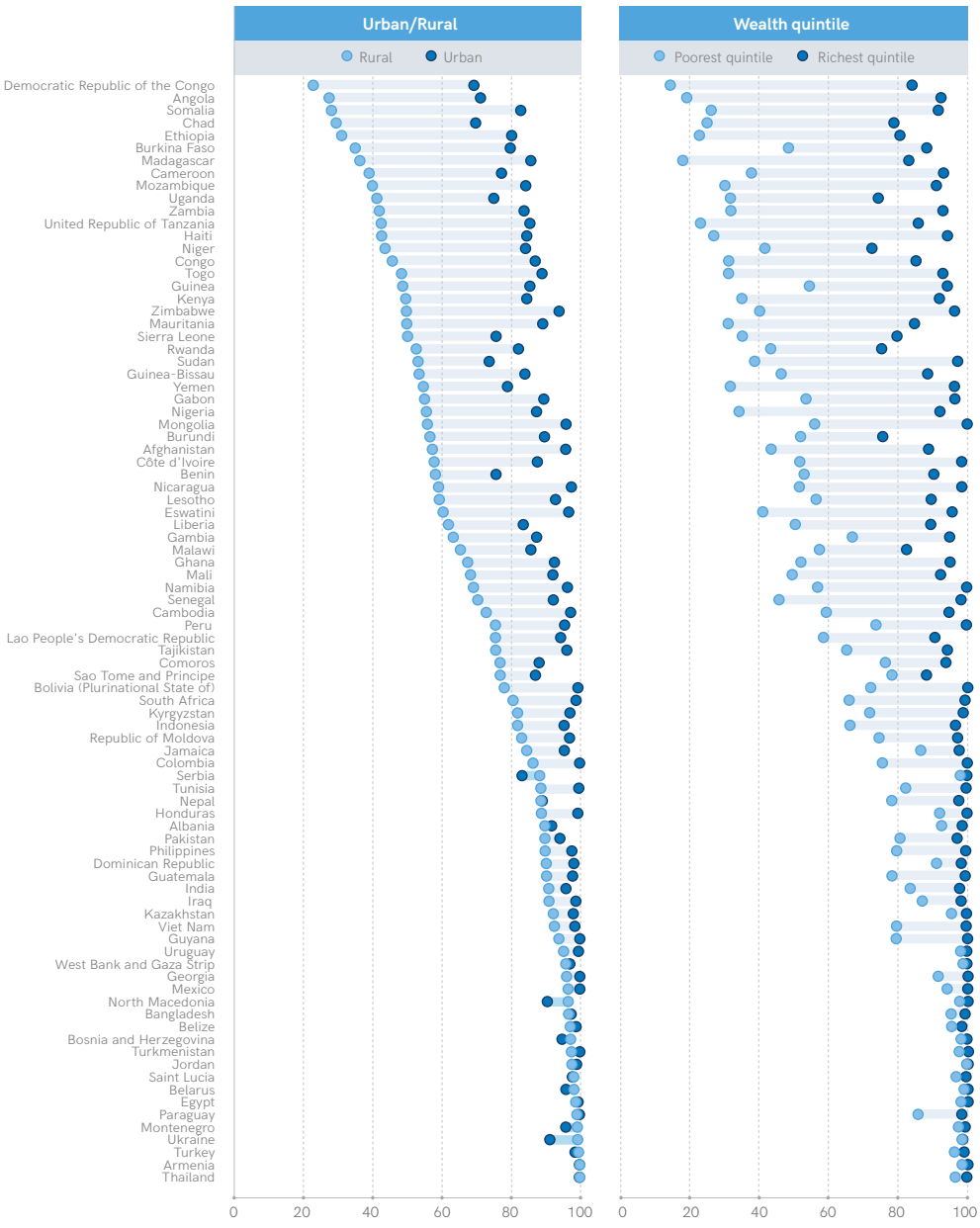
In countries with disaggregated data available, it is possible to identify sub-national inequalities in basic service coverage. Figure 28 shows that in many countries there were still significant inequalities between urban and rural areas and between the richest and poorest wealth quintiles in 2017. In most countries, coverage of basic water services was higher in urban than in rural areas but the degree of inequality varied.

21 countries had rural-urban coverage gaps of less than 10 percentage points, 45 countries had gaps of over 20 points, and 15 had gaps of over 40 points. The only country with a gap exceeding 50 points was Somalia where 83% of the urban population used basic water services, compared with just 28% of the rural population.

Figure 29 shows how inequalities in basic water services in rural areas have changed between 2000 and 2017. While most countries have increased rural coverage of basic services, onlyhalf have also succeeded in reducing the gap in coverage between the richest and poorest in rural areas. In the other half, inequalities between the richest and poorest rural quintiles have increased. For example, Paraguay increased rural coverage of basic water from 53% to 99% and reduced the gap between richest and poorest by over 40 percentage points. While Mexico and Ethiopia increased rural coverage by 22 and 23 points respectively, the gap between the richest and poorest in Mexico was reduced by 25 points whereas in Ethiopia it increased by 22 points. Over the same period, while rural water coverage decreased by ten percentage points in

In many countries, disparities in basic drinking water services by residence and wealth persist

FIGURE 28 **Inequalities in the proportion of population with at least basic water services, between urban and rural areas and richest and poorest wealth quintiles, 2017 (%)**



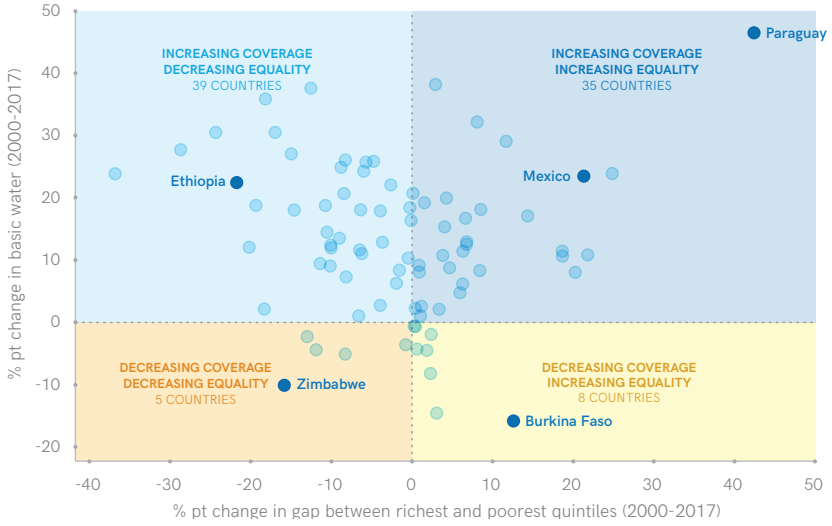
Zimbabwe and 16 points in Burkina Faso, the gap between the richest and poorest increased by 16 points in the former and decreased by 13 points in the latter.

Analysis of basic water coverage by wealth quintiles for the same countries reveals that, in general, the disparities between the richest and poorest are even greater. For example, while DDemocratic Republic of the Congo, Haiti, Madagascar and Togo had urban-rural gaps exceeding 40 percentage point gaps the gaps between the richest and poorest exceeded 60 points. While South Africa, Lao People's Democratic Republic and Benin have reduced the urban-rural gap to less than 20 points, the gaps between richest and poorest still exceed 30 points. The largest gap was observed in Angola where 94% of the richest have basic water services, compared with just 15% of the poorest wealth quintile. there is a 77 point gap between the richest.

Figure 30 shows current and required rates of progress for achieving 'nearly universal' (>99%) basic water services by 2030, among countries with less than 99% coverage in 2017. It shows that if current rates of change continue just one third of countries will achieve >99% coverage of basic services by 2030. Just one in four are on track to achieve >99% in rural areas, and only one in six are on track to achieve >99% among the poorest rural wealth quintile. For example, while Tunisia is on track to achieve 'nearly universal' coverage at national and rural levels, coverage among the poorest in rural has actually decreased since 2000.

Since 2000, 35 countries have increased basic water coverage and reduced the gap between the richest and poorest quintiles in rural areas

FIGURE 29 Changes in basic water coverage and inequalities between richest and poorest in rural areas, by country, 2000-2017 (%)



46 out of 132 countries are on track to achieve 'nearly universal' basic water services by 2030, but rural areas and the poorest wealth quintiles have furthest to go

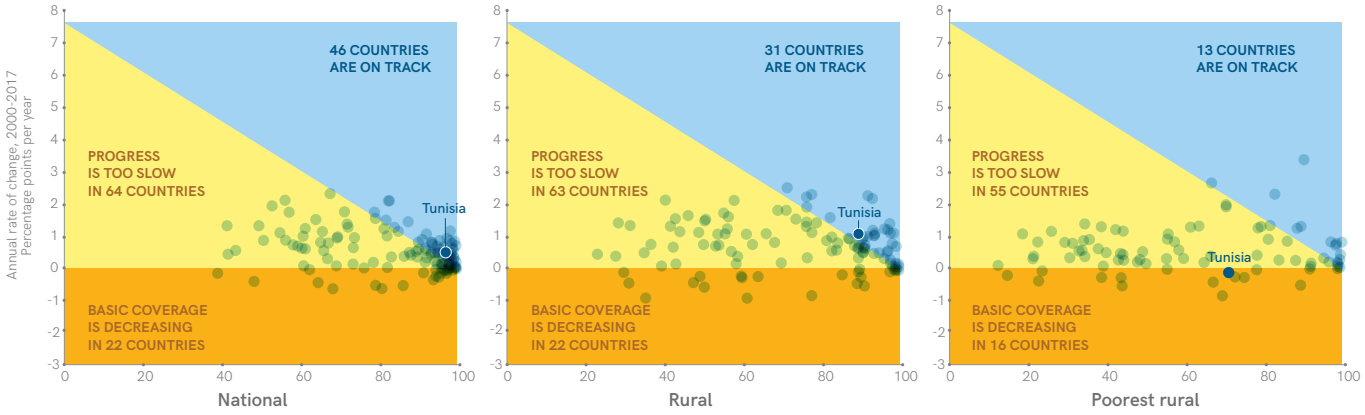


FIGURE 30 **Progress towards universal basic drinking water services by national, rural and poorest wealth quintile (2000-2017) among countries with <99% national coverage in 2017**

Note: Includes countries with trend data available and with >1% national (n=132), rural (n=116) and poorest rural (n=84) lacking basic services in 2017

SANITATION

In 2017, 74% of the world's population (5.5 billion people) used at least basic sanitation services, compared with 56% (3.4 billion people) in 2000. Achieving universal coverage by 2030 will require a doubling of the current annual rate of increase (one percentage point per annum). While coverage in urban areas (85%) is higher than in rural areas (59%), rural coverage has increased more quickly and the gap in coverage decreased from 43 to 26 percentage points between 2000 and 2017. By 2017, 50 countries had achieved >99% coverage and were therefore classified as 'nearly universal' (Figure 31), compared with just 36 countries in 2000.

Between 2000 and 2017, coverage of at least basic sanitation services increased in all SDG regions, except Oceania. Australia and New Zealand had already achieved >99% coverage by 2000 (Figure 32). The greatest increase was recorded in Central and Southern Asia, where coverage more than doubled from 25% to 61%, and the number of people with basic services tripled from 384 million to 1.2 billion. Eastern and South-Eastern Asia increased coverage by nearly a quarter. In Oceania, coverage decreased by 7% due to a decline in Papua New Guinea. Fewer than one in three people in Sub-Saharan Africa had basic services in 2000, and while coverage has increased by fewer than ten percentage points, the population with basic services has doubled from 149 million in 2000 to 314 million in 2017.

Since 2000, 27 countries have increased use of basic sanitation services by more than 20 percentage points. In 16 countries, coverage increased by more than 25 percentage points, and in seven countries coverage increased by more than one third. In the Federal States of Micronesia, coverage increased by 64 percentage points, from just 25% in 2000 to 88% in 2017 (Figure 33).

In 2017, 50 countries had achieved 'nearly universal' coverage of basic sanitation services

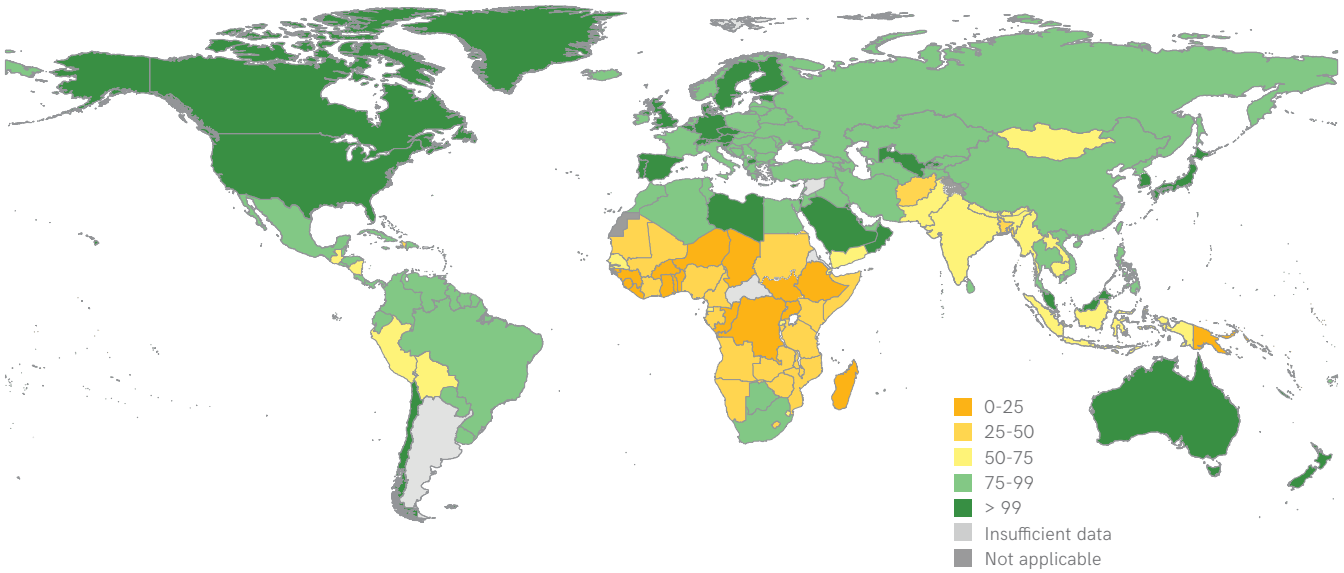


FIGURE 31 Proportion of population using at least basic sanitation services, 2017 (%)

Two SDG regions increased use of basic sanitation services by >20 percentage points between 2000 and 2017

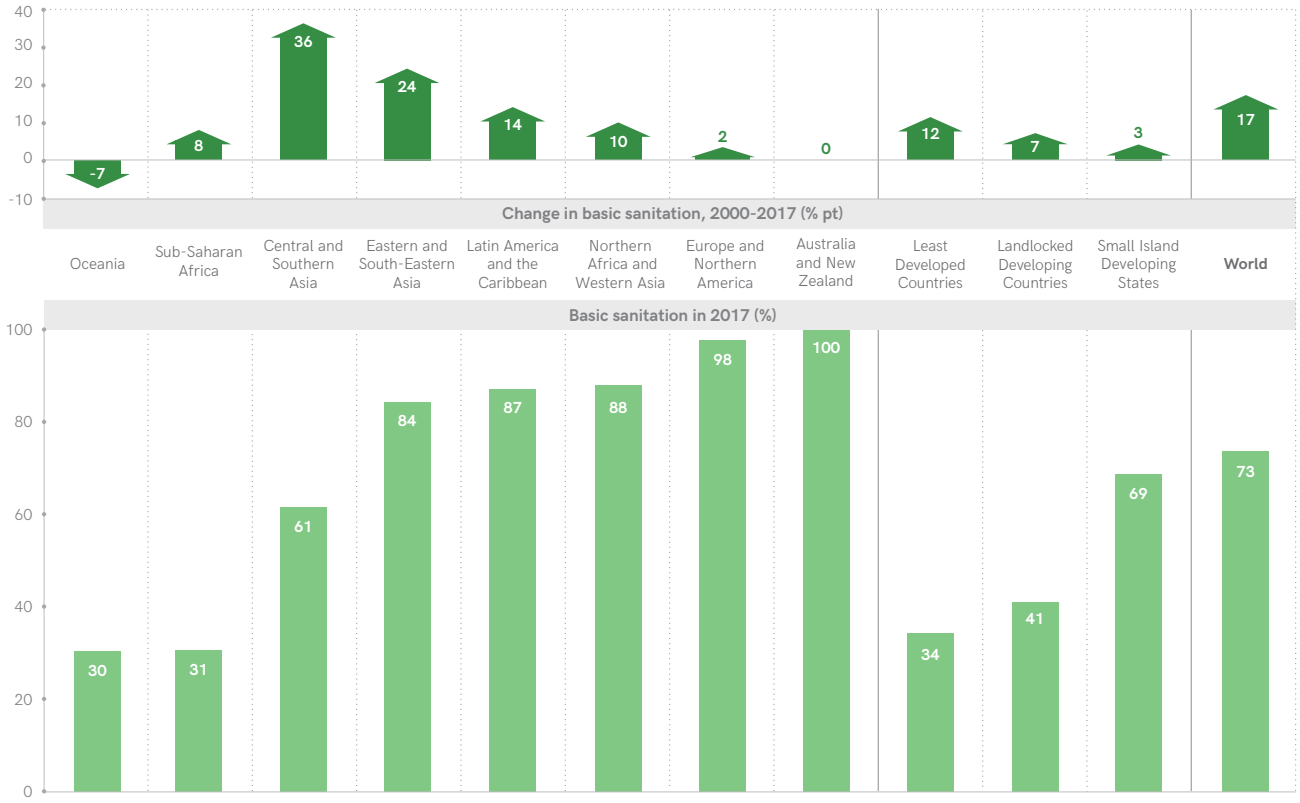


FIGURE 32 Proportion of population using at least basic sanitation services in 2017, and percentage point change 2000-2017, by region (%)

27 countries have increased use of basic sanitation services by >20 percentage points since 2000

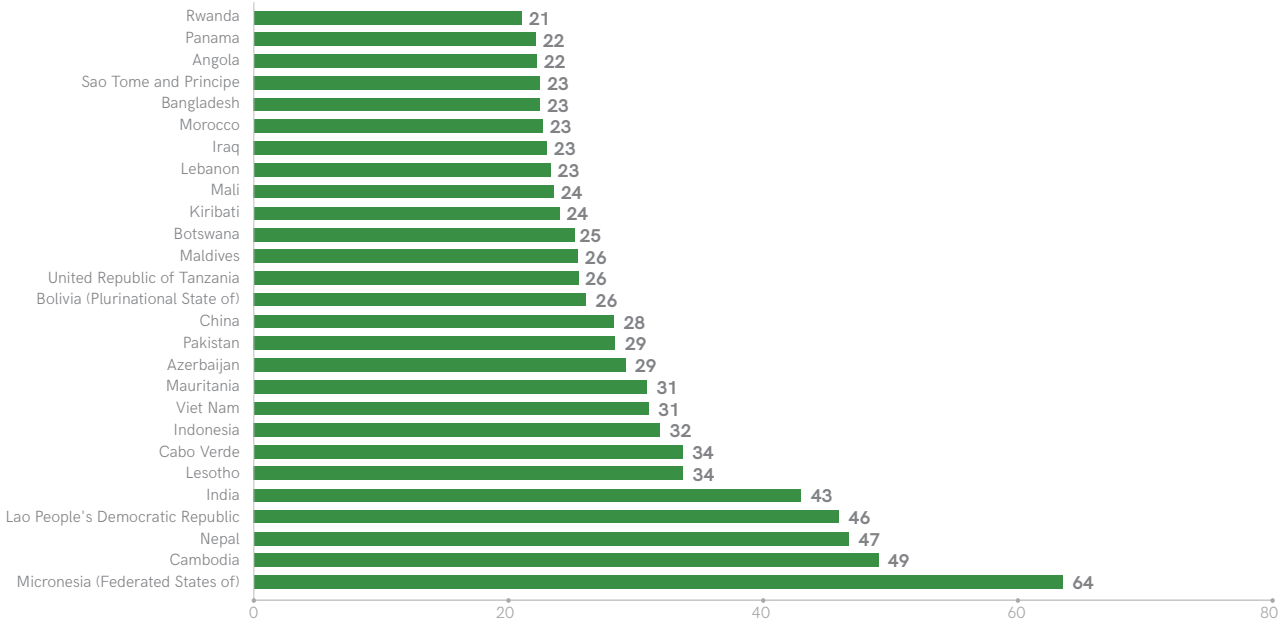


FIGURE 33 Percentage point increase in proportion of population using at least basic sanitation services, 2000-2017 (%)

The population without basic sanitation services decreased in all regions except Sub-Saharan Africa and Oceania

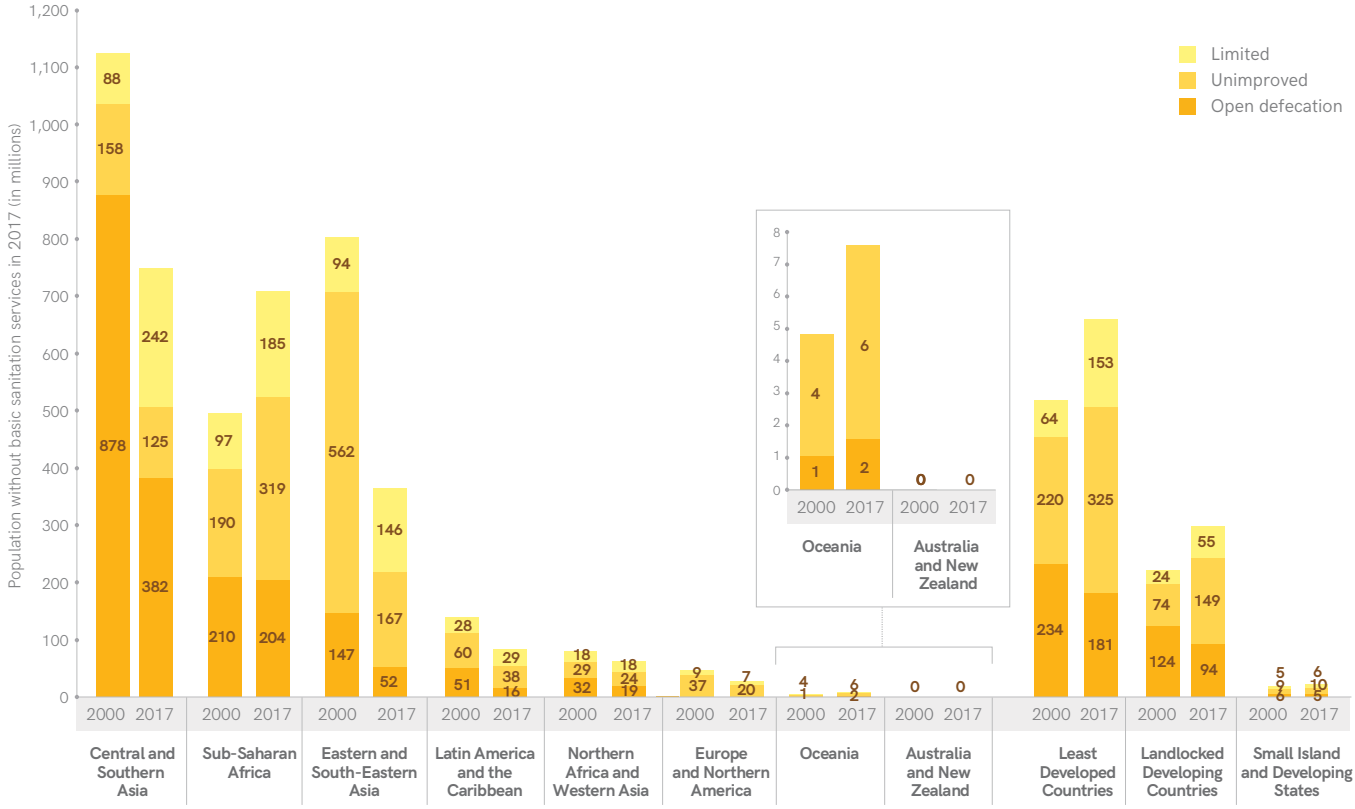


FIGURE 34 Population with limited and unimproved sanitation services and open defecation in 2000 and 2017 (millions)

Between 2000 and 2017, the proportion of the population that still lacked even a basic sanitation service decreased from 44% to 27% globally and decreased in all SDG regions except Oceania. Figure 34 shows that among the 2 billion people still without basic sanitation services in 2017, nine out of ten lived in three regions: Central and Southern Asia (749 million), Sub-Saharan Africa (709 million), and Eastern and South-Eastern Asia (364 million). While the total population without basic services decreased by 416 million in Eastern and South-Eastern Asia and by 381 million in Central and South Asia, it increased in Sub-Saharan Africa by 212 million and in Oceania by 3 million. While the number of people practising open defecation in Sub-Saharan Africa remained largely unchanged, the number using unimproved sanitation facilities increased by half, and the number sharing improved sanitation facilities with other households doubled. Shared sanitation is an important interim solution, especially in rapidly growing urban areas, but is generally considered a lower level of service due to increased health risks and human rights concerns relating to dignity and safety, which disproportionately affect women and girls (Box 8).

Box 8: **Gender inequalities associated with shared sanitation**

The JMP classes households using improved sanitation facilities shared with other households as a 'limited' service. The types of facilities being shared (for example, household toilets, compound toilets, community toilets, public toilets) and the numbers of people sharing them vary across countries, but sharing is generally agreed to represent a lower level of service. Sharing sanitation facilities is not only likely to increase exposure to health risks but the Special Rapporteur on the Human Rights to Water and Sanitation has also raised serious concerns about the negative impacts on dignity, privacy and safety, especially for women and girls and those with limited mobility who are disproportionately affected. Shared sanitation nevertheless remains an important interim solution, especially for poorer households in rapidly growing urban areas in low income countries. There has therefore been an increased effort in recent years to ensure that shared facilities and public toilets are well managed and 'female friendly'[10].

[10] See WaterAid, 'Female-friendly Public and Communal Toilets: A guide for planners and decision makers', WaterAid, WSUP and UNICEF, <https://washmatters.wateraid.org/publications/female-friendly-public-and-community-toilets-a-guide-for-planners-and-decision-makers> accessed 29 May 2019.

Figure 35 shows the total number of people gaining basic sanitation services between 2000 and 2017, including population growth. While the global population increased by 1.4 billion people, the population using basic sanitation services increased by 2.1 billion. Nearly three out of four people gaining access during this period lived in Central and South Asia (807 million) and in Eastern and South-Eastern Asia (698 million). The biggest contributions in each SDG region came from countries with the largest populations, including India, China, Brazil, Nigeria, Egypt, the United States of America and Papua New Guinea. 486 million people gained access to basic sanitation services in India and 451 million gained access in China, accounting for nearly half of the global total. Over 100 million people gained access in Indonesia and more than 50 million people in Pakistan and in Brazil.

2.1 billion people gained basic sanitation services between 2000 and 2017

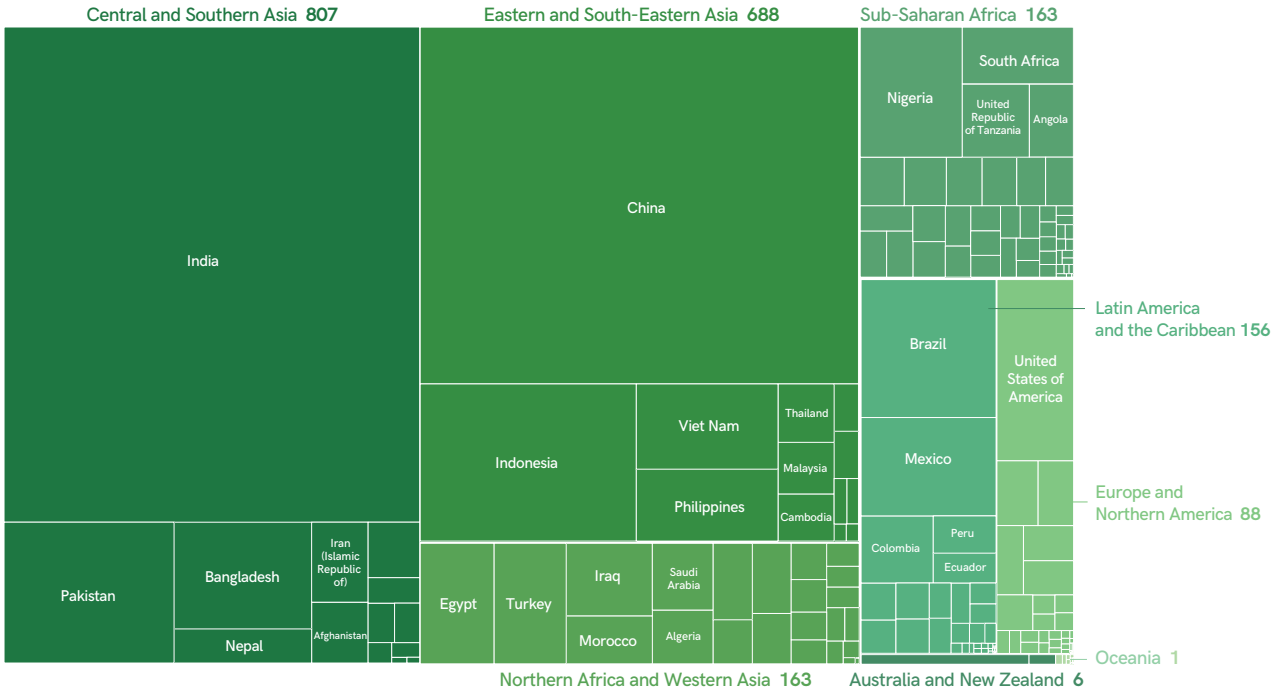


FIGURE 35 Population gaining access to at least basic sanitation services, 2000-2017, by country and region (millions)

Capital cities often have higher coverage of basic sanitation services

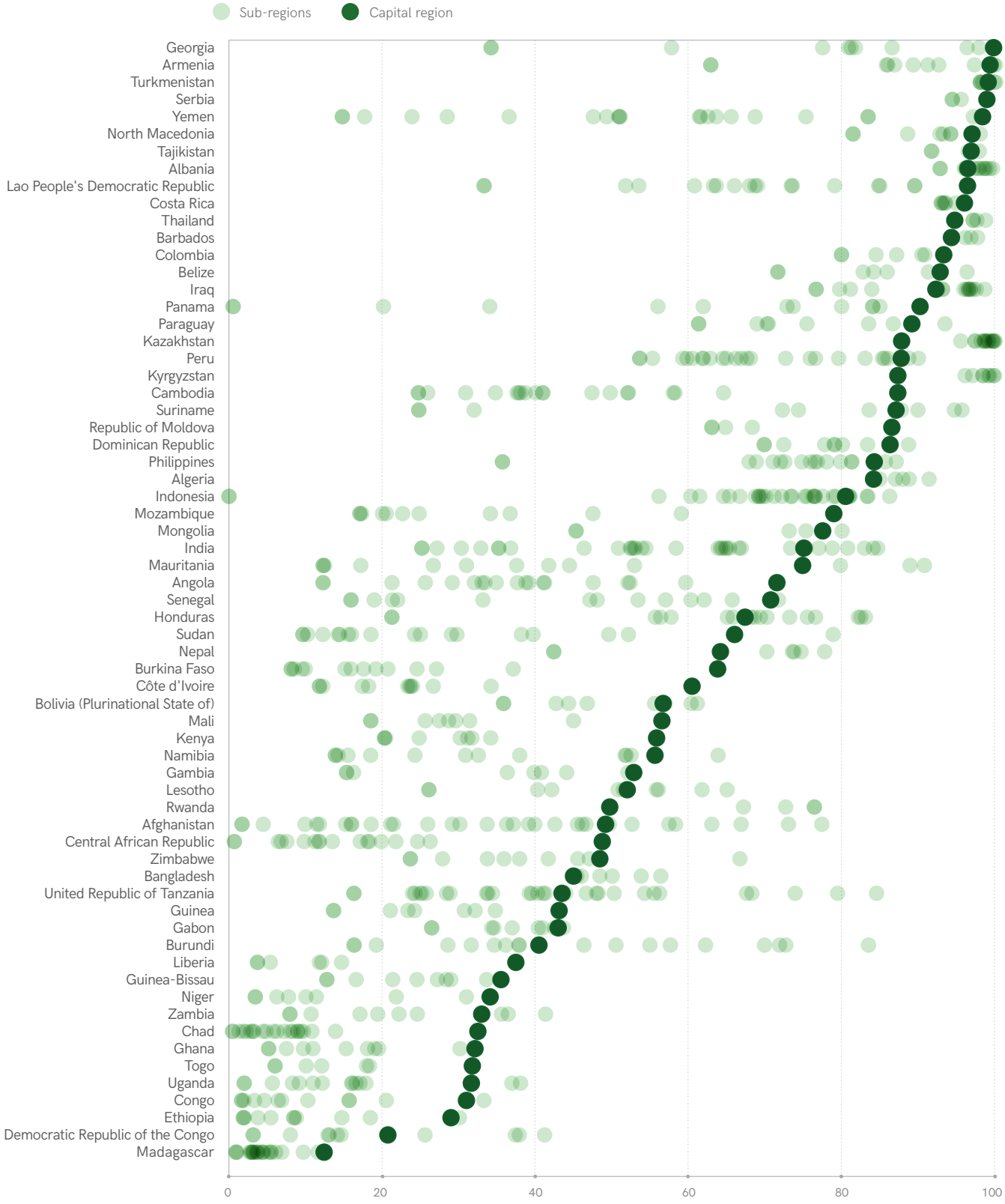


FIGURE 36 **Inequalities in the proportion of population with basic sanitation services, by sub-national region, 2017 (%)**

In countries where data are disaggregated by sub-national region, it is possible to identify inequalities between different parts of the country. Figure 36 shows that the regions in which the capital is located often have higher coverage than other regions, for example, in Colombia, and Central African Republic. But in some countries, for example, Iraq, Honduras and Burundi, the capital is in the middle of the range, and in a small number, for example, Thailand, Kyrgyzstan and Bangladesh, coverage is lowest in the capital region.

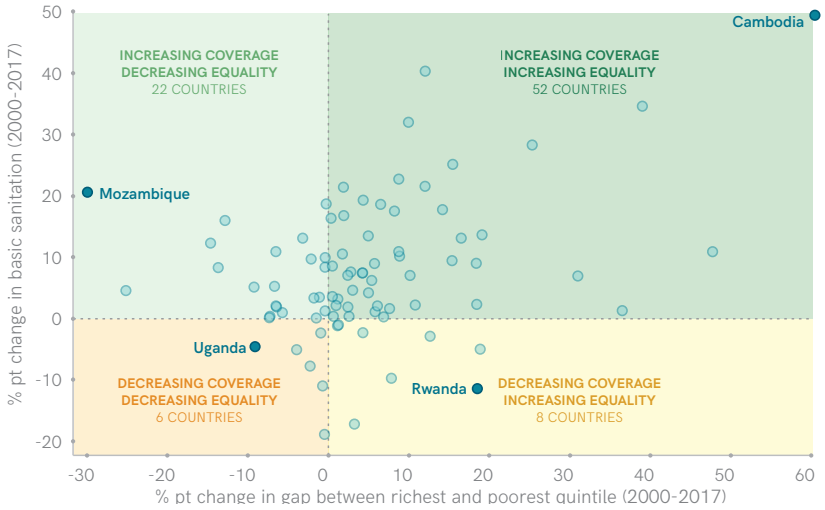
While the number of sub-national regions per country varies there are often significant inequalities in basic service coverage. In some countries, sub-national regions are closely grouped with similarly high levels of coverage (for example, Serbia) or low levels of coverage (for example, Madagascar). In other countries, large differences are observed between the highest and lowest sub-national regions, for example, in Yemen, Afghanistan, Mauritania and Tanzania. In some cases, a small number of regions lag far behind (for example, Georgia, Panama and Indonesia).

Figure 37 shows changes in basic sanitation coverage in urban areas, as well as changes in the 'gap' in coverage between the richest and poorest urban wealth quintiles, between 2000 and 2017. The majority of countries have increased urban coverage. While the gap between richest and poorest has been reduced in 52 countries it has increased in 22 countries. In 6 out of 14 countries where urban coverage decreased the gap between richest and poorest also increased.

Since 2000, Cambodia increased urban coverage of basic sanitation from 46% to 96% and reduced the gap between richest and poorest by over 60 percentage points. Meanwhile Mozambique increased coverage from 32% to 52% but the gap between richest and poorest increased by 30 points. Over the same period urban coverage decreased by 5 points in Uganda and 11 points in Rwanda, but the gap between the richest and poorest increased by XX points in the Uganda and decreased by YY points in Rwanda.

Since 2000, 52 countries have increased basic sanitation coverage, and reduced the gap between the richest and poorest quintiles, in urban areas

FIGURE 37 Changes in basic sanitation coverage and inequalities between wealth quintiles in urban areas, by country, 2000-2017 (%)



40 out of 152 countries are on track to achieve 'nearly universal' basic sanitation services by 2030, but progress is slower in rural areas and among the poorest wealth quintile

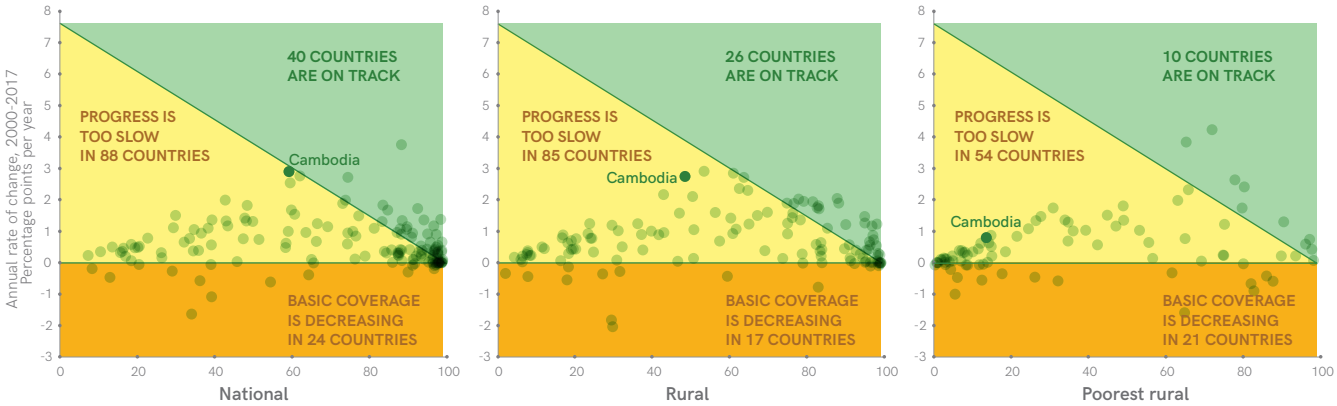


FIGURE 38 **Progress towards universal basic sanitation services by national, rural and poorest wealth quintile (2000-2017) among countries with <99% coverage in 2017**
Note: Includes countries with trend data available and with >1% national (n=152), rural (n=128) and poorest rural (n=85) lacking basic services in 2017.

HYGIENE

SDG target 6.2 includes an explicit reference to achieving 'equitable hygiene for all'. Hygiene comprises a range of behaviours that help to maintain health and prevent the spread of diseases, including handwashing, menstrual hygiene management and food hygiene. The indicator selected for global monitoring of SDG 6.2 is the proportion of the population with a handwashing facility with soap and water available at home.

In 2017, 60% of the global population (4.5 billion people) had a basic handwashing facility with soap and water available at home. A further 22% (1.6 billion people) had handwashing facilities that lacked water or soap at the time of the survey, and 18% (1.4 billion people) had no handwashing facility at all. Handwashing estimates were available for three out of eight SDG regions and for 78 countries, but few data were available for high income countries, and insufficient data were available to estimate regional and global trends.

In 42 out of 78 countries with data, less than half of the population had a basic handwashing facility at home

FIGURE 39 **Proportion of population with basic handwashing facilities at home, by country and region, 2017 (%)**

Figure 39 shows inequalities in coverage of basic handwashing facilities, which range from just one percent in Liberia to >99% in other countries. In Central and Southern Asia and Northern Africa and Western Asia, most countries had more than 50% coverage, whereas in Sub-Saharan Africa most countries had less than 50% coverage of basic handwashing facilities with soap and water available.

Figure 40 highlights the 19 countries with data where more than half of the population had no handwashing facility at all, ranging from 52% in Guinea to 97% in Liberia. In nine countries, at least three quarters of the population had no handwashing facility at home in 2017. Achieving the SDG target of universal access to basic handwashing facilities for all will be especially challenging in these countries.

Figure 41 shows both the proportion of the population and the total number of people with no handwashing facility among the 78 countries with data available. It shows that 17 countries had at least 10 million people and 30 countries had at least 5 million people with no facility in 2017. The largest numbers with no facility were found in populous countries, such as Indonesia (78 million), Democratic Republic of the Congo (69 million), Nigeria (49 million), Ethiopia (43 million) and India (37 million).

In 19 countries, more than half of the population had no handwashing facility at home

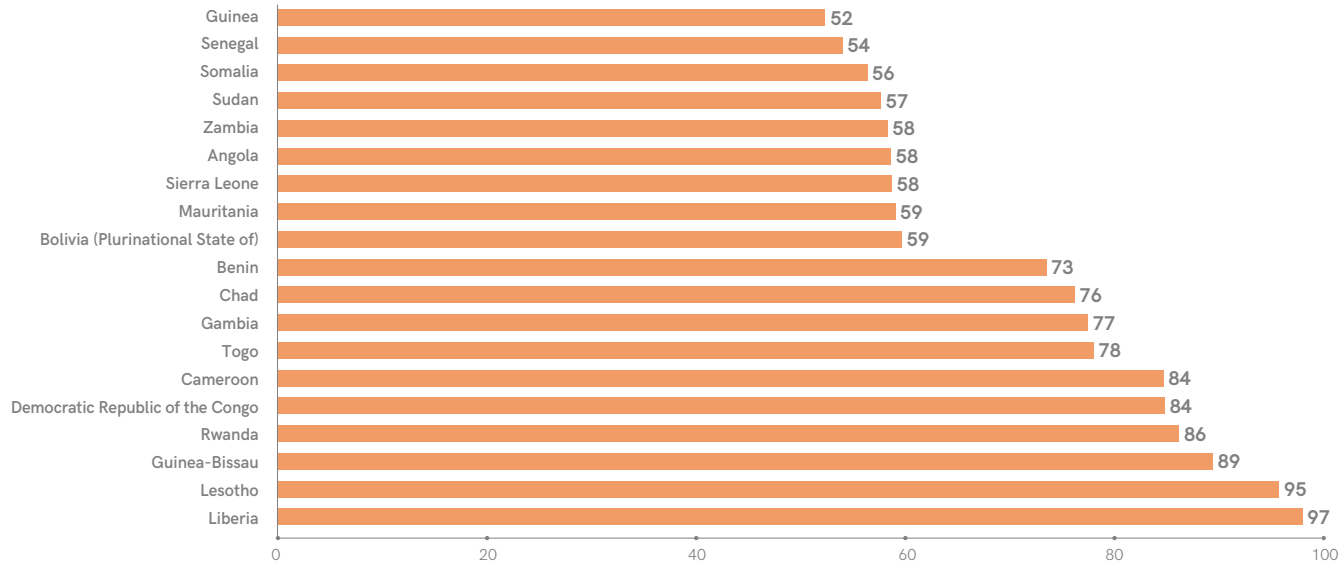


FIGURE 40 Proportion of population with no handwashing facility at home, 2017

In 17 countries >10 million people had no handwashing facility at home in 2017

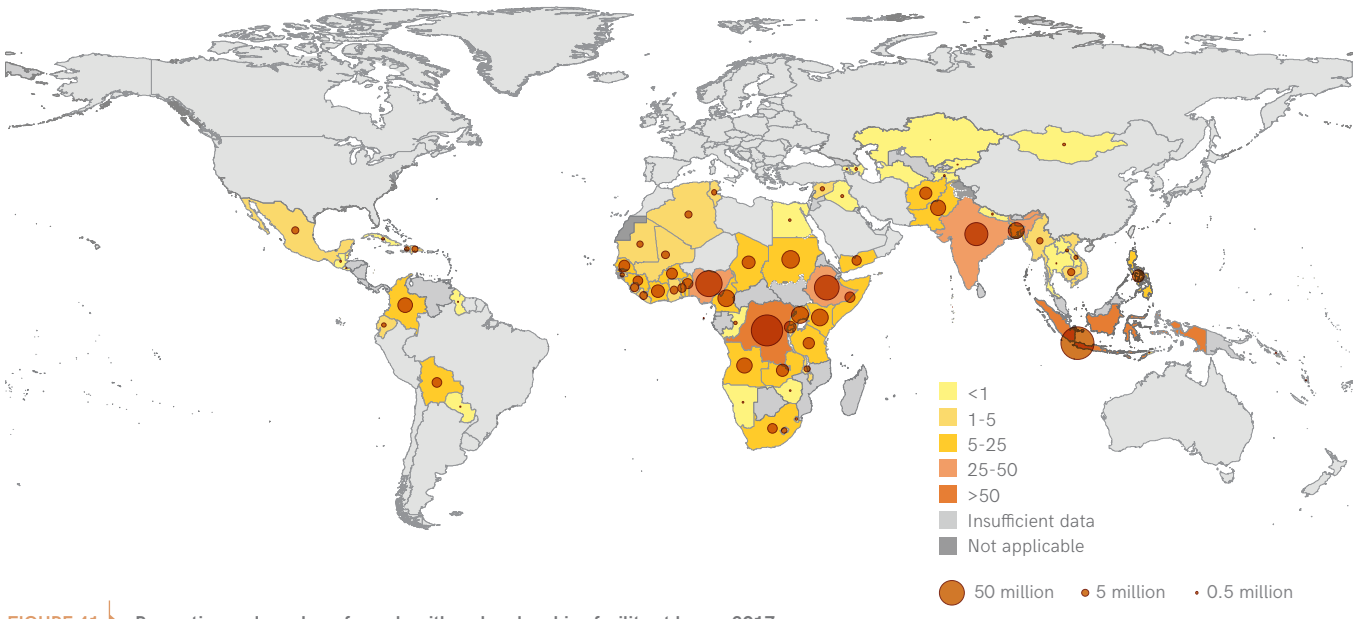


FIGURE 41 Proportion and number of people with no handwashing facility at home, 2017

Box 9: **Fixed and mobile handwashing facilities**

Observation of handwashing facilities has been a standard component of MICS and DHS household surveys since 2009. Enumerators ask to see the place where members of the household most often wash their hands and record the type of facility used and the presence of water and soap. Handwashing facilities may be fixed, such as sinks with taps or buckets with taps or tippy-taps, or mobile, such as 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. Disaggregated data show that the types of handwashing facilities used varies widely, and that in many countries people are more likely to use mobile facilities (Figure 42). However, emerging data also suggest that water and soap are less likely to be found near mobile facilities, for example, in Côte d'Ivoire (Figure 43).

Emerging data show that many households use mobile handwashing facilities

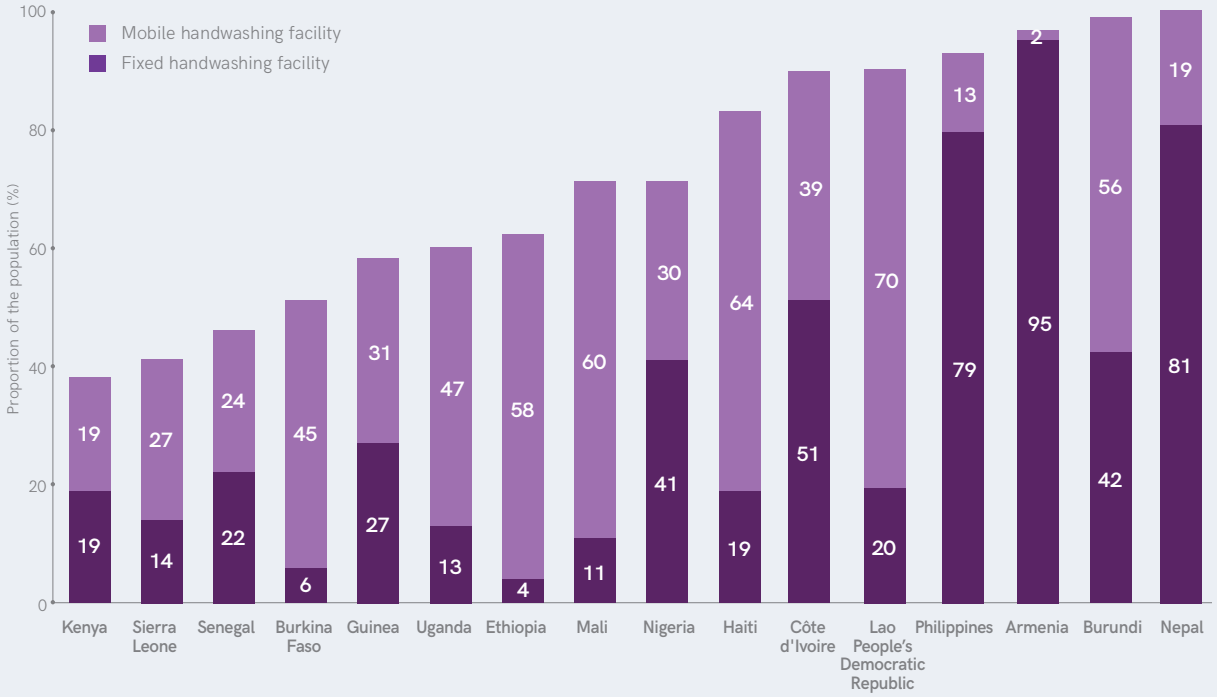


FIGURE 42 Proportion of population with fixed and mobile handwashing facilities at home, selected countries, 2015-2017

In Côte d'Ivoire, water and soap were less likely to be observed near mobile facilities

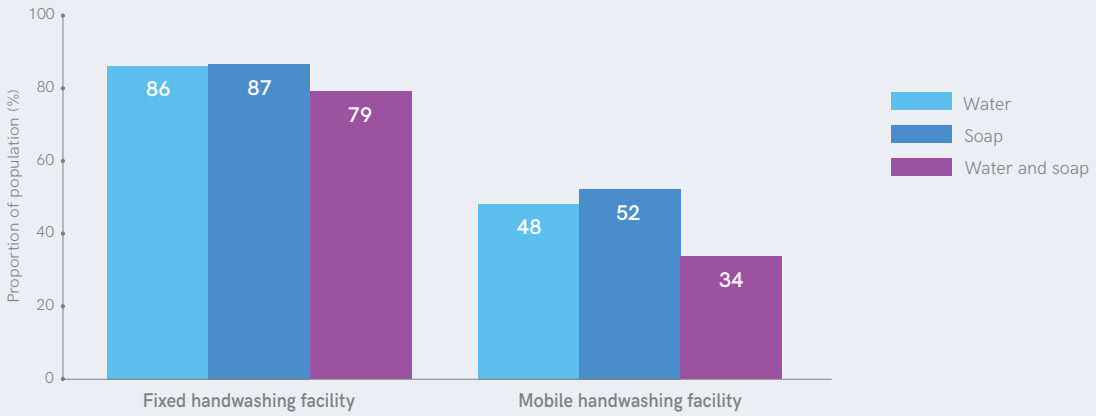


FIGURE 43 Proportion of population with fixed and mobile handwashing facilities with water and soap available, Côte d'Ivoire, 2016 (%)

Data collected through household surveys can be disaggregated for rural and urban areas and for wealth quintiles. Figure 44 shows that in most countries with disaggregated data available coverage was higher in urban areas than rural areas in 2017. The gap in coverage appears to be smaller in countries where urban coverage is less than 20%, but increases as urban coverage increases, and then decreases again when urban coverage reaches 80%. The gaps in coverage between the richest and poorest quintiles in urban areas are even greater, and in some cases, for example Gambia, Bangladesh, South Africa and Nepal, coverage among the poorest people in urban areas is lower than the average for rural areas.

Coverage of basic handwashing facilities is higher in urban areas but there are significant gaps between the richest and poorest

FIGURE 44 **Inequalities in coverage of basic handwashing facilities between urban and rural and urban wealth quintiles, 2017 (%)**

Box 10: **Paying special attention to the needs of women and girls**

Menstrual hygiene management (MHM) is increasingly widely used as a term for addressing the specific needs of women and girls during menstruation. It covers a range of issues from raising awareness and changing social norms and practices to the provision of facilities and materials that enable women and girls to manage their periods safely and with dignity. MHM-related questions are increasingly being included in household survey questionnaires for individual women aged 15-49, and typically cover access to materials and a private place to wash and change, as well as exclusion from social, educational and employment opportunities during menstruation. These can be used to assess gender-based inequalities in access to WASH services, which are one element to address as part of wider efforts to 'achieve gender equality and empower all women and girls' under SDG5.

Emerging data on menstrual hygiene from PMA2020 surveys show that women and girls typically wash and change menstrual materials at home (Figure 45). They also show that many women use sanitation facilities that are not safe, clean or private and frequently lack water or soap and that relatively few facilities meet all these criteria (Figure 46). Access to appropriate materials and the type of materials used also varies widely across countries (Figure 47). In Lao People's Democratic Republic, for example, disaggregated data show that women in the richest wealth quintile are more than twice as likely to have access to appropriate materials and a private place to wash and change, than women in the poorest quintile (Figure 48).

During their period, most women and girls wash and change materials at home

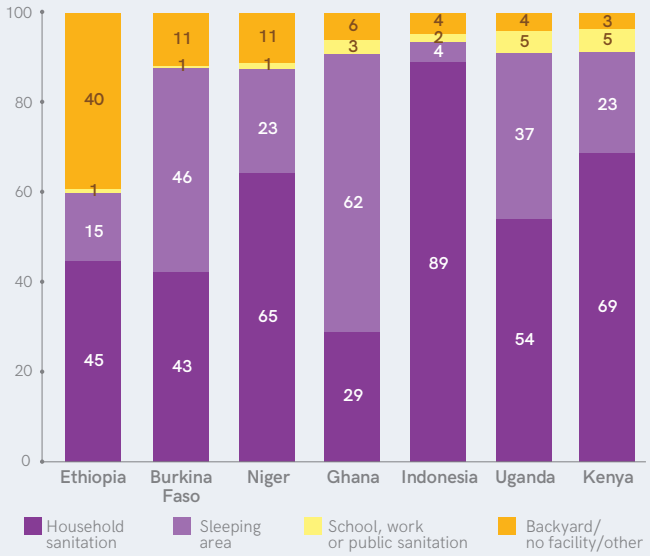


FIGURE 45 **Proportion of women and girls, aged 15-49 who menstruated in the last three months, by place they usually wash and change menstrual materials, selected PMA2020 surveys, 2015-2017**

Sanitation facilities often do not meet the needs of women and girls

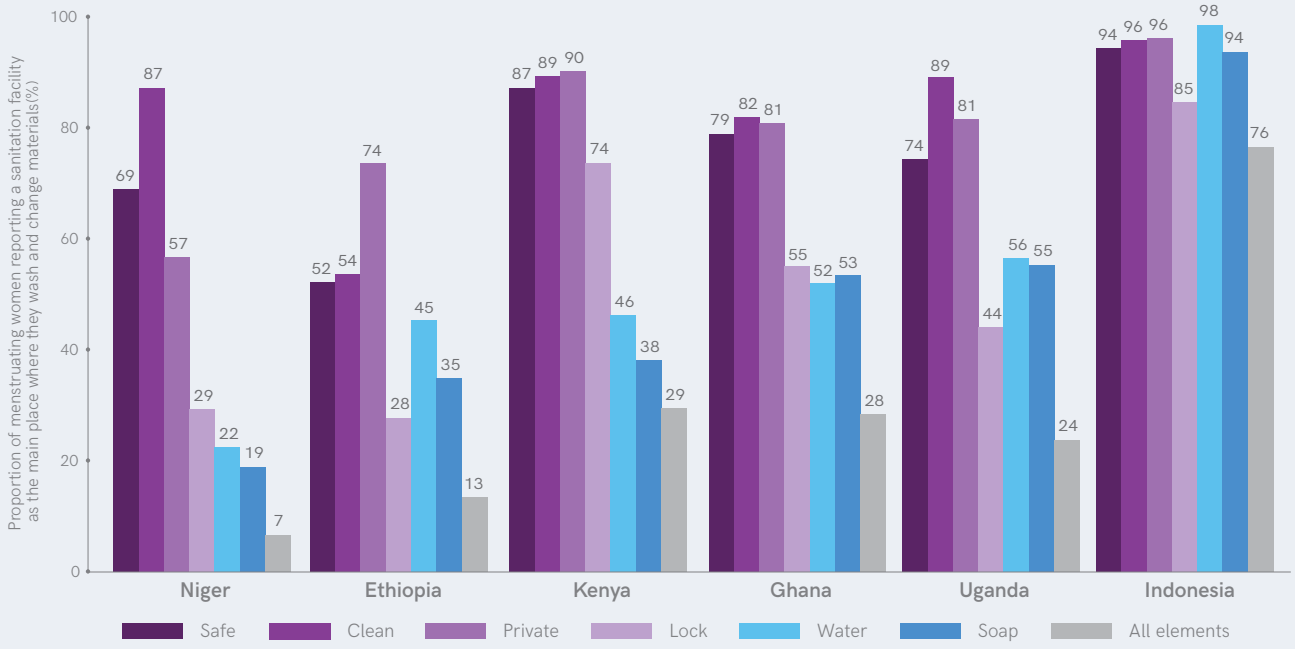


FIGURE 46 **Proportion of women and girls using a sanitation facility to wash and change materials during their period by condition of facility, selected PMA2020 surveys, 2015-2017**

The types of materials used during menstruation varies between and within countries

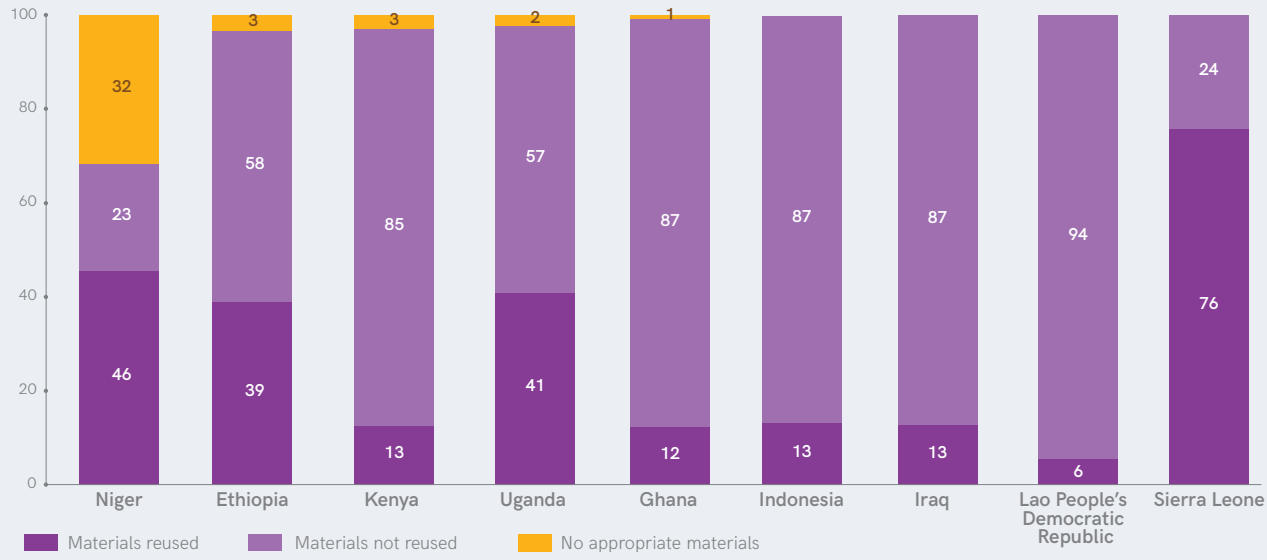


FIGURE 47 Proportion of women and girls, aged 15-49 who menstruated in the last three months, using appropriate materials and their reuse, selected MICS and PMA2020 surveys, 2015-2017

In Lao PDR, poorer women and girls are less likely to use appropriate materials and have a private place to wash and change

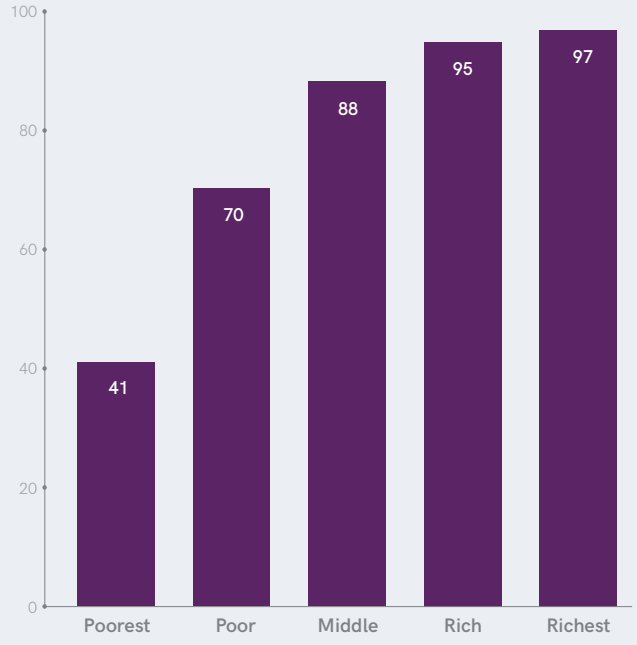


FIGURE 48 Proportion of women and girls, aged 15-49 who menstruated in the last 12 months, using appropriate materials and having a private place to wash and change, Lao People's Democratic Republic MICS/SIS, 2015-2017 (%)

Leave no one behind: closing the gap between richest and poorest

The 2030 Agenda commits member states to 'reduce inequalities within and between countries' and to 'leave no one behind' which implies progressively reducing and eliminating the gap between advantaged and disadvantaged groups. The JMP inequalities database includes estimates of trends in basic water and sanitation services and open defecation disaggregated by wealth quintile and Figure 49 shows how inequalities between the richest and poorest have changed between 2000 and 2017 in selected countries.

In Latin America and the Caribbean, 12% of the rural population lacked basic water services in 2017, compared to 29% in 2000. In Paraguay, rural basic water coverage has increased faster among the poorest, and the gap between the two has been significantly reduced, while in Trinidad and Tobago coverage has increased faster among the richest. In Haiti rural basic water coverage has increased among the richest but decreased among the poorest thereby widening the gap between them. In Nicaragua, rural basic water coverage has decreased among both groups.

In Eastern and South-Eastern Asia, the urban population lacking basic sanitation services was halved between 2000 and 2017, dropping from 20% to 9%, and in many countries the richest quintile have enjoyed near universal coverage for many years. Coverage of basic sanitation services in urban areas of Lao People's Democratic Republic has increased faster among the poorest, gradually closing the gap with the richest between 2000 and 2017. In urban Cambodia, Mongolia and Thailand the richest quintile already had nearly universal access to basic sanitation in 2000. In Cambodia the poorest quintile made substantial progress in catching up to the richest quintile, increasing coverage by 60 percentage points, but coverage among the poorest in Mongolia and Thailand has remained largely unchanged since 2000.

Open defecation is largely a rural phenomenon, and in 2017 the ten countries with highest levels of open defecation in rural areas were all in sub-Saharan Africa. In Ethiopia open defecation in rural areas has decreased faster among the richest (69 percentage points) than the poorest (49 points) since 2000. By 2017, Gambia had nearly eliminated open defecation among the richest and significantly reduced the gap with the poorest in rural areas. While Guinea Bissau has achieved a rapid reduction in open defecation among the richest, the practice is increasing among the poorest in rural areas. In Central African Republic, there has been little progress in reducing open defecation among the richest and a significant increase in open defecation among the poorest.

Progress in reducing inequalities between the richest and poorest varies widely across countries

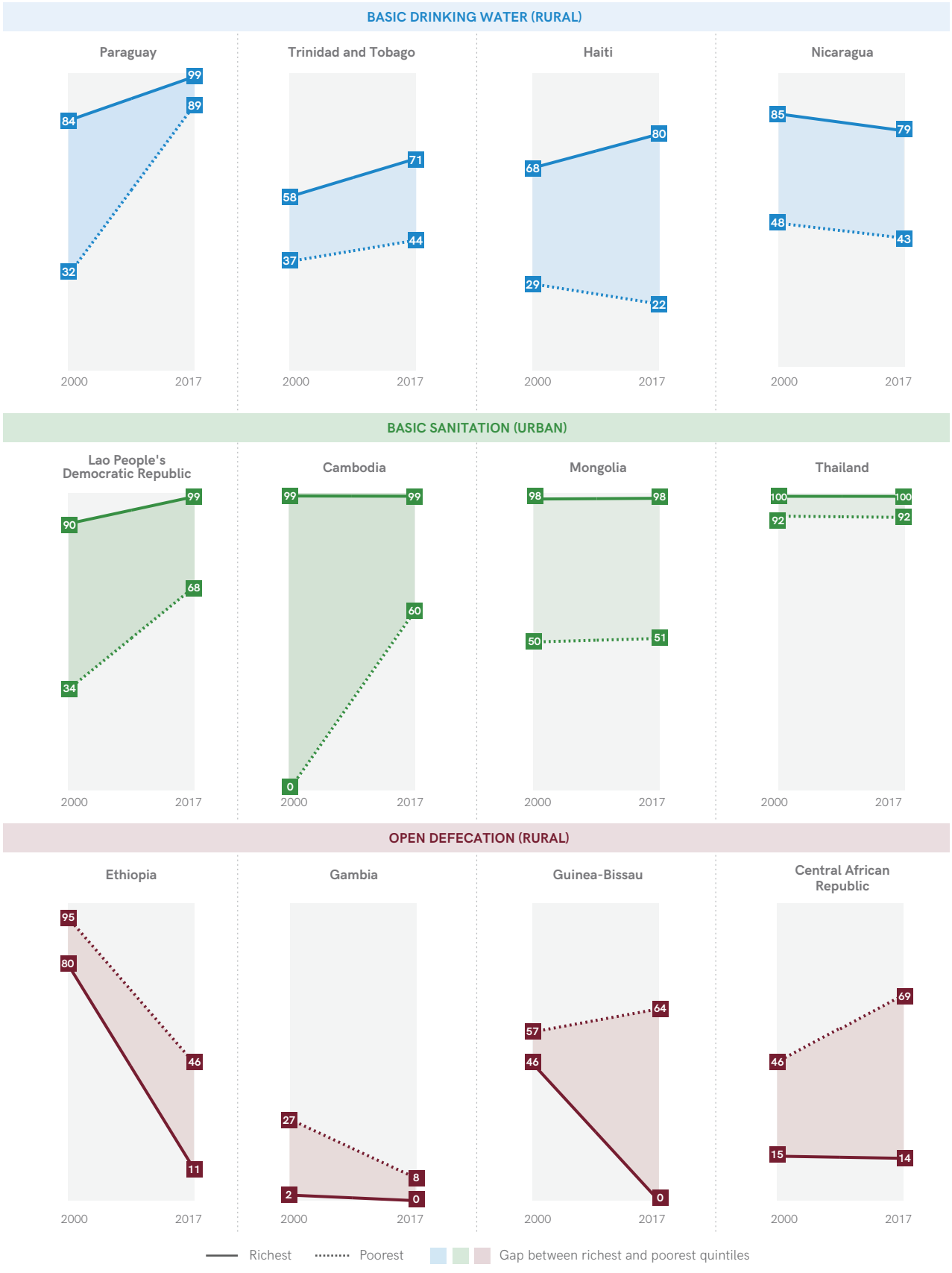


FIGURE 49 Trends in basic drinking water, basic sanitation and open defecation among the richest and poorest wealth quintiles in rural and urban areas, 2000-2017

5. Reducing inequalities in safely managed services

SAFELY MANAGED DRINKING WATER

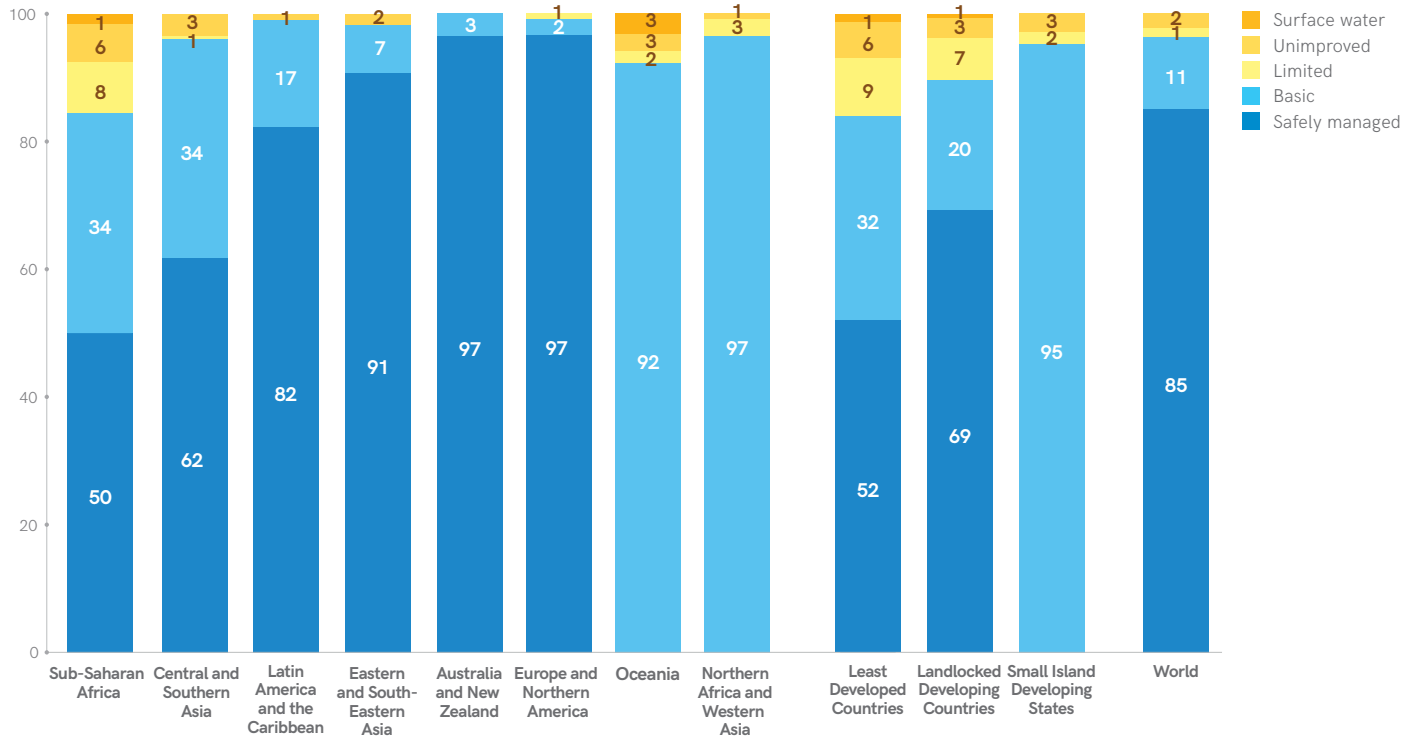
In 2017, 71% of the global population used safely managed drinking water services. National estimates were available for 117 countries and four out of eight SDG regions, representing 38% of the global population. Coverage was lower in rural areas (53%) than in urban areas (85%), which were home to two out of three of the 5.3 billion people using safely managed services. Between 2000 and 2017, rural coverage has nevertheless been increasing faster than urban coverage, and the gap in safely managed service coverage has decreased from 47 to 32 percentage points. Six SDG regions had urban estimates available in 2017, and three regions had estimates for rural areas (Figure 50).

Urban populations were twice as likely to have safely managed services in Latin America and the Caribbean and four times more likely in sub-Saharan Africa, whereas urban and rural areas had similar levels of coverage in Central and Southern Asia.

Figure 51 shows inequalities in national coverage of safely managed services, which ranged from just 7% in Uganda to >99% (`nearly universal' coverage) in other countries in 2017. There were 25 countries worldwide that had already achieved nearly universal coverage of safely managed services, but there were still countries with less than 50% coverage in all SDG regions, except for Australia and New Zealand.

In 2017, coverage of safely managed services was higher in urban areas in all regions

Urban drinking water ladders



Rural drinking water ladders

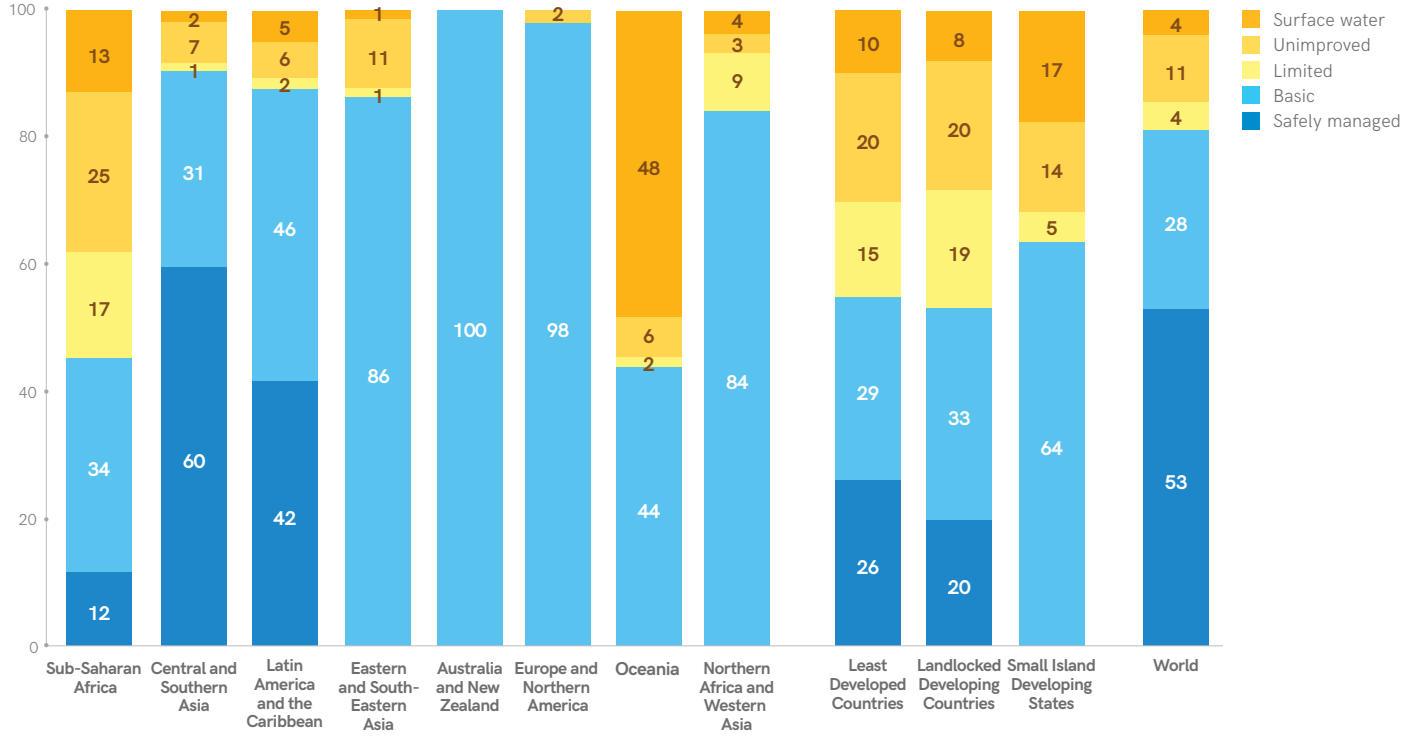


FIGURE 50 Urban and rural drinking water coverage, by SDG region, 2017 (%)

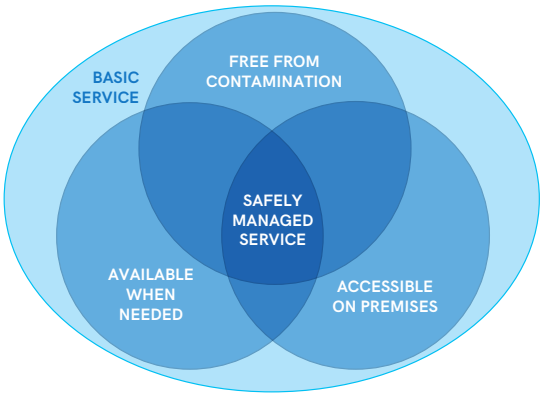
Use of safely managed drinking water services varies substantially by country and region

FIGURE 51 Proportion of population with safely managed drinking water services, by country and region, 2017 (%)

To meet the new SDG criteria for safely managed drinking water services, households must use an improved water source[11] that is:

- **Accessible on premises:** located within the dwelling, yard or plot
- **Available when needed:** sufficient water available or at least 12 hours per day
- **Free from contamination:** compliant with standards for faecal contamination (*E. coli*) and priority chemical contamination (arsenic and fluoride)

[11] Improved water sources include piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packaged or delivered water.



Improved facility types

To calculate the number of people using safely managed services, it is first necessary to understand the main types of improved drinking water sources they use. In 2017, piped sources were more common than other improved sources in all SDG regions except for Sub-Saharan Africa and Central and Southern Asia. Figure 52 shows that there have also been significant changes in the number of people using each type between 2000 and 2017. Globally, the population using piped sources increased from 3.5 billion to 4.8 billion and increased in all SDG regions. The largest increase was recorded in Eastern and South-Eastern Asia where 527 million people gained access. This equates to an average of 85,000 people per day over a 17-year period.

Over the same period, the global population using non-piped sources increased from 1.6 billion to 2.2 billion. The number of people using non-piped sources increased in four regions and decreased in the other four. In Central and Southern Asia, 335 million people gained access to non-piped sources, which equates to an average of 54,000 people per day between 2000 and 2017. Sub-Saharan Africa was the only other SDG region where more people gained access to non-piped sources than to piped sources. In Oceania the number of people using non-piped sources nearly doubled from 1.36 million to 2.66 million.

Half a billion people have gained access to piped water in Eastern and South-Eastern Asia since 2000

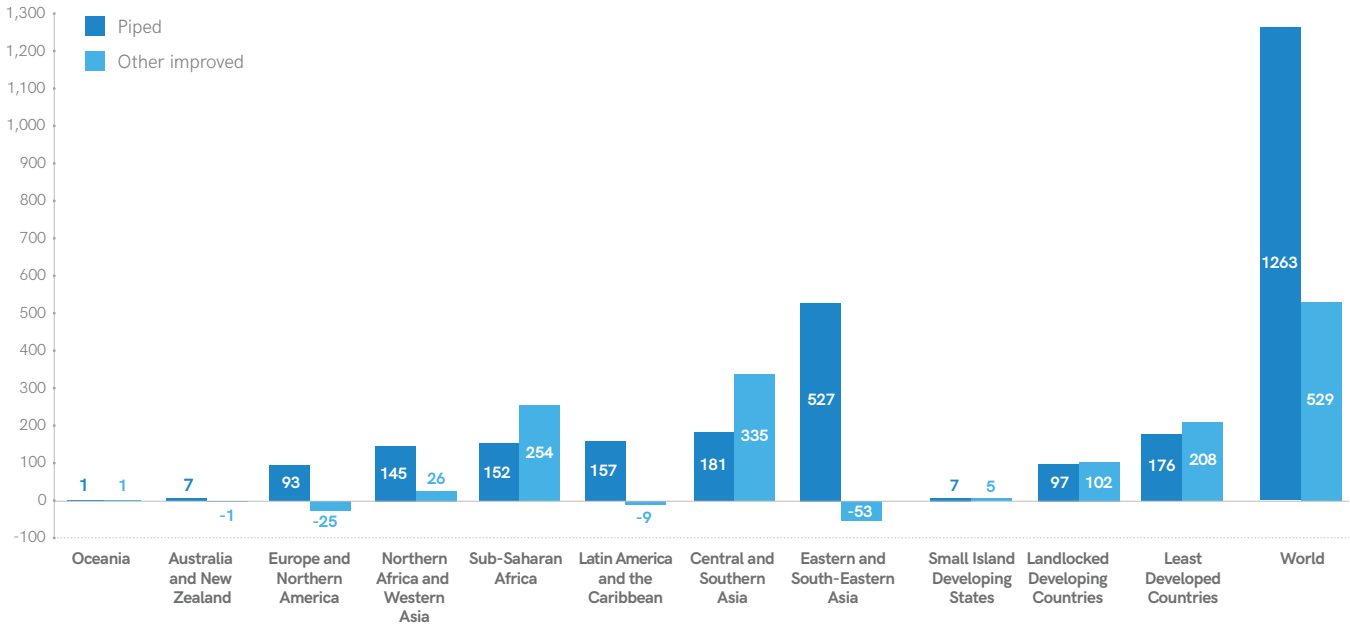


FIGURE 52 Change in population using piped and non-piped drinking water supplies, by SDG region, 2000-2017 (millions)

Improved water sources are not always accessible, available when needed, or free from contamination

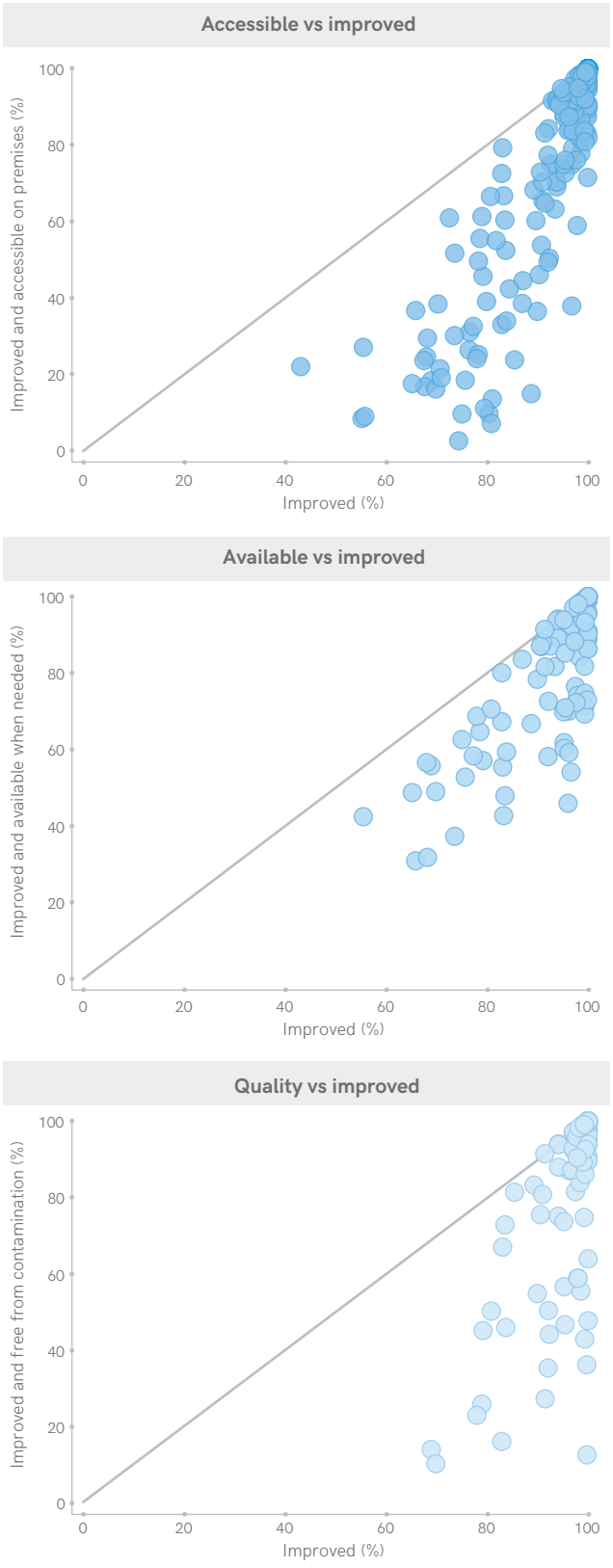


FIGURE 53 **Proportion of population using improved water sources, and using improved sources accessible on premises, available when needed, and free from contamination, by country, 2017 (%)**

In 2017, almost all countries had data on the proportion of the population using improved water sources. 221 countries had data on improved and accessible, 93 countries had data on improved and available, and 117 countries had data on improved and free from contamination. Figure 53 shows that not all improved water sources meet the new SDG criteria, and the proportion that are accessible, available and free from contamination varies widely between countries. This illustrates the challenge that many countries face in meeting the SDG target for safely managed services.

While household surveys and censuses remain the primary source of data on the types of facilities people use, information on service levels is drawn from a combination of household surveys and administrative sources, including regulators[12]. In the small number of countries that have disaggregated data available for all three criteria of safely managed drinking water services, significant differences are observed between urban and rural areas (Figure 54).

In almost all countries, service levels are higher in urban areas than in rural areas, but different patterns of inequality are observed. For example, accessibility is equally low in rural (4%) and urban (16%) areas of Uganda, whereas in Ethiopia there is a 67 percentage point gap between rural (5%) and urban (72%). In Nicaragua, the gap in service levels between urban and rural exceeds 40 percentage points for two out of three SDG criteria, while in Nepal the gaps between urban and rural are small. In Paraguay, urban and rural areas have similar levels of accessibility and availability but there is a 21 percentage point gap in water quality.

Increasingly, information for all three criteria for safely managed drinking water services is being collected through national household surveys. This enables much more detailed analysis of inequalities in service levels between population sub-groups. Figure 55 shows coverage of drinking water services meeting each of the SDG criteria among national and rural populations and the poorest rural quintile in Iraq.

Use of improved sources accessible on premises was higher at national level and in rural areas than among the poorest in rural areas, with similar differences in the use of improved sources available when needed. However, there were much larger inequalities in drinking water quality, which was the limiting factor for safely managed services in Iraq in 2018. The area of overlap between the three circles shows that 39% of the national population used improved sources meeting all three criteria, compared with 31% in rural areas and just 9% among the poorest rural quintile.

[12] 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.

Only 14 countries can disaggregate all three elements of safely managed drinking water for rural and urban areas

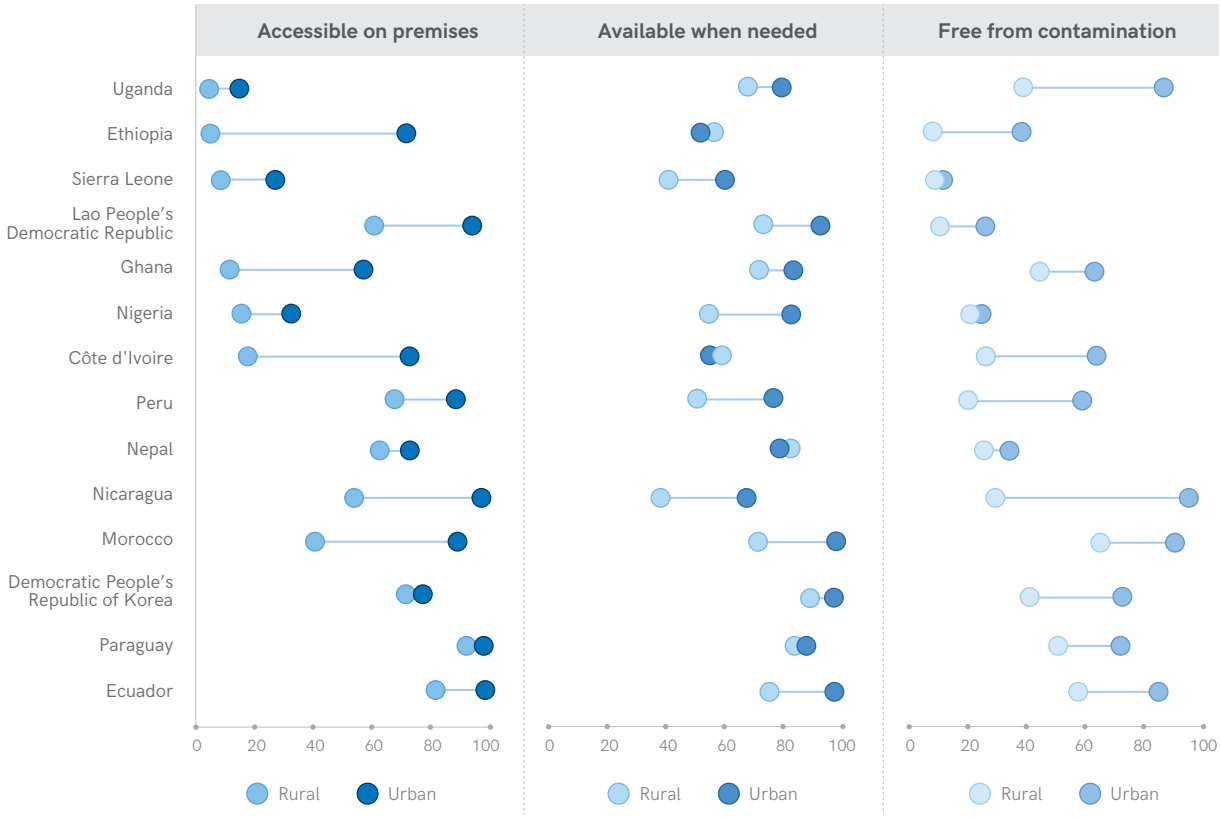


FIGURE 54 Proportion of rural and urban populations using improved drinking water sources accessible on premises, available when needed, and free from contamination, 2017 (%)

In Iraq, drinking water service levels are lowest among the poorest in rural areas

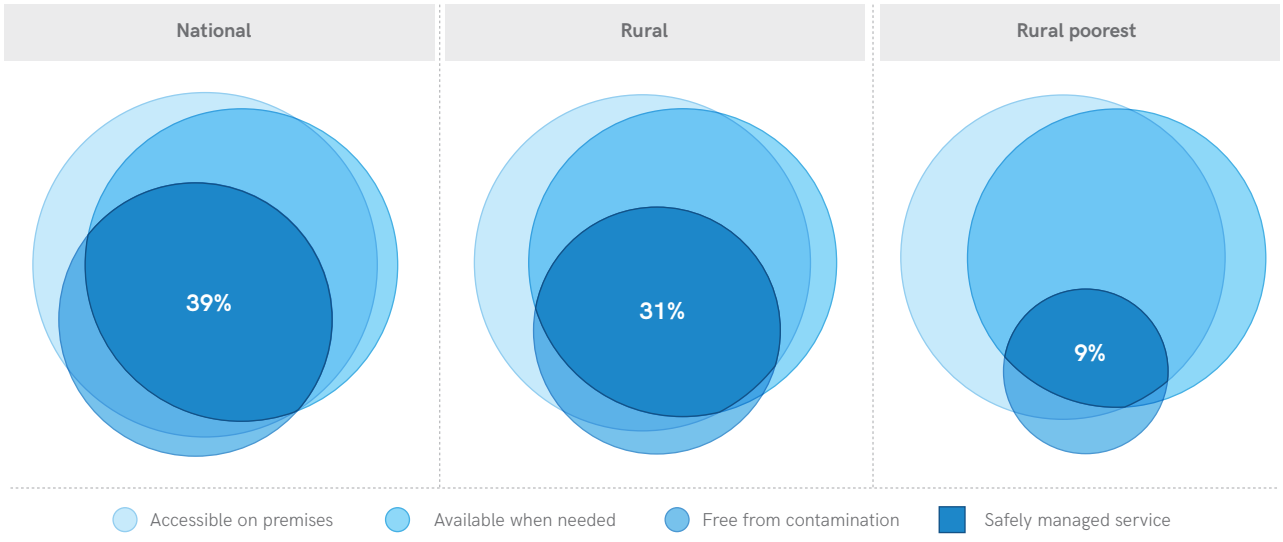


FIGURE 55 Proportion of population using improved drinking water sources accessible on premises, available when needed, and free from contamination, Iraq, 2018 (%)

Note: Rural poorest estimated based on reported values for 'rural' and 'poor'

Accessible on premises

In 2017, 75% of the world's population (5.7 billion people) used improved drinking water sources located on premises, compared with 61 % (3.8 billion people) in 2000. While coverage in urban areas (87%) remains higher than in rural areas (60%), the gap between urban and rural decreased from 47 to 27 percentage points between 2000 and 2017.

Accessibility of drinking water services has increased in all SDG regions, except for Oceania (Figure 56). The greatest increases were recorded in Central and Southern Asia and Eastern and South-eastern Asia, where coverage has risen by 23 and 20 percentage points. The respective numbers of people gaining improved sources on premises in these regions were 639 million and 625 million. Sub-Saharan Africa had the lowest baseline coverage in 2000, and while coverage has increased by fewer than ten percentage points, the population with improved sources on premises has more than doubled from 114 million in 2000 to 275 million in 2017. Three out of four people with improved sources on premises lived in urban areas.

The recent expansion of the JMP inequalities database has enabled further analysis of inequalities by facility type and service level. Figure 57 shows global, regional and national coverage of improved sources accessible on premises in Latin America and the Caribbean, and highlights sub-national inequalities in Guyana. While accessibility on premises in Guyana is higher than the regional average, and inequalities between urban and rural are relatively small, there is a large gap between the poorest and the other wealth quintiles, and significant inequalities in accessibility between sub-national regions. Accessibility on premises in the two most disadvantaged sub-national regions is closer to the regional average for Sub-Saharan Africa.

Since 2000, Central and Southern Asia and Eastern and South-eastern Asia have recorded the largest increases in improved drinking water on premises

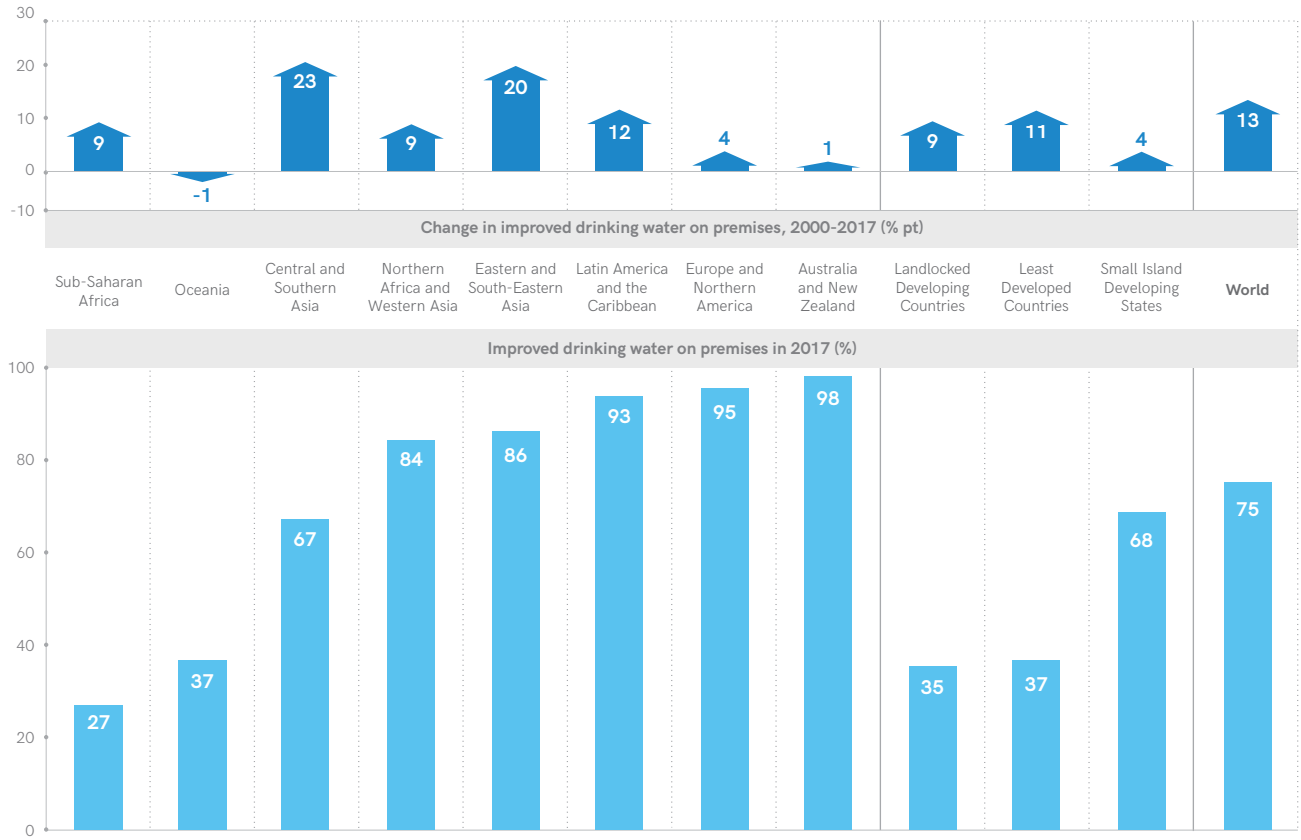


FIGURE 56 Proportion of population using improved drinking water sources on premises in 2017, and percentage point change 2000-2017, by region (%)

Accessibility on premises varies widely between sub-national regions in Guyana

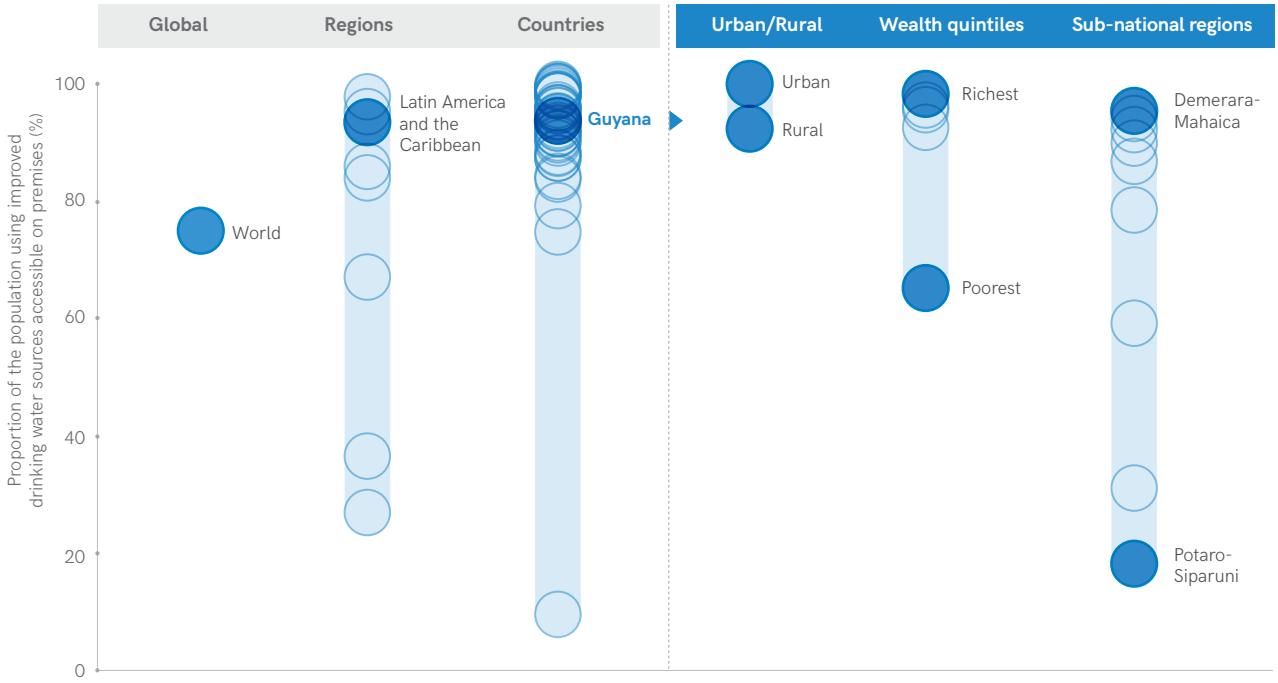


FIGURE 57 Inequalities in use of improved drinking water sources on premises, Guyana, 2017 (%)

Available when needed

Since 2000, use of improved sources with water available when needed has increased in all regions.

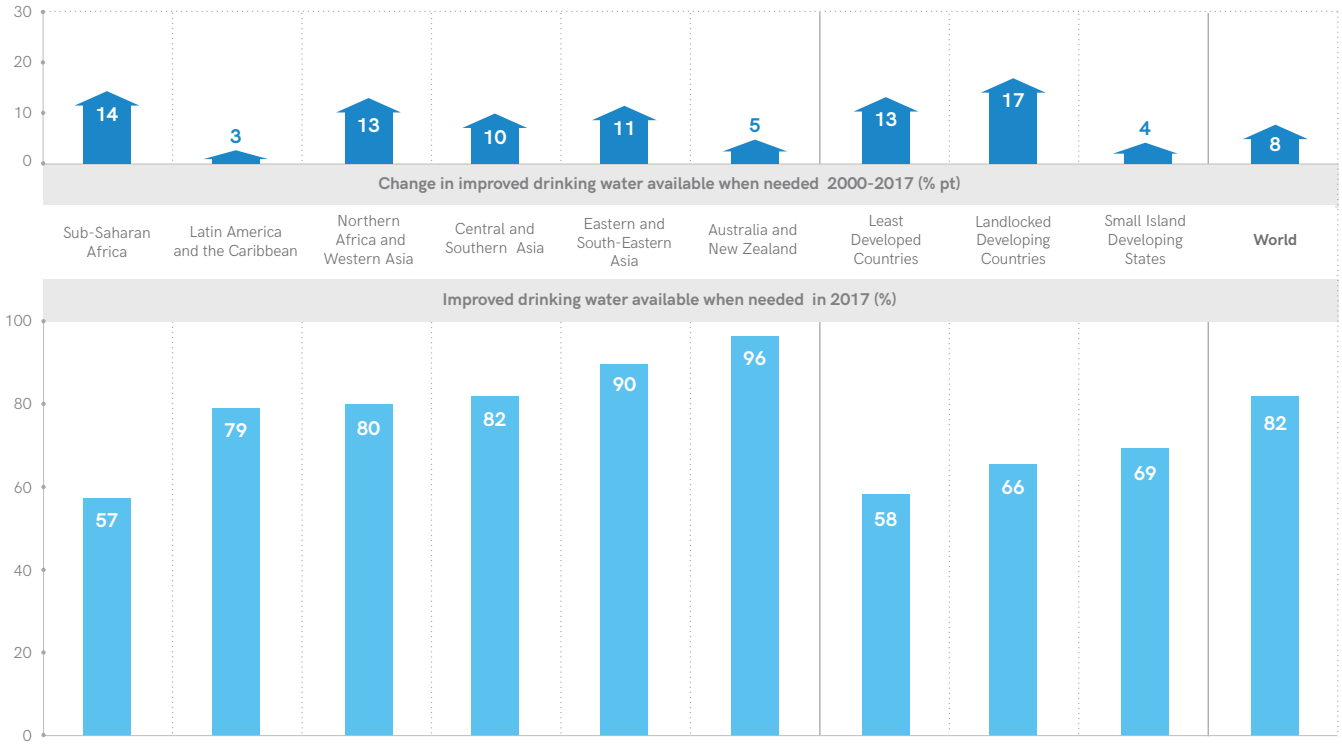


FIGURE 58 **Proportion of population using improved drinking water sources available when needed in 2017, and percentage point change 2000-2017, by region (%)**
Note: No estimates available for SDG region Europe and Northern America

Availability when needed is significantly higher among the richest quintile in Mexico

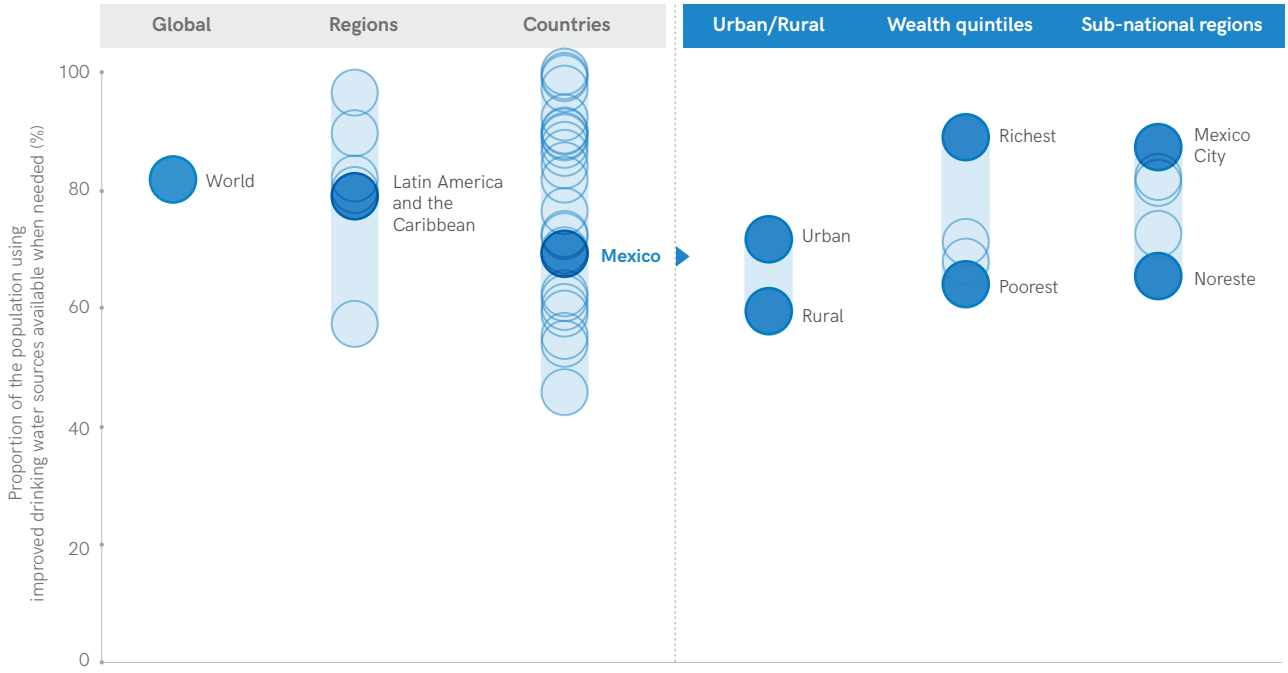


FIGURE 59 **Inequalities in use of improved drinking water sources available when needed, Mexico, 2017 (%)**

In 2017, 82% of the world's population (6.2 billion people) used improved water sources available when needed, compared with 74% (4.6 billion people) in 2000. Between 2000 and 2017, service levels in rural areas increased steadily, from 62% to 74%, but have remained unchanged at 88% in urban areas. Figure 58 shows that availability of drinking water when needed increased in all SDG regions with estimates available. Northern Africa and Western Asia, Sub-Saharan Africa, Central and South Asia and Eastern and South-eastern Asia all recorded increases of at least ten percentage points, while Landlocked Developing Countries recorded an increase of 17 percentage points.

Disaggregated data reveal significant inequalities in availability of drinking water when needed. Figure 59 shows that while availability of drinking water in Mexico is below the average for Latin America and the Caribbean, all population groups are equally affected. While availability is significantly higher among the richest than among other wealth quintiles, the inequalities in availability between urban and rural and between sub national regions are relatively small.

Box 11: **Different measures of availability**

Information on the availability of drinking water when needed may be collected from users themselves or from service providers. Household surveys frequently include questions on availability but use a range of different measures[13]. For the purposes of global monitoring the JMP classifies households who report having sufficient drinking water available within the last week or month as 'available when needed'. In cases where households report the number of hours per day or per week that water is available, the JMP classifies those with water available most of the time, that is at least 12 hours per day or 4 days per week, as 'available when needed'. Data from recent household surveys shows that there are often significant differences in availability in urban and rural areas but that patterns of inequality vary across countries (Figure 60). For example, in Ethiopia availability is higher in rural (95%) than in urban areas (65%), while the reverse is true in South Africa with 87% reporting having water available when needed in urban compared with just 67% in rural.

Regulators are a another major source of data on the availability of drinking water and often publish data on the number of service hours per day reported by utilities. For example in Kenya, the Water Services Regulatory Board (WASREB) publishes IMPACT reports benchmarking the levels of service provided by different types of utility (Figure 61).

[13] Safely managed drinking water services – thematic report on drinking water. World Health Organization and United Nations Children's Fund 2016, Geneva <https://washdata.org/report/jmp-2017-tr-smdw>

For the purposes of global monitoring the JMP combines data on the number of utilities providing water at least 12 hours per day on average with information on the population served by these utilities to calculate the proportion of urban and rural populations with drinking water available when needed.

Availability of drinking water in urban and rural areas varies widely across countries

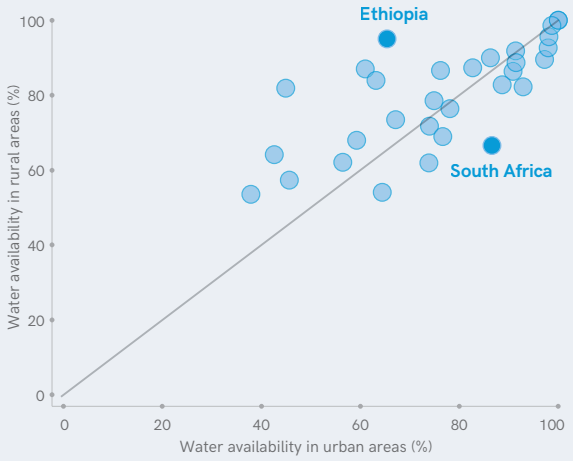


FIGURE 60 **Drinking water availability when needed in urban and rural areas, selected household surveys 2012-2017 (%)**

Regulatory data in Kenya are used to track national service level targets for drinking water availability

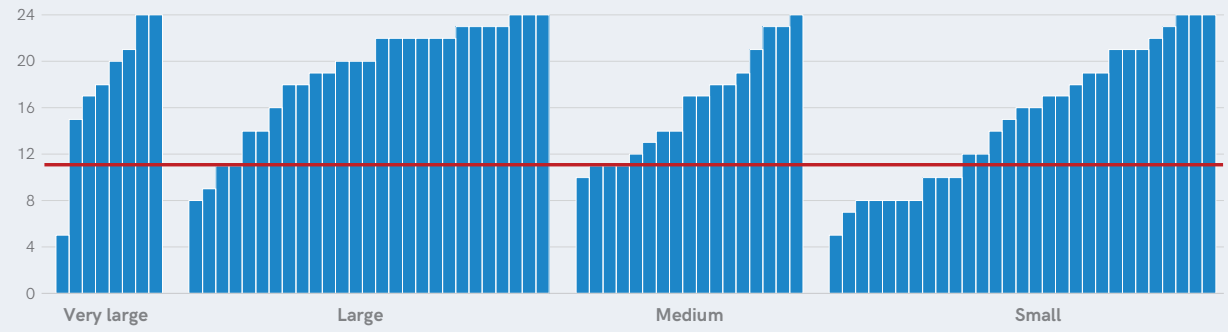


FIGURE 61 **Average reported number of service hours per day by size of utility, Kenya, WASREB Kenya Impact Report #9**

Water quality

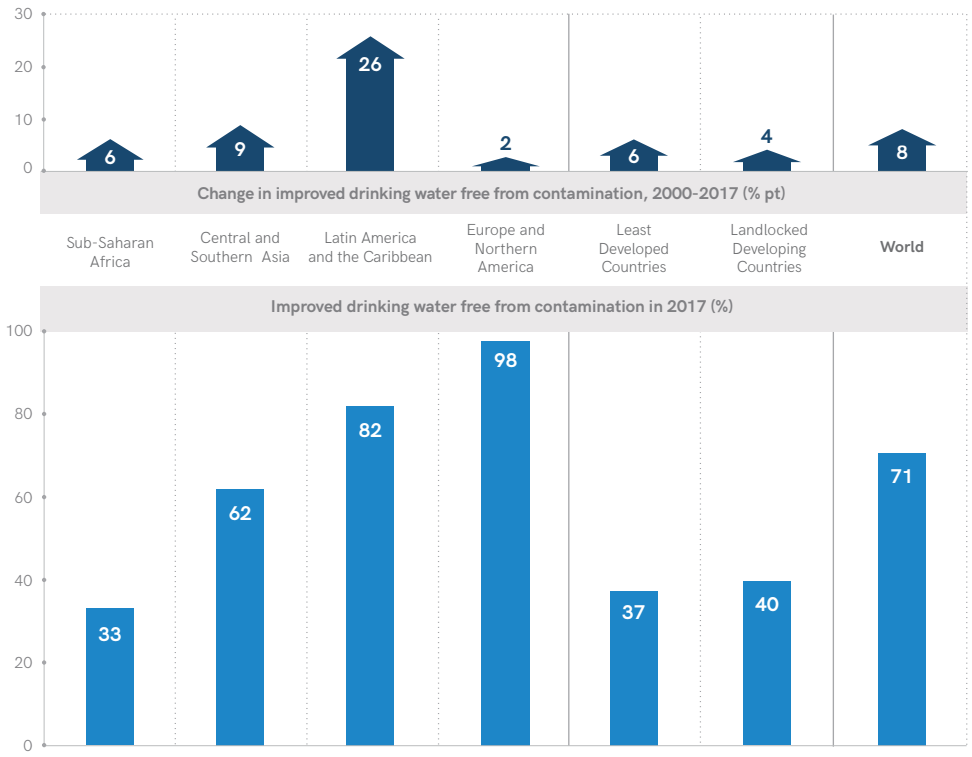
71% of the world's population (5.3 billion people) used improved drinking water sources free from contamination in 2017, compared with 62% (3.8 billion people) in 2000. Between 2000 and 2017, water quality in rural areas improved from 42% to 53% free from contamination, while water quality in urban areas remained largely unchanged at 85%. Use of improved sources free from contamination increased in all SDG regions with estimates available for 2000 and 2017 (Figure 62). In sub-Saharan Africa, just one in four people used sources free from contamination in 2000, rising to one in three by 2017. Latin America and the Caribbean recorded an increase of 26 percentage points, which means that 234 million people gained access to sources free from contamination between 2000 and 2017.

Disaggregated data can be used to analyse inequalities in drinking water quality between different parts of the country and between socio-economic sub-groups. Figure 63 shows that while 64% of the population of Paraguay used sources free from contamination in 2016, there were significant gaps in service levels between urban (72%) and rural (46%), and between the richest and poorest quintiles in each. The gap between the poorest wealth quintile and all other quintiles in urban areas exceeded 20 percentage points, while the gap between the richest and poorest wealth quintiles in rural areas exceeded 40 points. There were also large inequalities between sub-national regions. In Alto Paraguay, just one in five people used sources free from contamination, compared with four out of five in Asunción. Household survey data also show that bottled water and piped water were much less likely to be contaminated than other types of improved sources.

The integration of water quality testing into national household surveys has enabled the collection of data that is representative of the entire population, including those in rural areas who are not served by utilities or covered by regulators. Data from recent surveys enable quantification of the risk of faecal contamination by supply type and by socioeconomic group, and show that many people use drinking water sources at high risk of contamination (Figure 64). For example, in Sierra Leone, just one in ten people use sources free from contamination and classed as low risk, compared with half of the population of Congo and eight out of ten people in Ecuador. In five of the countries surveyed, more than one third of the population used sources classed as very high risk.

Since 2000, Latin America and the Caribbean has recorded the largest increase in the use of improved sources free from contamination

FIGURE 62 **Proportion of population using improved drinking water sources free from contamination in 2017, and percentage point change 2000-2017, by region (%)**



Disaggregated data reveal significant inequalities in drinking water quality

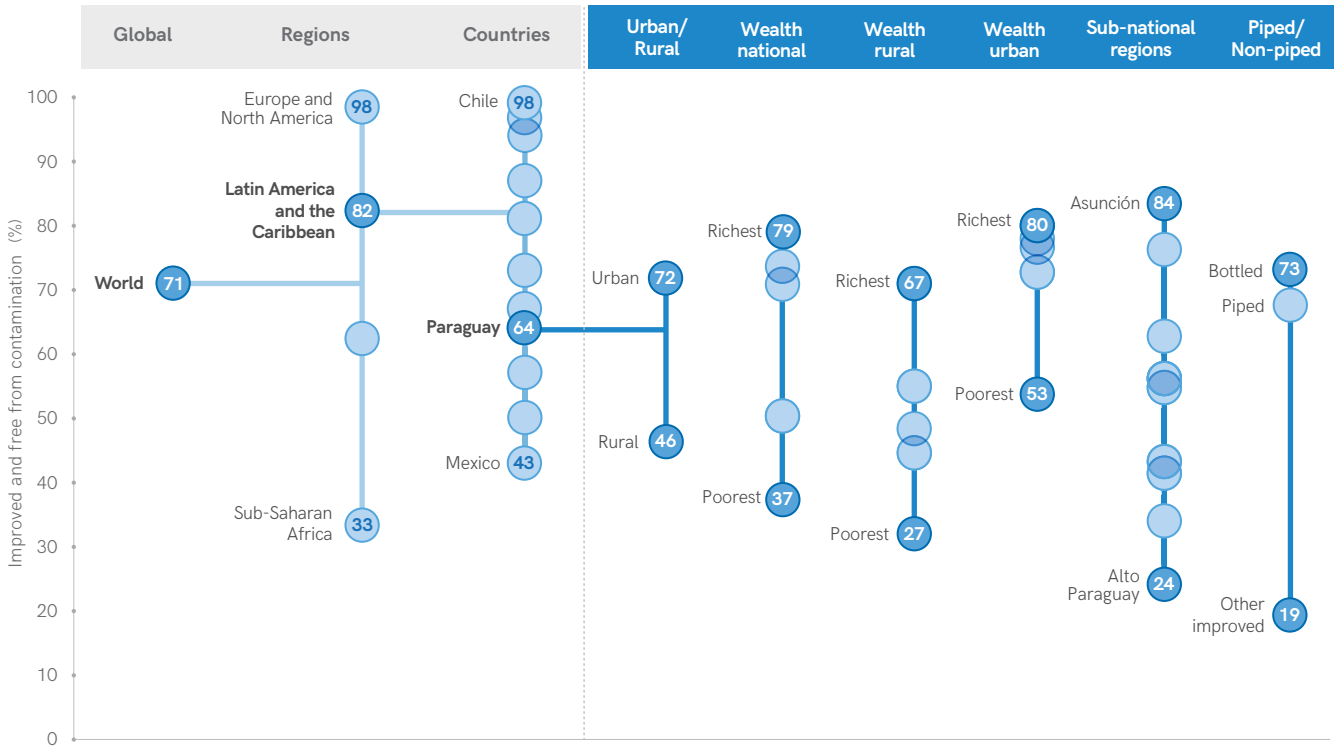


FIGURE 63 Inequalities in use of improved drinking water sources free from contamination, Paraguay, 2016 (%)

Household survey data show that many people use drinking water sources at high or very high risk of faecal contamination

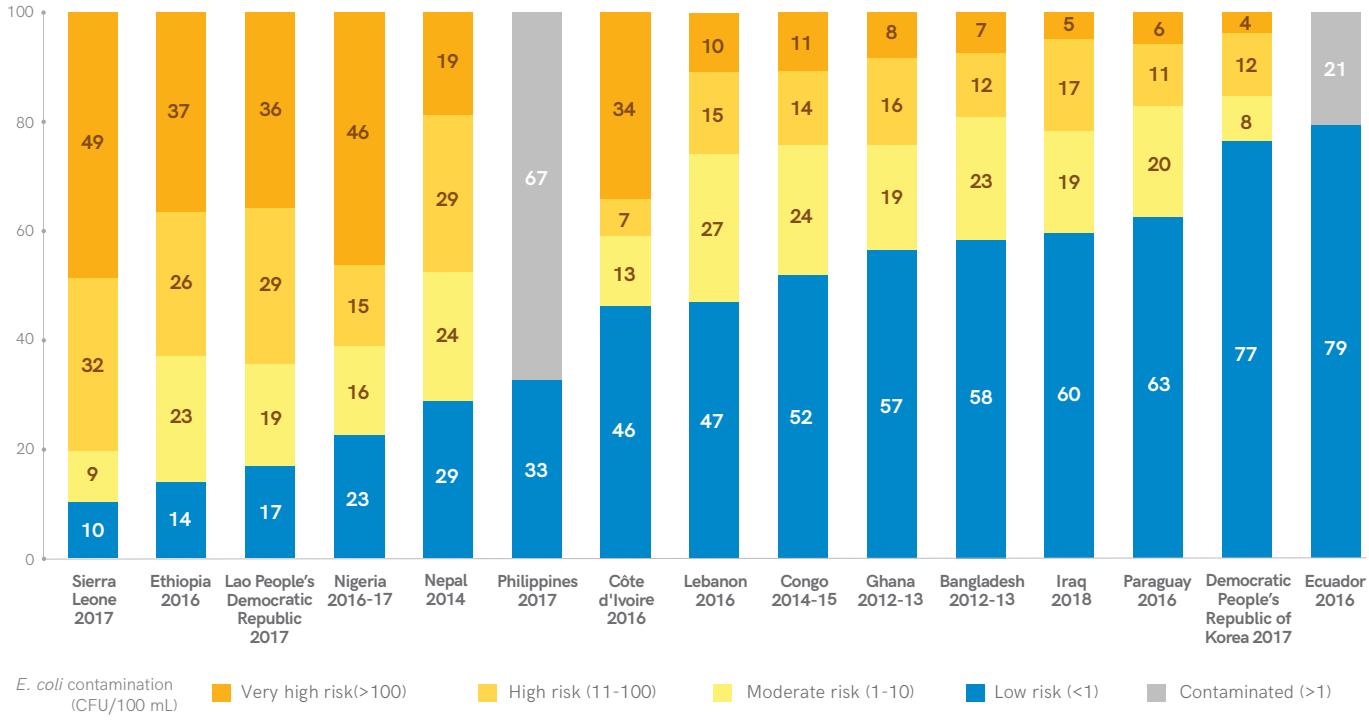


FIGURE 64 Proportion of population using drinking water sources by risk of faecal contamination, selected countries, 2012-2018 (%)

While microbial contamination of drinking water is a universal concern, the risk of contamination with arsenic or fluoride is greater in some parts of the world than others. Figure 65 shows that in some countries significant numbers of people use drinking water sources that exceed the WHO standard for arsenic of 10 parts per billion, and therefore do not count as safely managed. For example, it is estimated that at least 40 million people in Bangladesh and 10 million people in Pakistan used sources exceeding WHO guidelines in 2017[14]. However, national data also indicate that mitigation measures can reduce exposure to arsenic in drinking water. For example, in Hungary, the population using sources contaminated with arsenic has been reduced from 40% in 2005 to 4.9% in 2017[15].

[14] In Bangladesh and Pakistan, the national standard for arsenic in drinking water is 50 parts per billion.
[15] Summary report of Hungary under the Protocol on Water and Health, 2005; National Public Health Institute, HUMVI database, 2017

Arsenic contamination affects large populations in multiple countries

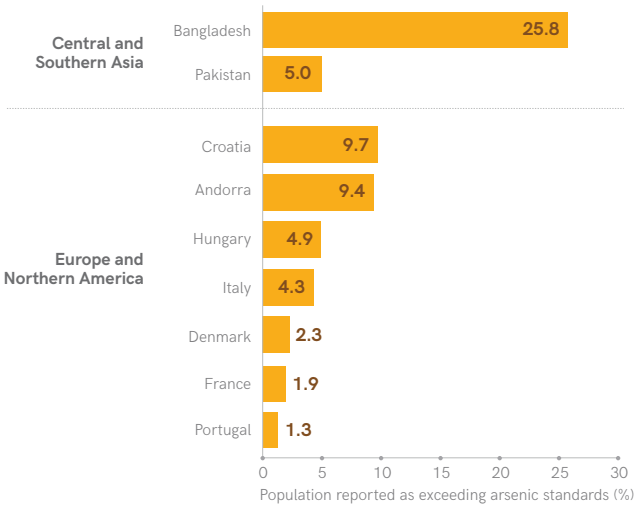


FIGURE 65 **Proportion of population using drinking water sources exceeding WHO guideline values for arsenic, by country and region, 2017 (%)**

Box 12: **Water quality at the point of collection and the point of use**

A growing number of national household surveys have integrated direct testing of drinking water for faecal contamination (*E. coli*). Households are asked to provide a glass of drinking water and show enumerators the source where the water was collected (for example, a tap, borehole, dug well, or river). Survey results show that microbial water quality often deteriorates between the point of collection and the point of use (Figure 66). When water supplies are located off premises there is an increased risk of contamination, which highlights the importance of safe handling, storage and treatment of water within the household.

In Côte d'Ivoire, for example, the risk of contamination increases significantly between the source and the household. Figure 67 shows that while 46% of the population used drinking water free from contamination at the point of collection, only 22% were using drinking water free from contamination at the point of use in 2016. The proportion of households using drinking water at high risk of contamination doubled between collection and use. Estimates based on the quality of water at the source may therefore overestimate the number of people drinking water free from contamination.

Microbial water quality often deteriorates between point of collection and point of use

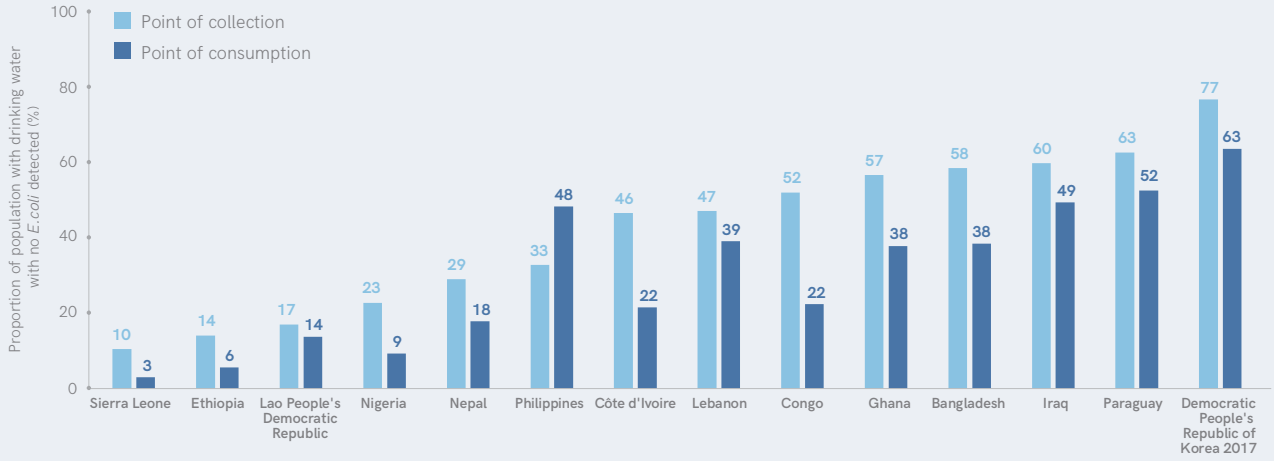
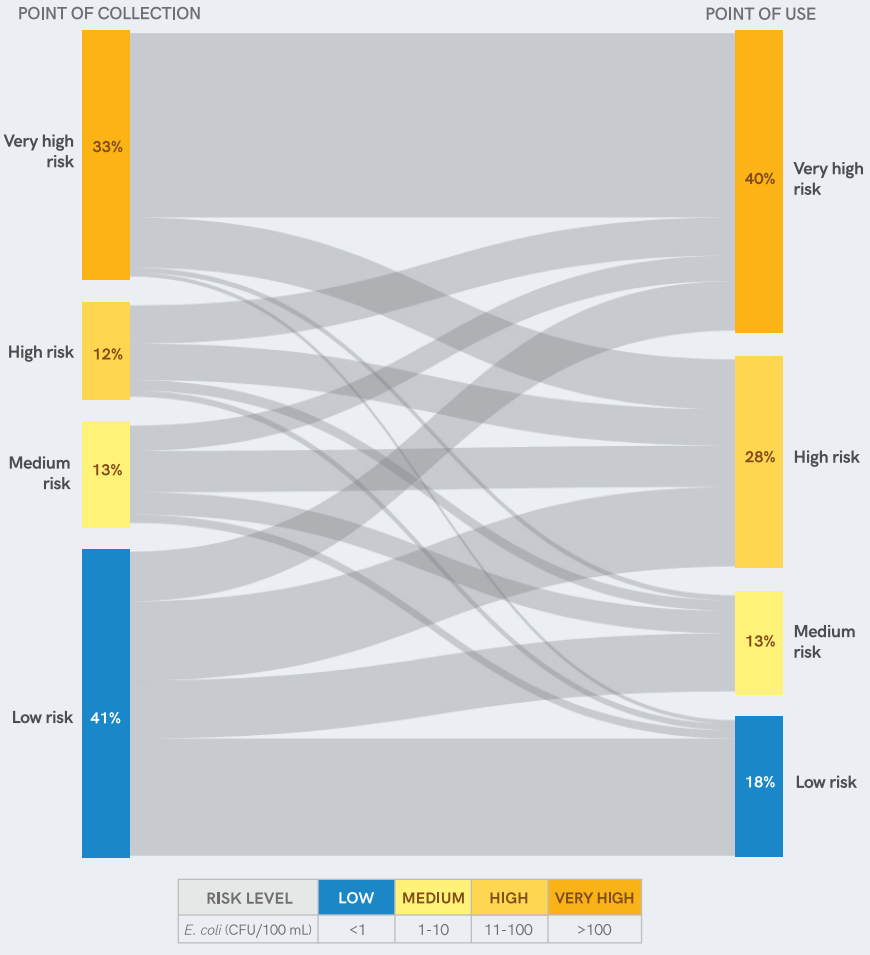


FIGURE 66 **Drinking water free from contamination at point of collection and point of use, selected countries, 2012-2017 (%)**

In Côte d'Ivoire, the risk of drinking water contamination increases between the point of collection and the point of use

FIGURE 67 Proportion of population by change in the risk of drinking water contamination between the point of collection and the point of use, Côte d'Ivoire MICS 2016 (%)



RISK LEVEL	LOW	MEDIUM	HIGH	VERY HIGH
E. coli (CFU/100 mL)	<1	1-10	11-100	>100

SAFELY MANAGED SANITATION SERVICES

In 2017, 45% of the global population (3.4 billion people) used safely managed sanitation services. National estimates were available for 92 countries and six out of eight SDG regions, representing 54% of the global population. Coverage was higher in urban (47%) than in rural (43%) areas, and two thirds of the population using safely managed services lived in urban areas.

Five SDG regions had urban estimates available and four regions had estimates for rural areas (Figure 68). Latin America and the Caribbean and Northern Africa and Western Asia had estimates for urban but not rural, while the reverse was true in Central and Southern Asia (Australia and New Zealand only had national estimates).

In 2017, coverage of safely managed services was higher in urban areas in all regions

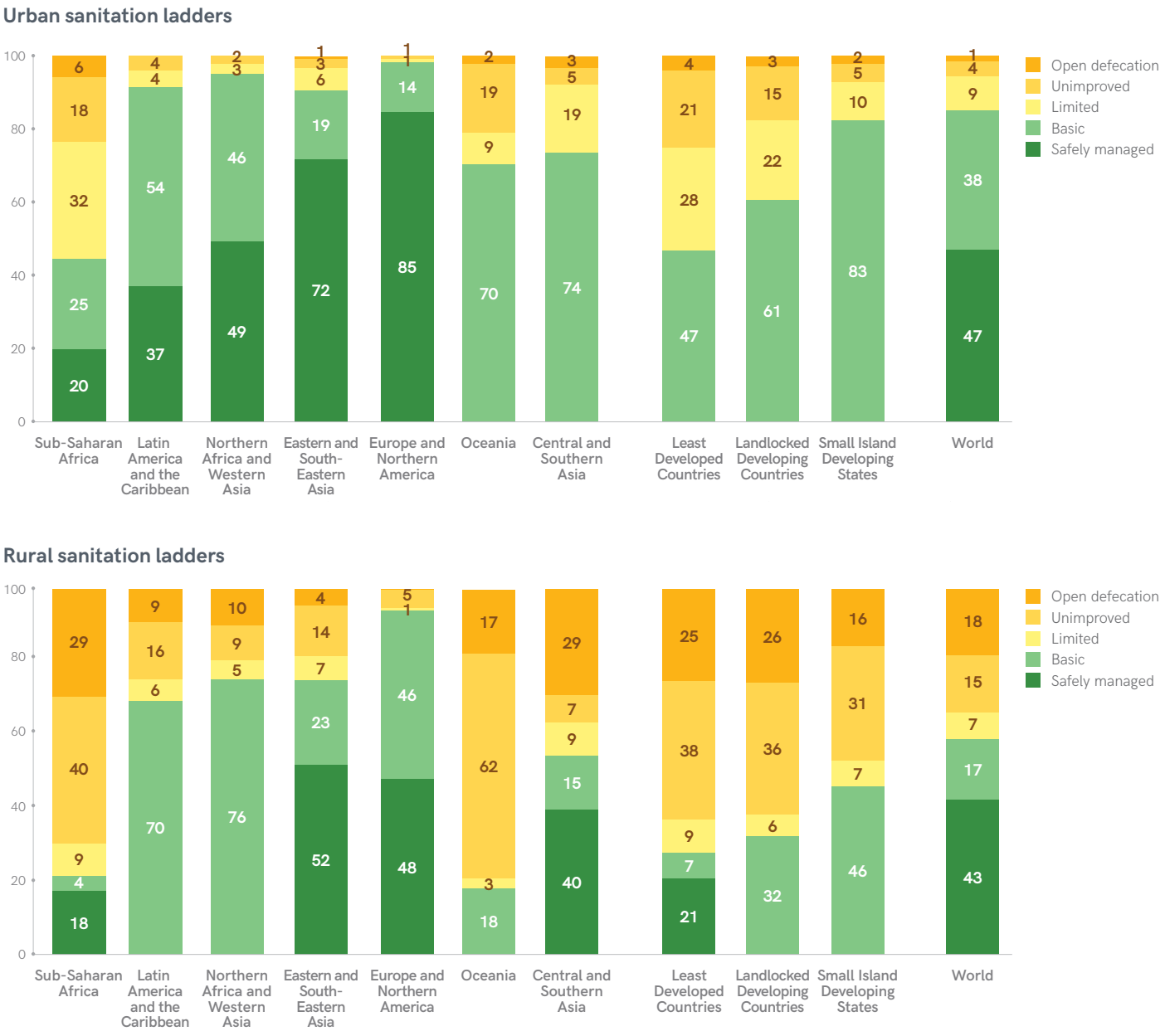


FIGURE 68 **Rural and urban sanitation service levels by SDG region, 2017 (%)**
Note: No separate urban and rural estimates available for SDG region Australia and New Zealand.

Use of safely managed sanitation services varied widely between countries and regions in 2017

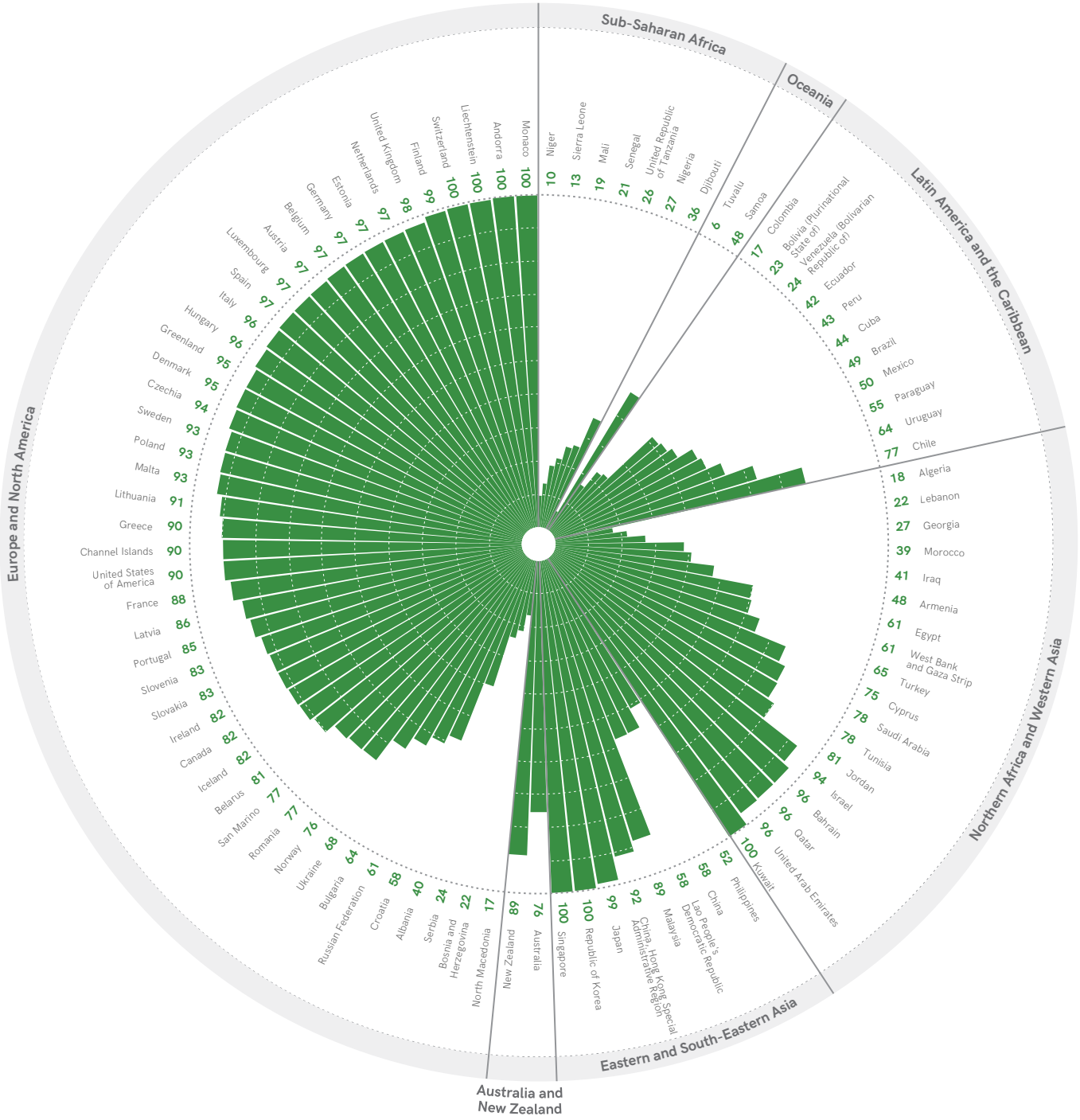
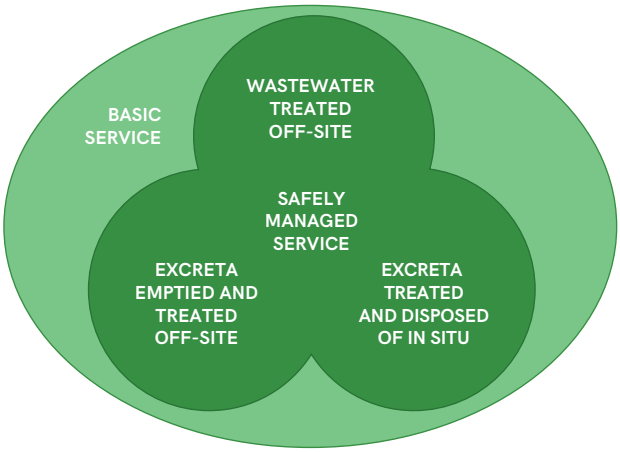


FIGURE 69 Proportion of population with safely managed sanitation services, by country and region, 2017 (%)

Figure 69 shows inequalities in coverage of safely managed services, which ranged from just 10% in Niger to >99% (`nearly universal coverage') in other countries in 2017. While eight countries had already achieved nearly universal coverage of safely managed sanitation services, there were still countries with <25% coverage in all SDG regions, except for Australia and New Zealand and Eastern and South-eastern Asia. No countries in Southern and Central Asia had national estimates in 2017.

To meet the new SDG criteria for safely managed sanitation services, households must use an improved type of sanitation facility that is not shared with other households and the excreta produced must either be safely treated in situ, or transported and treated off-site. In practice, there are three possible pathways to safely managed services:

- **Wastewater treated offsite:** excreta are conveyed with wastewater through sewer lines and treated off-site at wastewater treatment plants
- **Excreta emptied and treated off-site:** excreta are emptied from septic tanks and latrine pits, removed and treated off-site at facilities designed for faecal sludge
- **Excreta treated and disposed of in situ:** excreta are treated and disposed of in situ in septic tanks with appropriate leachfields, or in latrine pits that are covered and left undisturbed when full



Box 13: **Key terms and definitions related to sanitation**

Improved sanitation facilities are those designed to hygienically separate human excreta from human contact. These include wet sanitation technologies, such as flush and pour-flush toilets connecting to sewers, septic tanks or pit latrines, and dry sanitation technologies, such as dry pit latrines with slabs and composting toilets.

The JMP uses the term 'excreta' to refer to human wastes, including both faeces and urine, but uses 'wastewater' in the context of sewers. Occasionally the JMP also uses the following terms[16]:

- **Faecal sludge:** solid and liquid wastes removed from on-site storage containers, also called septage when removed from septic tanks
- **Sewage:** wastewater that is transported through sewers
- **Sewerage:** the physical sewer infrastructure for conveyance and treatment of sewage
- **Wastewater:** used water from any combination of domestic, industrial or commercial activity, stormwater, and sewer inflow/infiltration. Domestic wastewater contains mainly human excreta and used water. Both domestic and non-domestic wastewater are considered in the monitoring of SDG target 6.3 'safely treated wastewater'.

[16] World Health Organization, Guidelines on Sanitation and Health, WHO, Geneva, 2018, < www.who.int/water_sanitation_health/sanitation-waste/sanitation/sanitation-guidelines/en>.

Improved facility types

To assess whether sanitation services are safely managed, it is first necessary to understand the main types of improved sanitation facilities people use. In 2017, 6.2 billion people worldwide used improved sanitation facilities (including those shared with other households) with this population split evenly into those using sewer connections and those using on-site facilities (septic tanks, and latrines and other improved facilities). Eight out of ten people with sewer connections, and half of those using septic tanks, lived in urban areas, whereas two thirds of those using latrines and other improved facilities lived in rural areas.

Figure 70 shows that the proportion of the population using sewer connections and on-site facilities varied widely between SDG regions in 2017. Sewer connections were the dominant facility type in five out of eight SDG regions, while latrines and septic tanks dominated elsewhere. Between 2000 and 2017, there were also significant changes in the types of facilities used. For example, Eastern and South-eastern Asia recorded a 20 percentage point increase in sewer connections and a small decrease in the use of latrines and other improved facilities. Over the same period, Central and Southern Asia increased the use of latrines and other improved facilities and septic tanks by 18 and 15 percentage points, whereas use of sewer connections increased by just 3 points. In Least Developed Countries, there have been only small increases in the population using sewer connections but the proportion using improved on-site facilities increased by 17 percentage points.

Among the 3.1 billion people around the world who used improved on-site sanitation facilities in 2017, 1.5 billion used septic tanks and 1.6 billion used latrines and other improved facilities. Figure 71 shows that coverage of on-site sanitation facilities varied widely across countries in 2017, ranging from 98% in Samoa to 1% in the Republic of Korea. In 113 countries, septic tanks, latrines and other improved on-site facilities were more common than sewer connections. Most of these countries were found in Central and Southern Asia or Sub-Saharan Africa but the map shows that there were significant numbers of people using on-site sanitation facilities in all SDG regions.

Sewer connections are increasing in some regions while use of septic tanks and latrines is growing in others

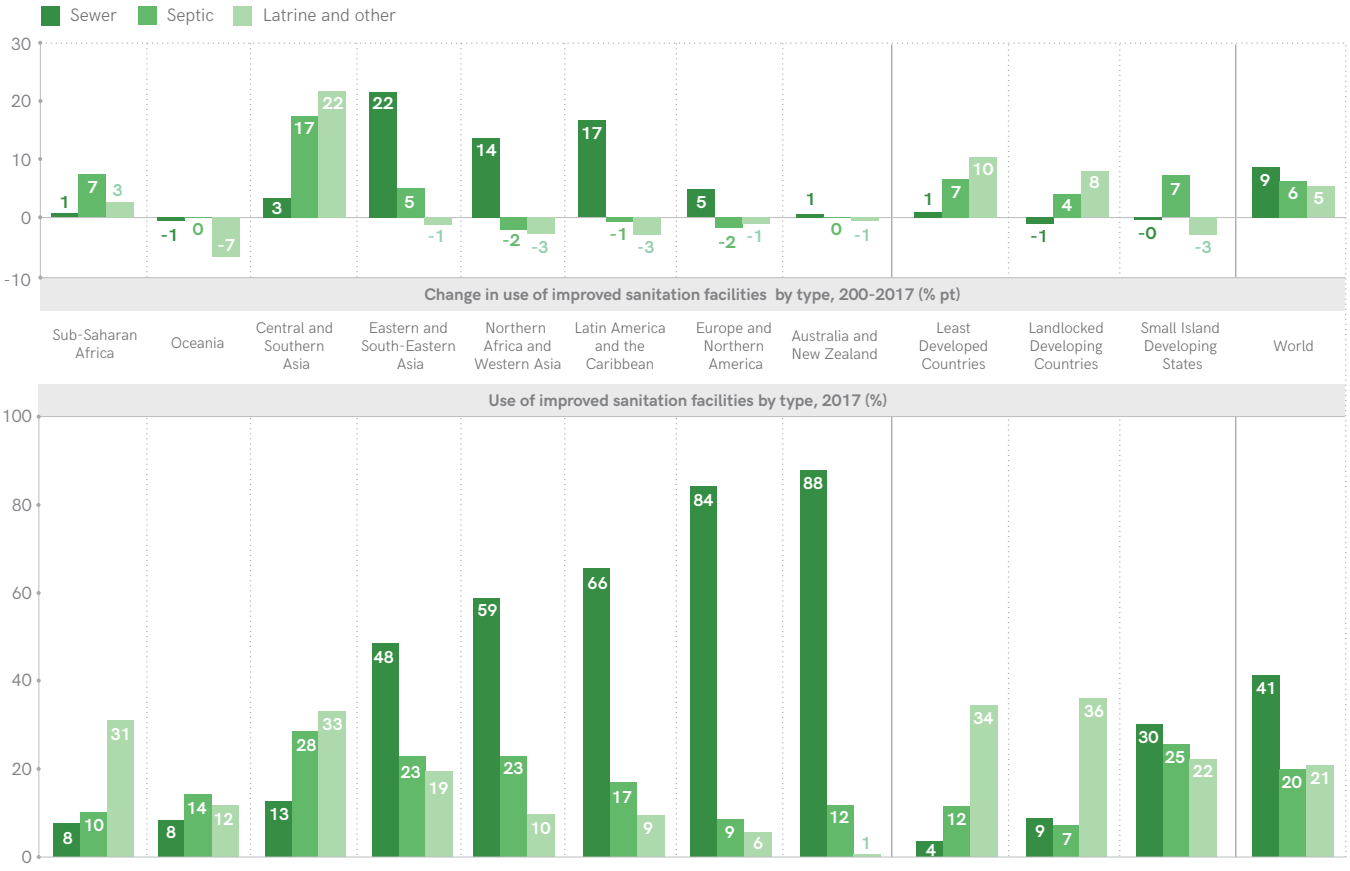


FIGURE 70 Proportion of population using sewer connections, septic tanks, latrines and other improved on-site systems in 2017, and percentage point change 2000-2017 (%)

The JMP inequalities database now includes facility type estimates disaggregated by urban and rural areas, wealth quintiles and sub-national regions. Figure 73 shows that the use of sewer connections, septic tanks and latrines not only varies widely between countries but also within countries. For example, in Armenia, nearly everyone in urban areas, but only one in five people in rural areas, uses sewer connections.

Use of septic tanks in the Philippines, and of latrines in Burundi, is very similar in urban and rural areas, with the largest gaps found in different sub-national regions. In countries with disaggregated data available for different years, it is now also possible to analyse trends in the types of facilities used by different wealth quintiles (Box 14).

Significant numbers of people use on-site sanitation facilities in all SDG regions

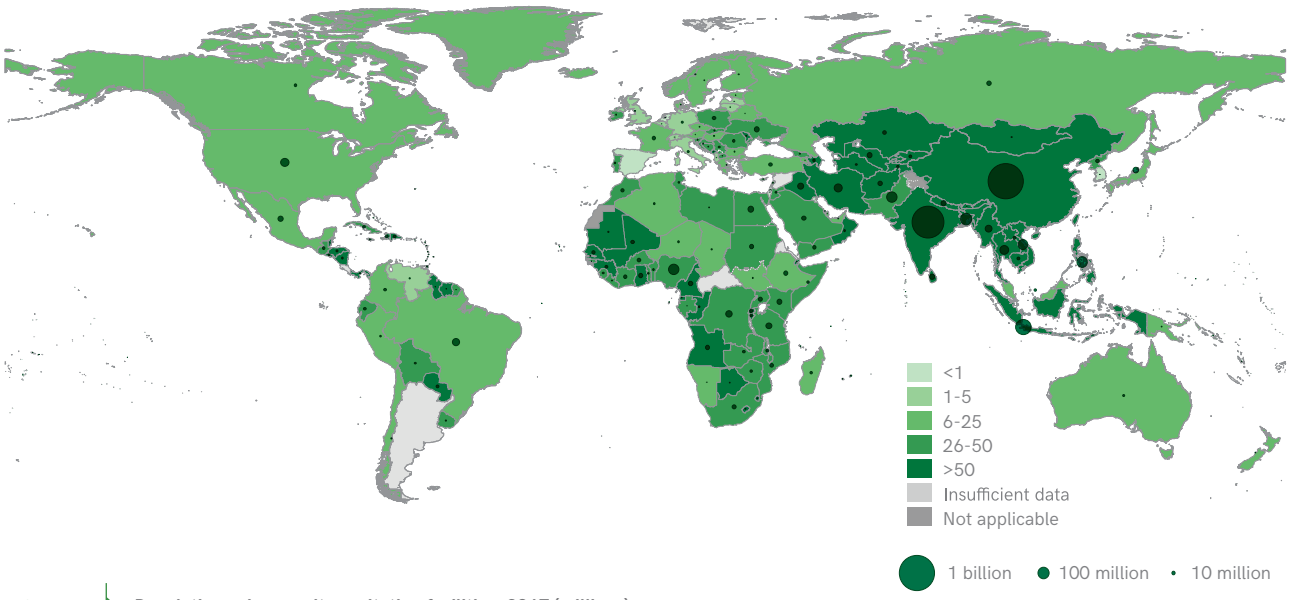


FIGURE 71 Population using on-site sanitation facilities, 2017 (millions)

Box 14: **In Mongolia, there have been major changes in the type of sanitation facilities used by both rich and poor households**

Disaggregation of data from MICS household surveys in Mongolia reveals dramatic changes in the types of sanitation facilities used by both rich and poor households between 2005 and 2014. Figure 72 shows that in 2005 just 26% of the poorest households used improved sanitation facilities compared with 100% of the richest households. The poorest all used on-site facilities (septic tanks, and latrines and other improved facilities) while nine out of ten households in the richest quintile used sewer connections. Between 2005 and 2014, use of on-site sanitation facilities increased by 53 percentage points among the poorest quintile and 24 percentage points among the poor. Over the same period, the middle quintile recorded a modest increase in the use of sewer connections, but coverage among the rich increased dramatically by 79 percentage points. By 2014, 86% of the rich and 100% of the richest used sewer connections.

In Mongolia, use of sewer connections has increased rapidly among the rich

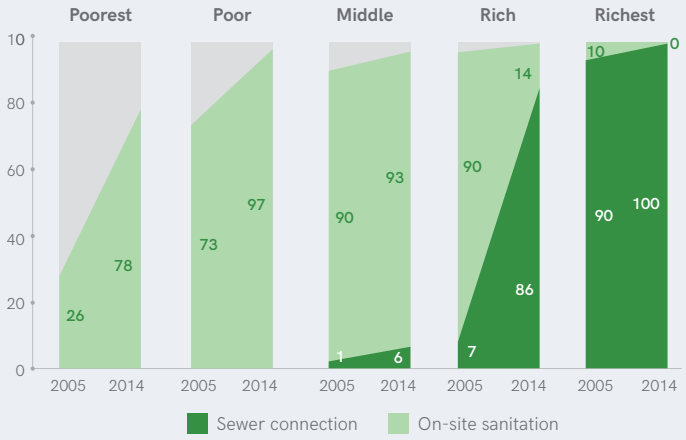


FIGURE 72 Use of on-site sanitation facilities and sewer connections by wealth quintile, Mongolia, 2005 and 2014 (%)

Use of different types of improved sanitation facility varies between and within countries

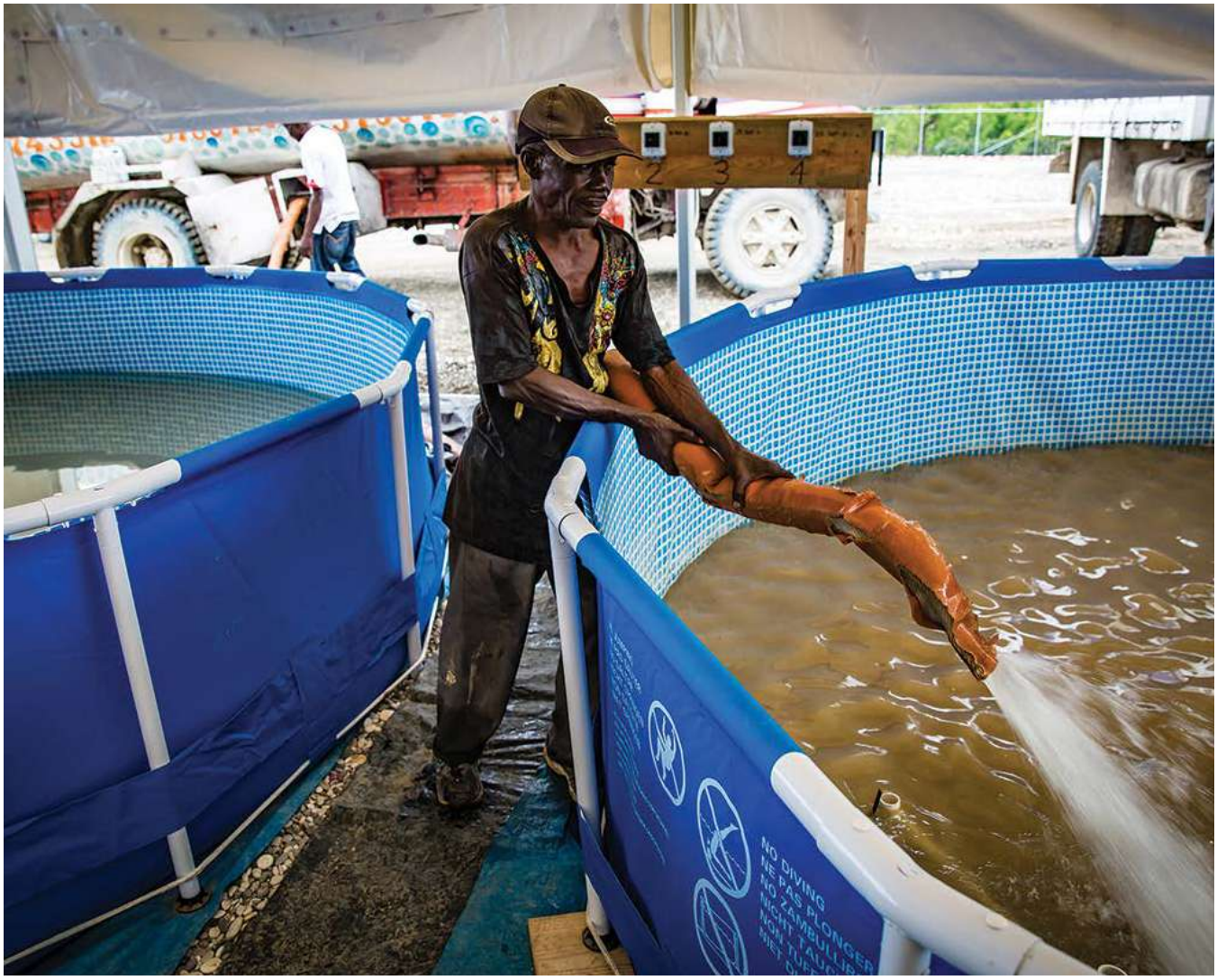
FIGURE 73 Population using sewer connections, septic tanks and latrines and other improved facilities, disaggregated by SDG region, country, urban-rural, sub-national region and wealth quintiles, selected countries, 2017 (%)

Safe management of excreta along the sanitation service chain

Safely managed sanitation goes beyond use of a hygienic toilet and implies safe management of excreta at each step of the sanitation service chain, including containment, emptying, conveyance, treatment, and eventual disposal or reuse (Figure 74). For the purposes of global monitoring, the JMP combines data on the proportion of the population using the three main types of improved sanitation facility (sewers, septic tanks, latrines and other improved facilities) with information on the following elements of excreta management: containment/storage/treatment in situ; emptying and disposal in situ or removal off-site; and conveyance or delivery to treatment plants and subsequent treatment.

The JMP only makes estimates for safely managed sanitation services when information on safe management of excreta is available for at least 50% of the population using the dominant category of improved sanitation facility (sewer connections or on-site sanitation facilities).

FIGURE 74 **Sanitation service chain**
Source: Guidelines on sanitation and health. Geneva: World Health Organization; 2018.



Non-sewered sanitation systems

Non-sewered sanitation systems include various kinds of decentralized storage and treatment facilities. Excreta are typically stored at or near the household (on-site), in containers such as septic tanks or pit latrines and may either be treated and disposed of in situ , or periodically removed for treatment off-site.

Containment/storage/treatment in situ

51% of the world's rural population and 32% of the urban population reports using improved sanitation facilities with on-site storage, such as flush or pour-flush toilets connected to a septic tank, and dry or wet pit latrines (including facilities shared with other households). Septic tanks and improved pit latrines that effectively contain faecal wastes and provide treatment in situ are considered safely managed. However on-site storage and treatment systems may be compromised due to poor design, damage or flooding, and where data on non-compliance are available these are discounted.

Data on effective containment and functioning of non-sewered systems are drawn from three main types of national data sources (Figure 75). Some household surveys ask whether septic tanks have outlets connected to a soak pit or leach field or simply discharge effluent without treatment. For example, the National Survey of Employment, Unemployment and Underemployment (ENEMDU) 2017 survey in Ecuador included the question, 'Where does your septic tank or pit latrine discharge to?' The JMP classes septic tanks and pit latrines that discharge directly 'to an open place' as 'not contained' and therefore not safely managed.

National authorities may also compile administrative reports on the use of on-site sanitation technologies that meet national standards for safe containment/storage/treatment in situ.

For example, China uses the term 'harmless sanitation' to classify households using septic tank and latrine technologies designed to treat excreta in situ and render them safe to discharge into the environment or use as fertilizer. Administrative reports in Norway record the number of households still using on-site sanitation facilities that discharge 'straight to the environment' without treatment, which are not counted as safely managed.

A number of countries go one step further and conduct periodic inspections to verify that on-site facilities are functioning as designed and effectively containing and treating excreta in situ. For example, Japan conducts a periodic census of all facilities, selects a sample to check for compliance with national standards, and records both minor and major system failures. In France, on-site sanitation facilities are routinely inspected, and administrative reports record the proportion that are effectively 'protecting against health and environmental risk'.[17]

The Environmental Protection Agency of Ireland publishes the results from periodic inspections of decentralized wastewater treatment systems, including septic tanks as well as small-scale secondary or tertiary treatment plants, which assess compliance with relevant regulations and issue advisory notices if any of seven risks[18] are identified. Between 2013 and 2018, over 6,000 systems were inspected. Nearly half were issued with an advisory notice and one in four were found to present a risk to human health or the environment. While non-compliance was highest among older septic tanks, problems were also identified among more recent and more advanced systems providing secondary or tertiary treatment (Figure 76).

[17] In the absence of national data on containment in on-site systems, the JMP assumes that faecal wastes are effectively contained in 100% of latrines and 50% of septic tanks.
[18] Inspectors check for unintended leakage from the system, unlicensed discharge to surface water, surface ponding, roof water or surface water entering the system, poor operation and maintenance, inadequate desludging, or any evidence that the system constitutes a risk to human health or the environment.

Inspections and household surveys find that septic tanks do not always effectively contain or treat excreta

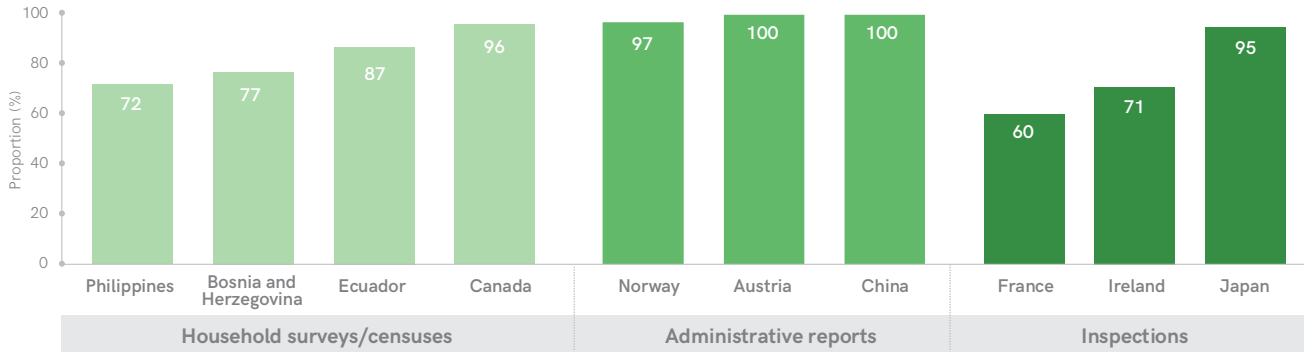


FIGURE 75 **Proportion of population using septic tanks providing effective containment/storage/treatment in situ, selected countries, 2017 (%)**

Inspections in Ireland show that older septic tanks are most likely to pose risks to human health or the environment

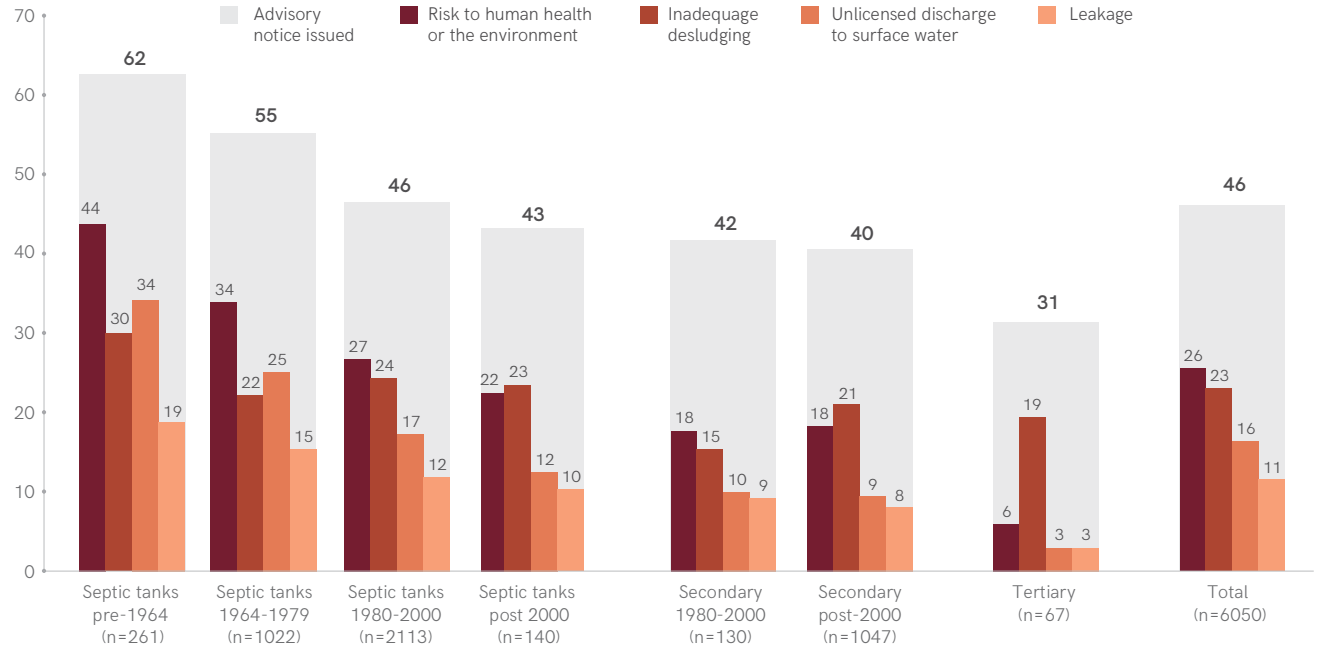


FIGURE 76 **Performance of decentralized wastewater treatment systems in Ireland, 2013-2018**

Emptying and disposal of in situ or removal off-site

In 2017, 14% of the global population (1 billion people) used on-site sanitation facilities that were not shared and wastes were classed as 'safely disposed of in situ'. This includes households using septic tanks, latrines and other improved facilities that had not been emptied and were considered to provide containment/storage/treatment in situ (as described above), and households that reported emptying containers when full and safely disposing of the waste in situ.

While questions on emptying of on-site containers have only been included in a small number of household surveys to date, the results show that emptying practices vary widely across countries (Figure 77)[19]. For example, in the Philippines, Sierra Leone, Ecuador and Lao People's Democratic Republic, at least three out of four septic tanks and pit latrines have reportedly never been emptied, whereas more than half were found to have been emptied in the Democratic People's Republic of Korea, Niger, Mali and Senegal. In almost all countries with data available, emptying of on-site systems is more common in urban areas than rural areas.

When latrines fill up, households may simply cover them over and dig a new one, although this is more challenging in urban areas where space is limited. Septic tanks, on the other hand, are designed to be periodically emptied. Solids reduce through settling and anaerobic treatment, but to continue functioning properly the tanks need to be periodically desludged.

Households may empty pits and tanks themselves, pay another member of the community to do it for them, or make use of a professional service provider. If excreta emptied from septic tanks and latrines are buried in a covered pit on-site, they are considered safely disposed of in situ but if they are buried in an uncovered pit or discharged to open ground, water body or elsewhere, they are classed as unsafely managed.

Not all households are able to access or afford emptying services. Figure 78 shows that while 40% of septic tanks and improved pit latrines have been emptied in Iraq, emptying practises vary widely between sub-national regions and between urban and rural areas. Septic tanks and pit latrines are twice as likely to be emptied in South/Central Iraq than in Kurdistan, ranging from 71% in Baghdad to 8% in Muthana. Nearly half of on-site facilities are emptied in urban compared with less than one third in rural. In urban areas septic tanks (54%) are more likely to be emptied than improved pit latrines (47%) but there is little difference in the emptying of improved types in rural. Unimproved pit latrines are significantly less likely to be emptied in both urban (14%) and rural (6%) areas.

[19] Some household survey respondents do not know whether their on-site systems have ever been emptied, or how the wastes were disposed of. For global monitoring, the JMP counts 'don't know' as 'never emptied'.

Emptying of on-site sanitation facilities varies widely among countries with data available

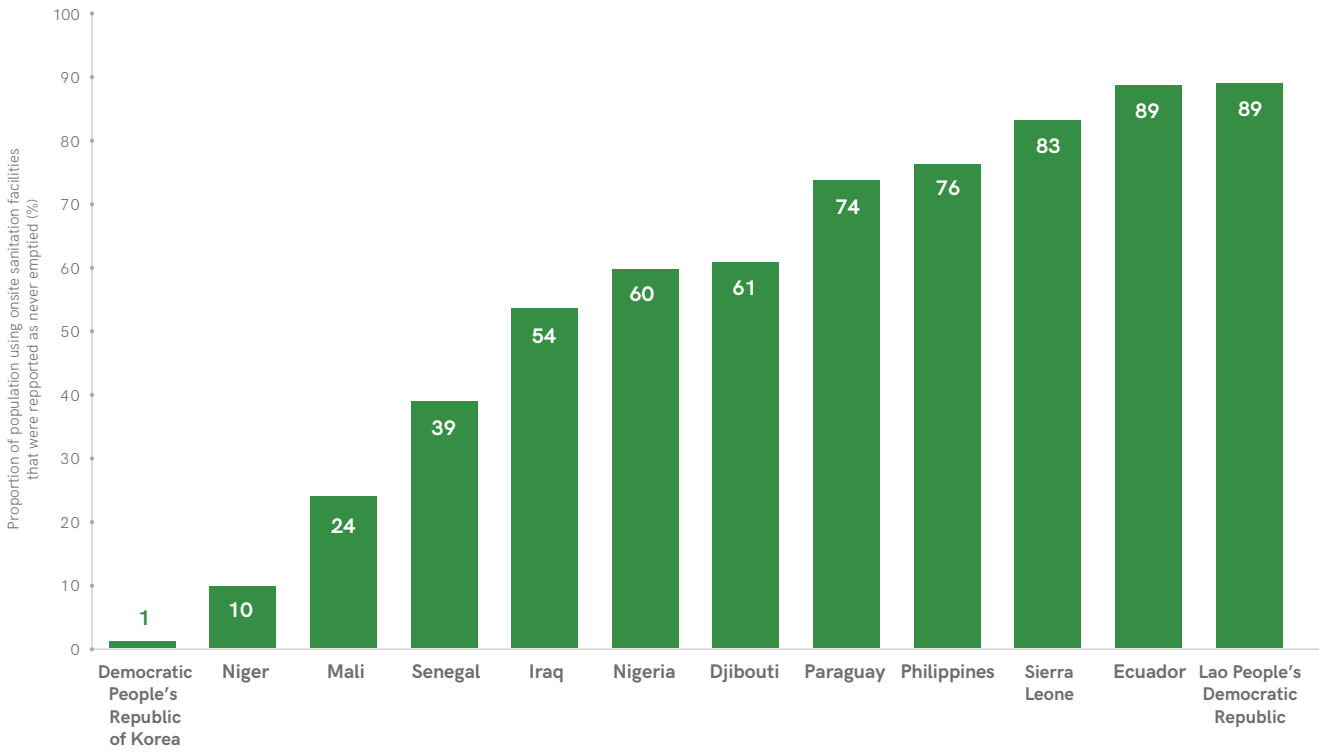


FIGURE 77 Proportion of septic tanks and latrines never emptied and wastes disposed of in situ

Septic tank and pit latrine emptying varies widely between urban and rural areas and subnational regions in Iraq

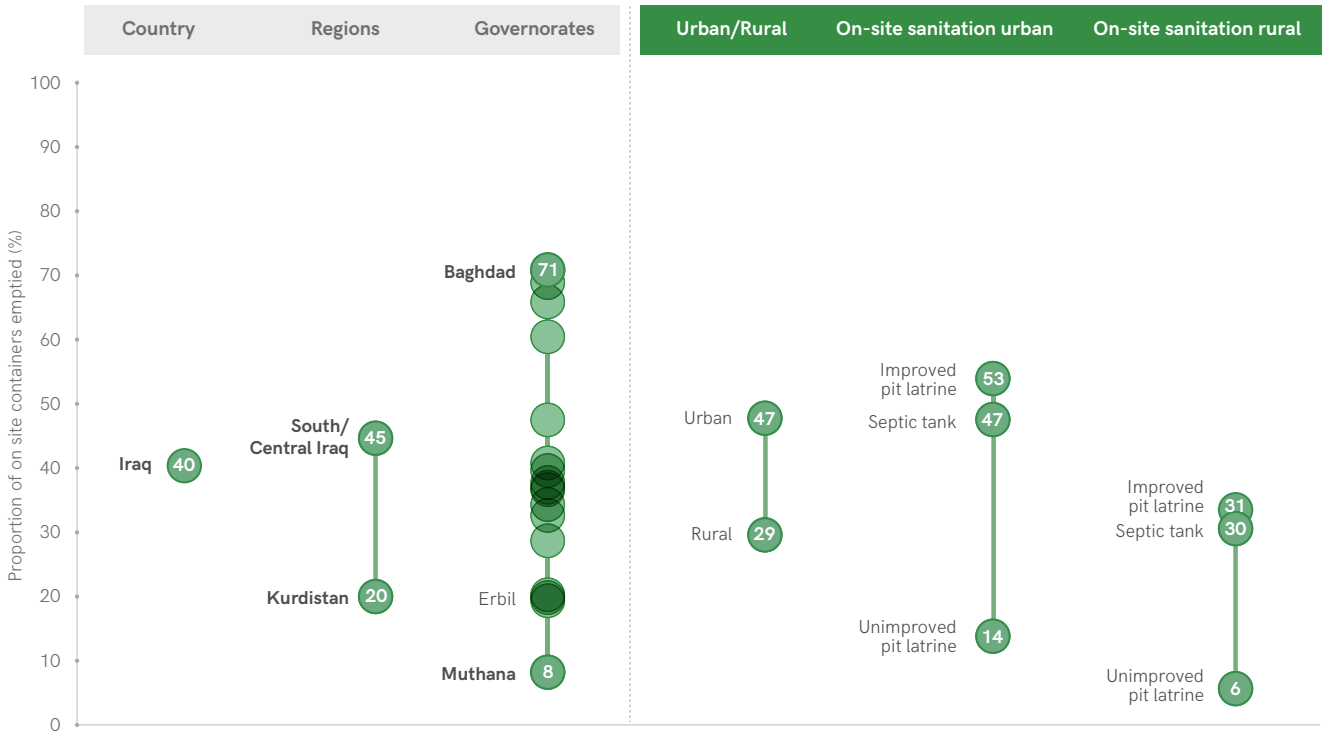


FIGURE 78 Emptying of on-site sanitation facilities, Iraq, 2018 (%)

Figure 79 shows the different methods used to dispose of excreta that are emptied from septic tanks and latrines. In many countries, most containers have reportedly never been emptied, especially in rural areas. In Sierra Leone, 76% of urban systems and 98% of rural systems have reportedly never been emptied. Septic tanks and latrines from which excreta are emptied and buried in a covered pit are counted as safely managed, as long as the facilities are not shared. In Nigeria, this practice is twice as common in urban areas (20%) as in rural areas (9%).

Excreta emptied and discharged to an open place or water body are not counted as safely managed. In the Democratic People's Republic of Korea, untreated excreta are regularly collected and used as a fertilizer in agricultural fields, which is considered unsafe unless it is adequately treated. In some countries, a significant proportion of systems are recorded as emptied to 'other/don't know where', particularly in urban areas. These are also considered unsafe and highlight the problem of unaccounted-for faecal waste.

In all countries shown in Figure 79, except for Iraq, fewer than one in five on-site facilities in urban areas and fewer than one in ten facilities in rural areas were emptied and removed by a service provider. To estimate the proportion of these that are safely managed, additional information is needed from local authorities or regulators on the amount of faecal sludge that reaches treatment plants. In the absence of such data, the JMP assumes that excreta emptied from septic tanks and latrines are not safely managed.

Households using on-site sanitation containers from which excreta have been removed off-site can count as safely managed through the `emptied and treated' pathway, if it can be shown that the removed excreta are conveyed to treatment plants and receive at least secondary treatment. While useful information on emptying of on-site containers can be collected in household surveys, household members generally do not know what happens to excreta once it is removed off-site. For this reason, the JMP prefers to use data from administrative sources or regulators to estimate the proportion of excreta from septic tanks, pit latrines and other improved on-site facilities that are delivered to off-site treatment plants and receive treatment.

However, while countries often have data on the operation of treatment plants, few maintain centralized records of desludging services that would allow calculation of how much of the removed excreta is actually delivered for treatment. Anecdotal evidence suggests that in many countries desludging service providers discharge septage into facilities not designed for faecal sludge treatment, such as landfills, or simply empty septage into open water bodies or channels. Supporting countries to develop more robust systems for monitoring safe management of on-site sanitation facilities will be a focus of the JMP in coming years (see Section 6).

Households rarely report service providers removing excreta off-site

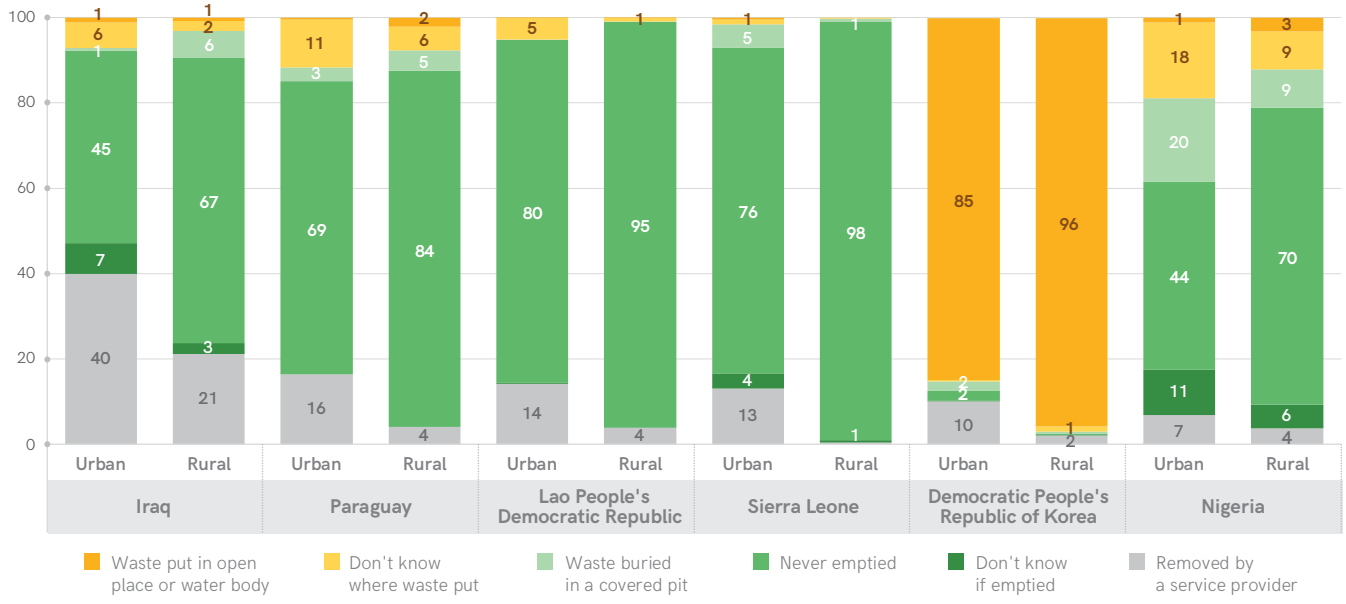


FIGURE 79 **Proportion of on-site sanitation facilities from which excreta are emptied and disposed of, by method in urban and rural areas, selected countries, 2017 (%)**

Sewered sanitation systems

Conveyed to wastewater treatment plants

In 2017, 63% of people in urban areas used toilets connected to sewers. Between 2000 and 2017, use of sewer connections in rural areas doubled from 7% to 14%, but on-site sanitation facilities remain dominant. Sewers are designed to remove excreta from the household and convey faecal waste along with other domestic wastewater (from showers, baths, sinks and laundry, for example) through sewer networks to wastewater treatment plants. However, some of the excreta from households connected to sewers do not reach wastewater treatment plants, and not all the wastewater is actually treated.

Wastewater may undergo a range of different types of treatment, and while the treatment can be classified according to technological processes as either primary, secondary or tertiary[20], these classifications are not yet consistently applied in national reporting. Most countries report on the type of treatment that plants are designed to provide but some use ambiguous terms, such as 'wastewater treated'. A small number report on the performance of treatment plants or compliance of treatment plant effluent with national standards for human or environmental health.

For the purposes of global monitoring, the JMP uses data on the proportion of wastewater that is treated with secondary or higher treatment processes and applies this to the population with sewer connections. Where effluent from primary treatment plants is discharged to water bodies at very low risk of exposure to humans (for example, long ocean outfalls) these wastes are also classified as safely managed.

Data on compliance of treatment plant effluent with health and environmental standards is not used to calculate the SDG 6.2 indicator 'safely managed sanitation' but will be used for monitoring the SDG 6.3 indicator 'safely treated wastewater'.

In 2017, 80% of household wastewater received at least secondary treatment. Figure 80 shows that the proportion of wastewater treated varies widely among countries with data available. Less than 50% of wastewater was treated in most countries in Sub-Saharan Africa and Latin America and the Caribbean and in at least one country in every other SDG region except for Australia and New Zealand. In 13 countries, less than a quarter of wastewater was treated.

[20] International Recommendations for Water Statistics (ST/ESA/STAT/SER.M/91). UNDESA, New York, 2012.

In all SDG regions except Australia and New Zealand, some countries treat less than half of domestic wastewater

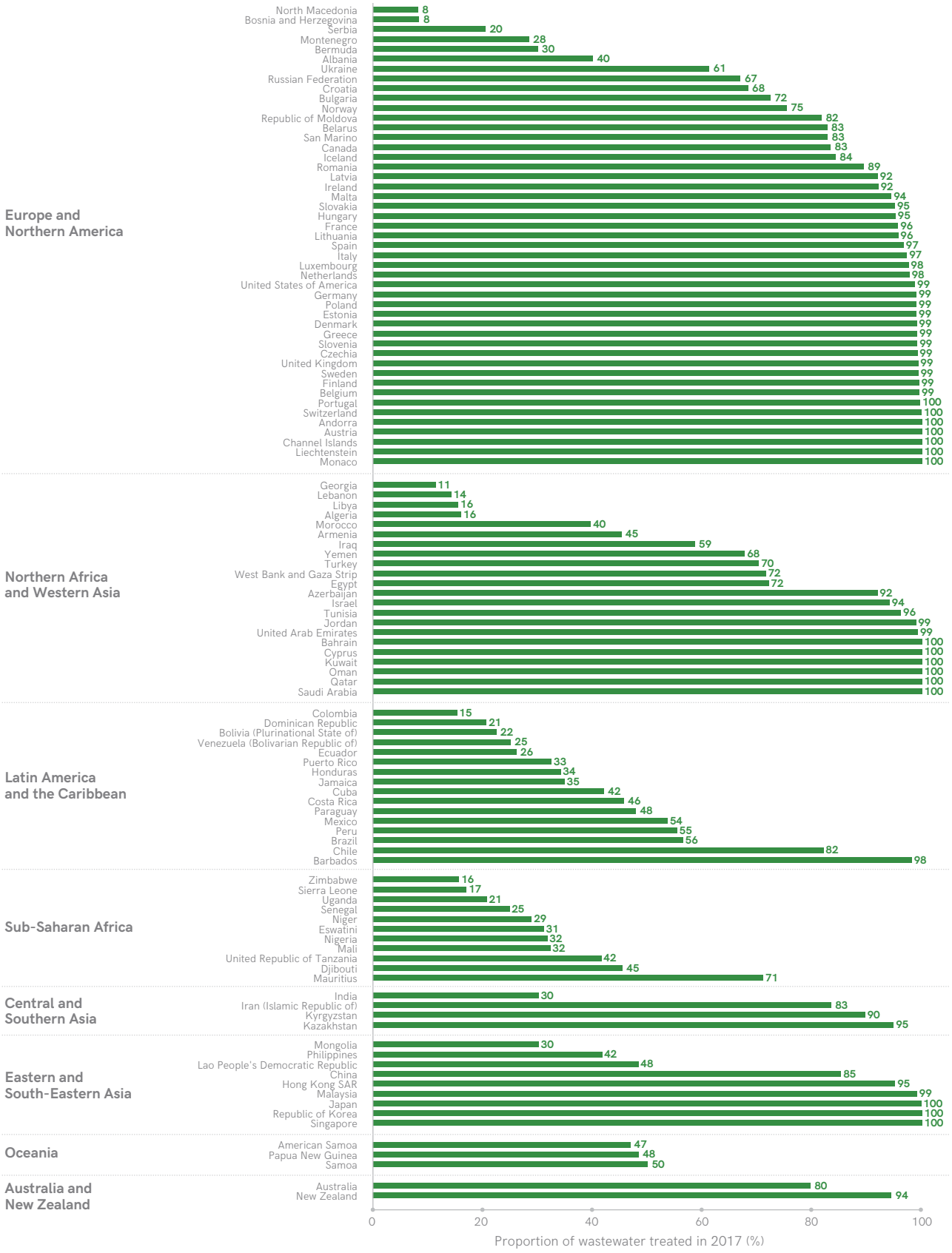


FIGURE 80 **Proportion of wastewater treated at plants providing at least secondary treatment**
Note: Proportion of wastewater treated by volume

Several countries have seen large increases in wastewater treatment in Latin America and the Caribbean and Europe

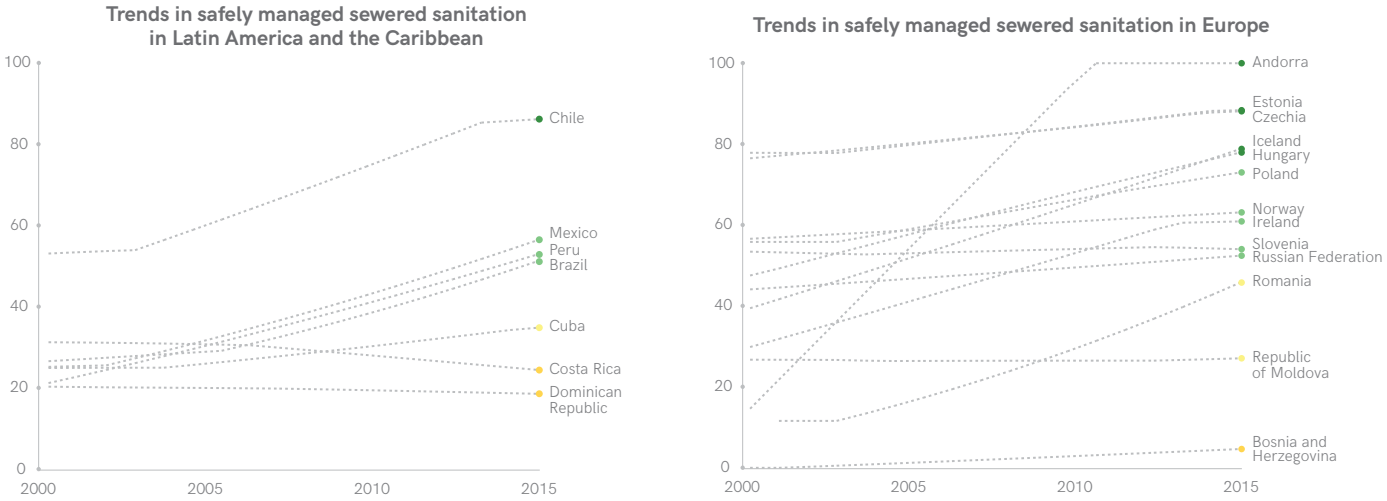


FIGURE 81 Proportion of population using sewer connections and on-site facilities with wastewater treated off-site, selected countries, 2000-2017 (%)

Figure 81 shows trends in the population connected to sewer networks where wastewater receives at least secondary treatment in Latin America and the Caribbean and in Europe between 2000 and 2017. Most countries in these regions recorded gradual increases in the proportion of excreta conveyed to wastewater treatment plants and receiving at least secondary treatment, with the largest increases observed in Andorra and Chile. Iceland, Hungary, Ireland, Romania and Mexico all recorded increases of over 20 percentage points. In Mexico, the use of sewer connections has increased from 64% in 2000 to 80% in 2017 (Figure 82). Over the same period, the proportion of excreta receiving at least secondary treatment at wastewater treatment plants increased four-fold from 11% to 43%, thereby progressively reducing unsafely managed sanitation.

In Mexico, wastewater treatment capacity has been catching up with sewer connections

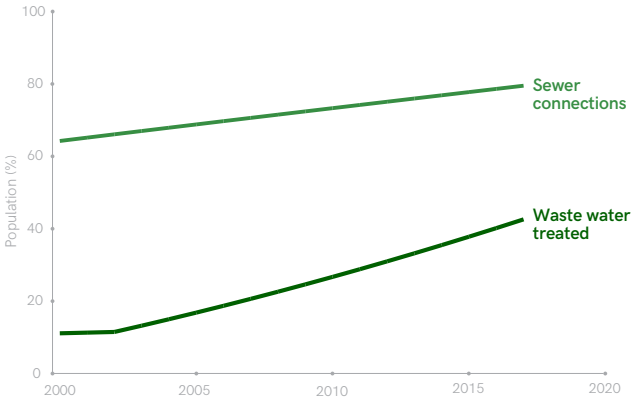


FIGURE 82 Trends in sewer connections and proportion of wastewater receiving at least secondary treatment, Mexico, 2000-2017 (%)

Not contained/conveyed/discharged without treatment

Excreta from households that report being connected to a sewer may never actually reach wastewater treatment plants, due to inadequate containment or connection of household facilities to sewer networks or losses during conveyance within the sewerage network.

Faecal wastes flushed from household toilet facilities may not enter the sewer network, for example discharging instead to an open drain or open ground directly outside the dwelling, exposing the community to pathogens. In some countries, household surveys include a category 'flush to open drain' , or 'flush to elsewhere', which can be used to estimate the population with inadequate sewer connections that do not effectively contain excreta and are therefore not considered safely managed (Box 15).

It is also recognized that excreta that do enter sewer networks may leak out or be discharged before reaching a treatment plant due to pump failure, breaks, blockages or flooding, causing discharge of untreated wastewater into the environment. Such losses within the sewer network are difficult to quantify and aggregate for different population groups, and there are currently insufficient countries with national data available that can be used for global monitoring. In the absence of national data, the JMP therefore assumes 100% of excreta from households with sewer connections is conveyed through sewer networks to treatment plants.

Box 15: **Inequalities beyond the toilet**

The human right to sanitation implies that people not only have a right to a hygienic toilet but also have a right not to be negatively affected by unmanaged faecal waste. This is most relevant to poor and marginalized groups who tend to be disproportionately affected by other people's unmanaged faecal sludge and sewage. A human rights approach to sanitation therefore requires that inequalities in exposure to faecal waste are monitored and progressively reduced.

For example, household survey data show that in some countries significant numbers of people use toilets that flush to an open drain. Open drains do not effectively contain faecal wastes, so they cannot be safely managed. In Timor-Leste, while 7% of the urban population uses toilets that flush to an open drain, 55% lives in communities where at least one household uses a toilet that flushes to an open drain, potentially exposing many other households in the neighbourhood to pathogens (Figure 83).

Many people live in communities where some toilets flush to open drains

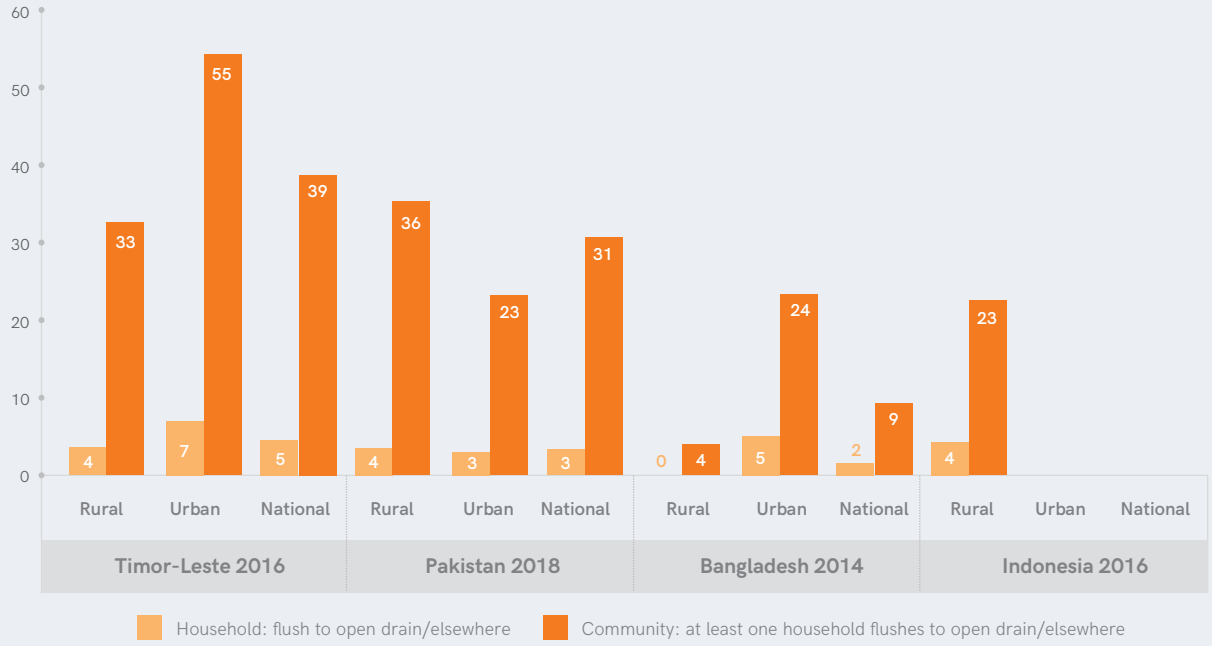


FIGURE 83 **Proportion of population living in households or communities with toilets flushing to open drains (%)**
Note: Data from Indonesia only available for rural areas

Figure 84 shows the proportion of population and number of people using different levels of drinking water, sanitation and hygiene service in 2000 and 2017. It shows that while billions of people have gained access over this period there are significant inequalities in service levels and many people remain unserved.

In 2017, 4.5 billion had basic handwashing facilities with soap and water available at home. 1.6 billion had facilities which lacked water or soap and 1.4 billion had no handwashing facility at all. However insufficient data were available to estimate global trends since 2000.

Between 2000 and 2017, the global population increased by 1.4 billion people. Over the same period 1.6 billion people gained access to safely managed drinking water and 1.7 billion people gained access to safely managed sanitation services.

A further 188 million gained access to basic water services and 436 million gained access to basic sanitation services. On average, 283,000 people gained access to at least basic water services and 338,000 gained access to at least basic sanitation services each day since 2000.

At the same time the total number of people lacking basic water and basic sanitation services has decreased by 352 million and 694 million people respectively. The number of people using unimproved water and sanitation facilities has decreased by nearly one third and the number of people practising open defecation has been almost halved. However the total population using limited services has increased. In 2017, 292 million more people shared improved sanitation facilities and 35 million more people used improved water sources with water collection exceeding 30 minutes.

Billions of people gained access to WASH services between 2000 and 2017

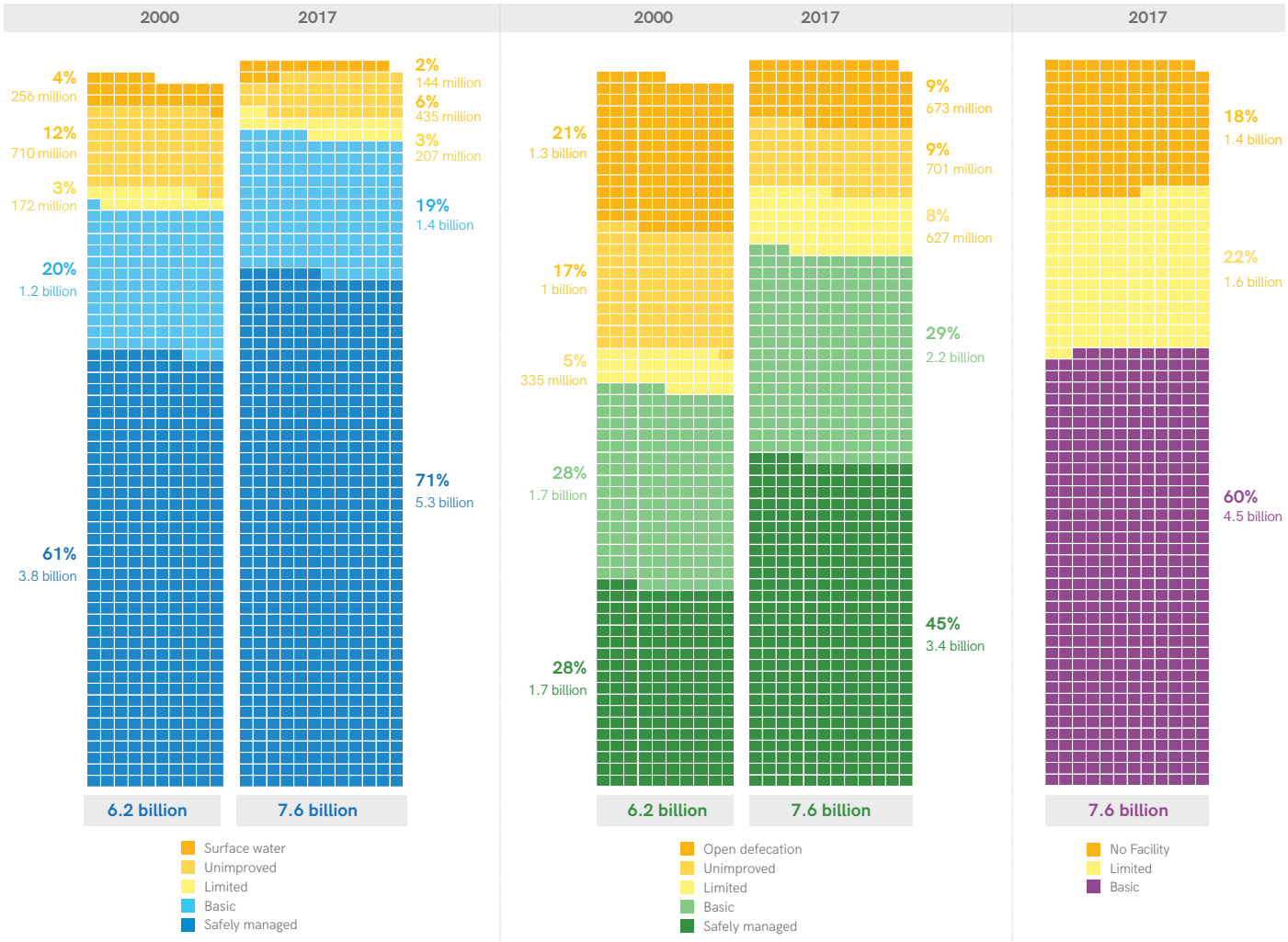


FIGURE 84 Population using different levels of WASH services in 2000 and 2017 (each unit represents 10 million people)

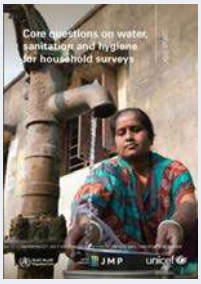
6. **Strengthening monitoring**

Core questions for households, schools and health care facilities

Household surveys and censuses can generate valuable information on the types of WASH facilities households use and the level of service they receive, but if the questions asked include inconsistent or unclear terms, they are of limited use for national and global monitoring. The value of survey and census data can be increased by using harmonized questions that allow comparison with other surveys and enable tracking of national, regional and global indicators.

Since 2005, the JMP has worked with statistical offices, international survey programmes, and WASH experts to develop sets of harmonized core questions for monitoring WASH in surveys and censuses, and the quality and comparability of datasets has improved steadily. Following the adoption of the SDGs, the recommended core questions for monitoring WASH in household surveys were reviewed and updated, and new sets of core questions were developed for monitoring WASH in schools and health care facilities (Box 16). Expanded questions are also proposed for cases where countries or survey programmes have the capacity to collect more information than is included in the core questions.

Box 16: **JMP core questions for WASH in households, schools and health care facilities**



For monitoring WASH in households, a minimum set of 14 core questions is recommended[21], including new questions on the availability and quality of drinking water, the emptying of septic tanks and pit latrines, and the availability of handwashing facilities with water and soap in the home. The 2018 update provides expanded notes to help enumerators to classify WASH facilities consistently. New core questions are also recommended for monitoring menstrual hygiene.

For monitoring basic WASH service levels in schools, seven core questions are recommended for inclusion in school facility assessments or Education Management Information Systems.[22]

There are five core indicators for WASH services in health care facilities: water, sanitation and hygiene, but also health care waste management and environmental cleaning services. A set of 16 core questions is recommended for monitoring these basic services as part of wider health care facility assessments.[23]

[21] United Nations Children's Fund and World Health Organization, Core Questions on Drinking Water, Sanitation and Hygiene for Household Surveys: 2018 update, UNICEF/WHO, New York, 2018, <https://washdata.org/report/jmp-2018-core-questions-household-surveys-0>.
[22] United Nations Children's Fund and World Health Organization, Core Questions and Indicators for Monitoring WASH in Schools in the Sustainable Development Goals, UNICEF/WHO, New York, 2016, <https://washdata.org/report/jmp-2018-core-questions-and-indicators-monitoring-wins>
[23] World Health Organization and United Nations Children's Fund, Core Questions and Indicators for Monitoring WASH in Health Care Facilities in the Sustainable Development Goals, UNICEF/WHO, Geneva, 2018, <https://washdata.org/report/jmp-2018-core-questions-monitoring-winhcf-en>.

Drinking water quality

The biggest challenge that many countries face in reporting on safely managed drinking water services is the lack of representative data on drinking water quality. Where data do exist, they are often not disaggregated by urban and rural populations. While 117 countries in 2019 had national data on water quality, only 55 had data for urban areas and only 34 had data for rural areas. Often water quality data come from public health surveillance or regulatory institutions that concentrate on piped water supplies in urban areas. The JMP uses such data in cases where at least 80% of the population uses piped supplies, but surveillance programmes often leave out small piped systems and may therefore overestimate water safety.

Ideally, countries will ensure that all public and private water supplies are operated using risk-management approaches and that water safety is verified through routine testing of all types of supplies. For example, the Drinking Water Inspectorate of Northern Ireland's Environmental Health staff annually monitor private systems including small supplies providing <10 m3/day, even though such systems are used by less than 1% of the population. In 2017, 4% of private supplies, compared to less than 1% of public supplies, were found to be contaminated with *E. coli*.[24]

In countries without robust independent water quality surveillance programmes, national household surveys afford an opportunity to collect data on water quality from all types of water supplies used by population sub-groups (see Section 5). The JMP team supports 15-20 such surveys each year, and is working to improve and bring down the price of the portable kits being used.

A hybrid approach between routine regulatory surveillance and household surveys is the Rapid Assessment of Drinking Water Quality (RADWQ) approach[25], in which public health authorities conduct field assessments on a number of water supplies, randomly chosen to represent the mix of supplies used in the country. The Serbian Institute of Public Health, with support from the WHO European Centre for Environment and Health, made such a survey in 2016, conducting sanitary inspections and measuring chemical and microbiological quality in 1318 piped systems and individual supplies in rural areas. Overall, one in three (33%) water supplies were contaminated with *E. coli*, and supplies given a higher risk score during sanitary inspections were more likely to be contaminated (Figure 85)[26]. The rapid assessment methodology enabled the identification of the most important causes of contamination and prioritization of activities for improving water quality. It allowed the public health authorities to identify systems that required increased attention and guidance. The findings of the survey contributed to efforts to improve water quality management in small systems, including by mandating the implementation of a water safety planning approach. Following the survey, the Serbian government has prepared a new law which will require that all water supply systems in Serbia that produce at least 10 m3 of water per day will be obliged to apply a risk assessment and risk management approach, in order to ensure the safe production and delivery of drinking water to households.

In many countries, bottled or packaged water represents an important and growing proportion of the drinking water supply, especially in urban areas. Where households report bottled water as their primary source of drinking water, data on the microbiological quality of bottled water should be used to classify households as having or not having safely managed drinking water services. Such data could come from household surveys, but ideally would come from regulatory institutions that routinely inspect and test bottled water. Since bottled water isn't likely to be used for all other domestic needs, including cooking and cleaning, there should also be information about the accessibility and availability of water supplies for other uses. In practice, such data are not always available, and the JMP is exploring how to improve reporting of safely managed drinking water services where people rely on bottled water.

[24] Northern Ireland Environment Agency, Drinking Water Quality in Northern Ireland, 2017; A report by the Drinking Water Inspectorate for Northern Ireland, Northern Ireland Environment Agency, Belfast, 2017, <www.daera-ni.gov.uk/publications/drinking-water-quality-northern-ireland>.

[25] World Health Organization and United Nations Children's Fund, Rapid Assessment of Drinking-water Quality: A handbook for implementation, WHO/UNICEF, Geneva, 2012, <www.who.int/water_sanitation_health/publications/rapid_assessment/en>.

[26] Jovanović, D, et al., 'Rapid assessment of drinking-water quality in rural Serbia: Overcoming the knowledge gaps and identifying the prevailing challenges', Public Health Panorama, 3(2) 175-185, 2017, <www.euro.who.int/en/publications/public-health-panorama/journal-issues/volume-3,-issue-2,-june-2017/original-research2>.

In Serbia, supplies given higher risk scores during sanitary inspections were also more likely to be contaminated

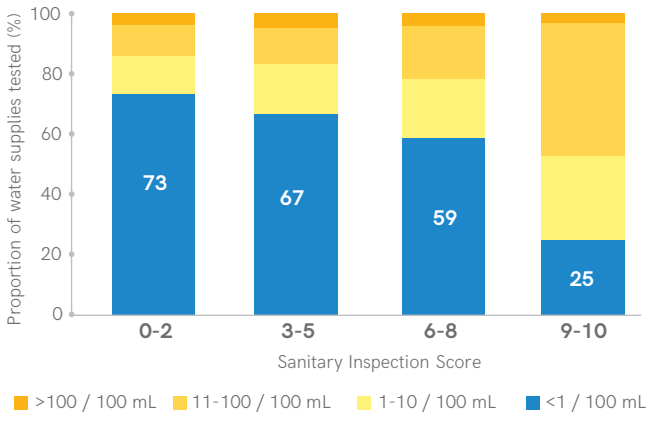


FIGURE 85 **Proportion of water supplies by risk of contamination and sanitary inspection score, Serbia, 2017 (%)**

Safely managed on-site sanitation systems

Countries at all stages of development struggle to establish systems for routine data collection and reporting on the proper functioning of non-sewered sanitation systems. As these systems are used by nearly half of the global population with improved sanitation facilities (see Section 5), this represents a critical data gap for national and global monitoring of safely managed sanitation services. The JMP is currently partnering with national governments to improve data collection methods, whether through household surveys or through surveillance by authorities responsible for regulating sanitation systems.

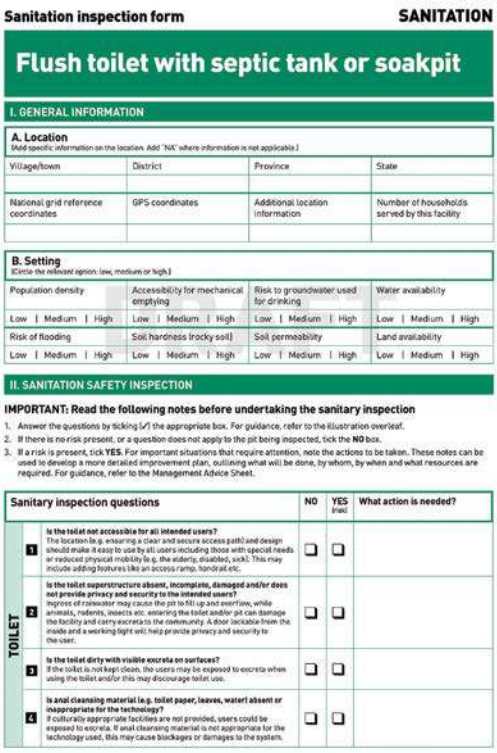
Household surveys are adapting to the SDGs by including new questions about containment or emptying of excreta in on-site storage facilities, such as septic tanks or pit latrines. Such questions are necessarily simplified, as neither the survey teams nor the household members responding to the survey can be expected to accurately report technical details relating to the design of on-site sanitation systems. However, more in-depth assessments can be made by drawing on sanitary inspection forms, developed as part of the 2018 Guidelines on Sanitation and Health (Figure 86), and designed for use by people without detailed technical backgrounds.

Sector experts, such as public health inspectors, can make much more detailed inspections, which could yield more reliable information about the effective containment and functioning of on-site storage and treatment systems. Such inspections might be done on a routine basis, or linked with events such as the building or buying and selling of properties.

Finally, more examples are needed of systems to quantify the amount of waste that is transported from on-site storage systems to off-site treatment, and the level of treatment that such faecal sludge receives, whether at a dedicated faecal sludge treatment plant, or alongside sewered waste at a wastewater treatment plant.

Over the next four years, the JMP will be working in a small number of focus countries to develop and pilot test indicators and data collection methods that municipalities or other institutions responsible for surveillance of sanitation systems could use to better understand the extent to which on-site sanitation systems are safely managed.

Sanitary inspections can be used to identify on-site systems that do not effectively contain excreta



Sanitation inspection form SANITATION

Flush toilet with septic tank or soakpit

I. GENERAL INFORMATION

A. Location
(Add specific information on the location. Add "NA" where information is not applicable.)

Village/town	District	Province	State
National grid reference coordinates	GPS coordinates	Additional location information	Number of households served by this facility

B. Setting
(Circle the relevant option: low, medium or high.)

Population density	Accessibility for mechanical emptying	Risk to groundwater used for drinking	Water availability
Low | Medium | High	Low | Medium | High	Low | Medium | High	Low | Medium | High
Risk of flooding	Soil hardness (rocky soil)	Soil permeability	Land availability
Low | Medium | High	Low | Medium | High	Low | Medium | High	Low | Medium | High

II. SANITATION SAFETY INSPECTION

IMPORTANT: Read the following notes before undertaking the sanitary inspection

1. Answer the questions by ticking (✓) the appropriate box. For guidance, refer to the illustration overleaf.
2. If there is no risk present, or a question does not apply to the pit being inspected, tick the **NO** box.
3. If a risk is present, tick **YES**. For important situations that require attention, note the actions to be taken. These notes can be used to develop a more detailed improvement plan, outlining what will be done, by whom, by when and what resources are required. For guidance, refer to the Management Advice Sheet.

		Sanitary inspection questions	NO	YES (risk)	What action is needed?
TOILET	1	**Is the toilet not accessible for all intended users?** The location (e.g. ensuring a clear and secure access path) and design should make it easy to use by all users including those with special needs or reduced physical mobility (e.g. the elderly, disabled, sick). This may include adding features like an access ramp, handrail etc.	❑	❑	
	2	**Is the toilet superstructure absent, incomplete, damaged and/or does not provide privacy and security to the intended users?** Ingress of rainwater may cause the pit to fill up and overflow, while animals, rodents, insects etc. entering the toilet and/or pit can damage the facility and carry excreta to the community. A door lockable from the inside and a working light will help provide privacy and security to the user.	❑	❑	
	3	**Is the toilet dirty with visible excreta on surfaces?** If the toilet is not kept clean, the users may be exposed to excreta when using the toilet and/or this may discourage toilet use.	❑	❑	
	4	**Is anal cleansing material (e.g. toilet paper, leaves, water) absent or inappropriate for the technology?** If culturally appropriate facilities are not provided, users could be exposed to excreta. If anal cleansing material is not appropriate for the technology used, this may cause blockages or damages to the system.	❑	❑	

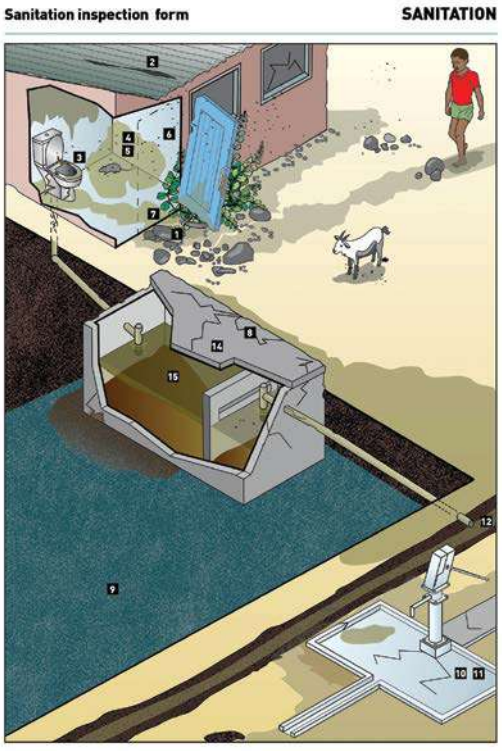


FIGURE 86 Sanitary inspection forms

Affordability of WASH services

General Comment 15 states: '…payment for water services has to be based on the principle of equity… Equity demands that poorer households should not be disproportionately burdened with water expenses'[27].

In 2018, the JMP and the UN-Water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) launched a joint initiative to review methods and indicators for monitoring the affordability of WASH services. An expert group has been formed, comprising academics, regulators, lawyers, civil society and international organizations. Case studies are underway in six countries to test the validity of different measures and to assess the availability of data that could potentially be used for national and global monitoring.

Measuring and monitoring WASH affordability requires an understanding of the interaction between three key dimensions:

1. What the user pays for WASH services, including capital costs associated with new infrastructure or network connections, ongoing operation and maintenance, related products such as containers, soap and cleaning materials, and non-monetary costs such as the time spent on water collection or sanitation-related travel. User payments vary depending on factors including geographical context, existing infrastructure, service provider efficiency, market competition, levels of corruption, the number and types of water source available to the user, and subsidy levels.

2. The spending power of the user, which is a function of both the income (wages, cash transfers, or in-kind payments) and wealth of the household (assets, property, and accumulated savings), and can include anything that makes the user more able to mobilize resources to pay for WASH services.

3. What other essential goods and services the user pays for. This determines the budget that can be made available for WASH payments. If other goods and services are less expensive, the user will have more funds to pay for WASH. The initiative has identified five main questions that form the basis of ongoing case studies in Cambodia, Ghana, Mexico, Pakistan, Uganda and Zambia:

[27] United Nations, General Comment 15, The Right to Water (Twenty-ninth session, 2002), U.N. Doc. E/C.12/2002/11, paras 26-27, 2003, < https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf>.

1. What do households spend on WASH as a percentage of total expenditure?
2. How do households change their demand for WASH in relation to changes in prices?
3. How households respond when asked directly about their demand and preferences for WASH?
4. How far is WASH accounted for in the poverty line, and explicitly considered in public policies to address poverty?
5. How are government or service providers responding to ensure affordable WASH access to all or a part of the population?

A specific objective of the country case studies is to expand on the first question, which has been used as an indicator in previous affordability assessments by international organizations, governments and utilities. But there are important questions regarding how best to define both the numerator and the denominator: Should costs be based on current reported expenditure, or the expenditure required for a minimum level of service? Should they include time spent collecting water or traveling to/from a point of open defecation or shared sanitation? Should the denominator include income or is total expenditure sufficient? Household expenditure surveys typically omit capital investments and rehabilitation costs, thereby underestimating the total cost of WASH services, so data availability is also an important consideration.

Total expenditure required for a basic level of service can greatly exceed current expenditures, especially for the poorest

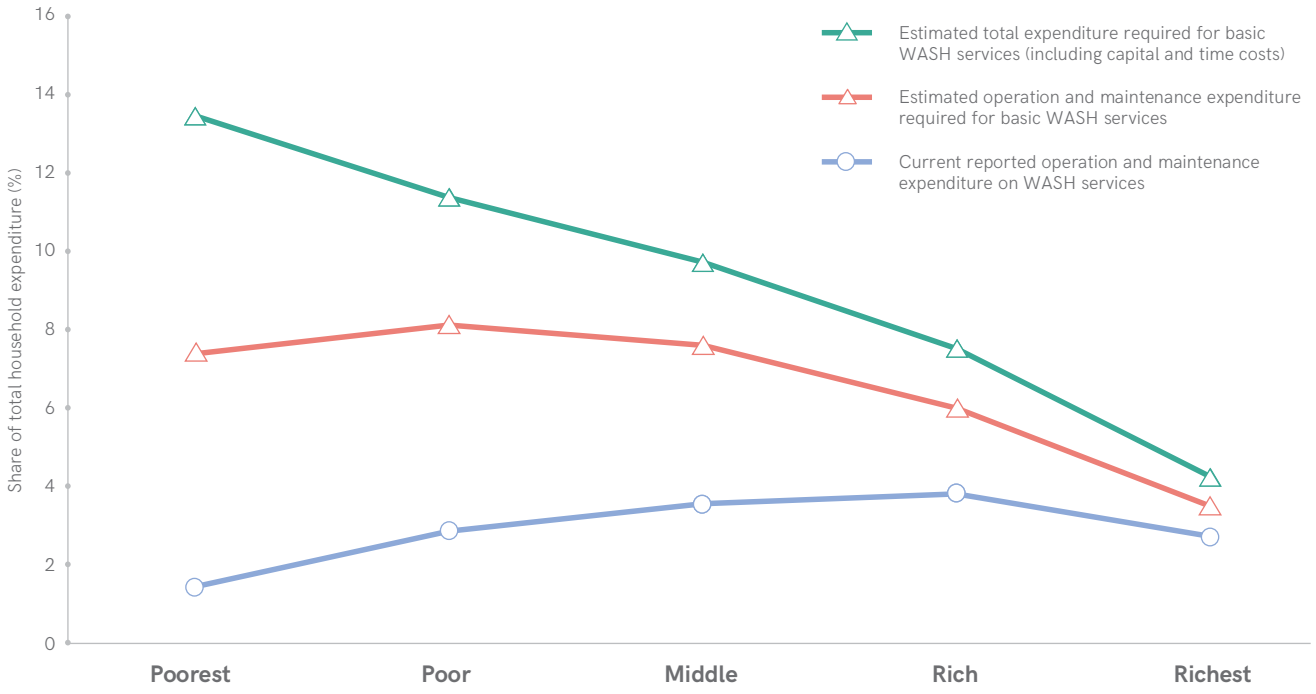


FIGURE 87 **WASH as a share of total household expenditure based on reported and estimated costs of basic services**
Note: Income quintile estimation based on per capita expenditure data.

Preliminary analysis from Ghana (Figure 87) shows that if only reported expenditure as a share of total expenditure is considered then households in poorer quintiles do not appear to be disproportionately burdened. However, if the total expenditure required for a 'basic' level of service, and the cost of time spent accessing services are taken into account, the affordability of WASH services decreases significantly, especially for the poorest. This suggests that assessments that neglect the annual recurrent and average annualized capital costs of accessing a basic service, or the value of the average time expenditure, may grossly mischaracterize the relationship between income level and the affordability of WASH services.

The Ghana case study suggests that it would be very challenging for lower income households to increase their spending to achieve the basic WASH service level. For example, the poorest households would have to pay the same for WASH as they currently pay for housing and twice as much as they currently pay for education. Such costs are unlikely to be affordable to them, and it would not be desirable for them to reduce their spending on other basic needs, such as housing, education, health, or food items. This suggests the continued need for channeling some form of public subsidy or cross-subsidy to poorer and more vulnerable households to ensure their financial access is not compromised.

Furthermore, poorer households are more likely to haul water with low monetary cost from distant and unreliable sources and suffer the inconvenience of using public latrines or practising open defecation. When the value of time spent collecting water[28] is taken into account, the total costs of accessing WASH services increase significantly for lower income households. It is likely that if other non-monetary costs associated with poor WASH were also included, such as drudgery – especially for women and girls – and health costs of consuming contaminated water – the costs to poorer households would be even higher.

It is clear from this preliminary analysis that the most valid indicator of affordability is one that includes the full costs for all households to achieve a commonly agreed minimum service level, but such assessments are only possible where robust data on household expenditure and WASH costs are readily available for target populations. Further work is ongoing to test these indicators in a larger number of countries before making recommendations for national and global monitoring.

[28] No data were available on the time spent on sanitation-related travel.

Annex 1: 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.[29]

The following is a brief summary of the methodology used for the JMP 2019 update. Apart from a few minor refinements (see Box A-1) it is identical to the methodology developed for the JMP 2017 update[30]. The methodology used to make country, regional and global estimates in this report will be documented in more detail in an updated methodological note.

[29] For further details see the JMP website https://washdata.org
[30] See JMP Methodology: 2017 update and SDG baselines https://washdata.org/sites/default/files/documents/reports/2018-04/JMP-2017-update-methodology.pdf

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 A-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. In addition data are collected on the availability of handwashing facilities, soap and water in the home, which are used to categorize populations as having access to **no facility**, **limited** and **basic handwashing** facilities.

	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 A-1 **JMP classification of improved and unimproved facility types**

The 2019 JMP update drew on a total 4,861 data inputs, 3,838 of which were used to produce estimates (Figure A-1). Similar numbers of datasets were used for drinking water services (n=2,878) and sanitation services (n=2,801) but there were comparatively few datasets with information on hygiene (n=146). About half of the data used to generate estimates were from administrative sources which are a major source of information on wastewater treatment and the availability and quality of drinking water.

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 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 2017 revision, while the proportion of population living in rural areas was taken from the World Urbanization Prospects 2018 revision.

National data sources used for the JMP 2019 progress report

FIGURE A-1 Number of data sources used in JMP 2019 report

Country estimates

For each country, the JMP develops estimates for WASH indicators by fitting a regression line to the collected data inputs, using data from 2000 onwards.

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 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.

Separate linear regressions are also made to distinguish between basic and limited drinking water and sanitation services. 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 using at least **basic sanitation services**. Likewise, trends were estimated for the proportion of the population using improved drinking water sources requiring more than 30 minutes for collection. This is subtracted from the trend estimates of improved drinking water sources, to generate the estimate of the population using at least **basic drinking water services**[31].

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, 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[32].

[31] 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 uses the term 'at least basic services' to be clear that the statistic refers to populations with either basic or safely managed services

[32] JMP country files can be downloaded from https://www.washdata.org

While the data required to estimate basic drinking water, sanitation and hygiene services 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 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 accessible 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. 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 treated and disposed of in situ, or
- Excreta are emptied and treated off-site, or
- Wastewater is treated off-site

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 the treatment of wastewater or the treatment of excreta from on-site sanitation facilities. 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.

Box A-1: **Refinements to JMP method used for the 2019 update**

1. Increase in number of datasets used to generate estimates from 3408 to 3838

2. Trends for safely managed drinking water and sanitation services estimated based on available data

3. Trends for limited drinking water and sanitation services for countries with sufficient data to assess changes in the proportion of the population using improved drinking water and sanitation services that do not meet the criteria for basic services

4. Change in default assumptions for containment of septic tanks (50% contained) and faecal sludge treatment in countries where most of the population use sewered sanitation systems. In such countries, it is assumed that faecal sludge receives the same level of treatment as sewage.

5. Reporting proportions of the population using different types of sanitation facility (sewer, septic, latrine or other improved) including users of shared facilities for greater comparability with SDG 6.3 monitoring and ease of comparison with national estimates for these indicators.

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[33] and assigns these to any countries without a national estimate for the reference year for the purpose of making regional and global aggregations. 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.

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

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.

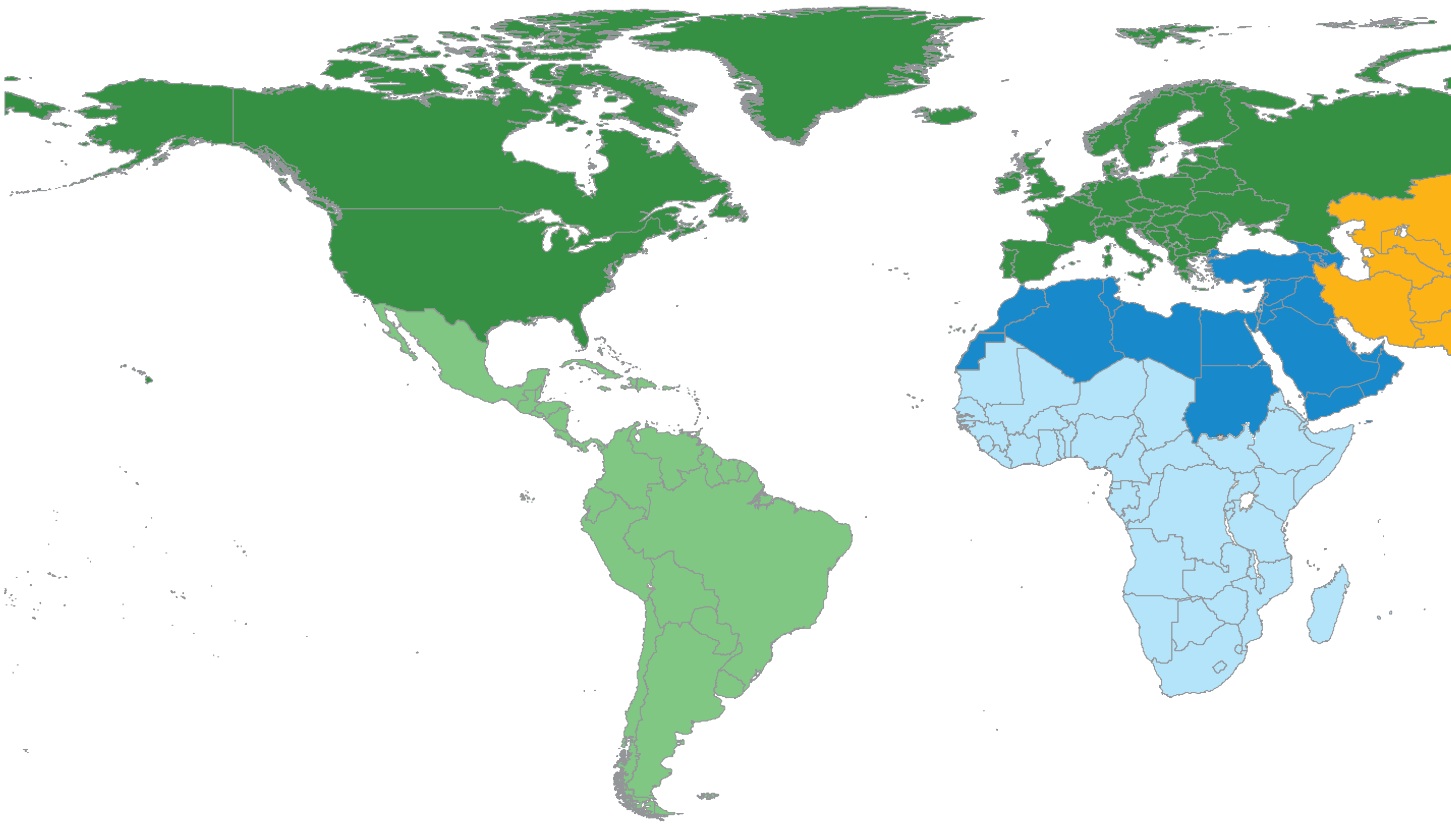
For safely managed sanitation services, regional estimates are calculated based on the populations using sewer connections or improved on-site sanitation systems (septic, latrines and other improved facilities). Estimates are only calculated where data are available for at least 30% of the population 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 on-site 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.

% of population and # countries covered by available data in 2017	Drinking water				Sanitation				Hygiene
	Basic water	Accessible on premises	Available when needed	Free from contamination	Basic sanitation	Safely disposed of in situ	Emptied and treated	Wastewater treated	Basic hygiene
World (233)	99% (220)	100% (220)	67% (93)	51% (116)	99% (212)	43% (23)	1% (9)	92% (107)	52% (78)
Rural	100% (207)	100% (206)	71% (75)	48% (55)	100% (203)	57% (22)	0% (0)	87% (92)	67% (77)
Urban	100% (212)	100% (211)	63% (98)	54% (75)	100% (207)	24% (17)	0% (0)	88% (95)	39% (76)
SDG regions									
Australia and New Zealand (2)	100% (2)	100% (2)	98% (1)	88% (1)	100% (2)	0% (0)	0% (0)	100% (2)	0% (0)
Central and Southern Asia (14)	100% (14)	100% (14)	73% (6)	72% (10)	100% (14)	51% (0)	0% (0)	70% (4)	93% (10)
Eastern and South-Eastern Asia (19)	100% (19)	100% (19)	83% (8)	53% (11)	100% (17)	53% (5)	3% (2)	95% (8)	27% (9)
Europe and Northern America (53)	100% (52)	100% (52)	17% (13)	100% (50)	100% (49)	18% (18)	8% (7)	100% (48)	0% (0)
Latin America and the Caribbean (48)	93% (40)	99% (40)	87% (25)	54% (14)	93% (39)	7% (0)	0% (0)	90% (15)	42% (12)
Northern Africa and Western Asia (25)	99% (23)	99% (23)	65% (14)	27% (13)	99% (23)	16% (0)	0% (0)	94% (21)	58% (10)
Oceania (21)	100% (21)	100% (21)	25% (7)	15% (7)	99% (20)	6% (0)	0% (0)	37% (3)	8% (3)
Sub-Saharan Africa (51)	99% (49)	99% (49)	76% (19)	51% (10)	99% (48)	37% (0)	0% (0)	8% (6)	89% (34)
Other regional groupings									
Least Developed Countries (47)	99% (45)	99% (45)	49% (19)	45% (9)	99% (45)	30% (0)	0% (0)	29% (5)	90% (36)
Landlocked Developing Countries (32)	99% (31)	99% (31)	68% (15)	59% (16)	99% (31)	14% (0)	0% (0)	61% (11)	84% (24)
Small Island Developing States (57)	99% (50)	99% (50)	35% (20)	18% (11)	99% (48)	1% (0)	0% (0)	90% (11)	57% (12)

TABLE A-2 **Data coverage for WASH indicators in the JMP 2019 report**

Annex 2: Regional groupings



SUSTAINABLE DEVELOPMENT GOALS: REGIONAL GROUPINGS

AUSTRALIA AND NEW ZEALAND:
Australia, New Zealand.

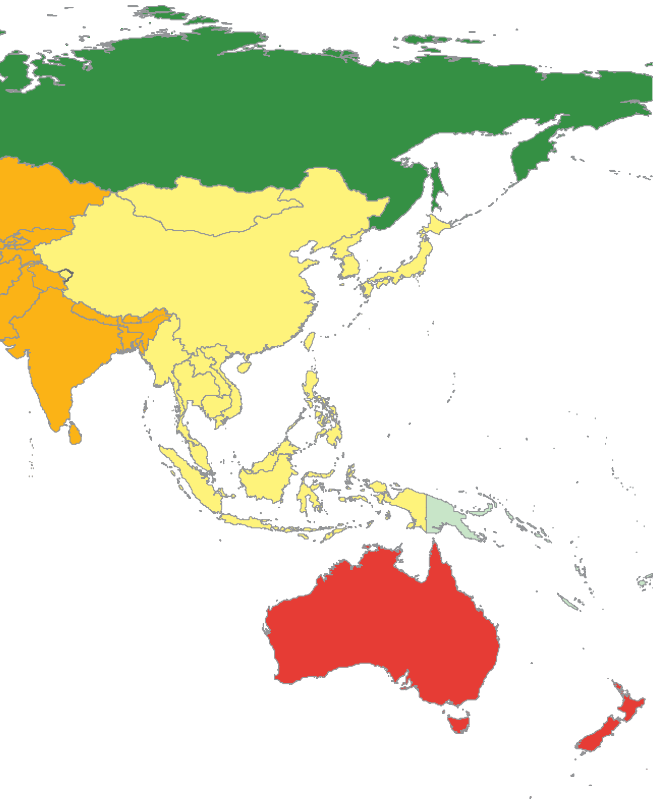
CENTRAL ASIA AND SOUTHERN ASIA: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Kazakhstan, Kyrgyzstan, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan, Uzbekistan.

EASTERN ASIA AND SOUTH-EASTERN ASIA: Brunei Darussalam, Cambodia, China (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.

EUROPE AND NORTHERN AMERICA: 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, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Saint Pierre and Miquelon, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America.

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 AFRICA AND WESTERN ASIA: 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.

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, Eswatini, 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, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

OTHER REGIONAL GROUPINGS

LANDLOCKED DEVELOPING COUNTRIES (LLDCS): Afghanistan, Armenia, Azerbaijan, Bhutan, Bolivia (Plurinational State of), Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Eswatini, Ethiopia, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Malawi, Mali, Mongolia, Nepal, Niger, North Macedonia, Paraguay, Republic of Moldova, Rwanda, South Sudan, Tajikistan, 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, 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, Bermuda, Bonaire, Sint Eustatius and Saba (Caribbean Netherlands), British Virgin Islands, Cabo Verde, Cayman Islands, Comoros, Cook Islands, Cuba, Curaçao, Dominica, Dominican Republic, Fiji, French Polynesia, Grenada, Guadeloupe, 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, Turks and Caicos Islands, 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 (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
Afghanistan	2000	20 094	22	**28**	4	43	25	2	**22**	3	46	30	2	**49**	5	36	10	3
	2017	35 530	25	**67**	3	19	11		**57**	4	24	14		**96**	<1	3	<1	
Albania	2000	3 122	42	**88**	9	2	1	0	**82**	13	3	2	0	**96**	4	<1	<1	-0
	2017	2 930	59	**91**	5	4	<1		**90**	5	5	<1		**92**	5	3	<1	
Algeria	2000	31 184	60	**90**	6	4	<1	0	**83**	8	7	1	0	**94**	4	2	<1	0
	2017	41 318	72	**94**	5	1	<1		**89**	9	2	<1		**95**	4	<1	<1	
American Samoa	2000	58	89	**98**	<1	2	<1	0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	56	87	**>99**	<1	<1	<1		**-**	-	-	-		**-**	-	-	-	
Andorra	2000	65	92	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0
	2017	77	88	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Angola	2000	16 441	50	**41**	21	9	29	1	**21**	16	16	47	0	**61**	26	2	10	1
	2017	29 784	65	**56**	10	19	15		**27**	9	23	41		**71**	10	17	2	
Anguilla	2000	11	100	**96**	<1	4	<1	0	**-**	-	-	-	-	**96**	<1	4	<1	0
	2017	15	100	**97**	<1	3	<1		**-**	-	-	-		**97**	<1	3	<1	
Antigua and Barbuda	2000	84	32	**98**	<1	2	<1	-0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	102	25	**97**	<1	3	<1		**-**	-	-	-		**-**	-	-	-	
Argentina	2000	37 057	89	**96**	<1	3	1	-	**76**	<1	14	10	-	**99**	<1	1	<1	0
	2017	44 271	92	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Armenia	2000	3 070	65	**95**	2	3	<1	0	**89**	5	6	<1	1	**99**	<1	<1	<1	0
	2017	2 930	63	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Aruba	2000	91	47	**94**	<1	5	<1	-	**-**	-	-	-	-	**-**	-	-	-	-
	2017	105	43	**-**	-	-	-		**-**	-	-	-		**-**	-	-	-	
Australia	2000	19 066	84	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0
	2017	24 451	86	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Austria	2000	8 069	60	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0
	2017	8 735	58	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Azerbaijan	2000	8 123	51	**73**	8	8	10	1	**55**	12	14	20	2	**91**	5	2	1	0
	2017	9 828	55	**91**	3	5	<1		**82**	6	10	2		**>99**	<1	<1	<1	
Bahamas	2000	298	82	**98**	<1	2	<1	0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	395	83	**99**	<1	1	<1		**-**	-	-	-		**-**	-	-	-	
Bahrain	2000	665	88	**>99**	<1	<1	<1	0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	1 493	89	**>99**	<1	<1	<1		**-**	-	-	-		**-**	-	-	-	
Bangladesh	2000	131 581	24	**95**	<1	2	2	0	**94**	<1	2	3	0	**99**	<1	<1	<1	-0
	2017	164 670	36	**97**	2	<1	<1		**97**	2	<1	1		**97**	1	<1	<1	
Barbados	2000	270	34	**98**	<1	1	<1	0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	286	31	**98**	<1	1	<1		**-**	-	-	-		**-**	-	-	-	
Belarus	2000	9 934	70	**>99**	<1	<1	<1	-0	**99**	<1	1	<1	-0	**>99**	<1	<1	<1	-0
	2017	9 468	78	**96**	3	<1	<1		**98**	<1	<1	<1		**96**	4	<1	<1	
Belgium	2000	10 282	97	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0
	2017	11 429	98	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Belize	2000	247	45	**87**	1	8	3	1	**84**	1	9	5	1	**91**	<1	7	<1	0
	2017	375	46	**98**	1	<1	<1		**97**	1	1	<1		**99**	1	<1	<1	
Benin	2000	6 866	38	**61**	6	20	12	0	**52**	8	24	16	0	**77**	3	14	6	-0
	2017	11 176	47	**66**	10	20	4		**58**	14	22	6		**76**	5	18	1	
Bermuda	2000	64	100	**>99**	<1	<1	<1	-0	**-**	-	-	-	-	**>99**	<1	<1	<1	-0
	2017	61	100	**>99**	<1	<1	<1		**-**	-	-	-		**>99**	<1	<1	<1	
Bhutan	2000	573	25	**83**	1	6	10	1	**78**	<1	8	13	1	**96**	3	<1	<1	0
	2017	808	40	**97**	3	<1	<1		**97**	3	<1	<1		**98**	1	<1	<1	

"-" = no estimate. For JMP estimate methods see Annex 1. 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	-	16	-	-	4	28	-	10	-	-	<1	25	-	40	-	-	17	37
	2017	-	38	-	-	22	49	-	25	-	-	14	48	-	79	-	-	45	51
Albania	2000	**49**	61	49	96	76	21	-	39	53	-	62	33	-	92	44	-	96	4
	2017	**70**	89	70	87	86	10	-	90	68	-	77	18	-	89	72	-	92	4
Algeria	2000	-	69	-	-	81	15	-	50	-	-	67	25	-	82	82	-	90	8
	2017	-	81	-	-	77	22	-	74	-	-	64	34	-	84	83	-	82	17
American Samoa	2000	**12**	78	-	12	97	1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**13**	99	-	13	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Andorra	2000	**91**	>99	>99	91	>99	<1	-	>99	>99	-	>99	<1	-	>99	>99	-	>99	<1
	2017	**91**	>99	>99	91	>99	<1	-	>99	>99	-	>99	<1	-	>99	>99	-	>99	<1
Angola	2000	-	8	31	-	24	38	-	2	24	-	14	24	-	13	37	-	35	52
	2017	-	37	31	-	41	25	-	7	23	-	8	28	-	53	35	-	58	24
Anguilla	2000	-	87	86	-	61	35	-	-	-	-	-	-	-	87	86	-	61	35
	2017	-	88	88	-	-	-	-	-	-	-	-	-	-	88	88	-	-	-
Antigua and Barbuda	2000	-	83	91	-	98	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	75	90	-	94	2	-	-	-	-	-	-	-	-	-	-	-	-
Argentina	2000	-	92	-	-	89	7	-	61	-	-	50	27	-	95	-	-	94	5
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	99	-	-	98	2
Armenia	2000	**30**	89	30	76	88	9	-	75	44	-	72	21	-	97	21	-	97	2
	2017	**86**	>99	86	90	99	<1	-	>99	75	-	98	2	-	99	93	-	>99	<1
Aruba	2000	-	93	-	-	91	3	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Australia	2000	-	96	90	-	83	16	-	87	-	-	59	40	**98**	98	-	>99	88	12
	2017	-	97	96	-	91	9	-	89	-	-	84	16	**99**	99	-	>99	92	8
Austria	2000	**98**	>99	99	98	-	-	-	>99	>99	-	-	-	-	>99	99	-	-	-
	2017	**99**	>99	99	>99	-	-	-	>99	>99	-	-	-	-	>99	99	-	-	-
Azerbaijan	2000	**50**	59	82	50	49	33	-	37	-	-	19	47	-	80	-	-	78	18
	2017	**74**	74	94	88	86	8	-	50	-	-	70	17	-	93	-	-	98	1
Bahamas	2000	-	97	98	-	96	2	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	98	99	-	97	2	-	-	-	-	-	-	-	-	-	-	-	-
Bahrain	2000	**99**	99	>99	99	97	2	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**99**	99	>99	>99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangladesh	2000	**56**	64	-	56	7	89	**59**	60	-	59	<1	95	**45**	77	-	45	30	68
	2017	**55**	78	-	55	15	84	**61**	76	-	61	3	96	**45**	82	-	45	37	62
Barbados	2000	-	98	89	-	97	2	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	98	89	-	99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	2000	**81**	81	-	>99	80	20	-	54	-	-	48	51	-	92	-	-	94	6
	2017	**95**	95	-	97	93	7	-	94	-	-	75	24	-	95	-	-	98	2
Belgium	2000	**>99**	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	**>99**	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Belize	2000	-	85	-	-	64	24	-	81	-	-	52	34	-	89	-	-	78	13
	2017	-	96	-	-	86	13	-	95	-	-	78	21	-	98	-	-	95	5
Benin	2000	-	41	-	-	42	26	-	23	-	-	26	34	-	68	-	-	67	13
	2017	-	26	-	-	40	37	-	12	-	-	27	45	-	43	-	-	54	27
Bermuda	2000	-	>99	-	-	>99	<1	-	-	-	-	-	-	-	>99	-	-	>99	<1
	2017	-	>99	-	-	>99	<1	-	-	-	-	-	-	-	>99	-	-	>99	<1
Bhutan	2000	**29**	68	74	29	81	3	**22**	67	67	22	75	3	**49**	69	92	49	98	<1
	2017	**36**	88	88	36	>99	<1	**28**	83	86	28	>99	<1	**49**	96	93	49	>99	<1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
Bolivia (Plurinational State of)	2000	8 340	62	**79**	<1	7	13	1	**54**	<1	12	33	1	**95**	<1	4	<1	0
	2017	11 052	69	**93**	<1	2	5		**78**	<1	4	18		**>99**	<1	<1	<1	
Bosnia and Herzegovina	2000	3 767	42	**97**	1	1	<1	-0	**96**	1	2	<1	0	**99**	<1	<1	<1	-0
	2017	3 507	48	**96**	4	<1	<1		**97**	3	<1	<1		**95**	5	<1	<1	
Botswana	2000	1 728	53	**75**	20	2	3	1	**54**	38	3	6	1	**94**	6	<1	<1	0
	2017	2 292	69	**90**	7	2	1		**76**	18	2	4		**97**	1	1	<1	
Brazil	2000	175 288	81	**94**	<1	5	<1	0	**74**	2	20	3	1	**98**	<1	1	<1	0
	2017	209 288	86	**98**	<1	2	-		**90**	2	8	-		**>99**	<1	<1	<1	
British Virgin Islands	2000	21	42	**95**	<1	5	<1	0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	31	47	**>99**	<1	<1	<1		**-**	-	-	-		**-**	-	-	-	
Brunei Darussalam	2000	333	71	**>99**	<1	<1	<1	0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	429	77	**>99**	<1	<1	<1		**-**	-	-	-		**-**	-	-	-	
Bulgaria	2000	7 998	69	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	-0
	2017	7 085	75	**>99**	<1	<1	-		**98**	<1	2	-		**>99**	<1	<1	<1	
Burkina Faso	2000	11 608	18	**55**	14	25	6	-0	**51**	13	28	8	-1	**74**	16	10	<1	0
	2017	19 193	29	**48**	28	23	1		**35**	33	31	2		**80**	15	5	<1	
Burundi	2000	6 401	8	**51**	19	15	15	1	**48**	21	15	16	1	**82**	6	4	8	0
	2017	10 864	13	**61**	20	15	5		**57**	21	17	5		**90**	8	2	<1	
Cabo Verde	2000	435	53	**79**	11	10	<1	0	**70**	17	12	<1	0	**86**	6	7	<1	0
	2017	546	65	**87**	9	4	<1		**76**	13	11	<1		**93**	7	<1	<1	
Cambodia	2000	12 152	19	**52**	<1	21	26	2	**47**	<1	24	29	2	**76**	<1	11	14	1
	2017	16 005	23	**79**	<1	10	11		**73**	<1	13	14		**97**	1	<1	<1	
Cameroon	2000	15 274	46	**59**	5	26	9	0	**38**	5	40	17	0	**85**	5	10	<1	-0
	2017	24 054	56	**60**	16	16	7		**39**	16	31	15		**77**	17	5	1	
Canada	2000	30 736	79	**>99**	<1	<1	<1	0	**98**	<1	2	<1	0	**>99**	<1	<1	<1	0
	2017	36 624	81	**>99**	<1	<1	<1		**99**	<1	1	<1		**>99**	<1	<1	<1	
Caribbean Netherlands	2000	14	75	**>99**	<1	<1	<1	-	**-**	-	-	-	-	**-**	-	-	-	-
	2017	25	75	**-**	-	-	-		**-**	-	-	-		**-**	-	-	-	
Cayman Islands	2000	42	100	**-**	-	-	-	-	**-**	-	-	-	-	**-**	-	-	-	-
	2017	62	100	**-**	-	-	-		**-**	-	-	-		**-**	-	-	-	
Central African Republic	2000	3 755	38	**58**	7	27	7	-	**44**	8	37	11	-	**82**	5	11	1	-
	2017	4 659	41	**-**	-	-	-		**-**	-	-	-		**-**	-	-	-	
Chad	2000	8 343	22	**41**	9	42	7	-0	**32**	11	48	9	-0	**76**	2	21	<1	-0
	2017	14 900	23	**39**	17	39	6		**29**	17	47	7		**70**	17	12	1	
Channel Islands	2000	149	30	**-**	-	-	-	-	**-**	-	-	-	-	**-**	-	-	-	-
	2017	165	31	**94**	<1	6	<1		**-**	-	-	-		**-**	-	-	-	
Chile	2000	15 263	86	**96**	<1	4	-	0	**75**	<1	25	-	1	**>99**	<1	<1	<1	0
	2017	18 055	87	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
China	2000	1 283	36	**80**	<1	16	3	1	**70**	<1	25	4	1	**98**	<1	<1	<1	-0
	2017	1 409	58	**93**	<1	6	<1		**86**	2	12	<1		**98**	<1	2	<1	
China, Hong Kong Special Administrative	2000	6 664	100	**99**	<1	1	<1	0	**-**	-	-	-	-	**99**	<1	1	<1	0
	2017	7 365	100	**>99**	<1	<1	<1		**-**	-	-	-		**>99**	<1	<1	<1	
China, Macao Special Administrative Region	2000	428	100	**>99**	<1	<1	<1	0	**-**	-	-	-	-	**>99**	<1	<1	<1	0
	2017	623	100	**>99**	<1	<1	<1		**-**	-	-	-		**>99**	<1	<1	<1	
Colombia	2000	40 404	74	**91**	<1	5	4	0	**71**	<1	15	13	1	**98**	<1	2	<1	0
	2017	49 066	80	**97**	<1	<1	2		**86**	<1	4	9		**>99**	<1	<1	<1	
Comoros	2000	542	28	**91**	2	6	2	-1	**91**	2	5	2	-1	**90**	2	8	<1	-0
	2017	814	29	**80**	11	8	<1		**77**	12	11	<1		**88**	9	2	<1	
Congo	2000	3 226	59	**57**	10	25	8	1	**18**	9	53	20	2	**85**	10	5	<1	0
	2017	5 261	66	**73**	10	10	6		**46**	11	24	19		**87**	10	3	<1	
Cook Islands	2000	18	65	**>99**	<1	<1	<1	-0	**-**	-	-	-	-	**-**	-	-	-	-
	2017	17	75	**>99**	<1	<1	<1		**-**	-	-	-		**-**	-	-	-	

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	-	72	-	-	75	5	-	40	-	-	47	8	-	91	85	-	92	3
	2017	-	92	-	-	71	22	-	76	-	-	33	45	-	99	79	-	88	12
Bosnia and Herzegovina	2000	**87**	92	87	91	85	13	-	87	86	-	77	21	-	97	90	-	96	3
	2017	**89**	91	89	99	95	5	-	92	88	-	93	7	-	90	90	-	98	2
Botswana	2000	-	59	-	-	89	6	-	31	-	-	77	14	**84**	84	-	84	>99	<1
	2017	-	79	-	-	90	6	-	47	-	-	77	18	**83**	93	-	83	97	1
Brazil	2000	-	84	86	-	86	8	-	46	64	-	51	26	**91**	93	91	97	95	4
	2017	-	98	90	-	97	1	-	90	76	-	83	9	**92**	>99	92	98	>99	<1
British Virgin Islands	2000	-	93	-	-	91	4	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brunei Darussalam	2000	-	>99	-	-	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	>99	-	-	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Bulgaria	2000	**97**	>99	97	99	96	4	-	>99	-	-	89	10	-	>99	-	-	98	2
	2017	**97**	97	98	98	>99	<1	-	92	-	-	98	<1	-	99	-	-	>99	<1
Burkina Faso	2000	-	2	49	-	21	47	-	<1	48	-	8	56	-	10	54	-	82	8
	2017	-	18	53	-	25	50	-	3	51	-	6	62	-	56	57	-	74	21
Burundi	2000	-	4	-	-	14	56	-	<1	-	-	9	60	-	43	<1	-	77	12
	2017	-	10	-	-	36	45	-	3	-	-	28	50	-	57	<1	-	89	8
Cabo Verde	2000	-	60	-	-	70	20	-	52	-	-	62	26	-	68	-	-	77	15
	2017	-	84	-	-	89	8	-	76	-	-	75	14	-	89	-	-	96	4
Cambodia	2000	**17**	37	-	17	6	46	**11**	30	-	11	<1	47	**43**	70	-	43	32	44
	2017	**26**	61	-	26	26	53	**17**	57	-	17	11	62	**57**	76	-	57	77	21
Cameroon	2000	-	8	-	-	39	25	-	4	-	-	12	31	-	14	-	-	71	18
	2017	-	31	-	-	40	37	-	6	-	-	13	41	-	51	-	-	61	33
Canada	2000	**98**	98	-	99	>99	<1	-	96	-	-	98	<1	-	99	-	-	>99	<1
	2017	**99**	99	-	>99	>99	<1	-	98	-	-	99	<1	-	>99	-	-	>99	<1
Caribbean Netherlands	2000	-	85	-	-	70	29	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cayman Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central African Republic	2000	-	8	38	-	21	44	-	3	22	-	4	48	-	16	66	-	49	38
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chad	2000	-	15	-	-	17	33	-	3	-	-	7	36	-	59	-	-	55	23
	2017	-	9	-	-	19	36	-	1	-	-	9	37	-	35	-	-	53	34
Channel Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**92**	92	-	94	90	4	-	-	-	-	-	-	-	-	-	-	-	-
Chile	2000	**92**	92	95	95	94	2	-	55	-	-	65	10	**98**	98	99	98	99	<1
	2017	**99**	>99	>99	99	>99	<1	-	97	-	-	99	1	**99**	>99	>99	99	>99	<1
China	2000	-	65	77	-	51	30	-	46	65	-	31	40	**93**	98	97	93	87	12
	2017	-	92	90	-	76	18	-	86	81	-	54	34	**92**	96	96	92	92	6
China, Hong Kong Special Administrative	2000	**79**	98	-	79	97	1	-	-	-	-	-	-	**79**	98	-	79	97	1
	2017	**>99**	>99	-	>99	>99	<1	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
China, Macao Special Administrative Region	2000	**53**	>99	>99	53	>99	<1	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1
	2017	**>99**	>99	>99	>99	>99	<1	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1
Colombia	2000	**68**	90	73	75	85	6	**33**	68	-	33	53	18	**81**	98	81	90	96	2
	2017	**73**	96	76	81	89	9	**40**	82	-	40	62	25	**81**	>99	81	92	95	5
Comoros	2000	-	66	-	-	48	44	-	66	-	-	38	55	-	67	-	-	75	16
	2017	-	65	-	-	59	32	-	63	-	-	53	36	-	71	-	-	76	21
Congo	2000	**27**	27	-	38	54	13	**7**	7	-	10	9	18	**42**	42	-	57	85	10
	2017	**45**	52	-	46	52	32	**19**	19	-	21	10	46	**59**	69	-	59	73	25
Cook Islands	2000	-	85	-	-	69	31	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	87	-	-	75	25	-	-	-	-	-	-	-	-	-	-	-	-

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
Costa Rica	2000	3 925	59	94	<1	2	3	0	87	<1	5	7	1	>99	<1	<1	<1	0
	2017	4 906	79	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Côte d'Ivoire	2000	16 687	43	71	9	15	5	0	56	14	21	10	0	91	3	6	<1	-0
	2017	24 295	50	73	6	15	6		58	10	23	9		88	3	7	2	
Croatia	2000	4 428	53	98	<1	1	<1	0	97	<1	2	<1	0	>99	<1	<1	<1	-0
	2017	4 189	57	>99	<1	<1	-		>99	<1	<1	-		>99	<1	<1	<1	
Cuba	2000	11 151	75	93	2	4	<1	0	80	4	14	2	1	97	1	1	<1	-0
	2017	11 485	77	95	2	2	<1		90	4	4	2		97	1	2	<1	
Curaçao	2000	132	91	99	<1	1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	161	89	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Cyprus	2000	943	69	>99	<1	<1	<1	-0	>99	<1	<1	<1	-0	>99	<1	<1	<1	-0
	2017	1 180	67	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Czech Republic	2000	10 290	74	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	10 618	74	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Democratic People's Republic of Korea	2000	22 929	59	>99	<1	<1	-	-0	>99	<1	<1	-	-1	>99	<1	<1	<1	-0
	2017	25 491	62	95	<1	5	<1		90	<1	9	<1		97	<1	2	<1	
Democratic Republic of the Congo	2000	47 076	35	34	11	37	18	1	16	9	49	26	0	68	14	15	3	0
	2017	81 340	44	43	12	36	9		23	10	53	15		69	15	14	2	
Denmark	2000	5 341	85	>99	<1	<1	<1	-0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	5 734	88	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Djibouti	2000	718	77	76	15	9	<1	0	55	14	29	2	-0	82	15	3	<1	0
	2017	957	78	76	15	7	2		47	12	31	10		84	15	<1	<1	
Dominica	2000	70	65	93	<1	7	<1	-	-	-	-	-	-	-	-	-	-	-
	2017	74	70	-	-	-	-		-	-	-	-		-	-	-	-	
Dominican Republic	2000	8 563	62	90	4	4	2	0	79	8	7	5	1	96	2	1	<1	0
	2017	10 767	80	97	<1	2	1		90	2	2	6		98	<1	1	<1	
Ecuador	2000	12 629	60	82	<1	9	8	1	70	1	9	19	1	90	<1	9	<1	1
	2017	16 625	64	94	<1	3	3		83	<1	8	8		>99	<1	<1	<1	
Egypt	2000	69 906	43	98	<1	1	<1	0	97	<1	2	<1	0	>99	<1	<1	<1	0
	2017	97 553	43	>99	<1	<1	<1		99	<1	<1	<1		>99	<1	<1	<1	
El Salvador	2000	5 868	59	78	6	10	5	1	56	12	21	12	2	93	3	3	<1	0
	2017	6 378	71	97	<1	<1	2		92	<1	<1	7		>99	<1	<1	<1	
Equatorial Guinea	2000	614	49	51	2	15	32	1	39	2	6	54	-0	64	3	24	9	1
	2017	1 268	72	65	3	26	6		31	1	46	22		78	4	18	<1	
Eritrea	2000	3 393	27	47	22	28	4	-	31	27	37	5	-	91	7	2	<1	-
	2017	5 069	39	-	-	-	-		-	-	-	-		-	-	-	-	
Estonia	2000	1 399	69	>99	<1	<1	<1	0	97	<1	3	<1	0	>99	<1	<1	<1	0
	2017	1 310	69	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Eswatini	2000	1 061	23	53	5	16	27	1	43	5	18	34	1	87	2	6	5	1
	2017	1 367	24	69	9	9	13		60	12	11	17		97	<1	1	1	
Ethiopia	2000	66 537	15	19	6	42	33	1	9	5	48	38	1	77	11	7	5	0
	2017	104 957	20	41	28	22	9		31	31	28	11		80	17	2	1	
Falkland Islands (Malvinas)	2000	3	68	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0
	2017	3	77	95	<1	5	<1		78	<1	22	<1		>99	<1	<1	<1	
Faroe Islands	2000	47	36	>99	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	49	42	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Fiji	2000	811	48	95	<1	3	2	-0	91	<1	5	4	-0	99	<1	1	<1	-0
	2017	906	56	94	<1	4	2		89	<1	7	4		98	<1	2	<1	
Finland	2000	5 188	82	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	5 523	85	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
France	2000	59 608	76	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	64 980	80	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	

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	87	94	-	87	90	4	74	87	-	74	81	7	96	>99	-	96	97	2
	2017	94	>99	-	94	>99	<1	84	99	-	84	>99	<1	96	>99	-	96	>99	<1
Côte d'Ivoire	2000	34	41	59	44	45	35	16	16	60	27	25	45	57	73	57	66	72	22
	2017	37	46	57	45	41	38	18	18	59	26	20	47	55	73	55	64	62	28
Croatia	2000	89	89	-	95	84	14	-	80	-	-	72	25	-	97	-	-	95	5
	2017	90	97	-	90	>99	<1	-	97	-	-	>99	<1	-	97	-	-	>99	<1
Cuba	2000	-	80	-	-	74	21	-	55	-	-	48	36	-	87	-	-	82	16
	2017	-	94	-	-	80	18	-	86	-	-	58	37	-	96	-	-	86	12
Curaçao	2000	-	99	-	-	99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	>99	-	-	99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	2000	95	>99	-	95	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Czech Republic	2000	96	96	-	98	96	3	-	94	-	-	91	8	-	97	>99	-	98	2
	2017	98	98	-	>99	>99	<1	-	98	-	-	>99	<1	-	98	>99	-	>99	<1
Democratic People's Republic of Korea	2000	69	79	99	76	91	9	55	79	99	55	83	17	79	79	99	90	97	3
	2017	67	75	94	74	68	28	50	71	89	50	54	37	77	77	97	89	76	22
Democratic Republic of the Congo	2000	-	14	-	-	23	21	-	<1	-	-	3	21	-	38	-	-	60	21
	2017	-	8	-	-	32	23	-	<1	-	-	8	24	-	18	-	-	63	21
Denmark	2000	94	97	-	94	>99	<1	-	98	-	-	>99	<1	-	97	-	-	>99	<1
	2017	97	97	-	98	>99	<1	-	98	-	-	>99	<1	-	97	-	-	>99	<1
Djibouti	2000	-	45	-	-	75	15	-	5	-	-	29	40	-	57	-	-	90	7
	2017	-	46	-	-	82	9	-	4	-	-	25	34	-	58	-	-	98	1
Dominica	2000	-	66	51	-	92	2	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dominican Republic	2000	-	74	-	-	76	18	-	61	-	-	58	30	-	83	-	-	87	12
	2017	-	95	-	-	81	17	-	79	-	-	66	26	-	98	-	-	84	14
Ecuador	2000	66	77	79	66	72	12	50	64	64	50	54	17	77	86	88	77	83	8
	2017	75	92	89	75	88	6	58	82	75	58	70	14	85	98	97	85	98	2
Egypt	2000	-	90	62	-	89	9	-	84	62	-	82	16	-	98	63	-	99	<1
	2017	-	98	71	-	98	1	-	98	67	-	98	1	-	99	77	-	99	1
El Salvador	2000	-	72	72	-	71	13	-	47	52	-	44	23	86	89	86	96	90	6
	2017	-	91	72	-	90	8	-	79	60	-	78	15	77	97	77	>99	95	5
Equatorial Guinea	2000	-	10	-	-	11	42	-	3	-	-	3	37	-	18	-	-	19	47
	2017	-	17	-	-	41	27	-	2	-	-	22	10	-	23	-	-	48	34
Eritrea	2000	-	27	-	-	28	41	-	9	-	-	14	45	-	75	-	-	67	31
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estonia	2000	93	93	>99	97	86	13	-	82	-	-	66	32	-	98	-	-	96	4
	2017	93	97	>99	93	97	3	-	92	-	-	91	8	-	99	-	-	>99	<1
Eswatini	2000	-	28	-	-	45	12	-	16	-	-	34	14	67	67	89	81	82	7
	2017	-	50	-	-	61	17	-	36	-	-	51	22	89	93	98	89	95	3
Ethiopia	2000	5	5	18	7	17	8	<1	<1	12	2	5	8	31	31	48	35	83	5
	2017	11	18	56	14	36	33	5	5	56	8	23	39	38	72	53	38	87	10
Falkland Islands (Malvinas)	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	-	>99	<1
	2017	-	93	-	-	90	5	-	67	-	-	56	22	-	>99	-	-	>99	<1
Faroe Islands	2000	-	>99	-	-	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	>99	-	-	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Fiji	2000	-	78	95	-	-	-	-	60	-	-	-	-	-	97	-	-	-	-
	2017	-	69	94	-	87	7	-	35	-	-	74	14	-	96	-	-	97	<1
Finland	2000	92	>99	-	92	99	1	-	98	-	-	94	6	-	>99	-	-	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	98	-	-	>99	<1	-	>99	-	-	>99	<1
France	2000	97	>99	-	97	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	98	>99	-	98	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
French Guiana	2000	163	79	92	<1	8	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	283	85	94	<1	6	<1		-	-	-	-		-	-	-	-	
French Polynesia	2000	237	56	>99	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	283	62	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Gabon	2000	1 231	79	80	4	5	11	0	37	4	17	42	1	91	4	2	3	-0
	2017	2 025	89	86	8	3	3		55	13	7	25		90	7	2	<1	
Gambia	2000	1 232	48	75	10	15	<1	0	68	11	21	<1	-0	83	8	9	<1	0
	2017	2 101	61	78	9	13	<1		63	17	20	<1		87	4	9	<1	
Georgia	2000	4 722	53	93	<1	6	<1	0	87	2	11	<1	1	98	<1	1	<1	0
	2017	3 912	58	98	<1	2	<1		96	<1	4	<1		>99	<1	<1	<1	
Germany	2000	81 488	75	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	82 114	77	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Ghana	2000	18 939	44	64	9	9	17	1	54	8	10	28	1	78	11	8	4	1
	2017	28 834	55	81	8	4	6		68	13	6	13		93	5	2	<1	
Gibraltar	2000	31	100	>99	<1	<1	<1	0	-	-	-	-	-	>99	<1	<1	<1	0
	2017	35	100	>99	<1	<1	<1		-	-	-	-		>99	<1	<1	<1	
Greece	2000	11 142	73	>99	<1	<1	<1	0	99	<1	1	<1	0	>99	<1	<1	<1	0
	2017	11 160	79	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Greenland	2000	56	82	>99	<1	<1	<1	-0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	56	87	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Grenada	2000	102	36	93	1	6	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	108	36	96	1	<1	3		-	-	-	-		-	-	-	-	
Guadeloupe	2000	425	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	450	98	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Guam	2000	155	93	>99	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	164	95	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Guatemala	2000	11 651	45	86	<1	10	3	0	78	<1	15	6	1	95	<1	5	<1	0
	2017	16 914	51	94	1	3	2		90	2	5	3		98	<1	2	<1	
Guinea	2000	8 809	31	63	1	20	16	-0	53	<1	24	23	-0	84	2	13	<1	0
	2017	12 717	36	62	18	9	11		49	21	13	18		86	12	2	<1	
Guinea-Bissau	2000	1 243	36	53	4	40	3	1	41	4	51	4	1	74	4	21	<1	1
	2017	1 861	43	67	7	26	<1		53	7	39	<1		84	7	9	<1	
Guyana	2000	753	29	88	2	5	5	0	86	2	6	6	0	93	2	4	<1	0
	2017	778	27	96	1	1	2		94	2	2	3		>99	<1	<1	<1	
Haiti	2000	8 549	36	56	7	21	16	1	40	9	28	22	0	85	4	7	4	-0
	2017	10 981	54	65	10	25	<1		43	13	45	<1		85	7	8	<1	
Holy See	2000	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	1	100	-	-	-	-		-	-	-	-		-	-	-	-	
Honduras	2000	6 524	45	85	<1	11	4	1	76	<1	17	7	1	95	<1	4	<1	0
	2017	9 265	56	95	<1	5	<1		89	<1	10	<1		>99	<1	<1	<1	
Hungary	2000	10 221	65	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	9 722	71	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Iceland	2000	280	92	>99	<1	<1	<1	-0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	335	94	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
India	2000	1 053	28	79	5	14	1	1	74	6	18	2	1	91	3	5	<1	0
	2017	1 339	34	93	<1	6	<1		91	<1	7	<1		96	<1	3	<1	
Indonesia	2000	211 540	42	76	<1	20	4	1	66	<1	28	6	1	90	<1	9	<1	0
	2017	263 991	55	89	1	8	2		82	2	13	3		95	1	3	<1	
Iran (Islamic Republic of)	2000	66 132	64	95	2	3	<1	0	90	4	6	<1	-0	98	1	<1	<1	-0
	2017	81 163	74	95	2	3	<1		89	4	7	<1		97	1	1	<1	
Iraq	2000	23 565	68	81	<1	7	12	1	53	3	13	32	2	94	<1	4	2	0
	2017	38 275	70	97	1	<1	1		91	4	<1	4		99	<1	<1	<1	

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 Guiana	2000	89	89	-	92	85	7	-	-	-	-	-	-	-	-	-	-	-	-
	2017	91	91	-	94	88	6	-	-	-	-	-	-	-	-	-	-	-	-
French Polynesia	2000	-	95	-	-	90	10	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	99	-	-	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Gabon	2000	-	41	-	-	78	5	-	8	-	-	23	18	-	50	-	-	93	1
	2017	-	70	-	-	87	7	-	23	-	-	24	44	-	76	-	-	94	2
Gambia	2000	-	22	-	-	55	30	-	4	-	-	27	52	41	41	-	80	85	6
	2017	-	44	-	-	72	15	-	8	-	-	53	27	68	68	-	80	84	7
Georgia	2000	75	83	-	75	69	25	-	69	-	-	47	41	-	96	-	-	88	10
	2017	80	98	-	84	80	18	-	96	-	-	59	37	-	>99	-	-	96	4
Germany	2000	>99	>99	>99	>99	-	-	-	>99	-	-	-	-	-	>99	-	-	-	-
	2017	>99	>99	>99	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Ghana	2000	13	13	64	44	43	31	<1	<1	56	34	14	48	30	30	76	57	80	9
	2017	36	36	78	55	33	57	11	11	72	45	24	57	57	57	83	63	40	58
Gibraltar	2000	>99	>99	-	>99	>99	<1	-	-	-	-	-	-	>99	>99	-	>99	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	-	-	-	-	-	>99	>99	-	>99	>99	<1
Greece	2000	99	99	-	>99	>99	<1	-	97	-	-	97	1	-	>99	-	-	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Greenland	2000	94	97	-	94	>99	<1	-	98	-	-	>99	<1	-	97	-	-	>99	<1
	2017	97	97	-	98	>99	<1	-	98	-	-	>99	<1	-	97	-	-	>99	<1
Grenada	2000	79	79	90	85	92	3	-	-	-	-	-	-	-	-	-	-	-	-
	2017	87	90	92	87	92	4	-	-	-	-	-	-	-	-	-	-	-	-
Guadeloupe	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	97	>99	-	97	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Guam	2000	>99	>99	-	>99	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	>99	>99	-	>99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guatemala	2000	47	72	50	51	76	10	39	58	46	39	64	15	55	88	55	65	91	4
	2017	56	87	62	57	80	15	46	79	58	46	68	24	66	95	66	67	92	6
Guinea	2000	-	7	-	-	21	42	-	<1	-	-	<1	54	-	24	-	-	69	17
	2017	-	39	-	-	28	52	-	20	-	-	7	62	-	73	-	-	65	33
Guinea-Bissau	2000	-	15	-	-	20	37	-	4	-	-	6	39	-	35	-	-	46	32
	2017	-	30	-	-	-	-	-	12	-	-	-	-	-	54	-	-	-	-
Guyana	2000	-	75	-	-	68	22	-	74	-	-	64	24	-	78	95	-	79	16
	2017	-	94	-	-	65	31	-	92	-	-	58	38	-	>99	>99	-	87	13
Haiti	2000	-	19	52	-	43	20	-	10	39	-	30	19	-	35	75	-	67	22
	2017	-	10	63	-	23	52	-	8	44	-	25	31	-	11	78	-	21	71
Holy See	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras	2000	-	82	56	-	78	7	16	72	59	16	65	11	-	93	52	-	93	3
	2017	-	88	60	-	90	5	19	78	68	19	82	7	-	96	54	-	96	3
Hungary	2000	51	94	>99	51	94	6	-	91	>99	-	91	9	-	96	>99	-	96	4
	2017	90	>99	>99	90	>99	<1	-	>99	>99	-	>99	<1	-	>99	>99	-	>99	<1
Iceland	2000	90	>99	-	90	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
India	2000	-	33	70	-	44	40	20	20	63	48	33	47	-	68	88	-	74	21
	2017	-	63	82	-	44	50	56	56	79	67	32	60	-	77	87	-	68	28
Indonesia	2000	-	61	72	-	20	56	-	47	61	-	6	60	-	80	88	-	40	50
	2017	-	54	87	-	18	72	-	54	78	-	13	71	-	54	95	-	23	74
Iran (Islamic Republic of)	2000	91	91	-	92	92	5	83	83	-	85	86	8	95	95	-	96	96	4
	2017	92	92	-	92	92	5	83	83	-	84	82	11	95	95	-	95	96	3
Iraq	2000	50	75	50	50	77	4	27	34	27	27	41	14	61	94	61	61	94	<1
	2017	59	82	74	59	80	18	46	75	66	46	68	27	64	86	78	64	84	15

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
Ireland	2000	3 849	59	**97**	<1	3	<1	0	**97**	<1	3	<1	0	**97**	<1	3	<1	-0
	2017	4 762	63	**97**	<1	3	<1		**98**	<1	2	<1		**97**	<1	3	<1	
Isle of Man	2000	73	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	84	52	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Israel	2000	6 014	91	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0
	2017	8 322	92	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Italy	2000	57 294	67	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	-0
	2017	59 360	70	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Jamaica	2000	2 657	52	**93**	<1	3	3	-0	**88**	1	5	6	-0	**98**	<1	2	<1	-0
	2017	2 890	55	**91**	5	2	2		**85**	8	3	4		**96**	3	1	<1	
Japan	2000	127 534	79	**98**	<1	2	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	127 484	92	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Jordan	2000	5 103	78	**>99**	<1	<1	<1	-0	**98**	<1	2	<1	-0	**>99**	<1	<1	<1	-0
	2017	9 702	91	**99**	<1	<1	<1		**98**	<1	2	<1		**>99**	<1	<1	<1	
Kazakhstan	2000	15 057	56	**85**	6	7	2	1	**72**	11	13	4	1	**94**	3	3	<1	0
	2017	18 204	57	**96**	2	3	<1		**92**	1	6	<1		**98**	2	<1	<1	
Kenya	2000	31 450	20	**47**	6	16	30	1	**37**	7	19	37	1	**88**	4	6	2	-0
	2017	49 700	27	**59**	9	12	20		**50**	11	15	25		**85**	4	5	6	
Kiribati	2000	84	43	**50**	<1	49	<1	1	-	-	-	-	-	-	-	-	-	-
	2017	116	53	**72**	<1	27	<1		-	-	-	-		-	-	-	-	
Kuwait	2000	2 051	99	**>99**	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	4 137	100	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Kyrgyzstan	2000	4 921	35	**81**	1	5	14	0	**73**	1	5	21	1	**95**	<1	5	<1	0
	2017	6 045	36	**87**	2	2	9		**82**	2	3	13		**97**	<1	<1	2	
Lao People's Democratic Republic	2000	5 329	22	**47**	<1	27	26	2	**38**	1	29	32	2	**77**	<1	18	5	1
	2017	6 858	34	**82**	<1	14	3		**76**	1	19	4		**94**	<1	5	<1	
Latvia	2000	2 384	68	**98**	<1	2	<1	0	**96**	<1	4	<1	0	**99**	<1	<1	<1	0
	2017	1 950	68	**99**	<1	<1	<1		**98**	<1	2	<1		**99**	<1	<1	<1	
Lebanon	2000	3 235	86	**85**	7	8	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	6 082	88	**93**	7	<1	<1		-	-	-	-		-	-	-	-	
Lesotho	2000	1 869	20	**67**	12	21	<1	0	**64**	12	24	<1	-0	**80**	13	7	<1	1
	2017	2 233	28	**69**	10	14	7		**59**	13	18	10		**93**	<1	6	<1	
Liberia	2000	2 885	44	**62**	4	18	16	1	**50**	1	23	26	1	**78**	6	12	4	0
	2017	4 732	51	**73**	8	6	13		**62**	6	6	26		**84**	10	6	<1	
Libya	2000	5 356	76	**84**	<1	16	<1	1	-	-	-	-	-	-	-	-	-	-
	2017	6 375	80	**99**	<1	1	<1		-	-	-	-		-	-	-	-	
Liechtenstein	2000	33	15	**>99**	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	38	14	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Lithuania	2000	3 502	67	**90**	<1	10	<1	0	**75**	<1	25	<1	1	**97**	<1	3	<1	0
	2017	2 890	68	**98**	<1	2	<1		**93**	<1	7	<1		**>99**	<1	<1	<1	
Luxembourg	2000	436	84	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	-0	**>99**	<1	<1	<1	0
	2017	583	91	**>99**	<1	<1	<1		**99**	<1	1	<1		**>99**	<1	<1	<1	
Madagascar	2000	15 767	27	**36**	3	21	41	1	**24**	2	24	50	1	**68**	5	12	15	1
	2017	25 571	37	**54**	1	32	13		**36**	<1	43	20		**86**	2	12	<1	
Malawi	2000	11 376	15	**53**	14	25	8	1	**47**	15	28	9	1	**86**	7	6	<1	-0
	2017	18 622	17	**69**	20	9	2		**65**	22	10	3		**86**	10	4	<1	
Malaysia	2000	23 186	62	**97**	<1	1	<1	-0	**94**	<1	3	2	-0	**>99**	<1	<1	<1	-0
	2017	31 624	75	**97**	<1	3	-		**89**	<1	10	-		**>99**	<1	<1	<1	
Maldives	2000	280	28	**92**	<1	7	<1	0	**90**	<1	9	<1	1	**98**	<1	2	<1	0
	2017	436	39	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**98**	<1	2	<1	
Mali	2000	10 968	28	**49**	4	43	4	2	**38**	5	52	6	2	**76**	2	20	1	1
	2017	18 542	42	**78**	5	15	2		**68**	4	24	3		**92**	5	3	<1	

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
Ireland	2000	**93**	97	-	93	97	<1	-	97	-	-	97	<1	-	97	-	-	97	<1
	2017	**97**	97	-	97	97	<1	-	98	-	-	98	<1	-	97	-	-	97	<1
Isle of Man	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**97**	97	-	>99	98	<1	-	-	-	-	-	-	-	-	-	-	-	-
Israel	2000	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2017	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
Italy	2000	**86**	98	86	97	-	-	-	98	-	-	-	-	-	98	-	-	-	-
	2017	**95**	97	95	95	-	-	-	97	-	-	-	-	-	98	-	-	-	-
Jamaica	2000	-	84	65	-	78	16	-	73	-	-	59	30	-	93	74	-	95	3
	2017	-	84	46	-	84	12	-	72	-	-	72	21	-	93	52	-	93	5
Japan	2000	**98**	98	-	98	97	1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**98**	98	-	>99	98	1	-	-	-	-	-	-	-	-	-	-	-	-
Jordan	2000	**94**	95	94	98	96	4	-	89	91	-	85	13	-	97	95	-	98	1
	2017	**94**	95	94	98	88	11	-	89	90	-	79	19	-	96	94	-	89	10
Kazakhstan	2000	**58**	58	-	88	63	28	-	23	-	-	29	55	-	84	-	-	90	6
	2017	**90**	90	-	97	81	17	-	84	-	-	63	31	-	94	-	-	94	6
Kenya	2000	-	25	37	-	31	22	-	15	31	-	18	26	**62**	65	62	78	84	8
	2017	-	24	57	-	32	36	-	15	51	-	21	39	**50**	50	72	75	62	27
Kiribati	2000	-	43	-	-	29	22	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	61	-	-	24	49	-	-	-	-	-	-	-	-	-	-	-	-
Kuwait	2000	**>99**	>99	>99	>99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**>99**	>99	>99	>99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	2000	**46**	46	-	72	39	43	**28**	28	-	64	21	53	**80**	80	-	88	72	24
	2017	**68**	68	-	83	89	<1	**54**	54	-	76	84	<1	**94**	94	-	96	98	<1
Lao People's Democratic Republic	2000	**5**	8	46	9	12	36	**<1**	<1	37	5	5	34	**21**	33	76	21	38	40
	2017	**16**	73	80	16	49	33	**11**	61	73	11	32	45	**26**	94	93	26	82	12
Latvia	2000	**93**	93	-	97	83	16	-	82	-	-	59	37	-	98	-	-	94	6
	2017	**95**	95	-	>99	92	7	-	89	-	-	81	17	-	98	-	-	97	3
Lebanon	2000	**44**	83	65	44	83	9	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**48**	90	91	48	87	13	-	-	-	-	-	-	-	-	-	-	-	-
Lesotho	2000	-	9	-	-	63	17	-	1	-	-	58	18	-	39	-	-	84	9
	2017	-	25	-	-	63	15	-	6	-	-	54	19	-	74	-	-	89	5
Liberia	2000	-	7	-	-	13	53	-	6	-	-	3	47	-	9	-	-	25	60
	2017	-	14	-	-	5	76	-	5	-	-	<1	68	-	22	-	-	9	85
Libya	2000	-	74	-	-	51	33	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	87	-	-	40	59	-	-	-	-	-	-	-	-	-	-	-	-
Liechtenstein	2000	**>99**	>99	-	>99	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**>99**	>99	-	>99	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	2000	**69**	79	-	69	80	10	-	51	-	-	52	23	-	92	-	-	94	3
	2017	**92**	94	-	92	95	3	-	85	-	-	85	8	-	>99	-	-	>99	<1
Luxembourg	2000	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2017	**>99**	>99	-	>99	>99	<1	**97**	97	-	99	98	1	**>99**	>99	-	>99	>99	<1
Madagascar	2000	-	6	30	-	24	14	-	1	20	-	11	15	-	17	54	-	59	14
	2017	-	27	42	-	36	20	-	16	29	-	16	21	-	47	66	-	70	18
Malawi	2000	-	7	50	-	22	45	-	2	51	-	13	50	-	35	42	-	78	15
	2017	-	15	67	-	22	67	-	8	71	-	10	78	-	51	43	-	81	14
Malaysia	2000	**93**	93	-	97	93	4	-	86	-	-	85	10	-	97	-	-	98	1
	2017	**93**	93	-	97	95	3	-	81	-	-	81	9	-	97	-	-	99	<1
Maldives	2000	-	89	68	-	23	70	-	86	61	-	3	87	-	97	86	-	75	24
	2017	-	97	75	-	48	52	-	96	67	-	15	85	-	98	86	-	98	<1
Mali	2000	-	20	45	-	21	31	-	10	39	-	7	36	-	44	59	-	58	21
	2017	-	33	67	-	45	37	-	17	62	-	20	53	-	55	74	-	82	16

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
Malta	2000	397	92	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	431	95	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Marshall Islands	2000	52	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	53	77	88	11	<1	<1		94	5	<1	<1		87	13	<1	<1	
Martinique	2000	387	90	>99	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	385	89	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Mauritania	2000	2 709	38	41	18	34	7	2	25	14	52	10	1	67	26	6	1	1
	2017	4 420	53	71	14	16	<1		50	18	32	<1		89	9	1	<1	
Mauritius	2000	1 185	43	>99	<1	<1	<1	0	99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	1 265	41	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Mayotte	2000	150	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	253	46	97	<1	<1	3		-	-	-	-		-	-	-	-	
Mexico	2000	101 720	75	89	1	7	3	1	73	3	14	9	1	94	<1	5	<1	0
	2017	129 163	80	>99	<1	<1	<1		97	<1	3	<1		>99	<1	<1	<1	
Micronesia (Federated States of)	2000	107	22	88	<1	12	-	-1	-	-	-	-	-	-	-	-	-	-
	2017	106	23	79	<1	21	-		-	-	-	-		-	-	-	-	
Monaco	2000	32	100	>99	<1	<1	<1	0	-	-	-	-	-	>99	<1	<1	<1	0
	2017	39	100	>99	<1	<1	<1		-	-	-	-		>99	<1	<1	<1	
Mongolia	2000	2 397	57	62	9	11	19	1	29	9	21	41	2	87	8	3	2	1
	2017	3 076	68	83	2	8	7		56	3	19	21		96	2	2	<1	
Montenegro	2000	614	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	629	66	97	3	<1	<1		>99	<1	<1	<1		96	4	<1	<1	
Montserrat	2000	5	2	99	<1	1	<1	-	-	-	-	-	-	-	-	-	-	-
	2017	5	9	-	-	-	-		-	-	-	-		-	-	-	-	
Morocco	2000	28 850	53	62	6	29	2	1	28	9	57	5	2	92	3	5	<1	0
	2017	35 740	62	87	4	6	3		71	8	13	8		97	2	2	<1	
Mozambique	2000	18 068	29	20	4	60	17	2	4	2	73	21	2	58	7	29	5	2
	2017	29 669	35	56	15	16	13		40	18	23	19		84	9	5	2	
Myanmar	2000	46 095	27	46	20	17	17	2	38	21	20	21	2	68	15	9	7	1
	2017	53 371	30	82	<1	9	9		77	<1	12	11		93	<1	4	3	
Namibia	2000	1 899	32	77	7	7	9	0	66	11	10	13	0	98	<1	1	<1	-0
	2017	2 534	49	83	7	4	6		69	12	7	12		96	2	<1	<1	
Nauru	2000	10	100	96	<1	4	<1	0	-	-	-	-	-	96	<1	4	<1	0
	2017	11	100	>99	<1	<1	<1		-	-	-	-		>99	<1	<1	<1	
Nepal	2000	23 741	13	80	1	15	3	1	78	1	17	3	1	93	<1	5	1	-0
	2017	29 305	19	89	3	7	2		89	3	6	2		89	3	7	1	
Netherlands	2000	15 926	77	>99	<1	<1	<1	-0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	17 036	91	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
New Caledonia	2000	213	62	95	<1	5	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	276	70	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
New Zealand	2000	3 859	86	>99	<1	<1	<1	-0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	4 706	86	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Nicaragua	2000	5 027	55	81	<1	14	4	0	63	1	26	9	-0	96	<1	4	<1	0
	2017	6 218	58	82	2	14	3		59	4	30	8		98	<1	2	<1	
Niger	2000	11 353	16	36	5	57	2	1	24	5	68	2	1	94	2	4	<1	-1
	2017	21 477	16	50	15	31	4		44	16	37	4		84	11	2	2	
Nigeria	2000	122 352	35	48	9	18	24	1	35	6	26	34	1	73	15	5	7	1
	2017	190 886	50	71	7	15	7		56	8	23	13		87	5	6	2	
Niue	2000	2	33	>99	<1	<1	<1	-0	-	-	-	-	-	-	-	-	-	-
	2017	2	44	98	<1	2	<1		-	-	-	-		-	-	-	-	
North Macedonia	2000	2 035	59	>99	<1	<1	<1	-0	99	<1	1	<1	-0	>99	<1	<1	<1	-1
	2017	2 083	58	93	6	<1	<1		97	2	1	<1		91	9	<1	<1	

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
Malta	2000	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1
Marshall Islands	2000	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
	2017	-	83	-	-	12	87	-	89	-	-	10	89	-	81	-	-	13	87
Martinique	2000	99	>99	-	99	92	7	-	-	-	-	-	-	-	-	-	-	-	-
	2017	99	>99	-	99	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Mauritania	2000	-	29	-	-	26	33	-	15	-	-	15	24	-	51	-	-	44	48
	2017	-	42	-	-	52	32	-	29	-	-	37	31	-	54	-	-	66	33
Mauritius	2000	-	>99	72	-	>99	<1	-	99	-	-	99	<1	-	>99	-	-	>99	<1
	2017	-	>99	73	-	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Mayotte	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	84	84	-	93	95	2	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	2000	39	80	70	39	84	6	-	58	59	-	63	14	-	88	74	-	91	4
	2017	43	95	69	43	96	3	-	84	60	-	88	9	-	98	72	-	98	2
Micronesia (Federated States of)	2000	-	57	72	-	37	50	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	56	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monaco	2000	>99	>99	-	>99	>99	<1	-	-	-	-	-	-	>99	>99	-	>99	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	-	-	-	-	-	>99	>99	-	>99	>99	<1
Mongolia	2000	22	22	-	67	29	41	-	1	-	-	3	35	-	38	-	-	49	46
	2017	24	24	-	81	25	60	-	8	-	-	5	54	-	31	-	-	34	63
Montenegro	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	94	96	-	94	85	15	-	>99	-	-	67	33	94	94	-	>99	94	6
Montserrat	2000	-	99	-	-	99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morocco	2000	55	55	67	61	59	9	19	19	34	31	19	19	86	86	95	87	95	<1
	2017	70	70	88	81	78	13	40	40	71	65	52	27	89	89	98	90	94	4
Mozambique	2000	-	9	-	-	19	4	-	<1	-	-	5	1	-	29	-	-	55	10
	2017	-	21	-	-	36	35	-	7	-	-	14	44	-	48	-	-	75	19
Myanmar	2000	-	28	-	-	12	54	-	19	-	-	7	52	-	51	-	-	26	58
	2017	-	55	-	-	25	57	-	44	-	-	10	66	-	80	-	-	57	36
Namibia	2000	-	43	-	-	70	14	-	24	-	-	57	20	-	82	-	-	98	<1
	2017	-	60	-	-	79	10	-	46	-	-	62	19	-	75	-	-	98	1
Nauru	2000	-	95	-	-	-	-	-	-	-	-	-	-	-	95	-	-	-	-
	2017	-	99	-	-	53	47	-	-	-	-	-	-	-	99	-	-	53	47
Nepal	2000	24	43	74	24	45	36	22	38	73	22	43	37	35	75	79	35	63	31
	2017	27	65	82	27	47	44	26	63	82	26	46	46	34	72	79	34	55	36
Netherlands	2000	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
New Caledonia	2000	86	86	-	92	89	5	-	-	-	-	-	-	-	-	-	-	-	-
	2017	97	98	-	97	99	<1	-	-	-	-	-	-	-	-	-	-	-	-
New Zealand	2000	78	>99	-	78	>99	<1	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1
	2017	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1
Nicaragua	2000	48	60	54	64	67	15	26	26	40	30	38	26	66	87	66	92	91	5
	2017	52	79	55	67	69	14	29	54	39	29	33	30	67	97	67	94	96	2
Niger	2000	-	8	28	-	21	19	-	2	22	-	9	21	-	40	60	-	86	11
	2017	-	17	49	-	33	33	-	9	45	-	23	37	-	62	67	-	83	13
Nigeria	2000	15	17	50	17	17	40	11	11	35	14	6	34	23	27	79	23	37	51
	2017	20	24	69	23	11	67	16	16	55	21	8	56	25	33	83	25	15	78
Niue	2000	98	>99	>99	98	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	97	98	98	97	87	11	-	-	-	-	-	-	-	-	-	-	-	-
North Macedonia	2000	97	97	-	>99	93	7	95	95	-	99	85	14	99	99	>99	>99	98	2
	2017	81	92	-	86	93	7	69	94	-	69	85	14	90	90	98	99	98	1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
Northern Mariana Islands	2000	69	90	**97**	<1	3	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	55	92	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Norway	2000	4 499	76	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0
	2017	5 305	82	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Oman	2000	2 268	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	4 636	84	**92**	8	<1	<1		**78**	22	<1	<1		**95**	5	<1	<1	
Pakistan	2000	138 523	33	**86**	5	4	5	0	**81**	6	5	7	0	**95**	3	1	<1	-0
	2017	197 016	36	**91**	<1	6	2		**90**	<1	6	3		**94**	<1	5	<1	
Palau	2000	19	70	**91**	<1	9	<1	1	**78**	<1	22	<1	1	**96**	<1	4	<1	0
	2017	22	79	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Panama	2000	3 030	62	**88**	<1	7	5	0	**75**	<1	14	12	1	**97**	<1	3	<1	0
	2017	4 099	67	**96**	2	1	<1		**93**	2	3	2		**98**	2	<1	<1	
Papua New Guinea	2000	5 572	13	**34**	1	26	38	0	**27**	1	29	44	0	**83**	4	11	2	0
	2017	8 251	13	**41**	2	6	51		**35**	1	6	58		**86**	4	3	7	
Paraguay	2000	5 303	55	**75**	<1	22	3	1	**53**	<1	41	7	3	**94**	<1	6	<1	0
	2017	6 811	61	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Peru	2000	25 915	73	**81**	1	11	7	1	**51**	1	23	25	1	**92**	1	7	<1	0
	2017	32 165	78	**91**	1	5	3		**76**	2	12	11		**96**	<1	3	<1	
Philippines	2000	77 992	46	**86**	4	8	3	0	**79**	4	11	5	1	**93**	3	3	<1	0
	2017	104 918	47	**94**	2	5	<1		**90**	3	7	<1		**98**	<1	1	<1	
Poland	2000	38 550	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	38 171	60	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Portugal	2000	10 355	54	**99**	<1	1	<1	0	**98**	<1	2	<1	0	**99**	<1	1	<1	0
	2017	10 330	65	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Puerto Rico	2000	3 797	94	**97**	<1	3	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	3 663	94	**97**	<1	3	<1		-	-	-	-		-	-	-	-	
Qatar	2000	592	96	**>99**	<1	<1	<1	-0	-	-	-	-	-	-	-	-	-	-
	2017	2 639	99	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Republic of Korea	2000	47 386	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	50 982	82	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Republic of Moldova	2000	4 201	45	**83**	1	15	<1	0	**74**	2	25	<1	1	**95**	1	4	<1	0
	2017	4 051	43	**89**	1	9	<1		**83**	1	15	<1		**97**	2	1	<1	
Réunion	2000	737	91	**>99**	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	877	100	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Romania	2000	22 128	53	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0	**>99**	<1	<1	<1	0
	2017	19 679	54	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Russian Federation	2000	146 397	73	**95**	<1	4	<1	0	**85**	1	11	2	0	**99**	<1	<1	<1	-0
	2017	143 990	74	**97**	<1	2	-		**93**	2	6	-		**99**	<1	<1	<1	
Rwanda	2000	8 026	15	**45**	21	14	19	1	**41**	22	16	21	1	**71**	13	8	8	1
	2017	12 208	17	**58**	22	14	6		**53**	24	16	7		**82**	10	7	1	
Saint Helena	2000	5	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	4	40	**>99**	<1	<1	<1		-	-	-	-		-	-	-	-	
Saint Kitts and Nevis	2000	45	33	**98**	<1	2	<1	-	-	-	-	-	-	-	-	-	-	-
	2017	55	31	-	-	-	-		-	-	-	-		-	-	-	-	
Saint Lucia	2000	157	28	**88**	2	10	<1	1	**87**	2	12	<1	1	**93**	2	5	<1	0
	2017	179	19	**98**	2	<1	<1		**98**	2	<1	<1		**98**	2	<1	<1	
Saint Pierre and Miquelon	2000	6	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	6	90	**91**	<1	9	<1		-	-	-	-		-	-	-	-	
Saint Vincent and the Grenadines	2000	108	45	**93**	<1	7	-	0	-	-	-	-	-	-	-	-	-	-
	2017	110	52	**95**	<1	5	-		-	-	-	-		-	-	-	-	
Samoa	2000	175	22	**92**	3	5	<1	0	**92**	4	4	<1	0	**90**	1	8	<1	1
	2017	196	18	**97**	<1	2	<1		**97**	<1	2	<1		**>99**	<1	<1	<1	

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
Northern Mariana Islands	2000	82	97	82	93	97	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	90	94	90	>99	90	10	-	-	-	-	-	-	-	-	-	-	-	-
Norway	2000	>99	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	98	>99	-	98	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Oman	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	90	90	-	98	90	10	-	75	-	-	74	26	-	93	>99	-	93	7
Pakistan	2000	38	83	-	38	37	54	32	77	-	32	22	66	51	94	-	51	67	32
	2017	35	77	-	35	28	64	33	75	-	33	15	75	40	81	-	40	51	43
Palau	2000	-	60	91	-	-	-	-	55	-	-	-	-	-	62	96	-	96	<1
	2017	-	>99	>99	-	>99	<1	-	>99	-	-	97	3	-	>99	>99	-	>99	<1
Panama	2000	-	84	77	-	88	<1	-	70	65	-	75	<1	-	93	84	-	96	<1
	2017	-	96	84	-	93	5	-	91	80	-	82	13	-	98	86	-	98	2
Papua New Guinea	2000	-	18	-	-	20	15	-	14	-	-	12	16	-	43	87	-	76	10
	2017	-	22	-	-	18	25	-	19	-	-	13	23	-	44	89	-	55	34
Paraguay	2000	49	73	65	49	50	25	27	49	43	27	19	34	68	92	83	68	76	18
	2017	64	96	86	64	94	6	51	93	84	51	88	12	72	98	88	72	97	3
Peru	2000	45	73	67	45	70	12	14	37	42	14	31	21	57	87	76	57	84	8
	2017	50	84	73	50	87	5	21	69	58	21	68	9	59	89	77	59	93	4
Philippines	2000	36	36	79	44	49	40	21	21	74	30	32	51	53	53	85	60	69	27
	2017	47	73	85	47	40	55	34	61	81	34	34	58	61	86	90	61	47	52
Poland	2000	-	-	-	-	96	-	-	-	-	-	91	-	-	-	-	-	99	-
	2017	>99	>99	-	>99	99	1	-	98	-	-	97	2	-	>99	-	-	>99	<1
Portugal	2000	93	98	93	97	98	<1	-	97	90	-	98	<1	-	98	96	-	99	<1
	2017	95	>99	95	99	>99	<1	-	99	91	-	>99	<1	-	>99	98	-	>99	<1
Puerto Rico	2000	75	94	75	97	94	3	-	-	-	-	-	-	-	-	-	-	-	-
	2017	94	94	97	97	94	3	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	2000	97	97	>99	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	96	96	>99	98	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Korea	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	98	>99	>99	98	99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Moldova	2000	40	40	81	76	36	48	-	14	73	-	<1	75	-	74	91	-	81	15
	2017	73	73	87	75	66	24	-	62	82	-	48	37	-	88	93	-	91	8
Réunion	2000	96	>99	-	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	96	>99	-	96	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Romania	2000	82	82	-	95	56	44	-	67	-	-	17	83	-	95	-	-	91	9
	2017	82	82	-	>99	65	35	-	67	-	-	35	65	-	95	-	-	90	10
Russian Federation	2000	75	75	-	94	79	17	-	52	-	-	44	42	-	83	-	-	92	7
	2017	76	76	-	96	94	4	-	57	-	-	88	6	-	83	-	-	96	3
Rwanda	2000	-	4	-	-	37	30	-	<1	-	-	31	32	24	24	84	79	68	16
	2017	-	11	-	-	37	42	-	4	-	-	29	47	43	43	92	87	75	17
Saint Helena	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	89	99	-	89	98	<1	-	-	-	-	-	-	-	-	-	-	-	-
Saint Kitts and Nevis	2000	-	97	86	-	97	1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Lucia	2000	-	86	-	-	89	<1	-	85	-	-	87	1	-	89	-	-	95	<1
	2017	-	96	-	-	96	4	-	96	-	-	95	5	-	94	-	-	>99	<1
Saint Pierre and Miquelon	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	83	83	91	91	91	<1	-	-	-	-	-	-	-	-	-	-	-	-
Saint Vincent and the Grenadines	2000	-	92	68	-	86	7	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	94	70	-	93	2	-	-	-	-	-	-	-	-	-	-	-	-
Samoa	2000	57	92	95	57	87	8	-	92	-	-	86	11	-	90	-	-	91	<1
	2017	59	95	98	59	85	13	-	94	-	-	84	14	-	98	-	-	90	10

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
San Marino	2000	27	93	>99	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	33	97	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Sao Tome and Principe	2000	139	53	65	15	10	10	1	58	14	12	16	1	71	16	7	6	1
	2017	204	72	84	12	<1	3		77	11	2	9		87	13	<1	<1	
Saudi Arabia	2000	20 764	80	97	<1	3	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	32 938	84	>99	<1	<1	<1		-	-	-	-		-	-	-	-	
Senegal	2000	9 884	40	60	5	33	2	1	40	7	51	2	2	89	3	7	<1	0
	2017	15 851	47	81	3	16	<1		70	4	25	<1		92	<1	7	<1	
Serbia	2000	9 488	53	95	5	<1	<1	-1	97	3	<1	<1	-0	93	7	<1	<1	-1
	2017	8 791	56	86	14	<1	<1		88	11	<1	<1		83	16	<1	<1	
Seychelles	2000	81	50	93	<1	7	-	0	-	-	-	-	-	-	-	-	-	-
	2017	95	56	96	<1	<1	4		-	-	-	-		-	-	-	-	
Sierra Leone	2000	4 564	36	40	6	16	39	1	24	3	17	55	2	68	10	13	9	0
	2017	7 557	42	61	9	16	14		50	6	23	21		76	14	7	3	
Singapore	2000	3 914	100	>99	<1	<1	<1	0	-	-	-	-	-	>99	<1	<1	<1	0
	2017	5 709	100	>99	<1	<1	<1		-	-	-	-		>99	<1	<1	<1	
Sint Maarten (Dutch part)	2000	32	100	98	<1	2	<1	-0	-	-	-	-	-	-	-	-	-	-
	2017	40	100	95	<1	5	<1		-	-	-	-		-	-	-	-	
Slovakia	2000	5 399	56	98	2	<1	<1	0	97	3	<1	<1	0	99	1	<1	<1	0
	2017	5 448	54	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Slovenia	2000	1 988	51	>99	<1	<1	<1	-0	>99	<1	<1	<1	-0	>99	<1	<1	<1	-0
	2017	2 080	54	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Solomon Islands	2000	413	16	79	5	11	5	-1	76	5	12	6	-1	90	3	5	1	0
	2017	611	23	68	6	15	12		61	6	18	15		91	4	4	1	
Somalia	2000	9 011	33	20	6	38	36	2	4	4	41	50	1	50	11	30	8	2
	2017	14 743	44	52	31	14	3		28	44	23	5		83	15	2	<1	
South Africa	2000	45 728	57	85	3	4	8	0	66	6	9	19	1	98	<1	<1	<1	0
	2017	56 717	66	93	3	2	3		81	7	5	8		99	<1	<1	<1	
South Sudan	2000	6 701	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	12 576	19	41	34	17	9		35	37	18	10		65	20	12	3	
Spain	2000	40 904	76	>99	<1	<1	<1	-0	>99	<1	<1	<1	0	>99	<1	<1	<1	-0
	2017	46 354	80	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Sri Lanka	2000	18 782	18	80	2	13	5	1	76	2	16	6	1	95	2	2	<1	0
	2017	20 877	18	89	3	6	2		88	4	7	2		97	1	1	<1	
Sudan	2000	27 251	32	43	19	29	8	1	35	18	35	11	1	60	21	16	3	1
	2017	40 533	34	60	27	4	9		53	27	6	14		74	25	<1	1	
Suriname	2000	472	66	90	<1	3	8	0	74	<1	4	22	1	98	<1	2	<1	0
	2017	563	66	95	1	3	-		90	2	8	-		98	<1	<1	<1	
Sweden	2000	8 882	84	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	9 911	87	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Switzerland	2000	7 167	73	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	8 476	74	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Syrian Arab Republic	2000	16 411	52	95	2	3	<1	0	90	4	5	<1	0	>99	<1	<1	<1	-0
	2017	18 270	54	97	2	<1	-		95	4	<1	-		99	<1	<1	<1	
Tajikistan	2000	6 216	27	56	4	6	34	1	43	4	8	44	2	90	3	1	5	0
	2017	8 921	27	81	2	2	14		76	3	3	19		96	<1	<1	2	
Thailand	2000	62 958	31	94	<1	6	<1	0	92	<1	7	<1	0	98	<1	2	<1	0
	2017	69 038	49	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Timor-Leste	2000	872	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	1 296	30	78	2	15	4		70	3	21	6		98	2	<1	<1	
Togo	2000	4 970	33	46	4	28	22	1	30	4	34	32	1	79	3	17	<1	1
	2017	7 798	41	65	6	16	13		48	8	22	22		89	3	7	1	

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
San Marino	2000	**>99**	>99	>99	>99	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
	2017	**>99**	>99	>99	>99	>99	<1	-	-	-	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	2000	-	27	-	-	74	6	-	18	-	-	64	8	-	34	-	-	83	4
	2017	-	38	-	-	94	3	-	24	-	-	82	7	-	43	-	-	98	2
Saudi Arabia	2000	-	79	-	-	72	25	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	>99	-	-	86	14	-	-	-	-	-	-	-	-	-	-	-	-
Senegal	2000	-	36	33	-	53	12	-	11	27	-	32	15	-	74	42	-	85	8
	2017	-	67	43	-	73	10	-	52	43	-	61	13	-	83	43	-	86	7
Serbia	2000	**74**	91	-	74	80	19	**67**	92	-	67	61	38	**82**	91	-	82	98	2
	2017	**75**	84	-	75	96	3	**66**	86	-	66	95	4	**81**	82	-	81	97	2
Seychelles	2000	-	90	-	-	86	7	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	95	-	-	95	2	-	-	-	-	-	-	-	-	-	-	-	-
Sierra Leone	2000	**5**	12	32	7	23	22	**2**	2	20	4	8	19	**11**	30	52	11	50	27
	2017	**10**	16	49	10	25	45	**8**	8	41	9	15	41	**12**	27	60	12	38	52
Singapore	2000	**>99**	>99	-	>99	>99	<1	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
	2017	**>99**	>99	-	>99	>99	<1	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
Sint Maarten (Dutch part)	2000	-	96	-	-	94	3	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	93	-	-	91	4	-	-	-	-	-	-	-	-	-	-	-	-
Slovakia	2000	**92**	92	-	98	95	5	-	91	-	-	91	9	-	93	-	-	98	2
	2017	**>99**	>99	-	>99	98	2	-	>99	-	-	>99	<1	-	>99	-	-	97	3
Slovenia	2000	**80**	>99	-	80	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	**98**	98	-	>99	99	<1	-	98	-	-	99	<1	-	98	-	-	>99	<1
Solomon Islands	2000	-	61	42	-	59	24	-	57	66	-	56	25	-	83	-	-	75	19
	2017	-	52	37	-	46	27	-	42	54	-	39	28	-	83	-	-	70	24
Somalia	2000	-	10	20	-	10	16	-	<1	5	-	3	5	-	29	51	-	23	39
	2017	-	34	59	-	41	42	-	8	42	-	14	58	-	66	81	-	75	23
South Africa	2000	-	63	81	-	82	5	-	28	64	-	60	12	**90**	90	94	98	99	<1
	2017	-	76	71	-	90	6	-	47	50	-	74	14	**82**	91	82	99	98	1
South Sudan	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	3	-	-	3	71	-	2	-	-	2	70	-	4	-	-	8	77
Spain	2000	**99**	>99	-	99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	**98**	>99	-	98	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Sri Lanka	2000	-	61	75	-	27	55	-	55	70	-	15	63	**86**	86	95	96	79	19
	2017	-	75	87	-	38	54	-	71	85	-	30	61	**91**	91	97	96	74	24
Sudan	2000	-	28	60	-	29	34	-	17	54	-	18	36	-	52	73	-	51	30
	2017	-	38	84	-	46	41	-	25	81	-	34	47	-	64	89	-	69	30
Suriname	2000	-	87	50	-	72	18	-	69	44	-	45	29	-	96	53	-	85	13
	2017	-	92	54	-	79	18	-	81	55	-	61	31	-	97	53	-	88	11
Sweden	2000	**>99**	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	**>99**	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Switzerland	2000	**93**	>99	-	93	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	**95**	>99	-	95	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Syrian Arab Republic	2000	-	79	91	-	85	12	-	64	88	-	70	24	-	93	93	-	>99	<1
	2017	-	81	93	-	73	27	-	68	93	-	71	28	-	92	93	-	75	25
Tajikistan	2000	**35**	35	39	39	48	12	-	19	33	-	33	15	-	79	57	-	89	5
	2017	**48**	60	48	73	64	19	-	49	43	-	55	24	-	90	62	-	91	6
Thailand	2000	-	88	-	-	34	60	-	85	-	-	17	75	-	96	-	-	71	27
	2017	-	>99	-	-	70	30	-	>99	-	-	54	46	-	>99	-	-	87	13
Timor-Leste	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	66	-	-	65	16	-	55	-	-	57	16	-	93	56	-	83	17
Togo	2000	-	10	-	-	36	14	-	4	-	-	17	17	-	21	-	-	74	8
	2017	-	19	-	-	26	45	-	6	-	-	12	44	-	38	-	-	45	48

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in basic
Tokelau	2000	2	0	99	<1	1	<1	0	99	<1	1	<1	0	-	-	-	-	-
	2017	1	0	>99	<1	<1	<1		>99	<1	<1	<1		-	-	-	-	
Tonga	2000	98	23	98	<1	2	<1	0	99	<1	1	<1	0	97	<1	3	<1	0
	2017	108	23	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Trinidad and Tobago	2000	1 268	56	92	1	6	1	0	-	-	-	-	-	-	-	-	-	-
	2017	1 369	53	98	1	<1	<1		-	-	-	-		-	-	-	-	
Tunisia	2000	9 699	63	88	4	7	<1	0	71	11	17	2	1	98	<1	2	<1	0
	2017	11 532	69	96	2	2	<1		89	6	6	<1		>99	<1	<1	<1	
Turkey	2000	63 240	65	95	<1	4	<1	0	89	<1	10	<1	1	99	<1	1	<1	-0
	2017	80 745	75	99	<1	<1	<1		>99	<1	<1	<1		99	<1	1	<1	
Turkmenistan	2000	4 516	46	87	2	2	10	1	79	<1	3	18	1	96	3	<1	<1	0
	2017	5 758	51	99	1	<1	<1		98	2	<1	<1		>99	<1	<1	<1	
Turks and Caicos Islands	2000	19	85	86	<1	14	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	35	93	94	<1	6	<1		-	-	-	-		-	-	-	-	
Tuvalu	2000	9	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	11	62	>99	<1	<1	<1		99	<1	1	<1		>99	<1	<1	<1	
Uganda	2000	24 039	15	27	34	26	14	1	19	36	29	16	1	70	21	8	2	0
	2017	42 863	23	49	32	12	7		41	36	14	8		75	18	6	1	
Ukraine	2000	48 840	67	98	<1	2	<1	-0	95	<1	5	<1	0	>99	<1	<1	<1	-0
	2017	44 223	69	94	6	<1	<1		>99	<1	<1	<1		91	8	<1	<1	
United Arab Emirates	2000	3 155	80	96	4	<1	<1	0	-	-	-	-	-	-	-	-	-	-
	2017	9 400	86	98	2	<1	<1		-	-	-	-		-	-	-	-	
United Kingdom	2000	58 951	79	>99	<1	<1	<1	-0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	66 182	83	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
United Republic of Tanzania	2000	34 178	22	27	8	49	16	2	16	7	56	20	2	65	9	24	3	1
	2017	57 310	33	57	11	18	14		43	14	24	20		86	7	5	3	
United States Virgin Islands	2000	109	93	99	<1	1	<1	-0	-	-	-	-	-	-	-	-	-	-
	2017	105	96	99	<1	1	<1		-	-	-	-		-	-	-	-	
United States of America	2000	281 983	79	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0
	2017	324 459	82	>99	<1	<1	<1		97	<1	3	<1		>99	<1	<1	<1	
Uruguay	2000	3 321	92	97	<1	2	<1	0	75	2	21	2	1	99	<1	<1	<1	0
	2017	3 457	95	>99	<1	<1	<1		95	5	<1	<1		>99	<1	<1	<1	
Uzbekistan	2000	24 849	46	85	8	3	5	1	76	12	5	7	1	95	2	<1	2	0
	2017	31 911	51	98	<1	<1	2		96	<1	<1	4		>99	<1	<1	<1	
Vanuatu	2000	185	22	82	<1	11	6	1	78	1	13	8	1	96	<1	4	<1	0
	2017	276	25	91	1	<1	8		88	1	<1	10		>99	<1	<1	<1	
Venezuela (Bolivarian Republic of)	2000	24 488	88	97	<1	1	2	-0	-	-	-	-	-	-	-	-	-	-
	2017	31 977	88	96	<1	2	1		-	-	-	-		-	-	-	-	
Viet Nam	2000	80 286	24	80	<1	9	9	1	76	<1	12	12	1	94	<1	3	2	0
	2017	95 541	35	95	<1	5	<1		93	<1	7	<1		99	<1	1	<1	
Wallis and Futuna Islands	2000	15	0	>99	<1	<1	<1	-0	>99	<1	<1	<1	-0	-	-	-	-	-
	2017	12	0	>99	<1	<1	<1		>99	<1	<1	<1		-	-	-	-	
West Bank and Gaza Strip	2000	3 223	72	91	<1	8	1	0	88	1	9	3	0	92	<1	7	<1	0
	2017	4 921	76	97	<1	3	-		96	1	3	-		97	<1	3	-	
Western Sahara	2000	314	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	553	87	-	-	-	-		-	-	-	-		-	-	-	-	
Yemen	2000	17 875	26	38	16	40	6	2	26	15	52	7	2	72	19	7	2	0
	2017	28 250	36	63	29	4	4		55	33	6	7		79	21	<1	<1	
Zambia	2000	10 531	35	49	4	28	19	1	31	4	37	28	1	84	3	11	2	-0
	2017	17 094	43	60	8	24	9		42	9	35	14		84	6	9	1	
Zimbabwe	2000	12 222	34	72	8	15	6	-0	60	10	21	9	-1	95	3	2	<1	-0
	2017	16 530	32	64	13	16	7		50	18	22	10		94	4	2	<1	

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	-	-	-	-	-	-	-	-	-	-
	2017	-	96	-	-	95	4	-	96	-	-	95	4	-	-	-	-	-	-
Tonga	2000	-	98	-	-	94	4	-	99	-	-	96	3	-	97	-	-	90	7
	2017	-	71	-	-	>99	<1	-	71	-	-	>99	<1	-	74	-	-	>99	<1
Trinidad and Tobago	2000	-	82	73	-	83	10	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	98	82	-	94	5	-	-	-	-	-	-	-	-	-	-	-	-
Tunisia	2000	**41**	87	-	41	79	13	-	71	-	-	55	26	-	96	-	-	93	5
	2017	**93**	93	-	98	92	6	-	82	-	-	77	17	-	98	-	-	>99	<1
Turkey	2000	-	94	-	-	91	4	-	86	-	-	80	10	-	98	-	-	98	1
	2017	-	96	-	-	99	<1	-	94	-	-	>99	<1	-	97	-	-	99	<1
Turkmenistan	2000	**66**	70	-	70	56	33	**50**	58	-	50	29	51	**84**	84	-	94	88	11
	2017	**94**	99	-	94	57	43	**91**	97	-	91	35	65	**97**	>99	-	97	78	22
Turks and Caicos Islands	2000	-	85	-	-	42	45	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	90	-	-	68	26	-	-	-	-	-	-	-	-	-	-	-	-
Tuvalu	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	97	-	-	>99	<1	-	-	-	-	99	<1	**50**	-	>99	50	>99	<1
Uganda	2000	**5**	5	53	37	11	49	**1**	1	49	28	3	52	**26**	26	76	89	61	30
	2017	**7**	7	71	50	21	60	**4**	4	68	39	12	66	**16**	16	78	87	53	40
Ukraine	2000	**66**	66	-	91	79	19	-	6	-	-	46	49	-	95	-	-	96	4
	2017	**92**	92	-	93	66	33	-	>99	-	-	31	68	-	89	-	-	82	18
United Arab Emirates	2000	-	88	99	-	72	28	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	98	>99	-	96	4	-	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	2000	**>99**	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2017	**>99**	>99	-	>99	>99	<1	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
United Republic of Tanzania	2000	-	<1	16	-	34	<1	-	<1	13	-	24	<1	**4**	4	28	63	71	2
	2017	-	29	32	-	36	32	-	16	30	-	24	32	**35**	57	35	78	59	34
United States Virgin Islands	2000	-	98	-	-	47	51	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	98	-	-	47	52	-	-	-	-	-	-	-	-	-	-	-	-
United States of America	2000	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
	2017	**>99**	>99	-	>99	99	<1	-	96	-	-	95	2	**>99**	>99	-	>99	>99	<1
Uruguay	2000	-	96	97	-	96	2	-	73	-	-	60	17	**94**	98	>99	94	99	<1
	2017	-	99	>99	-	>99	<1	-	95	-	-	98	2	**95**	99	>99	95	>99	<1
Uzbekistan	2000	**56**	56	-	87	75	18	**32**	32	-	82	57	31	**84**	84	97	92	95	3
	2017	**59**	59	-	90	70	28	**31**	31	-	88	52	44	**86**	86	>99	92	88	11
Vanuatu	2000	**40**	45	-	40	49	34	-	38	-	-	40	39	-	69	-	-	80	16
	2017	**44**	50	-	44	48	45	-	43	-	-	37	52	-	71	-	-	78	22
Venezuela (Bolivarian Republic of))	2000	-	88	60	-	86	11	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	87	59	-	87	9	-	-	-	-	-	-	-	-	-	-	-	-
Viet Nam	2000	-	65	-	-	13	68	-	57	-	-	2	75	-	88	95	-	49	46
	2017	-	95	-	-	43	52	-	93	-	-	22	70	-	99	99	-	81	18
Wallis and Futuna Islands	2000	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	-	-	-	-	-	-
	2017	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	-	-	-	-	-	-
West Bank and Gaza Strip	2000	-	83	83	-	86	5	-	84	83	-	70	19	-	83	83	-	92	<1
	2017	-	89	88	-	54	43	-	92	91	-	85	12	-	88	87	-	44	53
Western Sahara	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yemen	2000	-	30	34	-	41	13	-	16	26	-	32	9	-	69	56	-	65	26
	2017	-	49	58	-	48	44	-	35	56	-	32	55	-	75	62	-	77	23
Zambia	2000	-	20	-	-	33	20	-	4	-	-	6	28	**49**	49	72	66	82	5
	2017	-	24	-	-	32	36	-	6	-	-	4	46	**46**	46	89	89	68	21
Zimbabwe	2000	-	41	60	-	40	39	-	16	59	-	12	58	-	90	62	-	94	4
	2017	-	32	58	-	31	46	-	14	57	-	10	57	-	71	62	-	74	24

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	20 094	22	**24**	6	45	**26**	1.17	-0.78	**22**	4	43	**31**	0.90	-0.84	**30**	14	49	**7**	1.92	-0.42
	2017	35 530	25	**43**	10	34	**13**			**37**	6	40	**17**			**62**	21	16	**<1**		
Albania	2000	3 122	42	**88**	2	9	**<1**	0.55	-0.05	**82**	2	14	**1**	0.87	-0.07	**97**	2	<1	**<1**	0.08	-0.03
	2017	2 930	59	**98**	2	<1	**<1**			**97**	3	<1	**<1**			**98**	2	<1	**<1**		
Algeria	2000	31 184	60	**84**	8	1	**6**	0.23	-0.33	**72**	10	3	**15**	0.58	-0.74	**91**	7	<1	**<1**	-0.10	-0.03
	2017	41 318	72	**88**	8	3	**<1**			**82**	11	4	**2**			**90**	7	3	**<1**		
American Samoa	2000	58	89	**65**	34	<1	**-**	-0.61	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	56	87	**54**	45	<1	**<1**			**-**	-	-	**-**			**-**	-	-	**-**		
Andorra	2000	65	92	**>99**	<1	<1	**<1**	-0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00
	2017	77	88	**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**		
Angola	2000	16 441	50	**28**	11	18	**43**	1.31	-1.35	**8**	2	24	**67**	0.92	-0.70	**48**	21	13	**19**	0.99	-1.07
	2017	29 784	65	**50**	20	10	**20**			**23**	6	16	**55**			**64**	28	7	**<1**		
Anguilla	2000	11	100	**91**	2	5	**2**	0.35	-0.10	**-**	-	-	**-**	-	-	**91**	2	5	**2**	0.35	-0.10
	2017	15	100	**97**	2	<1	**<1**			**-**	-	-	**-**			**97**	2	<1	**<1**		
Antigua and Barbuda	2000	84	32	**82**	4	12	**1**	0.30	-0.06	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	102	25	**88**	4	8	**<1**			**-**	-	-	**-**			**-**	-	-	**-**		
Argentina	2000	37 057	89	**87**	4	9	**-**	-	-	**69**	4	27	**-**	-	-	**89**	4	7	**<1**	0.39	0.07
	2017	44 271	92	**-**	-	-	**-**			**-**	-	-	**-**			**96**	2	<1	**2**		
Armenia	2000	3 070	65	**87**	5	8	**<1**	0.40	-0.00	**77**	4	19	**<1**	0.36	0.00	**92**	5	3	**<1**	0.44	-0.01
	2017	2 930	63	**94**	<1	6	**<1**			**83**	1	15	**<1**			**>99**	<1	<1	**<1**		
Aruba	2000	91	47	**98**	<1	<1	**1**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	105	43	**-**	-	-	**-**			**-**	-	-	**-**			**-**	-	-	**-**		
Australia	2000	19 066	84	**>99**	<1	<1	**<1**	0.00	0.00	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	24 451	86	**>99**	<1	<1	**<1**			**-**	-	-	**-**			**-**	-	-	**-**		
Austria	2000	8 069	60	**>99**	<1	<1	**<1**	-0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00	**>99**	<1	<1	**<1**	-0.00	0.00
	2017	8 735	58	**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**		
Azerbaijan	2000	8 123	51	**63**	7	30	**<1**	1.72	0.00	**53**	2	45	**<1**	2.04	0.01	**73**	11	16	**<1**	1.38	-0.00
	2017	9 828	55	**93**	3	5	**<1**			**88**	1	11	**<1**			**96**	4	<1	**<1**		
Bahamas	2000	298	82	**88**	5	6	**1**	0.43	-0.05	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	395	83	**95**	3	2	**<1**			**-**	-	-	**-**			**-**	-	-	**-**		
Bahrain	2000	665	88	**>99**	<1	<1	**<1**	0.01	0.00	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	1 493	89	**>99**	<1	<1	**<1**			**-**	-	-	**-**			**-**	-	-	**-**		
Bangladesh	2000	131 581	24	**26**	12	44	**18**	1.33	-1.04	**20**	10	48	**22**	1.58	-1.27	**44**	19	32	**5**	0.41	-0.31
	2017	164 670	36	**48**	23	29	**<1**			**47**	18	36	**<1**			**51**	32	18	**<1**		
Barbados	2000	270	34	**89**	2	9	**<1**	0.50	0.01	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	286	31	**97**	2	<1	**<1**			**-**	-	-	**-**			**-**	-	-	**-**		
Belarus	2000	9 934	70	**92**	8	<1	**<1**	0.36	0.00	**96**	3	1	**<1**	0.02	0.00	**90**	10	<1	**<1**	0.49	0.00
	2017	9 468	78	**98**	2	<1	**<1**			**96**	2	2	**<1**			**98**	2	<1	**<1**		
Belgium	2000	10 282	97	**>99**	<1	<1	**<1**	0.00	0.00	**>99**	<1	<1	**<1**	-0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00
	2017	11 429	98	**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**		
Belize	2000	247	45	**82**	8	5	**4**	0.32	-0.22	**80**	9	4	**7**	0.21	-0.37	**85**	8	5	**1**	0.45	-0.03
	2017	375	46	**88**	9	2	**<1**			**83**	12	4	**<1**			**93**	6	<1	**<1**		
Benin	2000	6 866	38	**9**	16	8	**68**	0.46	-0.81	**2**	7	5	**86**	0.32	-0.62	**19**	30	13	**38**	0.44	-0.51
	2017	11 176	47	**16**	20	10	**54**			**8**	8	9	**75**			**27**	32	12	**29**		

"-" = no estimate. For JMP estimate 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 (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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	-	-	-	-	22	5	2	-	-	-	-	23	1	<1	-	-	-	-	18	17	8
	2017	-	-	-	-	41	10	3	-	-	-	-	41	2	<1	-	-	-	-	41	34	8
Albania	2000	39	9	4	26	11	14	64	38	15	6	17	19	23	43	40	1	<1	38	1	3	95
	2017	40	<1	<1	39	<1	2	98	39	<1	<1	38	<1	4	96	40	<1	<1	40	<1	<1	>99
Algeria	2000	19	6	1	11	6	17	69	19	11	2	7	9	30	43	18	3	<1	14	3	9	87
	2017	18	4	<1	13	4	8	84	21	10	2	9	11	23	59	16	1	<1	15	1	3	93
American Samoa	2000	-	-	-	18	25	43	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	23	11	39	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Andorra	2000	15	<1	<1	15	<1	-	>99	15	<1	<1	15	<1	-	>99	15	<1	<1	15	<1	-	>99
	2017	>99	<1	<1	>99	<1	-	>99	>99	<1	<1	>99	<1	-	>99	>99	<1	<1	>99	<1	-	>99
Angola	2000	-	-	-	-	28	<1	11	-	-	-	-	8	<1	1	-	-	-	-	48	<1	21
	2017	-	-	-	-	3	55	13	-	-	-	-	4	24	1	-	-	-	-	2	72	19
Anguilla	2000	-	-	-	-	<1	92	1	-	-	-	-	-	-	-	-	-	-	-	<1	92	1
	2017	-	-	-	-	4	94	1	-	-	-	-	-	-	-	-	-	-	-	4	94	1
Antigua and Barbuda	2000	-	-	-	-	10	71	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	11	79	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Argentina	2000	-	-	-	-	21	27	42	-	-	-	-	47	24	1	-	-	-	-	18	27	47
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	24	62
Armenia	2000	47	15	7	26	31	<1	61	-	-	-	8	62	<1	19	45	7	3	36	14	<1	83
	2017	48	12	5	32	22	2	70	-	-	-	9	59	6	20	45	<1	<1	45	<1	<1	>99
Aruba	2000	-	-	-	14	1	82	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Australia	2000	64	3	2	59	<1	11	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	76	3	2	70	<1	11	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Austria	2000	97	2	2	93	1	6	93	92	4	4	84	<1	15	84	>99	<1	<1	98	2	<1	98
	2017	97	2	2	92	1	6	92	92	4	4	84	<1	15	84	>99	<1	<1	98	2	<1	98
Azerbaijan	2000	-	-	-	33	30	<1	39	-	-	-	<1	54	<1	<1	70	3	3	64	7	1	76
	2017	-	-	-	36	55	<1	39	-	-	-	6	82	1	6	92	16	15	61	33	<1	66
Bahamas	2000	-	-	-	-	3	79	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	<1	77	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bahrain	2000	96	10	10	75	17	8	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	96	2	2	91	<1	8	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangladesh	2000	-	-	-	-	25	11	3	14	14	<1	<1	26	4	<1	-	-	-	-	21	31	10
	2017	-	-	-	-	52	13	5	32	32	<1	<1	55	9	<1	-	-	-	-	46	22	14
Barbados	2000	-	-	-	1	78	11	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	3	90	6	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	2000	90	13	12	65	25	2	72	94	30	30	34	60	3	35	88	5	5	78	11	1	88
	2017	81	2	2	76	2	5	92	76	9	7	60	11	14	73	82	<1	<1	81	<1	2	97
Belgium	2000	86	23	23	40	32	28	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	97	1	1	95	<1	5	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belize	2000	-	-	-	-	42	34	14	-	-	-	-	64	24	<1	-	-	-	-	16	47	30
	2017	-	-	-	-	26	62	9	-	-	-	-	40	55	<1	-	-	-	-	8	71	19
Benin	2000	-	-	-	-	21	3	<1	-	-	-	-	8	<1	<1	-	-	-	-	41	8	<1
	2017	-	-	-	-	31	4	1	-	-	-	-	15	<1	<1	-	-	-	-	48	8	3

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
Bermuda	2000	64	100	>99	<1	<1	<1	-0.01	0.00	-	-	-	-	-	-	>99	<1	<1	<1	-0.01	0.00
	2017	61	100	>99	<1	<1	<1			-	-	-	-			>99	<1	<1	<1		
Bhutan	2000	573	25	50	6	34	10	1.15	-0.60	41	3	43	12	1.50	-0.71	74	15	6	4	-0.09	-0.26
	2017	808	40	69	9	22	<1			67	5	28	<1			73	15	13	<1		
Bolivia (Plurinational State of)	2000	8 340	62	35	17	15	33	1.54	-1.16	15	4	19	62	1.24	-1.40	47	25	13	15	1.48	-0.76
	2017	11 052	69	61	17	9	13			36	6	19	38			72	22	4	2		
Bosnia and Herzegovina	2000	3 767	42	95	<1	4	<1	0.02	-0.04	93	<1	6	<1	-0.03	-0.05	98	<1	<1	<1	0.02	-0.02
	2017	3 507	48	95	<1	4	<1			92	<1	7	<1			99	<1	<1	<1		
Botswana	2000	1 728	53	52	8	18	22	1.49	-0.63	33	9	16	42	1.05	-0.56	69	7	21	4	1.21	-0.15
	2017	2 292	69	77	6	6	11			51	10	7	33			89	3	6	1		
Brazil	2000	175 288	81	73	1	17	9	0.91	-0.46	36	<1	29	35	1.42	-1.61	81	1	14	3	0.67	-0.17
	2017	209 288	86	88	<1	10	1			60	<1	32	7			93	<1	7	<1		
British Virgin Islands	2000	21	42	97	<1	2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	31	47	-	-	-	-			-	-	-	-			-	-	-	-		
Brunei Darussalam	2000	333	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	429	77	-	-	-	-			-	-	-	-			-	-	-	-		
Bulgaria	2000	7 998	69	86	14	<1	<1	0.01	0.00	84	16	<1	<1	-0.00	0.00	87	13	<1	<1	0.00	0.00
	2017	7 085	75	86	14	<1	<1			84	16	<1	<1			87	13	<1	<1		
Burkina Faso	2000	11 608	18	11	8	9	71	0.48	-1.45	3	4	9	85	0.50	-1.32	50	31	9	9	-0.64	-0.11
	2017	19 193	29	19	27	6	47			11	19	7	63			39	49	4	7		
Burundi	2000	6 401	8	45	6	46	3	0.04	-0.01	46	4	47	3	0.05	0.01	41	25	32	2	0.07	-0.08
	2017	10 864	13	46	12	40	3			46	7	44	3			42	43	14	<1		
Cabo Verde	2000	435	53	40	3	6	51	1.99	-1.81	22	<1	6	71	2.36	-2.09	56	5	5	34	1.44	-1.28
	2017	546	65	74	6	<1	20			62	3	<1	35			80	8	<1	12		
Cambodia	2000	12 152	19	10	2	4	85	2.90	-3.11	2	<1	4	94	2.74	-3.13	46	8	4	42	2.91	-2.44
	2017	16 005	23	59	6	3	32			48	7	3	41			96	4	<1	<1		
Cameroon	2000	15 274	46	40	18	35	7	-0.06	-0.03	27	9	51	13	-0.55	0.07	56	28	15	<1	0.02	0.02
	2017	24 054	56	39	19	35	7			18	8	60	14			56	27	15	1		
Canada	2000	30 736	79	>99	<1	<1	<1	-0.05	0.00	>99	<1	<1	<1	-0.07	0.00	>99	<1	<1	<1	-0.05	0.00
	2017	36 624	81	99	<1	1	<1			98	<1	2	<1			>99	<1	<1	<1		
Caribbean Netherlands	2000	14	75	99	<1	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	25	75	-	-	-	-			-	-	-	-			-	-	-	-		
Cayman Islands	2000	42	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	62	100	-	-	-	-			-	-	-	-			-	-	-	-		
Central African Republic	2000	3 755	38	15	9	53	23	-	-	8	4	53	35	-	-	26	17	54	4	-	-
	2017	4 659	41	-	-	-	-			-	-	-	-			-	-	-	-		
Chad	2000	8 343	22	12	3	15	71	-0.19	-0.22	8	<1	7	85	-0.34	-0.19	26	13	43	18	0.27	-0.11
	2017	14 900	23	8	7	18	67			2	1	15	82			30	26	27	16		
Channel Islands	2000	149	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	165	31	99	<1	2	<1			-	-	-	-			-	-	-	-		
Chile	2000	15 263	86	92	<1	6	2	0.47	-0.14	68	<1	29	3	1.90	-0.20	96	<1	2	2	0.23	-0.13
	2017	18 055	87	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
China	2000	1 283	36	56	3	38	3	1.67	-0.15	44	2	50	4	1.88	-0.22	77	5	17	<1	0.78	-0.01
	2017	1 409	58	85	6	9	<1			76	6	18	<1			91	6	3	<1		
China, Hong Kong Special Administrative	2000	6 664	100	97	<1	3	<1	-0.02	0.00	-	-	-	-	-	-	97	<1	3	<1	-0.02	0.00
	2017	7 365	100	96	<1	4	<1			-	-	-	-			96	<1	4	<1		
China, Macao Special Administrative Region	2000	428	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	623	100	-	-	-	-			-	-	-	-			-	-	-	-		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Bermuda	2000	-	-	-	2	95	-	5	-	-	-	-	-	-	-	-	-	-	2	95	-	5
	2017	-	-	-	2	95	-	5	-	-	-	-	-	-	-	-	-	-	2	95	-	5
Bhutan	2000	-	-	-	-	41	11	4	-	-	-	-	34	9	1	-	-	-	-	62	15	12
	2017	-	-	-	-	21	51	6	-	-	-	-	36	35	1	-	-	-	-	<1	75	12
Bolivia (Plurinational State of)	2000	13	5	2	6	12	9	32	-	-	-	<1	14	4	2	16	5	2	10	10	12	50
	2017	23	9	3	11	18	12	48	-	-	-	1	30	7	5	25	7	2	15	12	14	67
Bosnia and Herzegovina	2000	19	19	<1	<1	16	28	52	-	-	-	<1	25	36	32	6	6	<1	<1	5	16	78
	2017	22	16	1	5	<1	41	55	-	-	-	2	<1	64	29	11	4	<1	7	<1	16	84
Botswana	2000	-	-	-	-	54	4	1	-	-	-	-	39	3	<1	-	-	-	-	68	6	2
	2017	-	-	-	-	77	5	1	-	-	-	-	58	3	<1	-	-	-	-	85	6	2
Brazil	2000	27	11	3	13	12	20	42	-	-	-	1	21	12	4	29	10	3	15	10	22	51
	2017	49	8	4	38	8	14	66	-	-	-	5	25	27	9	52	6	3	43	5	12	76
British Virgin Islands	2000	-	-	-	-	<1	63	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brunei Darussalam	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bulgaria	2000	48	8	5	36	3	29	67	-	-	-	12	77	-	23	56	5	3	47	13	-	87
	2017	64	5	4	56	<1	23	77	-	-	-	21	70	-	30	73	3	2	68	7	-	93
Burkina Faso	2000	-	-	-	-	18	1	<1	-	-	-	-	6	<1	<1	-	-	-	-	74	5	3
	2017	-	-	-	-	44	2	<1	-	-	-	-	30	<1	<1	-	-	-	-	80	5	3
Burundi	2000	-	-	-	-	48	1	2	-	-	-	-	49	<1	<1	-	-	-	-	36	13	17
	2017	-	-	-	-	53	4	<1	-	-	-	-	53	<1	<1	-	-	-	-	55	26	3
Cabo Verde	2000	-	-	-	-	<1	29	14	-	-	-	-	<1	22	1	-	-	-	-	<1	35	26
	2017	-	-	-	-	<1	56	24	-	-	-	-	<1	64	1	-	-	-	-	<1	51	36
Cambodia	2000	-	-	-	-	<1	4	7	-	-	-	-	<1	<1	2	-	-	-	-	1	22	31
	2017	-	-	-	-	<1	51	14	-	-	-	-	<1	52	3	-	-	-	-	<1	49	51
Cameroon	2000	-	-	-	-	50	7	<1	-	-	-	-	36	<1	<1	-	-	-	-	67	15	2
	2017	-	-	-	-	44	13	<1	-	-	-	-	25	<1	<1	-	-	-	-	60	23	<1
Canada	2000	77	<1	10	66	3	12	85	77	2	24	51	2	31	66	77	<1	7	69	3	6	90
	2017	82	<1	13	68	6	11	81	81	3	31	48	3	38	58	82	<1	10	72	7	5	87
Caribbean Netherlands	2000	-	-	-	-	98	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cayman Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central African Republic	2000	-	-	-	-	23	<1	<1	-	-	-	-	12	<1	<1	-	-	-	-	41	1	<1
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chad	2000	-	-	-	-	14	<1	<1	-	-	-	-	8	<1	<1	-	-	-	-	36	<1	3
	2017	-	-	-	-	14	1	<1	-	-	-	-	3	<1	<1	-	-	-	-	50	5	2
Channel Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	90	7	1	82	<1	17	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chile	2000	48	4	2	39	5	7	80	-	-	-	6	27	29	12	47	1	<1	45	1	3	91
	2017	77	3	3	73	2	10	88	-	-	-	17	13	67	21	81	<1	<1	81	<1	2	98
China	2000	27	17	<1	10	24	6	29	25	25	<1	<1	37	8	<1	29	3	<1	26	<1	3	79
	2017	72	16	4	53	24	4	62	56	23	<1	33	38	5	38	84	10	6	68	14	3	79
China, Hong Kong Special Administrative	2000	92	2	2	89	3	-	94	-	-	-	-	-	-	-	92	2	2	89	3	-	94
	2017	92	2	2	88	4	-	93	-	-	-	-	-	-	-	92	2	2	88	4	-	93
China, Macao Special Administrative Region	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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
Colombia	2000	40 404	74	72	13	7	9	1.06	-0.35	49	6	16	29	1.58	-0.95	79	15	3	2	0.79	-0.07
	2017	49 066	80	90	5	2	3			76	4	7	13			93	5	<1	<1		
Comoros	2000	542	28	29	<1	70	<1	0.39	-0.00	23	<1	75	<1	0.51	-0.00	44	<1	55	<1	0.08	-0.00
	2017	814	29	36	13	50	<1			32	12	56	<1			45	17	37	<1		
Congo	2000	3 226	59	12	24	56	8	0.49	0.03	6	8	70	16	0.03	0.41	16	35	46	3	0.64	-0.07
	2017	5 261	66	20	34	37	9			6	9	62	23			27	46	25	2		
Cook Islands	2000	18	65	92	<1	7	<1	0.33	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	17	75	98	<1	2	-			-	-	-	-			-	-	-	-		
Costa Rica	2000	3 925	59	93	2	4	<1	0.27	-0.04	89	3	7	1	0.42	-0.05	97	1	2	<1	0.11	-0.02
	2017	4 906	79	98	<1	1	<1			96	<1	4	<1			98	<1	<1	<1		
Côte d'Ivoire	2000	16 687	43	21	19	24	36	0.66	-0.61	7	11	22	60	0.63	-0.94	39	30	26	5	0.42	0.17
	2017	24 295	50	32	22	20	26			18	15	24	44			46	30	16	8		
Croatia	2000	4 428	53	96	3	<1	<1	0.02	-	95	4	1	<1	0.02	-	98	2	<1	<1	0.02	0.00
	2017	4 189	57	97	2	<1	-			95	4	2	-			98	2	<1	<1		
Cuba	2000	11 151	75	87	7	4	2	0.34	-0.09	73	12	10	5	1.26	-0.24	92	5	2	<1	0.04	-0.04
	2017	11 485	77	93	3	4	<1			95	<1	5	<1			92	4	4	<1		
Curaçao	2000	132	91	98	<1	<1	<1	0.05	-0.04	-	-	-	-	-	-	-	-	-	-	-	-
	2017	161	89	99	<1	<1	<1			-	-	-	-			-	-	-	-		
Cyprus	2000	943	69	>99	<1	<1	<1	-0.04	0.00	>99	<1	<1	<1	-0.09	0.00	>99	<1	<1	<1	-0.01	0.00
	2017	1 180	67	>99	<1	<1	<1			98	<1	2	<1			>99	<1	<1	<1		
Czech Republic	2000	10 290	74	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	10 618	74	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Democratic People's Republic of Korea	2000	22 929	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	25 491	62	83	1	16	<1			72	<1	27	<1			90	2	8	<1		
Democratic Republic of the Congo	2000	47 076	35	21	23	45	10	-0.06	0.11	20	17	49	14	-0.13	0.25	23	35	39	3	0.01	0.06
	2017	81 340	44	20	20	47	12			18	12	52	19			23	31	42	4		
Denmark	2000	5 341	85	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	5 734	88	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Djibouti	2000	718	77	47	4	30	19	0.96	-0.10	12	2	20	67	0.44	-0.03	58	4	34	4	1.07	-0.06
	2017	957	78	64	6	13	17			19	2	12	66			76	8	13	3		
Dominica	2000	70	65	64	3	16	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	74	70	-	-	-	-			-	-	-	-			-	-	-	-		
Dominican Republic	2000	8 563	62	78	13	4	5	0.36	-0.14	71	13	6	10	0.14	-0.16	82	13	2	2	0.27	-0.03
	2017	10 767	80	84	11	2	3			74	16	4	7			86	10	2	2		
Ecuador	2000	12 629	60	70	9	7	14	1.08	-0.72	54	5	12	29	1.71	-1.36	80	12	3	5	0.63	-0.27
	2017	16 625	64	88	9	<1	2			83	9	2	6			91	9	<1	<1		
Egypt	2000	69 906	43	92	5	1	2	0.12	-0.10	90	6	2	2	0.06	-0.14	95	4	<1	<1	0.19	-0.04
	2017	97 553	43	94	4	1	<1			91	6	2	<1			98	2	<1	<1		
El Salvador	2000	5 868	59	83	5	1	10	0.25	-0.54	74	3	2	20	0.28	-0.99	90	6	<1	3	0.08	-0.18
	2017	6 378	71	87	11	<1	1			79	16	2	4			91	9	<1	<1		
Equatorial Guinea	2000	614	49	55	8	27	11	0.68	-0.46	46	5	36	13	0.69	-0.56	64	10	17	8	0.32	-0.33
	2017	1 268	72	66	10	21	3			57	6	33	4			70	11	16	3		
Eritrea	2000	3 393	27	8	8	1	83	-	-	1	<1	<1	98	-	-	27	27	5	41	-	-
	2017	5 069	39	-	-	-	-			-	-	-	-			-	-	-	-		
Estonia	2000	1 399	69	>99	<1	<1	<1	-0.03	0.00	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	-0.05	0.00
	2017	1 310	69	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Eswatini	2000	1 061	23	50	19	7	23	0.48	-0.97	45	18	7	30	0.93	-1.21	68	24	6	2	-1.01	-0.10
	2017	1 367	24	58	27	8	7			61	22	9	9			51	43	6	<1		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Colombia	2000	13	3	<1	10	1	13	70	-	-	-	2	4	35	16	14	1	<1	12	<1	5	89
	2017	17	4	<1	12	1	16	77	-	-	-	2	5	61	14	16	1	<1	14	<1	5	93
Comoros	2000	-	-	-	-	30	<1	<1	-	-	-	-	24	<1	<1	-	-	-	-	45	<1	<1
	2017	-	-	-	-	38	5	5	-	-	-	-	36	4	4	-	-	-	-	44	10	8
Congo	2000	-	-	-	-	29	1	6	-	-	-	-	14	<1	<1	-	-	-	-	39	2	10
	2017	-	-	-	-	38	15	1	-	-	-	-	14	<1	<1	-	-	-	-	50	22	2
Cook Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Costa Rica	2000	-	-	-	17	3	64	29	-	-	-	4	7	78	6	-	-	-	27	<1	54	44
	2017	-	-	-	10	-	75	23	-	-	-	3	<1	90	6	-	-	-	13	<1	71	28
Côte d'Ivoire	2000	-	-	-	-	25	9	7	-	-	-	-	16	2	<1	-	-	-	-	36	18	15
	2017	-	-	-	-	30	18	6	-	-	-	-	24	8	<1	-	-	-	-	37	27	12
Croatia	2000	58	12	8	38	5	38	56	-	-	-	20	7	61	29	64	6	4	54	3	17	79
	2017	58	11	8	39	5	36	58	-	-	-	20	8	61	29	64	6	4	54	3	17	79
Cuba	2000	34	18	5	11	25	27	42	-	-	-	3	53	20	13	32	14	4	14	16	30	51
	2017	44	16	7	21	21	25	50	-	-	-	7	49	31	15	42	12	5	25	12	23	60
Curaçao	2000	-	-	-	-	<1	74	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	<1	81	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	2000	76	12	12	53	<1	47	53	-	-	-	9	<1	91	9	86	7	7	73	<1	27	73
	2017	75	12	12	52	<1	47	52	-	-	-	9	<1	89	9	86	7	7	73	<1	27	73
Czech Republic	2000	84	3	3	78	1	9	89	76	9	8	60	3	29	68	86	1	<1	84	<1	3	97
	2017	94	3	3	88	1	9	89	85	9	9	68	3	29	68	98	1	1	96	<1	3	97
Democratic People's Republic of Korea	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	<1	-	-	30	10	45	5	<1	<1	5	49	15	10	-	1	-	-	18	6	67
Democratic Republic of the Congo	2000	-	-	-	-	39	4	2	-	-	-	-	37	<1	<1	-	-	-	-	42	12	4
	2017	-	-	-	-	35	5	<1	-	-	-	-	29	<1	<1	-	-	-	-	43	12	<1
Denmark	2000	92	3	3	87	<1	10	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	95	2	2	91	<1	8	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Djibouti	2000	26	24	<1	2	35	11	5	12	12	<1	<1	13	<1	<1	30	27	<1	3	41	15	7
	2017	36	34	<1	2	54	11	5	19	19	<1	<1	21	<1	<1	41	38	<1	3	63	15	7
Dominica	2000	-	-	-	-	14	39	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dominican Republic	2000	-	-	-	6	39	22	29	-	-	-	2	60	14	10	-	-	-	9	27	27	41
	2017	-	-	-	5	16	57	22	-	-	-	<1	39	46	5	-	-	-	6	10	60	27
Ecuador	2000	41	31	<1	10	22	18	40	43	40	<1	3	34	15	11	40	25	<1	15	14	20	59
	2017	42	25	<1	17	6	28	64	57	50	<1	7	16	49	27	33	11	<1	22	<1	15	85
Egypt	2000	54	19	14	23	13	52	32	-	-	-	6	14	74	8	64	11	8	45	12	23	64
	2017	61	8	6	48	2	29	67	-	-	-	33	4	48	45	71	<1	<1	69	<1	4	96
El Salvador	2000	-	-	-	-	45	7	36	-	-	-	-	69	6	3	-	-	-	-	29	8	59
	2017	-	-	-	-	40	17	41	-	-	-	-	75	19	<1	-	-	-	-	26	17	57
Equatorial Guinea	2000	-	-	-	-	47	6	9	-	-	-	-	39	5	7	-	-	-	-	56	7	12
	2017	-	-	-	-	59	6	11	-	-	-	-	52	5	7	-	-	-	-	63	7	12
Eritrea	2000	-	-	-	-	6	4	6	-	-	-	-	<1	1	<1	-	-	-	-	22	12	21
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estonia	2000	96	10	10	76	18	4	78	93	22	21	50	39	10	51	97	5	5	88	8	2	90
	2017	97	5	5	88	8	3	89	94	15	15	65	25	10	65	99	<1	<1	99	<1	<1	>99
Eswatini	2000	-	-	-	3	55	6	9	-	-	-	1	57	3	3	-	-	-	12	49	14	30
	2017	-	-	-	3	69	6	10	-	-	-	1	77	3	3	-	-	-	10	45	14	35

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
Ethiopia	2000	66 537	15	3	4	14	79	0.23	-3.34	1	<1	10	89	0.17	-3.65	16	24	37	23	0.21	-1.04
	2017	104 957	20	7	7	63	22			4	2	68	27			20	30	45	5		
Falkland Islands (Malvinas)	2000	3	68	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	3	77	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Faroe Islands	2000	47	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	49	42	-	-	-	-			-	-	-	-			-	-	-	-		
Fiji	2000	811	48	80	4	16	<1	0.91	-0.04	70	4	25	1	1.47	-0.07	90	4	5	<1	0.31	-0.00
	2017	906	56	95	5	<1	<1			95	5	<1	<1			95	5	<1	<1		
Finland	2000	5 188	82	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	5 523	85	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
France	2000	59 608	76	99	1	<1	<1	-0.00	0.00	99	1	<1	<1	0.00	0.00	99	1	<1	<1	0.00	0.00
	2017	64 980	80	99	1	<1	<1			99	1	<1	<1			99	1	<1	<1		
French Guiana	2000	163	79	92	<1	8	<1	-0.03	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	283	85	92	<1	8	<1			-	-	-	-			-	-	-	-		
French Polynesia	2000	237	56	98	<1	<1	2	-0.09	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	283	62	97	<1	3	-			-	-	-	-			-	-	-	-		
Gabon	2000	1 231	79	34	36	28	2	0.76	0.07	31	25	42	3	0.41	0.22	36	38	25	1	0.77	0.06
	2017	2 025	89	47	27	22	3			37	14	42	7			49	29	20	3		
Gambia	2000	1 232	48	58	30	6	6	-1.08	-0.27	64	18	8	10	-2.03	-0.41	51	43	5	1	-0.30	-0.08
	2017	2 101	61	39	27	33	1			30	15	53	3			45	35	20	<1		
Georgia	2000	4 722	53	95	3	<1	1	-0.30	-0.08	96	1	<1	3	-0.78	-0.17	94	5	<1	<1	0.06	0.00
	2017	3 912	58	90	1	9	<1			83	<1	17	<1			95	2	3	<1		
Germany	2000	81 488	75	>99	<1	<1	<1	0.00	0.00	99	1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	82 114	77	>99	<1	<1	<1			99	1	<1	<1			>99	<1	<1	<1		
Ghana	2000	18 939	44	9	50	20	22	0.58	-0.22	4	37	27	32	0.45	-0.05	14	66	11	9	0.57	-0.08
	2017	28 834	55	18	50	13	18			12	38	19	31			24	60	8	7		
Gibraltar	2000	31	100	>99	<1	<1	<1	0.00	0.00	-	-	-	-	-	-	>99	<1	<1	<1	0.00	0.00
	2017	35	100	>99	<1	<1	<1			-	-	-	-			>99	<1	<1	<1		
Greece	2000	11 142	73	97	1	<1	1	0.10	-0.07	94	2	<1	3	0.22	-	98	<1	<1	<1	0.04	-0.02
	2017	11 160	79	99	1	<1	<1			98	2	<1	-			>99	<1	<1	<1		
Greenland	2000	56	82	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	56	87	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Grenada	2000	102	36	90	8	<1	2	0.10	0.10	-	-	-	-	-	-	-	-	-	-	-	-
	2017	108	36	91	2	3	4			-	-	-	-			-	-	-	-		
Guadeloupe	2000	425	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	450	98	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Guam	2000	155	93	89	9	3	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	164	95	-	-	-	-			-	-	-	-			-	-	-	-		
Guatemala	2000	11 651	45	63	4	19	14	0.10	-0.55	48	<1	29	22	0.14	-0.82	82	7	7	4	-0.14	-0.17
	2017	16 914	51	65	12	19	5			51	11	30	8			79	12	8	1		
Guinea	2000	8 809	31	9	12	51	28	0.78	-0.78	3	4	54	39	0.79	-1.02	24	29	45	2	0.60	-0.03
	2017	12 717	36	23	30	33	14			17	18	44	22			34	52	13	1		
Guinea-Bissau	2000	1 243	36	12	10	42	36	0.52	-1.14	4	2	39	55	0.23	-1.55	25	24	48	4	0.73	-0.12
	2017	1 861	43	21	16	47	17			8	5	58	28			37	30	32	2		
Guyana	2000	753	29	79	8	12	1	0.41	-0.04	77	7	15	2	0.42	-0.04	84	10	5	<1	0.42	-0.04
	2017	778	27	86	10	3	<1			84	12	4	<1			92	6	2	<1		
Haiti	2000	8 549	36	17	17	30	37	1.06	-1.01	11	7	30	52	0.78	-1.08	28	34	28	10	0.94	-0.11
	2017	10 981	54	35	27	18	20			24	16	26	34			44	37	11	8		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Ethiopia	2000	-	-	-	-	6	<1	<1	1	<1	<1	<1	<1	<1	<1	-	-	-	-	35	2	3
	2017	-	-	-	-	11	2	1	4	4	<1	<1	5	<1	<1	-	-	-	-	37	10	3
Falkland Islands (Malvinas)	2000	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99
	2017	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99
Faroe Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fiji	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Finland	2000	>99	20	<1	78	21	<1	79	-	-	-	4	96	<1	4	99	2	2	94	4	1	95
	2017	>99	14	<1	85	14	<1	85	-	-	-	20	79	1	20	>99	2	2	96	3	<1	96
France	2000	89	11	<1	79	1	18	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	88	10	<1	78	<1	18	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
French Guiana	2000	-	-	-	-	13	43	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	8	39	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
French Polynesia	2000	-	-	-	-	2	77	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	<1	80	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gabon	2000	-	-	-	-	48	-	22	-	-	-	-	50	-	5	-	-	-	-	48	-	26
	2017	-	-	-	-	41	-	34	-	-	-	-	43	-	9	-	-	-	-	41	-	37
Gambia	2000	-	-	-	-	73	12	3	-	-	-	-	81	2	<1	-	-	-	-	66	23	5
	2017	-	-	-	-	46	18	3	-	-	-	-	43	2	<1	-	-	-	-	48	28	4
Georgia	2000	22	22	<1	<1	45	2	52	-	-	-	<1	83	3	11	5	5	<1	<1	10	<1	88
	2017	27	19	2	6	38	2	52	-	-	-	<1	75	3	5	16	5	<1	10	11	<1	85
Germany	2000	95	<1	<1	94	<1	4	96	90	3	3	83	<1	14	86	97	<1	<1	97	<1	<1	>99
	2017	97	<1	<1	96	<1	3	97	92	3	3	85	<1	14	86	99	<1	<1	99	<1	<1	>99
Ghana	2000	-	-	-	-	49	5	5	-	-	-	-	39	<1	1	-	-	-	-	61	10	9
	2017	-	-	-	-	48	17	3	-	-	-	-	47	2	<1	-	-	-	-	50	29	6
Gibraltar	2000	-	-	-	-	<1	-	>99	-	-	-	-	-	-	-	-	-	-	-	<1	-	>99
	2017	-	-	-	-	<1	-	>99	-	-	-	-	-	-	-	-	-	-	-	<1	-	>99
Greece	2000	76	13	13	51	4	43	52	-	-	-	10	14	72	10	83	8	8	67	<1	32	67
	2017	90	4	4	82	<1	17	83	-	-	-	37	<1	62	38	97	1	1	94	<1	5	95
Greenland	2000	92	3	3	87	<1	10	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	95	2	2	91	<1	8	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grenada	2000	-	-	-	-	46	49	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	28	59	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guadeloupe	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	12	48	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guam	2000	-	-	-	-	<1	26	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guatemala	2000	-	-	-	-	26	5	37	-	-	-	-	33	5	11	-	-	-	-	17	4	68
	2017	-	-	-	-	23	12	42	-	-	-	-	36	15	10	-	-	-	-	10	9	73
Guinea	2000	-	-	-	-	20	<1	1	-	-	-	-	7	<1	<1	-	-	-	-	50	<1	3
	2017	-	-	-	-	40	11	2	-	-	-	-	32	2	<1	-	-	-	-	54	27	5
Guinea-Bissau	2000	-	-	-	-	15	2	4	-	-	-	-	5	<1	<1	-	-	-	-	33	6	10
	2017	-	-	-	-	19	14	3	-	-	-	-	11	2	<1	-	-	-	-	30	31	6
Guyana	2000	-	-	-	-	50	33	5	-	-	-	-	57	25	2	-	-	-	-	32	51	11
	2017	-	-	-	-	28	66	2	-	-	-	-	34	61	<1	-	-	-	-	9	81	8
Haiti	2000	-	-	-	-	30	2	<1	-	-	-	-	17	<1	<1	-	-	-	-	54	5	2
	2017	-	-	-	-	47	14	<1	-	-	-	-	37	3	<1	-	-	-	-	56	24	1

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
Holy See	2000	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	1	100	-	-	-	-			-	-	-	-			-	-	-	-		
Honduras	2000	6 524	45	**63**	6	11	**20**	1.09	-0.81	**52**	3	12	**33**	1.43	-1.29	**76**	11	10	**4**	0.56	-0.11
	2017	9 265	56	**81**	9	4	**6**			**76**	7	5	**11**			**85**	10	3	**2**		
Hungary	2000	10 221	65	**98**	2	<1	**<1**	-0.00	0.00	**99**	1	<1	**<1**	0.00	0.00	**98**	2	<1	**<1**	0.00	0.00
	2017	9 722	71	**98**	2	<1	**<1**			**99**	1	<1	**<1**			**98**	2	<1	**<1**		
Iceland	2000	280	92	**99**	1	<1	**<1**	-0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00	**99**	1	<1	**<1**	0.00	0.00
	2017	335	94	**99**	1	<1	**<1**			**>99**	<1	<1	**<1**			**99**	1	<1	**<1**		
India	2000	1 053	28	**16**	5	6	**73**	2.54	-2.76	**4**	<1	5	**90**	2.91	-3.17	**49**	16	8	**27**	1.34	-1.29
	2017	1 339	34	**60**	13	2	**26**			**53**	8	3	**36**			**72**	22	2	**5**		
Indonesia	2000	211 540	42	**41**	13	14	**33**	1.88	-1.34	**25**	10	19	**46**	2.30	-1.70	**63**	17	6	**14**	1.03	-0.62
	2017	263 991	55	**73**	12	5	**10**			**65**	12	7	**17**			**80**	12	4	**4**		
Iran (Islamic Republic of)	2000	66 132	64	**87**	11	1	**<1**	0.07	-	**79**	17	2	**2**	-0.01	-	**92**	7	<1	**<1**	-0.01	0.00
	2017	81 163	74	**88**	10	2	**-**			**79**	17	4	**-**			**92**	7	1	**<1**		
Iraq	2000	23 565	68	**71**	15	9	**5**	1.36	-0.28	**56**	9	20	**15**	1.90	-0.86	**78**	17	4	**<1**	1.10	-0.01
	2017	38 275	70	**94**	1	5	**<1**			**88**	2	10	**<1**			**97**	<1	2	**<1**		
Ireland	2000	3 849	59	**90**	7	4	**<1**	0.10	0.00	**92**	5	4	**<1**	0.16	0.00	**88**	8	4	**<1**	0.08	0.00
	2017	4 762	63	**91**	7	2	**<1**			**94**	5	1	**<1**			**89**	8	2	**<1**		
Isle of Man	2000	73	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	84	52	-	-	-	-			-	-	-	-			-	-	-	-		
Israel	2000	6 014	91	**>99**	<1	<1	**<1**	0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00
	2017	8 322	92	**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**		
Italy	2000	57 294	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	59 360	70	**99**	<1	1	**<1**			**99**	<1	1	**<1**			**99**	<1	1	**<1**		
Jamaica	2000	2 657	52	**82**	15	2	**<1**	0.31	-0.02	**82**	13	4	**1**	0.45	-0.08	**82**	16	1	**<1**	0.21	0.03
	2017	2 890	55	**87**	12	<1	**<1**			**90**	10	<1	**<1**			**86**	13	<1	**<1**		
Japan	2000	127 534	79	**>99**	<1	<1	**<1**	-0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	127 484	92	**>99**	<1	<1	**<1**			-	-	-	-			-	-	-	-		
Jordan	2000	5 103	78	**98**	1	<1	**<1**	-0.07	0.00	**98**	1	<1	**<1**	-0.11	0.02	**99**	1	<1	**<1**	-0.07	0.01
	2017	9 702	91	**97**	1	1	**<1**			**96**	<1	2	**<1**			**97**	1	1	**<1**		
Kazakhstan	2000	15 057	56	**97**	2	1	**<1**	0.06	-0.00	**97**	1	2	**<1**	0.12	-0.01	**97**	3	<1	**<1**	0.02	0.00
	2017	18 204	57	**98**	2	<1	**<1**			**>99**	<1	<1	**<1**			**97**	3	<1	**<1**		
Kenya	2000	31 450	20	**34**	18	31	**17**	-0.27	-0.42	**33**	13	33	**21**	-0.36	-0.45	**36**	37	24	**3**	-0.06	-0.05
	2017	49 700	27	**29**	22	38	**10**			**27**	14	45	**13**			**35**	44	19	**2**		
Kiribati	2000	84	43	**24**	5	23	**49**	1.42	-1.20	-	-	-	-	-	-	-	-	-	-	-	-
	2017	116	53	**48**	13	10	**28**			-	-	-	-			-	-	-	-		
Kuwait	2000	2 051	99	**>99**	<1	<1	**<1**	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	4 137	100	**>99**	<1	<1	**<1**			-	-	-	-			-	-	-	-		
Kyrgyzstan	2000	4 921	35	**92**	3	4	**<1**	0.24	-0.01	**92**	2	6	**<1**	0.44	-0.00	**94**	5	<1	**<1**	-0.13	-0.01
	2017	6 045	36	**97**	3	<1	**<1**			**>99**	<1	<1	**<1**			**92**	8	<1	**<1**		
Lao People's Democratic Republic	2000	5 329	22	**28**	1	9	**62**	2.72	-2.40	**17**	<1	9	**73**	2.71	-2.48	**67**	4	8	**21**	1.67	-1.17
	2017	6 858	34	**74**	3	2	**21**			**64**	3	3	**31**			**95**	3	<1	**1**		
Latvia	2000	2 384	68	**88**	<1	12	**<1**	0.22	0.00	**73**	<1	27	**<1**	0.64	0.00	**96**	<1	4	**<1**	0.02	0.00
	2017	1 950	68	**92**	2	6	**<1**			**83**	1	15	**<1**			**96**	3	1	**<1**		
Lebanon	2000	3 235	86	**75**	1	24	**<1**	1.38	-0.01	-	-	-	-	-	-	-	-	-	-	-	-
	2017	6 082	88	**98**	1	<1	**<1**			-	-	-	-			-	-	-	-		
Lesotho	2000	1 869	20	**9**	4	41	**46**	1.99	-1.12	**6**	<1	38	**55**	2.17	-1.17	**21**	18	52	**9**	1.27	-0.18
	2017	2 233	28	**43**	20	10	**27**			**43**	10	12	**35**			**43**	46	5	**6**		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Holy See	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras	2000	-	-	-	9	23	18	27	-	-	-	<1	30	22	2	33	10	4	19	15	14	57
	2017	-	-	-	14	24	26	40	-	-	-	2	44	33	6	35	9	3	23	9	20	66
Hungary	2000	96	24	24	48	32	18	50	98	41	41	17	83	-	17	95	16	16	64	32	-	68
	2017	96	9	9	78	<1	18	82	98	19	19	60	39	-	61	95	5	5	85	10	-	90
Iceland	2000	44	3	2	39	2	9	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	82	2	1	79	<1	6	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
India	2000	-	-	-	2	3	12	7	2	1	<1	<1	<1	4	<1	-	-	-	5	10	33	23
	2017	-	-	-	3	28	33	11	39	39	<1	<1	36	24	<1	-	-	-	9	14	50	30
Indonesia	2000	-	-	-	-	4	38	12	-	-	-	-	<1	21	14	-	-	-	-	9	61	10
	2017	-	-	-	-	3	71	11	-	-	-	-	3	60	14	-	-	-	-	3	80	10
Iran (Islamic Republic of)	2000	-	-	-	22	71	<1	27	-	-	-	9	83	<1	13	-	-	-	29	64	<1	35
	2017	-	-	-	22	70	1	27	-	-	-	1	93	1	1	-	-	-	30	62	1	36
Iraq	2000	32	21	<1	11	21	41	24	31	31	<1	<1	28	36	1	32	17	<1	15	19	43	34
	2017	41	26	<1	15	14	56	26	45	42	<1	3	18	65	6	39	20	<1	20	12	52	34
Ireland	2000	52	22	<1	30	<1	33	63	63	54	<1	9	<1	77	18	45	<1	<1	44	<1	3	93
	2017	82	20	1	61	6	26	66	72	51	<1	21	11	65	22	88	2	2	84	3	2	92
Isle of Man	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Israel	2000	79	<1	<1	79	<1	<1	>99	78	1	<1	76	<1	5	95	80	<1	<1	79	<1	<1	>99
	2017	94	<1	<1	93	<1	<1	>99	92	1	1	89	<1	5	95	94	<1	<1	94	<1	<1	>99
Italy	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	96	3	3	91	5	-	94	96	3	3	90	6	-	93	96	2	2	91	5	-	94
Jamaica	2000	-	-	-	6	39	41	17	-	-	-	<1	58	34	3	-	-	-	10	20	47	31
	2017	-	-	-	8	52	25	23	-	-	-	3	73	19	7	-	-	-	12	34	29	35
Japan	2000	97	<1	39	58	15	27	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	99	<1	22	76	4	19	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jordan	2000	76	12	12	53	<1	46	54	-	-	-	<1	<1	>99	<1	83	8	8	67	<1	31	68
	2017	81	8	8	64	<1	34	64	-	-	-	13	<1	84	13	83	7	7	69	<1	29	70
Kazakhstan	2000	-	-	-	42	52	2	45	-	-	-	10	82	5	11	93	14	13	66	28	<1	71
	2017	-	-	-	35	54	9	37	-	-	-	2	90	7	2	91	15	15	60	27	10	63
Kenya	2000	-	-	-	-	42	2	8	-	-	-	-	44	<1	2	-	-	-	-	32	9	32
	2017	-	-	-	-	42	4	5	-	-	-	-	40	1	<1	-	-	-	-	47	12	20
Kiribati	2000	-	-	-	-	<1	16	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	20	29	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kuwait	2000	>99	<1	<1	>99	<1	-	>99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	>99	<1	<1	>99	<1	-	>99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	2000	-	-	-	17	73	1	21	-	-	-	5	88	<1	6	-	-	-	40	46	3	49
	2017	-	-	-	12	86	<1	14	-	-	-	<1	>99	<1	<1	-	-	-	33	62	<1	37
Lao People's Democratic Republic	2000	22	21	<1	<1	22	7	<1	15	15	<1	<1	14	3	<1	46	44	<1	2	47	20	4
	2017	58	58	<1	<1	57	19	1	56	55	<1	<1	56	10	<1	62	61	<1	<1	60	36	2
Latvia	2000	79	5	5	69	8	4	76	64	9	8	48	15	5	53	86	3	3	79	5	4	87
	2017	86	<1	<1	84	<1	2	92	77	2	2	72	2	5	78	90	<1	<1	90	<1	<1	98
Lebanon	2000	17	7	1	9	15	<1	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	22	9	1	12	18	<1	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lesotho	2000	-	-	-	-	11	<1	1	-	-	-	-	6	<1	<1	-	-	-	-	32	2	5
	2017	-	-	-	-	60	1	1	-	-	-	-	52	<1	<1	-	-	-	-	82	4	3

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
Liberia	2000	2 885	44	**14**	18	13	**55**	0.20	-0.90	**4**	13	6	**77**	0.10	-0.95	**25**	25	22	**28**	0.14	-0.50
	2017	4 732	51	**17**	27	16	**40**			**6**	18	16	**60**			**28**	36	17	**19**		
Libya	2000	5 356	76	**97**	<1	3	**<1**	0.15	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	6 375	80	**>99**	<1	<1	**<1**			-	-	-	-			-	-	-	-		
Liechtenstein	2000	33	15	**>99**	<1	<1	**<1**	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	38	14	**>99**	<1	<1	**<1**			-	-	-	-			-	-	-	-		
Lithuania	2000	3 502	67	**84**	2	14	**<1**	0.53	0.00	**66**	2	32	**<1**	1.10	0.00	**93**	2	5	**<1**	0.25	0.00
	2017	2 890	68	**93**	2	5	**<1**			**85**	2	12	**<1**			**97**	2	<1	**<1**		
Luxembourg	2000	436	84	**98**	2	<1	**<1**	-0.01	0.00	**99**	1	<1	**<1**	-0.01	0.00	**98**	3	<1	**<1**	-0.00	0.00
	2017	583	91	**98**	2	<1	**<1**			**99**	1	<1	**<1**			**97**	2	<1	**<1**		
Madagascar	2000	15 767	27	**5**	7	51	**38**	0.35	0.40	**3**	4	48	**45**	0.21	0.67	**9**	16	58	**17**	0.49	0.37
	2017	25 571	37	**11**	16	29	**45**			**6**	10	27	**57**			**18**	25	34	**23**		
Malawi	2000	11 376	15	**21**	11	53	**15**	0.32	-0.57	**19**	8	55	**18**	0.34	-0.65	**32**	26	40	**2**	0.12	-0.05
	2017	18 622	17	**26**	13	55	**6**			**25**	11	58	**7**			**34**	24	40	**1**		
Malaysia	2000	23 186	62	**97**	<1	2	**2**	0.16	-	**94**	<1	2	**3**	0.25	-	**98**	<1	1	**<1**	0.09	-0.03
	2017	31 624	75	**>99**	<1	<1	**-**			**99**	<1	1	**-**			**>99**	<1	<1	**<1**		
Maldives	2000	280	28	**74**	2	10	**15**	1.50	-0.87	**67**	1	11	**21**	1.93	-1.21	**92**	3	5	**<1**	0.40	-0.00
	2017	436	39	**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**		
Mali	2000	10 968	28	**16**	16	47	**21**	1.36	-0.82	**9**	8	55	**28**	1.19	-0.95	**34**	35	26	**4**	1.14	-0.19
	2017	18 542	42	**39**	15	39	**7**			**29**	5	54	**12**			**53**	29	16	**1**		
Malta	2000	397	92	**>99**	<1	<1	**<1**	-0.00	0.00	**>99**	<1	<1	**<1**	0.00	0.00	**>99**	<1	<1	**<1**	-0.00	0.00
	2017	431	95	**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**			**>99**	<1	<1	**<1**		
Marshall Islands	2000	52	69	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	53	77	**83**	6	<1	**10**			**59**	7	3	**32**			**91**	5	<1	**3**		
Martinique	2000	387	90	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	385	89	**>99**	<1	<1	**<1**			**-**	-	-	**-**			**-**	-	-	**-**		
Mauritania	2000	2 709	38	**17**	8	20	**55**	1.82	-1.36	**7**	3	14	**76**	0.70	-1.06	**34**	16	29	**21**	2.37	-0.72
	2017	4 420	53	**48**	8	12	**32**			**19**	6	16	**58**			**75**	9	8	**8**		
Mauritius	2000	1 185	43	**90**	7	2	**<1**	0.32	0.00	**88**	8	4	**<1**	0.40	0.01	**92**	7	<1	**<1**	0.22	-0.00
	2017	1 265	41	**96**	4	<1	**<1**			**95**	4	<1	**<1**			**96**	4	<1	**<1**		
Mayotte	2000	150	48	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	253	46	**-**	-	-	**-**			**-**	-	-	**-**			**-**	-	-	**-**		
Mexico	2000	101 720	75	**75**	8	7	**10**	0.94	-0.55	**53**	3	16	**28**	1.75	-1.47	**83**	9	4	**4**	0.62	-0.23
	2017	129 163	80	**91**	7	1	**<1**			**82**	9	5	**3**			**93**	6	<1	**<1**		
Micronesia (Federated States of)	2000	107	22	**25**	<1	75	**-**	3.75	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	106	23	**88**	<1	12	**-**			**-**	-	-	**-**			**-**	-	-	**-**		
Monaco	2000	32	100	**>99**	<1	<1	**<1**	0.00	0.00	**-**	-	-	**-**	-	-	**>99**	<1	<1	**<1**	0.00	0.00
	2017	39	100	**>99**	<1	<1	**<1**			**-**	-	-	**-**			**>99**	<1	<1	**<1**		
Mongolia Mongolia	2000	2 397	57	**48**	27	8	**17**	0.62	-0.39	**26**	22	14	**38**	0.89	-0.46	**64**	32	3	**1**	0.13	0.00
	2017	3 076	68	**58**	28	3	**10**			**42**	24	5	**30**			**66**	30	3	**1**		
Montenegro	2000	614	59	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	629	66	**98**	<1	2	**<1**			**94**	<1	6	**<1**			**>99**	<1	<1	**<1**		
Montserrat	2000	5	2	**80**	9	7	**4**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-
	2017	5	9	**-**	-	-	**-**			**-**	-	-	**-**			**-**	-	-	**-**		
Morocco	2000	28 850	53	**66**	9	<1	**24**	1.34	-1.00	**46**	4	<1	**50**	1.95	-1.82	**83**	14	1	**2**	0.66	-0.11
	2017	35 740	62	**89**	4	<1	**7**			**79**	2	<1	**19**			**94**	5	<1	**<1**		
Mozambique	2000	18 068	29	**10**	2	28	**59**	1.11	-1.87	**2**	<1	25	**73**	0.88	-2.07	**32**	6	37	**25**	1.21	-1.00
	2017	29 669	35	**29**	5	39	**27**			**17**	2	43	**38**			**52**	9	30	**8**		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Liberia	2000	-	-	-	-	21	7	4	-	-	-	-	16	<1	<1	-	-	-	-	27	14	9
	2017	-	-	-	-	21	22	<1	-	-	-	-	21	3	<1	-	-	-	-	22	41	<1
Libya	2000	29	18	3	9	31	9	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	26	13	2	11	22	8	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Liechtenstein	2000	>99	<1	<1	99	<1	1	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	>99	<1	<1	99	<1	1	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	2000	83	5	5	73	10	-	76	65	10	10	46	20	-	48	91	2	2	86	5	-	90
	2017	91	1	1	89	2	-	93	83	3	3	77	7	-	81	95	<1	<1	95	<1	-	>99
Luxembourg	2000	91	<1	<1	90	<1	3	97	85	5	4	76	<1	19	81	92	<1	<1	92	<1	<1	>99
	2017	97	<1	<1	96	<1	2	98	89	5	5	80	<1	19	81	97	<1	<1	97	<1	<1	>99
Madagascar	2000	-	-	-	-	9	2	<1	-	-	-	-	6	<1	<1	-	-	-	-	18	6	1
	2017	-	-	-	-	19	6	1	-	-	-	-	15	1	<1	-	-	-	-	26	14	2
Malawi	2000	-	-	-	-	28	2	2	-	-	-	-	25	<1	1	-	-	-	-	45	9	4
	2017	-	-	-	-	34	3	2	-	-	-	-	34	<1	<1	-	-	-	-	35	15	8
Malaysia	2000	78	14	3	61	4	26	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	89	10	<1	78	<1	20	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maldives	2000	-	-	-	-	8	39	28	-	-	-	-	11	51	6	-	-	-	-	<1	9	86
	2017	-	-	-	-	4	36	60	-	-	-	-	6	59	34	-	-	-	-	<1	<1	>99
Mali	2000	7	6	<1	1	27	1	4	7	7	<1	<1	15	<1	3	7	5	<1	2	57	4	8
	2017	19	18	<1	<1	49	4	1	26	26	<1	<1	33	<1	<1	9	8	<1	<1	70	9	3
Malta	2000	93	<1	<1	93	<1	2	99	93	<1	<1	93	<1	-	>99	93	<1	<1	93	<1	-	>99
	2017	93	<1	<1	93	<1	1	99	93	<1	<1	93	<1	-	>99	93	<1	<1	93	<1	-	>99
Marshall Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	2	47	40	-	-	-	-	8	55	3	-	-	-	-	<1	45	51
Martinique	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	1	51	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mauritania	2000	-	-	-	-	13	11	2	-	-	-	-	6	4	<1	-	-	-	-	23	24	3
	2017	-	-	-	-	39	14	3	-	-	-	-	22	4	<1	-	-	-	-	55	24	5
Mauritius	2000	-	-	-	13	72	7	19	-	-	-	1	86	9	2	-	-	-	29	54	4	42
	2017	-	-	-	17	70	7	23	-	-	-	4	85	9	5	-	-	-	35	47	4	49
Mayotte	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	2000	18	5	1	11	5	13	64	-	-	-	4	12	24	20	18	4	<1	14	3	10	79
	2017	50	5	3	43	3	15	80	-	-	-	18	14	42	35	52	2	1	49	<1	8	91
Micronesia Federated States of)	2000	-	-	-	-	<1	14	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	37	38	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monaco	2000	>99	<1	<1	>99	<1	-	>99	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	-	>99
	2017	>99	<1	<1	>99	<1	-	>99	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	-	>99
Mongolia	2000	-	-	-	4	52	<1	23	-	-	-	<1	47	<1	<1	-	-	-	6	57	<1	39
	2017	-	-	-	6	65	<1	21	-	-	-	<1	62	<1	3	-	-	-	9	67	<1	29
Montenegro	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	13	1	51	46	-	-	-	4	4	75	15	30	10	3	17	<1	39	61
Montserrat	2000	-	-	-	-	2	73	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morocco	2000	32	11	5	16	19	10	46	-	-	-	<1	33	15	2	37	4	2	31	7	6	84
	2017	39	11	5	22	10	27	55	-	-	-	<1	23	55	3	40	3	1	35	2	9	87
Mozambique	2000	-	-	-	-	10	1	1	2	2	<1	<1	2	<1	<1	-	-	-	-	28	5	5
	2017	-	-	-	-	26	7	<1	16	16	<1	<1	18	<1	<1	-	-	-	-	39	20	3

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
Myanmar	2000	46 095	27	71	10	9	9	-0.39	0.00	67	9	12	12	-0.43	0.04	82	13	4	1	-0.38	0.00
	2017	53 371	30	64	9	17	9			59	8	19	13			76	12	11	1		
Namibia	2000	1 899	32	28	9	7	56	0.38	-0.43	13	3	8	76	0.29	-0.16	59	21	5	14	-0.45	0.51
	2017	2 534	49	35	12	4	49			18	4	5	73			51	21	4	23		
Nauru	2000	10	100	66	31	3	<1	-0.01	0.10	-	-	-	-	-	-	66	31	3	<1	-0.01	0.10
	2017	11	100	66	31	1	3			-	-	-	-			66	31	1	3		
Nepal	2000	23 741	13	15	11	7	67	2.76	-2.67	12	6	7	74	2.85	-2.90	33	42	6	19	2.04	-0.71
	2017	29 305	19	62	14	3	21			61	11	3	25			67	24	<1	7		
Netherlands	2000	15 926	77	98	2	<1	<1	-0.02	0.00	>99	<1	<1	<1	-0.00	0.00	98	3	<1	<1	0.00	0.00
	2017	17 036	91	98	2	<1	<1			>99	<1	<1	<1			98	3	<1	<1		
New Caledonia	2000	213	62	>99	<1	<1	<1	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	276	70	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
New Zealand	2000	3 859	86	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	4 706	86	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Nicaragua	2000	5 027	55	58	4	21	16	0.95	-0.55	43	4	23	30	1.07	-0.91	71	5	20	4	0.77	-0.21
	2017	6 218	58	74	6	13	7			62	5	19	14			84	6	9	<1		
Niger	2000	11 353	16	5	3	8	84	0.50	-0.93	1	<1	3	95	0.38	-0.97	25	17	35	23	1.10	-0.71
	2017	21 477	16	14	10	9	68			8	5	8	79			44	33	12	11		
Nigeria	2000	122 352	35	30	24	20	26	0.57	-0.39	29	16	22	33	0.08	-0.15	30	40	17	14	1.05	-0.29
	2017	190 886	50	39	21	21	20			31	9	30	31			48	32	11	9		
Niue	2000	2	33	>99	<1	<1	<1	-0.19	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	2	44	97	<1	3	<1			-	-	-	-			-	-	-	-		
North Macedonia	2000	2 035	59	85	7	8	<1	0.82	0.04	77	8	14	<1	1.23	0.08	91	6	3	<1	0.53	0.00
	2017	2 083	58	>99	<1	<1	<1			98	<1	<1	2			>99	<1	<1	<1		
Northern Mariana Islands	2000	69	90	75	18	7	<1	0.21	-0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	55	92	79	19	2	<1			-	-	-	-			-	-	-	-		
Norway	2000	4 499	76	98	2	<1	<1	-0.00	0.00	98	2	<1	<1	0.00	0.00	98	2	<1	<1	0.00	0.00
	2017	5 305	82	98	2	<1	<1			98	2	<1	<1			98	2	<1	<1		
Oman	2000	2 268	72	89	<1	11	-	0.67	-	77	<1	23	-	1.37	-	93	<1	7	-	0.38	-
	2017	4 636	84	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Pakistan	2000	138 523	33	31	4	24	40	1.68	-1.75	14	2	27	57	2.11	-2.39	66	9	20	6	0.64	-0.35
	2017	197 016	36	60	10	20	10			50	13	21	16			77	6	18	<1		
Palau	2000	19	70	>99	<1	<1	<1	0.04	0.00	99	<1	1	<1	0.08	0.00	>99	<1	<1	<1	0.03	0.00
	2017	22	79	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Panama	2000	3 030	62	61	8	23	8	1.31	-0.20	44	3	35	17	1.23	-0.28	71	11	16	2	1.22	-0.09
	2017	4 099	67	83	6	6	4			65	8	15	13			92	5	2	<1		
Papua New Guinea	2000	5 572	13	21	4	62	13	-0.47	0.07	15	3	67	14	-0.44	0.12	58	9	27	5	-0.63	-0.27
	2017	8 251	13	13	2	70	14			8	1	74	17			48	8	44	<1		
Paraguay	2000	5 303	55	70	3	26	<1	1.14	-0.01	52	<1	46	1	1.81	-0.02	85	4	10	<1	0.53	-0.00
	2017	6 811	61	90	3	6	<1			83	2	14	<1			94	4	1	<1		
Peru	2000	25 915	73	64	7	11	18	0.60	-0.70	29	2	19	50	1.60	-1.83	77	9	7	7	0.14	-0.22
	2017	32 165	78	74	11	8	7			56	5	20	19			80	13	5	3		
Philippines	2000	77 992	46	62	20	7	11	0.85	-0.35	53	20	11	16	1.26	-0.51	72	19	3	5	0.37	-0.15
	2017	104 918	47	77	15	3	5			75	13	5	7			78	17	2	3		
Poland	2000	38 550	62	88	<1	11	<1	0.66	0.00	77	<1	22	<1	1.30	0.00	94	1	5	<1	0.26	0.00
	2017	38 171	60	99	1	<1	<1			>99	<1	<1	<1			99	1	<1	<1		
Portugal	2000	10 355	54	97	<1	2	<1	0.13	0.00	96	<1	4	<1	0.23	0.00	98	<1	1	<1	0.06	0.00
	2017	10 330	65	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Myanmar	2000	-	-	-	-	70	9	2	-	-	-	-	69	7	<1	-	-	-	-	72	15	8
	2017	-	-	-	-	65	9	<1	-	-	-	-	66	2	<1	-	-	-	-	63	25	<1
Namibia	2000	-	-	-	-	7	2	29	-	-	-	-	6	<1	10	-	-	-	-	8	4	68
	2017	-	-	-	-	10	1	36	-	-	-	-	14	2	6	-	-	-	-	6	<1	66
Nauru	2000	-	-	-	-	44	29	23	-	-	-	-	-	-	-	-	-	-	-	44	29	23
	2017	-	-	-	-	44	29	23	-	-	-	-	-	-	-	-	-	-	-	44	29	23
Nepal	2000	-	-	-	-	9	12	4	-	-	-	-	9	8	<1	-	-	-	-	9	39	26
	2017	-	-	-	-	22	49	5	-	-	-	-	23	47	2	-	-	-	-	15	57	19
Netherlands	2000	97	<1	<1	97	<1	1	99	97	1	1	95	<1	5	95	97	<1	<1	97	<1	<1	>99
	2017	97	<1	<1	97	<1	<1	>99	97	1	1	95	<1	5	95	97	<1	<1	97	<1	<1	>99
New Caledonia	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Zealand	2000	79	7	5	67	7	13	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	89	5	5	79	4	13	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nicaragua	2000	-	-	-	-	43	4	16	-	-	-	-	46	<1	<1	-	-	-	-	40	7	29
	2017	-	-	-	-	45	10	24	-	-	-	-	62	4	<1	-	-	-	-	33	15	41
Niger	2000	3	3	<1	<1	7	<1	<1	<1	<1	<1	<1	1	<1	<1	15	13	<1	1	34	3	4
	2017	10	9	<1	<1	19	3	<1	7	7	<1	<1	12	1	<1	23	23	<1	<1	60	13	3
Nigeria	2000	25	24	<1	<1	46	3	4	25	25	<1	<1	43	<1	<1	24	21	<1	2	52	8	10
	2017	27	23	<1	3	31	19	10	24	22	<1	2	30	5	4	30	25	<1	5	32	32	16
Niue	2000	-	-	-	-	15	78	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	12	78	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Macedonia	2000	14	9	<1	4	2	33	57	-	-	-	2	<1	57	29	12	5	<1	6	3	17	77
	2017	17	10	<1	6	13	12	74	-	-	-	3	32	29	38	8	<1	<1	8	<1	<1	>99
Northern Mariana Islands	2000	-	-	-	-	3	48	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	<1	44	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	2000	73	9	8	57	1	19	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	76	6	7	63	2	14	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oman	2000	-	-	-	9	<1	79	9	-	-	-	2	<1	75	2	-	-	-	13	<1	81	13
	2017	-	-	-	11	4	85	11	-	-	-	2	10	89	2	-	-	-	13	3	84	13
Pakistan	2000	-	-	-	-	<1	15	20	-	-	-	-	<1	12	4	-	-	-	-	<1	22	52
	2017	-	-	-	-	12	33	25	-	-	-	-	16	42	5	-	-	-	-	4	18	60
Palau	2000	-	-	-	-	<1	48	51	-	-	-	-	<1	87	12	-	-	-	-	<1	32	68
	2017	-	-	-	-	<1	44	56	-	-	-	-	<1	88	12	-	-	-	-	<1	32	68
Panama	2000	-	-	-	-	20	21	28	-	-	-	-	31	13	3	-	-	-	-	13	25	44
	2017	-	-	-	-	15	37	37	-	-	-	-	32	37	4	-	-	-	-	7	37	53
Papua New Guinea	2000	-	-	-	2	16	5	4	-	-	-	<1	16	2	1	-	-	-	11	20	25	23
	2017	-	-	-	2	7	5	4	-	-	-	<1	7	2	1	-	-	-	11	8	25	23
Paraguay	2000	44	37	<1	6	28	32	13	36	34	<1	2	25	23	4	49	40	<1	10	29	40	20
	2017	58	54	<1	4	42	43	9	66	66	<1	<1	58	27	<1	54	47	<1	7	31	53	14
Peru	2000	11	4	<1	7	4	12	56	-	-	-	<1	7	21	3	13	3	<1	10	2	8	75
	2017	43	5	3	39	8	6	71	-	-	-	10	20	23	17	51	2	1	47	4	2	86
Philippines	2000	42	40	<1	2	8	70	4	36	35	<1	<1	14	57	2	48	46	<1	3	<1	85	6
	2017	52	50	<1	2	12	75	4	50	48	<1	1	16	69	3	54	52	<1	2	7	83	6
Poland	2000	79	9	15	56	4	27	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	93	7	13	73	4	22	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portugal	2000	49	11	6	32	4	35	59	-	-	-	17	6	59	31	52	5	3	45	3	14	82
	2017	85	10	10	64	6	30	64	-	-	-	31	9	59	31	93	5	5	82	4	14	82

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
Puerto Rico	2000	3 797	94	97	<1	3	<1	0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	3 663	94	97	<1	3	<1			-	-	-	-			-	-	-	-		
Qatar	2000	592	96	>99	<1	<1	<1	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	2 639	99	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Republic of Korea	2000	47 386	80	>99	<1	<1	<1	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	50 982	82	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Republic of Moldova	2000	4 201	45	74	4	21	<1	0.12	0.01	62	3	35	<1	0.38	0.01	89	6	5	<1	-0.17	0.00
	2017	4 051	43	76	11	13	<1			69	10	21	<1			86	12	2	<1		
Réunion	2000	737	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	877	100	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Romania	2000	22 128	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	19 679	54	84	<1	15	<1			71	<1	28	<1			95	<1	5	<1		
Russian Federation	2000	146 397	73	83	<1	17	<1	0.42	0.00	55	<1	45	<1	1.36	0.00	94	<1	6	<1	0.06	0.00
	2017	143 990	74	90	<1	10	<1			78	<1	22	<1			95	<1	5	<1		
Rwanda	2000	8 026	15	45	7	43	4	1.24	-0.13	42	5	48	5	1.61	-0.15	63	20	16	2	-0.67	0.00
	2017	12 208	17	67	14	17	2			70	10	18	2			52	36	10	2		
Saint Helena	2000	5	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	4	40	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Saint Kitts and Nevis	2000	45	33	85	1	10	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	55	31	-	-	-	-			-	-	-	-			-	-	-	-		
Saint Lucia	2000	157	28	82	5	3	11	0.40	-0.59	81	6	2	11	0.57	-0.67	83	<1	7	9	-0.29	-0.30
	2017	179	19	88	11	<1	<1			91	9	<1	<1			78	18	<1	4		
Saint Pierre and Miquelon	2000	6	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	6	90	-	-	-	-			-	-	-	-			-	-	-	-		
Saint Vincent and the Grenadines	2000	108	45	71	2	24	3	0.96	0.04	-	-	-	-	-	-	-	-	-	-	-	-
	2017	110	52	87	3	6	3			-	-	-	-			-	-	-	-		
Samoa	2000	175	22	98	<1	2	<1	0.04	0.00	97	<1	3	<1	0.06	0.00	>99	<1	<1	<1	-0.04	0.01
	2017	196	18	98	<1	2	<1			98	<1	2	<1			98	<1	1	<1		
San Marino	2000	27	93	>99	<1	<1	<1	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	33	97	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Sao Tome and Principe	2000	139	53	20	4	5	71	1.33	-1.36	14	4	4	78	1.02	-0.91	26	4	6	65	1.26	-1.34
	2017	204	72	43	6	4	47			31	4	2	62			48	7	4	42		
Saudi Arabia	2000	20 764	80	98	<1	2	<1	0.09	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	32 938	84	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Senegal	2000	9 884	40	39	10	27	24	0.74	-0.60	23	6	34	38	1.00	-0.80	63	17	17	4	0.11	-0.10
	2017	15 851	47	51	17	18	14			40	9	27	24			65	26	7	2		
Serbia	2000	9 488	53	95	3	2	<1	0.13	0.00	94	3	3	<1	0.04	0.01	96	3	<1	<1	0.20	-0.01
	2017	8 791	56	98	<1	2	<1			95	<1	5	<1			>99	<1	<1	<1		
Seychelles	2000	81	50	94	<1	4	1	0.34	-0.08	-	-	-	-	-	-	-	-	-	-	-	-
	2017	95	56	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Sierra Leone	2000	4 564	36	10	24	40	26	0.32	-0.51	5	14	44	37	0.23	-0.68	20	41	32	6	0.31	-0.01
	2017	7 557	42	16	34	33	18			9	23	42	26			26	49	20	6		
Singapore	2000	3 914	100	>99	<1	<1	<1	0.00	0.00	-	-	-	-	-	-	>99	<1	<1	<1	0.00	0.00
	2017	5 709	100	>99	<1	<1	<1			-	-	-	-			>99	<1	<1	<1		
Sint Maarten (Dutch part)	2000	32	100	98	<1	1	<1	0.02	-0.02	-	-	-	-	-	-	-	-	-	-	-	-
	2017	40	100	99	<1	1	<1			-	-	-	-			-	-	-	-		
Slovakia	2000	5 399	56	98	2	<1	<1	0.00	0.00	97	3	<1	<1	0.01	0.00	99	1	<1	<1	0.00	0.00
	2017	5 448	54	98	2	<1	<1			97	3	<1	<1			99	1	<1	<1		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Puerto Rico	2000	33	1	<1	31	3	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	33	1	<1	31	3	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	2000	86	7	7	73	<1	27	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	96	2	2	92	<1	8	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Korea	2000	86	12	<1	73	<1	25	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	>99	<1	<1	>99	<1	<1	>99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Moldova	2000	-	-	-	27	35	9	35	-	-	-	2	52	10	3	72	8	6	57	13	8	75
	2017	-	-	-	27	45	9	33	-	-	-	3	65	10	3	78	9	9	60	18	8	73
Réunion	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	3	47	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Romania	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	77	16	14	46	32	2	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russian Federation	2000	55	7	4	44	12	3	69	39	15	10	14	27	5	22	61	3	2	55	6	2	86
	2017	61	5	4	52	9	3	78	55	14	10	32	26	5	47	63	2	1	60	3	2	89
Rwanda	2000	-	-	-	-	51	<1	<1	-	-	-	-	47	<1	<1	-	-	-	-	74	6	3
	2017	-	-	-	-	79	<1	1	-	-	-	-	79	<1	<1	-	-	-	-	81	2	6
Saint Helena	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	<1	48	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Kitts and Nevis	2000	-	-	-	-	10	77	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Lucia	2000	-	-	-	-	52	27	6	-	-	-	-	59	24	4	-	-	-	-	35	37	12
	2017	-	-	-	-	13	82	5	-	-	-	-	15	82	4	-	-	-	-	3	82	11
Saint Pierre and Miquelon	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Vincent and the Grenadines	2000	-	-	-	-	21	49	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	16	67	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Samoa	2000	49	49	<1	<1	14	83	<1	52	52	<1	<1	15	82	<1	41	40	<1	<1	10	88	<1
	2017	48	48	<1	<1	10	88	<1	51	51	<1	<1	12	86	<1	38	37	<1	<1	3	95	<1
San Marino	2000	77	4	3	70	<1	15	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	77	4	3	70	<1	15	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	2000	-	-	-	-	5	15	4	-	-	-	-	5	9	4	-	-	-	-	5	20	4
	2017	-	-	-	-	31	3	15	-	-	-	-	26	<1	8	-	-	-	-	33	4	17
Saudi Arabia	2000	68	16	16	36	1	61	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	78	11	11	56	<1	44	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Senegal	2000	14	12	<1	2	20	21	9	13	13	<1	<1	19	8	2	16	11	<1	5	21	40	19
	2017	21	19	<1	2	27	33	8	21	21	<1	<1	28	20	<1	22	18	<1	4	27	47	17
Serbia	2000	29	17	3	9	24	22	52	-	-	-	3	51	32	15	19	3	<1	15	<1	14	85
	2017	25	11	2	11	2	40	56	-	-	-	4	<1	75	20	23	5	1	17	4	12	83
Seychelles	2000	-	-	-	-	2	84	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	<1	82	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sierra Leone	2000	9	9	<1	<1	31	3	<1	5	4	<1	<1	18	<1	<1	16	16	<1	<1	53	7	2
	2017	13	13	<1	<1	44	5	<1	8	8	<1	<1	31	<1	<1	20	20	<1	<1	62	11	1
Singapore	2000	>99	<1	<1	>99	<1	-	>99	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	-	>99
	2017	>99	<1	<1	>99	<1	-	>99	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	-	>99
Sint Maarten (Dutch part)	2000	-	-	-	-	41	43	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	47	43	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Slovakia	2000	84	8	8	68	4	26	70	77	12	12	53	5	39	55	90	5	5	79	3	16	82
	2017	83	8	8	66	4	27	69	76	12	12	52	6	39	55	88	5	5	78	3	16	82

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
Slovenia	2000	1 988	51	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	2 080	54	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Solomon Islands	2000	413	16	20	3	19	57	0.77	-0.21	13	1	20	66	0.43	0.13	62	14	16	9	0.96	-0.25
	2017	611	23	34	6	7	54			20	2	9	69			78	18	<1	4		
Somalia	2000	9 011	33	20	14	8	59	1.10	-1.84	7	7	4	82	0.76	-1.96	45	27	16	12	0.96	-0.66
	2017	14 743	44	38	15	19	28			20	7	24	49			61	25	13	1		
South Africa	2000	45 728	57	59	15	14	12	1.00	-0.64	42	9	23	25	1.89	-1.30	71	19	7	3	0.30	-0.12
	2017	56 717	66	76	15	8	1			75	6	16	3			76	19	4	<1		
South Sudan	2000	6 701	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	12 576	19	11	8	18	63			5	6	14	75			37	17	33	12		
Spain	2000	40 904	76	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	46 354	80	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Sri Lanka	2000	18 782	18	85	3	12	-	0.66	-	85	2	14	-	0.67	-	85	11	5	-	0.60	-
	2017	20 877	18	96	3	<1	<1			96	3	<1	<1			95	2	3	<1		
Sudan	2000	27 251	32	21	5	23	51	0.94	-1.57	11	3	22	64	0.78	-1.63	40	10	26	24	1.16	-1.31
	2017	40 533	34	37	8	31	24			24	6	33	36			60	12	26	2		
Suriname	2000	472	66	79	10	3	8	0.31	-0.33	59	11	5	25	0.92	-1.03	89	9	2	<1	0.01	0.02
	2017	563	66	84	11	2	3			75	13	4	8			89	9	1	<1		
Sweden	2000	8 882	84	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	-0.00	0.00
	2017	9 911	87	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Switzerland	2000	7 167	73	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	-0.00	0.00
	2017	8 476	74	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Syrian Arab Republic	2000	16 411	52	93	4	2	2	-0.08	-	88	5	3	4	0.15	-	96	3	<1	<1	-0.29	0.00
	2017	18 270	54	91	8	<1	-			91	8	1	-			91	8	<1	<1		
Tajikistan	2000	6 216	27	90	3	6	1	0.43	-0.08	89	3	7	2	0.54	-0.09	93	5	2	<1	0.13	-0.05
	2017	8 921	27	97	2	<1	<1			98	2	<1	<1			95	5	<1	<1		
Thailand	2000	62 958	31	92	6	<1	1	0.40	-0.08	93	4	<1	2	0.30	-0.11	89	10	<1	<1	0.59	-0.01
	2017	69 038	49	99	1	<1	<1			98	2	<1	<1			>99	<1	<1	<1		
Timor-Leste	2000	872	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	1 296	30	54	9	18	20			44	7	22	28			76	15	9	<1		
Togo	2000	4 970	33	10	19	13	59	0.36	-0.64	3	7	14	76	0.26	-0.20	24	41	10	24	0.25	-0.65
	2017	7 798	41	16	26	10	48			7	9	12	72			29	52	7	13		
Tokelau	2000	2	0	77	4	19	-	1.17	-	77	4	19	-	1.17	-	-	-	-	-	-	-
	2017	1	0	97	3	<1	<1			97	3	<1	<1			-	-	-	-		
Tonga	2000	98	23	89	<1	10	<1	0.28	-0.02	86	<1	13	<1	0.40	-0.02	99	<1	<1	<1	-0.13	0.00
	2017	108	23	93	1	6	<1			92	1	6	<1			97	<1	3	<1		
Trinidad and Tobago	2000	1 268	56	90	8	2	<1	0.20	-0.02	-	-	-	-	-	-	-	-	-	-	-	-
	2017	1 369	53	93	6	<1	<1			-	-	-	-			-	-	-	-		
Tunisia	2000	9 699	63	77	7	5	11	0.81	-0.63	48	15	8	28	1.94	-1.67	94	3	3	<1	0.10	-0.03
	2017	11 532	69	91	5	4	<1			81	11	8	<1			95	2	2	<1		
Turkey	2000	63 240	65	82	2	16	<1	0.90	-0.01	69	3	27	1	1.21	0.01	89	2	9	<1	0.64	-0.01
	2017	80 745	75	97	<1	2	<1			90	2	7	1			>99	<1	<1	<1		
Turkmenistan	2000	4 516	46	93	5	1	<1	0.35	-0.03	96	2	2	<1	0.22	-0.05	89	10	<1	<1	0.51	-0.02
	2017	5 758	51	99	1	<1	<1			>99	<1	<1	<1			98	2	<1	<1		
Turks and Caicos Islands	2000	19	85	81	<1	16	3	0.42	-0.06	-	-	-	-	-	-	-	-	-	-	-	-
	2017	35	93	88	<1	10	2			-	-	-	-			-	-	-	-		
Tuvalu	2000	9	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	11	62	84	7	1	7			86	5	<1	9			83	9	2	6		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Slovenia	2000	74	11	10	53	1	41	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	83	15	14	54	13	32	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solomon Islands	2000	-	-	-	-	7	12	5	-	-	-	-	8	4	2	-	-	-	-	<1	53	23
	2017	-	-	-	-	19	13	7	-	-	-	-	16	4	2	-	-	-	-	33	40	23
Somalia	2000	-	-	-	-	26	<1	7	-	-	-	-	14	<1	<1	-	-	-	-	51	<1	20
	2017	-	-	-	-	38	4	11	-	-	-	-	24	1	2	-	-	-	-	57	8	22
South Africa	2000	-	-	-	-	24	3	46	-	-	-	-	44	1	7	-	-	-	-	10	4	76
	2017	-	-	-	-	29	3	58	-	-	-	-	71	5	5	-	-	-	-	8	2	86
South Sudan	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	15	4	<1	-	-	-	-	11	<1	<1	-	-	-	-	33	21	<1
Spain	2000	94	<1	<1	93	<1	3	97	93	2	2	90	<1	5	94	95	<1	<1	93	<1	2	98
	2017	97	<1	<1	97	<1	<1	>99	97	<1	<1	97	<1	<1	>99	97	<1	<1	97	<1	<1	>99
Sri Lanka	2000	-	-	-	-	80	6	2	-	-	-	-	81	5	<1	-	-	-	-	75	12	9
	2017	-	-	-	-	93	2	4	-	-	-	-	96	1	2	-	-	-	-	80	4	13
Sudan	2000	-	-	-	-	24	1	<1	-	-	-	-	14	<1	<1	-	-	-	-	46	4	<1
	2017	-	-	-	-	38	6	1	-	-	-	-	30	<1	<1	-	-	-	-	53	16	3
Suriname	2000	-	-	-	-	22	66	<1	-	-	-	-	38	31	<1	-	-	-	-	14	84	<1
	2017	-	-	-	-	4	89	1	-	-	-	-	10	77	<1	-	-	-	-	1	96	2
Sweden	2000	92	5	5	83	3	14	84	87	7	7	73	2	25	73	93	4	4	85	3	12	86
	2017	93	4	4	86	2	12	86	88	6	6	75	<1	24	75	94	4	4	87	2	10	88
Switzerland	2000	98	1	1	96	<1	4	96	98	<1	<1	96	<1	3	97	98	1	1	96	<1	4	96
	2017	>99	<1	<1	98	1	<1	98	99	3	3	93	4	3	93	>99	<1	<1	>99	<1	<1	>99
Syrian Arab Republic	2000	-	-	-	-	19	6	71	-	-	-	-	37	11	45	-	-	-	-	2	1	96
	2017	-	-	-	-	21	6	72	-	-	-	-	43	11	45	-	-	-	-	2	1	96
Tajikistan	2000	-	-	-	-	78	1	14	-	-	-	-	88	<1	3	-	-	-	-	51	2	44
	2017	-	-	-	-	85	<1	15	-	-	-	-	>99	<1	<1	-	-	-	-	46	<1	54
Thailand	2000	-	-	-	-	4	92	2	-	-	-	-	3	93	2	-	-	-	-	5	91	3
	2017	-	-	-	-	2	89	9	-	-	-	-	3	91	5	-	-	-	-	<1	87	12
Timor-Leste	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	35	17	11	-	-	-	-	32	10	8	-	-	-	-	40	33	18
Togo	2000	-	-	-	-	23	6	<1	-	-	-	-	10	<1	<1	-	-	-	-	48	17	<1
	2017	-	-	-	-	23	19	<1	-	-	-	-	13	3	<1	-	-	-	-	38	41	<1
Tokelau	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tonga	2000	-	-	-	-	9	81	<1	-	-	-	-	9	78	<1	-	-	-	-	9	91	<1
	2017	-	-	-	-	14	81	<1	-	-	-	-	16	78	<1	-	-	-	-	7	91	<1
Trinidad and Tobago	2000	-	-	-	-	26	48	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	6	73	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tunisia	2000	59	10	9	42	9	27	49	-	-	-	3	23	36	5	74	5	5	64	<1	22	74
	2017	78	13	12	55	14	25	57	-	-	-	7	30	54	8	88	6	6	76	6	12	79
Turkey	2000	53	3	2	47	<1	14	70	-	-	-	22	<1	39	33	61	<1	<1	61	<1	<1	90
	2017	65	4	3	59	1	13	83	-	-	-	30	5	43	44	70	<1	<1	68	<1	3	97
Turkmenistan	2000	-	-	-	-	75	1	22	-	-	-	-	97	<1	<1	-	-	-	-	49	2	48
	2017	-	-	-	-	70	1	29	-	-	-	-	97	2	2	-	-	-	-	45	<1	54
Turks and Caicos Islands	2000	-	-	-	-	10	61	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	17	61	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuvalu	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	6	6	<1	<1	10	8	74	10	10	<1	<1	13	15	63	4	4	<1	<1	7	4	81

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
Uganda	2000	24 039	15	17	11	57	15	0.06	-0.53	15	6	62	17	0.06	-0.60	31	43	25	2	-0.27	0.00
	2017	42 863	23	18	18	58	6			16	10	67	7			26	42	30	2		
Ukraine	2000	48 840	67	94	3	3	<1	0.11	-0.00	89	4	7	<1	0.28	-0.01	97	2	<1	<1	0.02	0.00
	2017	44 223	69	96	2	2	<1			94	3	4	<1			97	2	<1	<1		
United Arab Emirates	2000	3 155	80	99	<1	<1	<1	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	9 400	86	99	<1	<1	<1			-	-	-	-			-	-	-	-		
United Kingdom	2000	58 951	79	>99	<1	<1	<1	-0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	66 182	83	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
United Republic of Tanzania	2000	34 178	22	4	2	84	10	1.51	0.12	3	<1	85	12	1.24	0.29	11	9	78	3	1.88	-0.05
	2017	57 310	33	30	17	41	12			24	6	54	17			43	40	16	2		
United States Virgin Islands	2000	109	93	99	<1	1	<1	0.03	0.00	-	-	-	-	-	-	-	-	-	-	-	-
	2017	105	96	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
United States of America	2000	281 983	79	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2017	324 459	82	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Uruguay	2000	3 321	92	94	3	1	2	0.16	-0.07	85	3	8	5	0.73	-0.28	95	3	<1	1	0.11	-0.05
	2017	3 457	95	97	2	<1	<1			97	1	2	<1			97	2	<1	<1		
Uzbekistan	2000	24 849	46	93	<1	7	<1	0.43	-0.00	88	<1	11	<1	0.68	-0.01	98	<1	2	<1	0.14	0.00
	2017	31 911	51	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Vanuatu	2000	185	22	62	10	26	2	-1.63	-0.11	60	5	32	3	-1.82	-0.14	67	27	6	<1	-1.13	0.01
	2017	276	25	34	35	31	<1			29	32	39	<1			48	43	8	<1		
Venezuela (Bolivarian Republic of)	2000	24 488	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	31 977	88	94	<1	3	3			-	-	-	-			-	-	-	-		
Viet Nam	2000	80 286	24	52	3	27	18	1.83	-0.87	43	3	32	22	2.02	-1.05	81	5	9	5	0.80	-0.22
	2017	95 541	35	84	4	10	3			78	4	14	4			94	3	2	1		
Wallis and Futuna Islands	2000	15	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	12	0	>99	<1	<1	<1			>99	<1	<1	<1			-	-	-	-		
West Bank and Gaza Strip	2000	3 223	72	90	8	<1	<1	0.40	-0.03	87	10	2	1	0.56	-0.04	91	7	<1	<1	0.34	-0.02
	2017	4 921	76	97	3	<1	<1			96	3	<1	<1			97	3	<1	<1		
Western Sahara	2000	314	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	553	87	-	-	-	-			-	-	-	-			-	-	-	-		
Yemen	2000	17 875	26	42	2	26	30	1.00	-0.60	27	2	32	39	0.96	-0.52	86	1	9	5	0.12	-0.21
	2017	28 250	36	59	5	16	20			43	6	22	30			88	5	6	1		
Zambia	2000	10 531	35	24	12	40	25	0.16	-0.31	12	6	46	36	0.42	-0.25	46	24	28	3	-0.57	-0.01
	2017	17 094	43	26	18	37	19			19	6	43	32			36	33	28	3		
Zimbabwe	2000	12 222	34	46	19	5	30	-0.57	-0.31	36	14	6	44	-0.28	-0.41	65	30	2	4	-1.11	-0.21
	2017	16 530	32	36	28	11	25			31	18	14	37			46	50	4	<1		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situt	Emptied and treatedm	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
Uganda	2000	-	-	-	<1	27	1	<1	-	-	-	<1	21	<1	<1	-	-	-	<1	64	7	3
	2017	-	-	-	<1	34	2	<1	-	-	-	<1	26	<1	<1	-	-	-	<1	59	7	2
Ukraine	2000	42	16	6	21	32	3	62	-	-	-	6	73	3	17	37	6	2	28	11	4	84
	2017	68	23	14	31	46	<1	51	-	-	-	2	91	3	3	66	13	8	44	27	<1	73
United Arab Emirates	2000	90	5	5	80	<1	18	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	96	3	3	90	4	5	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	2000	97	<1	<1	96	<1	3	96	92	4	4	84	<1	15	84	99	<1	<1	99	<1	<1	>99
	2017	98	<1	<1	96	<1	3	97	92	4	4	84	<1	15	84	99	<1	<1	99	<1	<1	>99
United Republic of Tanzania	2000	4	3	<1	<1	5	<1	2	2	2	<1	<1	2	<1	<1	9	6	<1	3	13	<1	7
	2017	25	25	<1	<1	38	8	<1	22	22	<1	<1	27	3	<1	31	31	<1	<1	61	19	2
United States Virgin Islands	2000	-	-	-	-	1	43	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	<1	57	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United States of America	2000	88	5	5	79	<1	20	80	-	-	-	30	<1	69	31	95	2	2	91	<1	7	93
	2017	90	4	4	81	<1	18	82	-	-	-	31	<1	69	31	95	2	2	92	<1	7	93
Uruguay	2000	-	-	-	-	<1	41	56	-	-	-	-	<1	86	1	-	-	-	-	<1	37	60
	2017	-	-	-	-	4	35	60	-	-	-	-	10	86	2	-	-	-	-	3	33	63
Uzbekistan	2000	-	-	-	-	79	<1	13	-	-	-	-	88	<1	<1	-	-	-	-	68	<1	29
	2017	-	-	-	-	77	<1	23	-	-	-	-	>99	<1	<1	-	-	-	-	55	<1	45
Vanuatu	2000	-	-	-	-	44	18	9	-	-	-	-	54	3	8	-	-	-	-	10	70	14
	2017	-	-	-	-	36	20	12	-	-	-	-	46	3	11	-	-	-	-	6	70	15
Venezuela (Bolivarian Republic of)	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	24	<1	<1	23	<1	4	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Viet Nam	2000	-	-	-	-	35	19	1	-	-	-	-	37	8	<1	-	-	-	-	27	55	3
	2017	-	-	-	-	16	71	<1	-	-	-	-	24	57	<1	-	-	-	-	<1	95	2
Wallis and Futuna Islands	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Bank and Gaza Strip	2000	53	11	8	33	<1	49	49	-	-	-	5	<1	85	12	58	8	6	44	<1	35	64
	2017	61	14	10	37	9	40	51	-	-	-	5	16	75	9	65	10	8	47	6	29	65
Western Sahara	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yemen	2000	-	-	-	7	28	7	9	-	-	-	<1	26	3	<1	67	22	18	27	35	19	33
	2017	-	-	-	20	9	26	29	-	-	-	<1	11	30	7	67	7	6	54	5	19	69
Zambia	2000	-	-	-	-	21	1	13	-	-	-	-	16	<1	1	-	-	-	-	30	3	36
	2017	-	-	-	-	29	6	9	-	-	-	-	24	<1	<1	-	-	-	-	36	13	21
Zimbabwe	2000	-	-	-	7	34	<1	31	-	-	-	<1	46	<1	4	23	4	1	18	10	1	83
	2017	-	-	-	4	34	5	26	-	-	-	<1	45	2	2	16	3	1	12	9	12	76

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	2017	35 530	25	**38**	34	28	**29**	38	33	**64**	23	13
Algeria	2017	41 318	72	**84**	8	8	**73**	13	14	**88**	6	6
Angola	2017	29 784	65	**27**	15	58	**13**	14	73	**34**	16	50
Armenia	2017	2 930	63	**94**	1	5	**90**	<1	10	**97**	1	2
Azerbaijan	2017	9 828	55	**83**	11	5	**-**	-	-	**-**	-	-
Bangladesh	2017	164 670	36	**35**	54	11	**26**	61	14	**51**	42	7
Belize	2017	375	46	**90**	9	<1	**90**	9	2	**91**	9	<1
Benin	2017	11 176	47	**11**	16	73	**6**	17	77	**17**	15	68
Bolivia (Plurinational State of)	2017	11 052	69	**25**	15	59	**19**	27	54	**28**	10	62
Burkina Faso	2017	19 193	29	**12**	42	46	**8**	41	51	**23**	44	33
Burundi	2017	10 864	13	**6**	93	1	**4**	95	1	**20**	79	<1
Cambodia	2017	16 005	23	**66**	13	21	**60**	15	26	**88**	5	7
Cameroon	2017	24 054	56	**9**	5	85	**3**	6	91	**15**	5	81
Chad	2017	14 900	23	**6**	18	76	**2**	18	79	**18**	19	63
Colombia	2017	49 066	80	**65**	4	30	**35**	6	60	**73**	4	23
Congo	2017	5 261	66	**48**	34	18	**32**	43	25	**56**	29	14
Côte d'Ivoire	2017	24 295	50	**19**	34	47	**10**	37	53	**28**	30	42
Cuba	2017	11 485	77	**85**	10	5	**76**	12	12	**88**	9	3
Democratic Republic of the Congo	2017	81 340	44	**4**	11	84	**2**	11	87	**7**	12	81
Dominican Republic	2017	10 767	80	**55**	16	29	**42**	16	42	**58**	16	26
Ecuador	2017	16 625	64	**81**	10	10	**75**	16	8	**84**	6	10
Egypt	2017	97 553	43	**90**	10	<1	**88**	12	<1	**93**	6	2
El Salvador	2017	6 378	71	**91**	7	3	**86**	10	4	**92**	5	2
Eswatini	2017	1 367	24	**24**	31	44	**17**	33	50	**48**	27	26
Ethiopia	2017	104 957	20	**8**	51	41	**4**	50	46	**23**	57	19
Gambia	2017	2 101	61	**8**	15	77	**1**	13	85	**12**	16	72
Ghana	2017	28 834	55	**41**	42	17	**37**	43	20	**45**	41	14
Guatemala	2017	16 914	51	**77**	21	3	**70**	27	3	**83**	14	2
Guinea	2017	12 717	36	**17**	31	52	**13**	33	55	**26**	27	47
Guinea-Bissau	2017	1 861	43	**6**	5	89	**5**	4	92	**9**	6	85
Guyana	2017	778	27	**77**	11	12	**78**	12	10	**75**	9	16
Haiti	2017	10 981	54	**23**	61	16	**16**	63	21	**29**	60	12
India	2017	1 339 180	34	**60**	38	3	**49**	47	3	**80**	19	2
Indonesia	2017	263 991	55	**64**	6	29	**55**	6	38	**72**	6	22
Iraq	2017	38 275	70	**95**	4	2	**90**	7	3	**96**	3	<1
Kazakhstan	2017	18 204	57	**99**	<1	<1	**99**	<1	<1	**>99**	<1	<1
Kenya	2017	49 700	27	**25**	35	40	**22**	34	44	**32**	40	29
Kyrgyzstan	2017	6 045	36	**89**	9	2	**87**	11	2	**93**	5	1
Lao People's Democratic Republic	2017	6 858	34	**50**	40	10	**41**	48	11	**67**	25	8

"-" = no estimate. For JMP estimate 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
Lesotho	2017	2 233	28	**2**	3	95	**<1**	2	98	**6**	5	89
Liberia	2017	4 732	51	**1**	1	97	**<1**	1	98	**2**	1	97
Malawi	2017	18 622	17	**9**	76	16	**7**	75	17	**15**	77	7
Maldives	2017	436	39	**96**	2	2	**95**	1	4	**97**	2	<1
Mali	2017	18 542	42	**52**	25	23	**39**	31	30	**70**	16	13
Marshall Islands	2017	53	77	**83**	15	2	**77**	19	4	**84**	14	2
Mauritania	2017	4 420	53	**43**	37	20	**29**	38	33	**55**	36	8
Mexico	2017	129 163	80	**88**	9	3	**80**	15	5	**90**	8	2
Mongolia	2017	3 076	68	**71**	7	22	**49**	10	41	**81**	6	12
Myanmar	2017	53 371	30	**79**	15	6	**74**	19	7	**92**	5	3
Namibia	2017	2 534	49	**45**	43	12	**27**	58	15	**62**	28	9
Nepal	2017	29 305	19	**48**	51	<1	**43**	56	1	**67**	32	<1
Nigeria	2017	190 886	50	**42**	33	25	**31**	40	28	**53**	25	23
Pakistan	2017	197 016	36	**60**	32	8	**46**	43	11	**83**	12	5
Paraguay	2017	6 811	61	**80**	18	2	**72**	25	3	**84**	13	2
Peru	2017	32 165	78	**-**	-	-	**56**	42	3	**-**	-	-
Philippines	2017	104 918	47	**78**	12	10	**73**	14	13	**85**	9	6
Rwanda	2017	12 208	17	**5**	10	86	**3**	10	87	**13**	8	79
Sao Tome and Principe	2017	204	72	**41**	14	45	**47**	17	36	**39**	13	48
Senegal	2017	15 851	47	**24**	22	54	**9**	23	68	**42**	21	37
Sierra Leone	2017	7 557	42	**19**	22	58	**14**	22	64	**27**	23	50
Solomon Islands	2017	611	23	**36**	36	28	**29**	40	31	**59**	24	17
Somalia	2017	14 743	44	**10**	34	56	**8**	35	57	**12**	34	54
South Africa	2017	56 717	66	**44**	44	12	**27**	55	18	**53**	38	10
Sudan	2017	40 533	34	**23**	19	57	**19**	21	60	**32**	16	52
Syrian Arab Republic	2017	18 270	54	**71**	21	9	**69**	20	11	**72**	21	7
Tajikistan	2017	8 921	27	**73**	23	5	**67**	27	6	**87**	11	2
Thailand	2017	69 038	49	**84**	8	8	**83**	10	7	**85**	6	9
Timor-Leste	2017	1 296	30	**28**	65	7	**22**	69	9	**43**	54	4
Togo	2017	7 798	41	**10**	12	78	**4**	11	85	**20**	13	66
Tunisia	2017	11 532	69	**79**	5	16	**54**	10	36	**90**	3	7
Turkmenistan	2017	5 758	51	**>99**	<1	<1	**>99**	<1	<1	**>99**	<1	<1
Uganda	2017	42 863	23	**21**	32	47	**17**	33	50	**34**	27	39
United Republic of Tanzania	2017	57 310	33	**48**	35	17	**40**	40	19	**63**	25	12
Vanuatu	2017	276	25	**25**	43	32	**17**	46	36	**48**	33	19
Viet Nam	2017	95 541	35	**86**	13	2	**82**	16	2	**93**	7	<1
Yemen	2017	28 250	36	**50**	26	25	**38**	29	33	**71**	20	9
Zambia	2017	17 094	43	**14**	28	58	**5**	24	71	**26**	33	41
Zimbabwe	2017	16 530	32	**37**	61	2	**31**	67	2	**49**	49	3

Annex 6: Inequalities in basic services

COUNTRIES, AREAS AND TERRITORIES	Year	Wealth quintile	DRINKING WATER				SANITATION				HYGIENE		
			At least basic	Limited (more than 30 mins)	Unimproved	Surface water	At least basic	Limited (shared)	Unimproved	Open defecation	Basic	Limited (without water or soap)	No facility
Afghanistan	2005	Poorest	**39**	4	31	26	**12**	2	46	40	-	-	-
		Richest	**81**	2	14	4	**43**	17	38	2	-	-	-
Albania	2000	Poorest	**92**	2	6	<1	**89**	2	9	<1	-	-	-
		Richest	**99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Angola	2000	Poorest	**27**	11	15	47	**1**	<1	31	67	-	-	-
		Richest	**85**	5	7	3	**71**	10	12	8	-	-	-
Armenia	2000	Poorest	**95**	<1	4	<1	**78**	3	18	<1	-	-	-
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Bangladesh	2000	Poorest	**93**	2	<1	4	**8**	7	56	29	-	-	-
		Richest	**98**	<1	<1	<1	**63**	16	21	<1	-	-	-
Belarus	2000	Poorest	**98**	<1	1	<1	**95**	5	<1	<1	-	-	-
		Richest	**>99**	<1	<1	<1	**96**	4	<1	<1	-	-	-
Belize	2000	Poorest	**89**	<1	6	4	**75**	12	2	11	-	-	-
		Richest	**>99**	<1	<1	<1	**97**	2	1	<1	-	-	-
Benin	2000	Poorest	**41**	7	27	25	**<1**	3	3	94	-	-	-
		Richest	**91**	1	8	<1	**47**	36	5	11	-	-	-
Bolivia (Plurinational State of)	2000	Poorest	**43**	<1	24	33	**9**	4	12	74	-	-	-
		Richest	**>99**	<1	<1	<1	**81**	9	9	1	-	-	-
Bosnia and Herzegovina	2000	Poorest	**96**	1	3	<1	**82**	2	16	<1	-	-	-
		Richest	**99**	<1	1	<1	**98**	<1	2	<1	-	-	-
Burkina Faso	2000	Poorest	**46**	18	25	11	**<1**	<1	<1	>99	-	-	-
		Richest	**87**	9	4	<1	**44**	31	9	17	-	-	-
Burundi	2000	Poorest	**37**	17	20	26	**42**	7	41	9	-	-	-
		Richest	**60**	13	15	12	**48**	17	35	<1	-	-	-
Cambodia	2000	Poorest	**55**	<1	25	20	**<1**	<1	<1	>99	-	-	-
		Richest	**87**	<1	3	10	**77**	7	3	13	-	-	-
Cameroon	2000	Poorest	**30**	7	40	24	**27**	4	52	17	-	-	-
		Richest	**87**	5	6	2	**71**	23	6	<1	-	-	-
Central African Republic	2000	Poorest	**45**	12	34	9	**2**	1	66	30	-	-	-
		Richest	**76**	13	9	1	**39**	19	39	3	-	-	-
Chad	2000	Poorest	**25**	11	63	<1	**1**	1	3	95	-	-	-
		Richest	**62**	7	28	4	**21**	17	38	24	-	-	-
Colombia	2000	Poorest	**70**	<1	13	17	**39**	9	15	37	-	-	-
		Richest	**>99**	<1	<1	<1	**96**	3	<1	<1	-	-	-
Comoros	2000	Poorest	**77**	8	10	5	**3**	<1	95	<1	-	-	-
		Richest	**96**	1	2	<1	**61**	6	33	<1	-	-	-
Congo	2000	Poorest	**19**	5	51	25	**2**	2	76	20	-	-	-
		Richest	**83**	13	4	<1	**38**	27	33	1	-	-	-
Côte d'Ivoire	2000	Poorest	**46**	8	27	20	**5**	10	19	66	-	-	-
		Richest	**98**	1	1	<1	**67**	20	12	1	-	-	-
Democratic Republic of the Congo	2000	Poorest	**13**	7	52	28	**16**	14	49	22	-	-	-
		Richest	**81**	10	8	1	**26**	41	32	1	-	-	-
Dominican Republic	2000	Poorest	**80**	3	8	10	**52**	23	10	15	-	-	-
	2000	Richest	**97**	<1	2	<1	**99**	1	<1	<1	-	-	-
Egypt	2000	Poorest	**95**	1	4	<1	**76**	6	9	10	-	-	-
	2000	Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Eswatini	2000	Poorest	**23**	6	19	51	**23**	8	11	58	-	-	-
	2000	Richest	**85**	1	6	7	**64**	34	1	<1	-	-	-
Ethiopia	2000	Poorest	**8**	5	50	37	**1**	<1	5	93	-	-	-
	2000	Richest	**58**	7	20	14	**12**	15	33	40	-	-	-
Gabon	2000	Poorest	**34**	12	17	36	**18**	31	46	5	-	-	-
	2000	Richest	**97**	2	<1	<1	**87**	8	4	<1	-	-	-
Gambia	2000	Poorest	**62**	12	27	<1	**39**	20	19	23	-	-	-
	2000	Richest	**92**	3	5	<1	**79**	20	<1	<1	-	-	-
Georgia	2000	Poorest	**92**	4	4	<1	**98**	2	<1	<1	-	-	-
	2000	Richest	**>99**	<1	<1	<1	**99**	<1	<1	<1	-	-	-

COUNTRIES, AREAS AND TERRITORIES	Year	Wealth quintile	DRINKING WATER				SANITATION				HYGIENE		
			At least basic	Limited (more than 30 mins)	Unimproved	Surface water	At least basic	Limited (shared)	Unimproved	Open defecation	Basic	Limited (without water or soap)	No facility
Afghanistan	2017	Poorest	**45**	4	34	16	**31**	6	44	18	**21**	45	34
	2017	Richest	**92**	2	5	1	**56**	22	21	<1	**65**	20	15
Albania	2017	Poorest	**92**	2	5	<1	**91**	2	7	<1	**-**	-	-
	2017	Richest	**98**	<1	<1	<1	**98**	<1	1	<1	**-**	-	-
Angola	2017	Poorest	**17**	7	20	56	**12**	5	8	75	**9**	14	77
	2017	Richest	**94**	6	<1	<1	**88**	12	<1	<1	**57**	11	33
Armenia	2017	Poorest	**>99**	<1	<1	<1	**84**	3	13	<1	**89**	9	2
	2017	Richest	**>99**	<1	<1	<1	**97**	<1	3	<1	**>99**	<1	<1
Bangladesh	2017	Poorest	**95**	2	1	1	**23**	19	54	5	**5**	70	25
	2017	Richest	**>99**	<1	<1	<1	**75**	19	7	<1	**65**	30	5
Belarus	2017	Poorest	**99**	<1	<1	<1	**89**	5	7	<1	**-**	-	-
	2017	Richest	**>99**	<1	<1	<1	**96**	4	<1	<1	**-**	-	-
Belize	2017	Poorest	**97**	<1	2	<1	**69**	11	15	4	**85**	14	1
	2017	Richest	**98**	<1	2	<1	**98**	2	<1	<1	**96**	4	<1
Benin	2017	Poorest	**56**	10	23	12	**<1**	4	4	92	**4**	11	84
	2017	Richest	**90**	1	9	<1	**46**	36	12	6	**26**	9	65
Bolivia (Plurinational State of)	2017	Poorest	**79**	<1	7	13	**20**	9	21	49	**7**	43	50
	2017	Richest	**>99**	<1	<1	<1	**87**	10	2	<1	**41**	8	52
Bosnia and Herzegovina	2017	Poorest	**98**	1	<1	<1	**84**	2	14	<1	**-**	-	-
	2017	Richest	**>99**	<1	<1	<1	**99**	<1	1	<1	**-**	-	<1
Burkina Faso	2017	Poorest	**49**	20	23	8	**10**	13	2	75	**-**	-	-
	2017	Richest	**88**	9	3	<1	**58**	41	1	<1	**-**	-	-
Burundi	2017	Poorest	**56**	25	16	3	**32**	5	56	7	**2**	96	2
	2017	Richest	**79**	17	4	<1	**63**	22	14	<1	**17**	82	<1
Cambodia	2017	Poorest	**60**	<1	18	21	**15**	6	1	78	**39**	25	35
	2017	Richest	**96**	<1	3	<1	**92**	8	<1	<1	**87**	5	8
Cameroon	2017	Poorest	**40**	9	36	16	**8**	1	60	31	**2**	8	90
	2017	Richest	**94**	5	<1	<1	**74**	24	3	<1	**27**	4	69
Central African Republic	2017	Poorest	**42**	11	39	8	**<1**	<1	31	67	**-**	-	-
	2017	Richest	**75**	13	11	<1	**67**	32	<1	<1	**-**	-	-
Chad	2017	Poorest	**25**	11	47	18	**<1**	<1	10	88	**<1**	10	94
	2017	Richest	**83**	9	7	<1	**36**	28	25	11	**10**	19	72
Colombia	2017	Poorest	**77**	<1	9	14	**58**	14	6	22	**-**	-	-
	2017	Richest	**>99**	<1	<1	<1	**97**	3	<1	<1	**-**	-	-
Comoros	2017	Poorest	**76**	8	14	2	**29**	8	62	<1	**-**	-	-
	2017	Richest	**93**	1	6	<1	**54**	5	41	<1	**-**	-	-
Congo	2017	Poorest	**34**	8	30	28	**3**	3	61	33	**30**	46	25
	2017	Richest	**85**	13	1	<1	**53**	38	8	<1	**66**	23	12
Côte d'Ivoire	2017	Poorest	**53**	9	26	11	**5**	10	26	58	**7**	36	57
	2017	Richest	**98**	1	<1	<1	**71**	22	7	<1	**46**	23	31
Democratic Republic of the Congo	2017	Poorest	**15**	8	62	15	**16**	14	44	27	**<1**	7	93
	2017	Richest	**85**	10	5	<1	**26**	40	33	2	**11**	13	76
Dominican Republic	2017	Poorest	**94**	3	1	2	**60**	27	4	9	**24**	20	56
	2017	Richest	**98**	<1	1	<1	**98**	1	<1	<1	**83**	9	8
Egypt	2017	Poorest	**99**	1	<1	<1	**89**	7	4	<1	**87**	31	<1
	2017	Richest	**>99**	<1	<1	<1	**98**	<1	2	<1	**>99**	6	<1
Eswatini	2017	Poorest	**45**	12	17	26	**42**	15	11	32	**8**	33	59
	2017	Richest	**98**	2	<1	<1	**63**	33	3	<1	**59**	26	15
Ethiopia	2017	Poorest	**27**	18	39	17	**5**	1	48	45	**2**	47	52
	2017	Richest	**86**	11	3	<1	**21**	27	50	2	**24**	72	4
Gabon	2017	Poorest	**58**	21	5	16	**14**	25	55	6	**-**	-	-
	2017	Richest	**96**	2	2	<1	**86**	8	6	<1	**-**	-	-
Gambia	2017	Poorest	**68**	13	19	<1	**27**	14	55	5	**<1**	15	84
	2017	Richest	**95**	3	1	<1	**72**	18	10	<1	**24**	14	61
Georgia	2017	Poorest	**91**	4	4	<1	**65**	1	34	<1	**-**	-	-
	2017	Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	**-**	-	-

COUNTRIES, AREAS AND TERRITORIES	Year	Wealth quintile	DRINKING WATER				SANITATION				HYGIENE		
			At least basic	Limited (more than 30 mins)	Unimproved	Surface water	At least basic	Limited (shared)	Unimproved	Open defecation	Basic	Limited (without water or soap)	No facility
Ghana	2000	Poorest	**44**	10	13	34	**7**	16	16	60	-	-	-
	2000	Richest	**98**	2	<1	<1	**41**	46	10	3	-	-	-
Guatemala	2000	Poorest	**80**	2	2	15	**36**	2	37	24	-	-	-
	2000	Richest	**98**	<1	2	<1	**94**	4	2	<1	-	-	-
Guinea	2000	Poorest	**46**	7	22	26	**4**	3	45	48	-	-	-
	2000	Richest	**89**	4	6	1	**39**	31	29	<1	-	-	-
Guinea-Bissau	2000	Poorest	**39**	3	54	3	**7**	4	33	55	-	-	-
	2000	Richest	**84**	4	12	<1	**26**	22	50	1	-	-	-
Guyana	2000	Poorest	**67**	<1	10	22	**56**	11	27	6	-	-	-
	2000	Richest	**>99**	<1	<1	<1	**94**	4	3	<1	-	-	-
Haiti	2000	Poorest	**22**	10	60	8	**3**	2	23	72	-	-	-
	2000	Richest	**93**	4	3	<1	**43**	18	37	2	-	-	-
Honduras	2000	Poorest	**81**	<1	16	2	**43**	5	12	41	-	-	-
	2000	Richest	**99**	<1	1	<1	**90**	4	3	3	-	-	-
India	2000	Poorest	**73**	4	19	3	**3**	1	2	94	-	-	-
	2000	Richest	**95**	<1	3	<1	**81**	8	4	7	-	-	-
Indonesia	2000	Poorest	**47**	2	39	12	**16**	8	23	53	-	-	-
	2000	Richest	**88**	<1	12	<1	**87**	2	7	4	-	-	-
Iraq	2000	Poorest	**80**	2	9	9	**78**	8	8	5	-	-	-
	2000	Richest	**95**	<1	5	<1	**93**	6	<1	<1	-	-	-
Jamaica	2000	Poorest	**87**	3	6	3	**74**	21	1	4	-	-	-
	2000	Richest	**95**	<1	1	3	**>99**	<1	<1	<1	-	-	-
Jordan	2000	Poorest	**>99**	<1	<1	<1	**95**	2	2	<1	-	-	-
	2000	Richest	**>99**	<1	<1	<1	**98**	2	<1	<1	-	-	-
Kazakhstan	2000	Poorest	**87**	2	6	5	**96**	3	1	<1	-	-	-
	2000	Richest	**>99**	<1	<1	<1	**99**	<1	<1	<1	-	-	-
Kenya	2000	Poorest	**27**	9	21	44	**5**	5	43	47	-	-	-
	2000	Richest	**89**	3	3	4	**49**	36	15	<1	-	-	-
Kyrgyzstan	2000	Poorest	**75**	1	8	16	**93**	1	6	<1	-	-	-
	2000	Richest	**>99**	<1	<1	<1	**97**	3	<1	<1	-	-	-
Lao People's Democratic Republic	2000	Poorest	**22**	<1	30	48	**5**	<1	7	87	-	-	-
	2000	Richest	**56**	<1	34	9	**41**	<1	9	49	-	-	-
Lesotho	2000	Poorest	**56**	9	35	<1	**4**	<1	11	84	-	-	-
		Richest	**84**	6	10	<1	**42**	19	35	5	-	-	-
Liberia	2005	Poorest	**37**	2	30	31	**1**	8	6	84	-	-	-
		Richest	**85**	6	9	<1	**38**	21	26	15	-	-	-
Madagascar	2000	Poorest	**9**	<1	30	60	**<1**	<1	18	82	-	-	-
		Richest	**88**	2	10	<1	**7**	8	83	3	-	-	-
Malawi	2000	Poorest	**41**	14	33	12	**12**	9	47	32	-	-	-
		Richest	**76**	12	10	3	**42**	19	38	2	-	-	-
Mali	2000	Poorest	**36**	2	56	5	**19**	4	54	23	-	-	-
		Richest	**76**	3	20	<1	**57**	31	11	<1	-	-	-
Mauritania	2000	Poorest	**21**	16	59	4	**3**	1	19	76	-	-	-
		Richest	**80**	13	3	4	**76**	14	7	2	-	-	-
Mexico	2000	Poorest	**84**	1	4	11	**67**	9	6	18	-	-	-
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Mongolia	2000	Poorest	**18**	5	31	47	**4**	4	17	75	-	-	-
		Richest	**>99**	<1	<1	<1	**95**	5	<1	<1	-	-	-
Montenegro	2000	Poorest	**92**	<1	5	2	**93**	2	3	1	-	-	-
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Mozambique	2000	Poorest	**14**	6	62	19	**11**	2	21	66	-	-	-
		Richest	**80**	4	15	2	**42**	8	45	5	-	-	-
Namibia	2000	Poorest	**53**	11	18	18	**1**	<1	3	95	-	-	-
		Richest	**>99**	<1	<1	<1	**88**	10	<1	<1	-	-	-
Nepal	2000	Poorest	**66**	4	22	7	**<1**	<1	5	95	-	-	-
		Richest	**91**	1	7	1	**57**	22	6	16	-	-	-
Nicaragua	2000	Poorest	**53**	<1	32	15	**26**	2	19	53	-	-	-
		Richest	**98**	<1	2	<1	**85**	4	11	<1	-	-	-
Niger	2000	Poorest	**28**	14	57	1	**1**	1	3	95	-	-	-
		Richest	**69**	12	18	<1	**38**	30	8	24	-	-	-
Nigeria	2000	Poorest	**19**	3	49	29	**15**	3	34	48	-	-	-
		Richest	**81**	4	11	4	**49**	37	8	7	-	-	-

COUNTRIES, AREAS AND TERRITORIES	Year	Wealth quintile	DRINKING WATER				SANITATION				HYGIENE		
			At least basic	Limited (more than 30 mins)	Unimproved	Surface water	At least basic	Limited (shared)	Unimproved	Open defecation	Basic	Limited (without water or soap)	No facility
Ghana	2017	Poorest	**54**	12	9	25	**9**	20	19	53	**12**	18	70
	2017	Richest	**94**	2	4	<1	**45**	51	3	1	**52**	18	30
Guatemala	2017	Poorest	**77**	2	8	12	**45**	3	32	20	**25**	22	3
	2017	Richest	**>99**	<1	<1	<1	**93**	4	4	<1	**46**	3	1
Guinea	2017	Poorest	**57**	9	19	16	**8**	7	56	28	**6**	30	64
	2017	Richest	**95**	5	<1	<1	**55**	43	2	<1	**30**	22	48
Guinea-Bissau	2017	Poorest	**48**	4	47	<1	**8**	5	33	53	**6**	9	>99
	2017	Richest	**89**	4	6	<1	**44**	37	20	<1	**19**	12	83
Guyana	2017	Poorest	**82**	<1	8	9	**68**	13	15	3	**62**	19	19
	2017	Richest	**>99**	<1	<1	<1	**96**	4	<1	<1	**92**	2	6
Haiti	2017	Poorest	**28**	12	57	2	**12**	7	27	54	**13**	64	23
	2017	Richest	**94**	4	2	<1	**68**	29	2	<1	**40**	51	8
Honduras	2017	Poorest	**94**	1	2	3	**54**	6	9	31	-	-	-
	2017	Richest	**>99**	<1	<1	<1	**94**	4	2	<1	-	-	-
India	2017	Poorest	**86**	5	8	<1	**10**	4	3	82	**25**	69	6
	2017	Richest	**98**	<1	<1	<1	**88**	9	2	1	**92**	7	1
Indonesia	2017	Poorest	**71**	3	20	7	**42**	22	8	28	-	-	-
	2017	Richest	**98**	<1	1	<1	**96**	2	<1	<1	-	-	-
Iraq	2017	Poorest	**89**	2	2	7	**78**	8	11	3	-	-	-
	2017	Richest	**99**	<1	1	<1	**91**	6	3	<1	-	-	<1
Jamaica	2017	Poorest	**86**	3	7	4	**74**	21	2	3	-	-	-
	2017	Richest	**98**	<1	1	<1	**99**	<1	<1	<1	-	-	-
Jordan	2017	Poorest	**>99**	<1	<1	<1	**98**	2	<1	<1	-	-	-
	2017	Richest	**>99**	<1	<1	<1	**98**	2	<1	<1	-	-	-
Kazakhstan	2017	Poorest	**97**	3	<1	<1	**97**	3	<1	<1	**98**	2	<1
	2017	Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	**>99**	<1	<1
Kenya	2017	Poorest	**37**	13	14	37	**11**	11	36	43	**3**	15	82
	2017	Richest	**92**	3	3	2	**51**	37	12	<1	**37**	17	46
Kyrgyzstan	2017	Poorest	**71**	1	3	25	**99**	1	<1	<1	**77**	20	3
	2017	Richest	**98**	<1	<1	1	**96**	3	<1	<1	**96**	3	<1
Lao People's Democratic Republic	2017	Poorest	**68**	<1	23	9	**29**	1	4	65	-	-	-
	2017	Richest	**>99**	<1	<1	<1	**98**	2	<1	<1	-	-	-
Lesotho	2017	Poorest	**56**	9	34	2	**28**	3	<1	69	**<1**	<1	99
	2017	Richest	**91**	6	3	<1	**64**	29	6	<1	**8**	6	86
Liberia	2017	Poorest	**56**	3	5	36	**2**	13	16	69	**<1**	2	98
	2017	Richest	**91**	6	2	<1	**58**	33	7	2	**5**	3	93
Madagascar	2017	Poorest	**20**	2	52	26	**2**	4	25	70	-	-	-
	2017	Richest	**82**	2	14	3	**17**	21	46	16	-	-	-
Malawi	2017	Poorest	**61**	22	14	3	**15**	12	59	14	**<1**	42	49
	2017	Richest	**84**	13	3	<1	**41**	19	40	<1	**12**	46	38
Mali	2017	Poorest	**53**	4	40	3	**13**	3	53	30	**2**	25	73
	2017	Richest	**96**	4	<1	<1	**60**	33	7	<1	**23**	30	47
Mauritania	2017	Poorest	**34**	25	39	2	**4**	2	4	90	**11**	31	58
	2017	Richest	**86**	14	<1	<1	**78**	14	7	<1	**40**	50	11
Mexico	2017	Poorest	**97**	2	2	<1	**80**	11	4	4	**80**	15	5
	2017	Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	**97**	3	<1
Mongolia	2017	Poorest	**66**	18	2	15	**37**	32	17	14	**42**	9	49
	2017	Richest	**>99**	<1	<1	<1	**95**	5	<1	<1	**97**	<1	2
Montenegro	2017	Poorest	**98**	1	<1	<1	**85**	2	13	<1	-	-	-
	2017	Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Mozambique	2017	Poorest	**34**	15	30	21	**8**	1	40	50	-	-	-
	2017	Richest	**94**	5	1	<1	**75**	14	10	<1	-	-	-
Namibia	2017	Poorest	**57**	12	16	15	**4**	2	2	92	**17**	60	23
	2017	Richest	**>99**	<1	<1	<1	**87**	10	2	<1	**79**	16	5
Nepal	2017	Poorest	**81**	5	5	8	**69**	10	4	17	**32**	66	2
	2017	Richest	**99**	1	<1	<1	**72**	28	<1	<1	**86**	13	<1
Nicaragua	2017	Poorest	**51**	<1	32	17	**46**	3	22	29	-	-	-
	2017	Richest	**98**	<1	2	<1	**92**	4	4	<1	-	-	-
Niger	2017	Poorest	**45**	23	31	<1	**3**	3	8	86	-	-	-
	2017	Richest	**73**	13	13	1	**36**	28	7	29	-	-	-
Nigeria	2017	Poorest	**38**	7	40	15	**17**	3	32	48	**4**	80	16
	2017	Richest	**95**	4	<1	<1	**52**	39	5	4	**29**	66	6

COUNTRIES, AREAS AND TERRITORIES	Year	Wealth quintile	DRINKING WATER				SANITATION				HYGIENE		
			At least basic	Limited (more than 30 mins)	Unimproved	Surface water	At least basic	Limited (shared)	Unimproved	Open defecation	Basic	Limited (without water or soap)	No facility
North Macedonia	2000	Poorest	**97**	1	<1	<1	**77**	7	15	<1	-	-	-
		Richest	**>99**	<1	<1	<1	**98**	<1	2	<1	-	-	-
Pakistan	2000	Poorest	**81**	8	6	6	**13**	4	7	76	-	-	-
		Richest	**96**	2	<1	2	**89**	4	5	2	-	-	-
Paraguay	2000	Poorest	**36**	<1	56	8	**30**	2	66	2	-	-	-
		Richest	**98**	<1	2	<1	**99**	<1	<1	<1	-	-	-
Peru	2000	Poorest	**60**	1	23	16	**22**	1	20	57	-	-	-
		Richest	**>99**	<1	<1	<1	**95**	3	2	<1	-	-	-
Philippines	2000	Poorest	**65**	3	30	2	**31**	15	17	37	-	-	-
		Richest	**99**	<1	<1	<1	**95**	5	<1	<1	-	-	-
Republic of Moldova	2000	Poorest	**86**	2	12	<1	**54**	6	40	<1	-	-	-
		Richest	**98**	<1	1	<1	**87**	5	8	<1	-	-	-
Rwanda	2000	Poorest	**44**	24	17	15	**27**	8	60	5	-	-	-
		Richest	**68**	13	10	9	**62**	26	11	<1	-	-	-
Saint Lucia	2000	Poorest	**84**	<1	16	<1	**51**	14	2	33	-	-	-
		Richest	**>99**	<1	<1	<1	**99**	1	<1	<1	-	-	-
Sao Tome and Principe	2000	Poorest	**71**	11	3	14	**9**	4	<1	87	-	-	-
		Richest	**81**	9	5	5	**58**	5	2	35	-	-	-
Senegal	2000	Poorest	**36**	7	56	<1	**15**	5	23	57	-	-	-
		Richest	**96**	<1	3	<1	**77**	14	8	<1	-	-	-
Serbia	2000	Poorest	**97**	<1	2	<1	**98**	2	<1	<1	-	-	-
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Sierra Leone	2000	Poorest	**25**	2	18	55	**2**	9	51	39	-	-	-
		Richest	**68**	12	14	6	**28**	41	28	3	-	-	-
Somalia	2000	Poorest	**2**	2	58	37	**6**	5	2	87	-	-	-
		Richest	**86**	6	7	<1	**44**	40	15	<1	-	-	-
Sudan	2005	Poorest	**47**	27	26	<1	**5**	1	38	55	-	-	-
		Richest	**98**	<1	1	<1	**63**	12	23	1	-	-	-
Suriname	2000	Poorest	**61**	<1	4	34	**40**	16	11	33	-	-	-
		Richest	**>99**	<1	<1	<1	**97**	3	<1	<1	-	-	-
Tajikistan	2000	Poorest	**40**	4	12	44	**84**	1	12	2	-	-	-
		Richest	**88**	2	1	9	**94**	3	2	2	-	-	-
Thailand	2000	Poorest	**91**	<1	8	1	**92**	5	<1	3	-	-	-
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	-	-	-
Togo	2000	Poorest	**21**	4	34	41	**<1**	2	11	86	-	-	-
		Richest	**82**	2	15	1	**41**	43	3	13	-	-	-
Trinidad and Tobago	2000	Poorest	**89**	2	7	2	**81**	12	6	<1	-	-	-
		Richest	**99**	<1	<1	<1	**99**	1	<1	<1	-	-	-
Tunisia	2000	Poorest	**79**	9	10	2	**46**	5	14	35	-	-	-
		Richest	**99**	<1	<1	<1	**96**	<1	3	<1	-	-	-
Turkey	2000	Poorest	**96**	1	3	<1	**55**	3	39	3	-	-	-
		Richest	**98**	<1	<1	<1	**99**	<1	1	<1	-	-	-
Turkmenistan	2000	Poorest	**92**	<1	1	6	**96**	2	2	<1	-	-	-
		Richest	**>99**	<1	<1	<1	**96**	4	<1	<1	-	-	-
Uganda	2000	Poorest	**24**	30	28	17	**8**	7	52	33	-	-	-
		Richest	**64**	14	17	5	**32**	30	37	1	-	-	-
Ukraine	2000	Poorest	**93**	<1	6	<1	**87**	3	10	<1	-	-	-
		Richest	**96**	<1	3	<1	**98**	<1	1	<1	-	-	-
United Republic of Tanzania	2000	Poorest	**17**	10	45	29	**<1**	<1	68	32	-	-	-
		Richest	**79**	6	11	4	**21**	13	65	<1	-	-	-
Uruguay	2000	Poorest	**98**	1	<1	<1	**96**	4	<1	<1	-	-	-
		Richest	**>99**	<1	<1	<1	**98**	2	<1	<1	-	-	-
Viet Nam	2000	Poorest	**62**	<1	19	19	**12**	2	43	43	-	-	-
		Richest	**97**	<1	2	1	**91**	2	5	2	-	-	-
West Bank and Gaza Strip	2005	Poorest	**96**	<1	3	<1	**87**	5	4	4	-	-	-
		Richest	**>99**	<1	<1	<1	**96**	4	<1	<1	-	-	-
Yemen	2000	Poorest	**19**	14	57	10	**7**	<1	26	66	-	-	-
		Richest	**96**	3	1	<1	**88**	1	10	<1	-	-	-
Zambia	2000	Poorest	**25**	4	44	27	**3**	1	34	62	-	-	-
		Richest	**93**	2	5	<1	**67**	28	5	<1	-	-	-
Zimbabwe	2000	Poorest	**45**	17	26	12	**13**	10	6	71	-	-	-
		Richest	**96**	3	1	<1	**66**	33	<1	<1	-	-	-

COUNTRIES, AREAS AND TERRITORIES	Year	Wealth quintile	DRINKING WATER				SANITATION				HYGIENE		
			At least basic	Limited (more than 30 mins)	Unimproved	Surface water	At least basic	Limited (shared)	Unimproved	Open defecation	Basic	Limited (without water or soap)	No facility
North Macedonia	2017	Poorest	**98**	1	1	<1	**73**	7	17	3	**-**	-	-
	2017	Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	**-**	-	-
Pakistan	2017	Poorest	**80**	8	8	4	**25**	9	15	52	**15**	70	15
	2017	Richest	**97**	2	<1	<1	**93**	4	3	<1	**92**	3	4
Paraguay	2017	Poorest	**98**	<1	1	<1	**60**	4	36	<1	**56**	40	4
	2017	Richest	**98**	<1	2	<1	**99**	<1	<1	<1	**94**	3	3
Peru	2017	Poorest	**77**	2	11	10	**54**	3	25	18	**-**	-	-
	2017	Richest	**>99**	<1	<1	<1	**97**	3	<1	<1	**-**	-	-
Philippines	2017	Poorest	**83**	4	13	<1	**50**	24	8	18	**52**	39	9
	2017	Richest	**>99**	<1	<1	<1	**95**	5	<1	<1	**93**	4	3
Republic of Moldova	2017	Poorest	**71**	2	27	<1	**59**	7	33	<1	**-**	-	-
	2017	Richest	**97**	<1	2	<1	**95**	5	<1	<1	**-**	-	-
Rwanda	2017	Poorest	**43**	23	24	10	**48**	14	33	6	**<1**	10	89
	2017	Richest	**77**	14	6	3	**67**	28	5	<1	**14**	9	77
Saint Lucia	2017	Poorest	**>99**	<1	<1	<1	**77**	21	<1	1	**-**	-	-
	2017	Richest	**>99**	<1	<1	<1	**99**	1	<1	<1	**-**	-	-
Sao Tome and Principe	2017	Poorest	**80**	13	1	6	**13**	5	2	80	**25**	19	55
		Richest	**90**	10	<1	<1	**85**	7	<1	8	**65**	9	26
Senegal	2017	Poorest	**48**	9	42	<1	**10**	4	43	44	**2**	5	93
		Richest	**98**	<1	1	<1	**84**	16	<1	<1	**37**	24	39
Serbia	2017	Poorest	**98**	<1	2	<1	**88**	2	10	<1	**-**	-	-
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	**-**	<1	-
Sierra Leone	2017	Poorest	**38**	2	26	34	**3**	19	37	40	**<1**	23	77
		Richest	**82**	14	3	<1	**36**	53	10	1	**13**	39	48
Somalia	2017	Poorest	**32**	40	25	3	**3**	2	23	72	**-**	-	-
		Richest	**93**	7	<1	<1	**50**	46	3	<1	**-**	-	-
Sudan	2017	Poorest	**35**	20	45	<1	**7**	1	37	54	**16**	13	71
		Richest	**96**	<1	3	<1	**81**	16	3	<1	**49**	19	32
Suriname	2017	Poorest	**89**	<1	2	8	**50**	20	10	20	**-**	-	-
		Richest	**>99**	<1	<1	<1	**97**	3	<1	<1	**-**	-	-
Tajikistan	2017	Poorest	**72**	7	3	18	**97**	1	1	<1	**46**	43	11
		Richest	**96**	2	1	2	**96**	3	1	<1	**87**	11	2
Thailand	2017	Poorest	**98**	<1	<1	2	**94**	5	<1	<1	**72**	20	8
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	**89**	3	8
Togo	2017	Poorest	**34**	6	28	33	**3**	5	9	84	**-**	-	-
		Richest	**95**	2	2	<1	**44**	47	6	3	**-**	-	-
Trinidad and Tobago	2017	Poorest	**98**	2	<1	<1	**84**	13	3	<1	**-**	-	-
		Richest	**>99**	<1	<1	<1	**99**	1	<1	<1	**-**	-	-
Tunisia	2017	Poorest	**83**	9	8	<1	**80**	9	4	7	**-**	-	-
		Richest	**>99**	<1	<1	<1	**>99**	<1	<1	<1	**-**	<1	-
Turkey	2017	Poorest	**96**	1	2	<1	**92**	5	3	<1	**-**	-	-
		Richest	**99**	<1	<1	<1	**>99**	<1	<1	<1	**-**	-	-
Turkmenistan	2017	Poorest	**99**	<1	<1	<1	**98**	2	<1	<1	**98**	1	1
		Richest	**>99**	<1	<1	<1	**96**	4	<1	<1	**>99**	<1	<1
Uganda	2017	Poorest	**34**	42	14	10	**5**	5	69	21	**2**	36	62
		Richest	**77**	17	4	3	**43**	40	17	<1	**19**	48	33
Ukraine	2017	Poorest	**>99**	<1	<1	<1	**96**	3	1	<1	**-**	-	-
		Richest	**99**	1	<1	<1	**>99**	<1	<1	<1	**-**	-	-
United Republic of Tanzania	2017	Poorest	**24**	13	42	20	**16**	4	52	27	**<1**	77	22
		Richest	**87**	7	4	2	**57**	35	7	<1	**17**	74	9
Uruguay	2017	Poorest	**98**	1	1	<1	**88**	4	5	3	**-**	-	-
		Richest	**>99**	<1	<1	<1	**98**	1	<1	<1	**-**	-	-
Viet Nam	2017	Poorest	**84**	<1	15	<1	**41**	5	35	19	**64**	31	5
		Richest	**>99**	<1	<1	<1	**98**	2	<1	<1	**97**	2	<1
West Bank and Gaza Strip	2017	Poorest	**>99**	<1	<1	<1	**94**	6	<1	<1	**-**	-	-
		Richest	**>99**	<1	<1	<1	**96**	4	<1	<1	**-**	-	-
Yemen	2017	Poorest	**35**	25	37	3	**13**	2	26	59	**20**	43	37
		Richest	**96**	3	<1	<1	**96**	1	<1	2	**76**	15	9
Zambia	2017	Poorest	**34**	6	41	19	**15**	5	48	32	**2**	22	76
		Richest	**93**	2	4	<1	**64**	26	10	<1	**41**	32	27
Zimbabwe	2017	Poorest	**39**	14	30	17	**10**	8	17	65	**6**	59	35
		Richest	**96**	3	<1	<1	**65**	33	2	<1	**52**	39	9

Annex 7: Regional and global drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	NATIONAL					RURAL					URBAN				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change (basic)	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change (basic)	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change (basic)
SDG REGIONS																		
Australia and New Zealand	2000	22 925	85	>99	<1	<1	<1	0	>99	<1	<1	<1	0	>99	<1	<1	<1	0
	2017	29 156	86	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Central and Southern Asia	2000	1 508 317	30	81	5	12	2	1	76	6	15	3	1	93	3	4	<1	0
	2017	1 939 824	36	93	<1	5	1		91	1	7	2		96	<1	3	<1	
Eastern and South-Eastern Asia	2000	2 037 035	41	81	1	14	3	1	71	1	22	6	1	97	<1	2	<1	0
	2017	2 296 945	58	93	<1	5	<1		86	1	11	1		98	<1	2	<1	
Europe and Northern America	2000	1 040 046	73	99	<1	1	<1	0	96	<1	3	<1	0	>99	<1	<1	<1	-0
	2017	1 103 282	77	99	<1	<1	<1		98	<1	2	<1		>99	<1	<1	<1	
Latin America and the Caribbean	2000	525 795	76	90	<1	6	3	0	71	2	17	10	1	97	<1	3	<1	0
	2017	645 593	80	97	<1	2	1		88	2	6	5		99	<1	<1	<1	
Northern Africa and Western Asia	2000	357 578	56	84	4	10	2	0	71	6	18	5	1	94	2	3	<1	0
	2017	501 263	62	92	5	2	1		84	9	3	4		97	3	<1	<1	
Oceania	2000	8 305	23	52	1	20	26	0	40	1	24	34	0	91	1	7	<1	0
	2017	11 534	23	55	2	6	38		44	2	6	48		92	2	3	3	
Sub-Saharan Africa	2000	645 007	31	46	9	26	19	1	31	9	34	26	1	78	9	9	4	0
	2017	1 022 664	40	61	13	18	8		45	17	25	13		84	8	6	1	
OTHER REGIONAL GROUPINGS																		
Least Developed Countries	2000	664 805	25	51	9	26	15	1	42	8	31	19	1	76	9	11	4	0
	2017	1 002 486	33	65	13	15	7		55	15	20	10		84	9	6	1	
Landlocked Developing countries	2000	335 283	27	51	8	25	15	1	38	10	32	20	1	86	5	7	2	0
	2017	503 550	30	64	15	15	6		53	19	20	8		90	7	3	<1	
Small Island Developing States	2000	56 534	57	80	3	10	7	0	61	4	18	16	0	95	1	3	<1	0
	2017	69 024	62	83	3	7	7		64	5	14	17		95	2	3	<1	
WORLD	2000	6 145 007	47	81	3	12	4	0	69	4	19	7	1	95	2	3	<1	0
	2017	7 550 262	55	90	3	6	2		81	4	11	4		97	1	2	<1	

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
SDG REGIONS																			
Australia and New Zealand	2000	-	97	92	-	86	13	-	89	90	-	65	34	**92**	98	92	96	90	10
	2017	-	98	96	-	93	7	-	90	96	-	86	14	**97**	99	97	>99	94	6
Central and Southern Asia	2000	**41**	44	72	53	43	43	**31**	31	65	48	30	52	**66**	75	89	66	72	23
	2017	**60**	67	82	62	42	51	**60**	60	79	62	29	63	**62**	80	88	62	67	30
Eastern and South-Eastern Asia	2000	-	66	78	-	49	33	-	48	67	-	28	45	**91**	92	95	91	80	17
	2017	-	86	90	-	67	27	-	79	81	-	44	44	**91**	91	96	92	83	15
Europe and Northern America	2000	**90**	92	-	96	93	6	-	78	-	-	80	16	**97**	97	-	>99	98	2
	2017	**95**	95	-	98	96	3	-	90	-	-	90	9	**97**	97	-	>99	98	1
Latin America and the Caribbean	2000	**56**	82	76	56	83	9	-	54	57	-	54	20	**82**	91	82	90	92	5
	2017	**74**	93	79	82	92	6	**42**	80	65	42	75	15	**82**	97	82	92	96	3
Northern Africa and Western Asia	2000	-	75	67	-	75	13	-	57	56	-	57	20	-	89	75	-	89	7
	2017	-	84	80	-	83	14	-	71	72	-	72	21	-	92	85	-	89	10
Oceania	2000	-	37	46	-	37	16	-	26	-	-	23	19	-	72	91	-	83	9
	2017	-	37	-	-	34	23	-	26	-	-	22	23	-	73	94	-	72	22
Sub-Saharan Africa	2000	**18**	18	43	27	29	25	**6**	6	32	14	13	27	**42**	42	67	54	65	22
	2017	**27**	27	57	33	33	41	**12**	12	50	19	18	44	**50**	50	69	54	56	36
OTHER REGIONAL GROUPINGS																			
Least Developed Countries	2000	**25**	25	45	31	20	39	**18**	18	41	27	10	41	**45**	46	56	45	52	33
	2017	**35**	37	58	37	31	47	**26**	26	57	30	17	53	**52**	58	61	52	60	33
Landlocked Developing countries	2000	**26**	26	49	35	33	27	**12**	12	41	24	16	32	**64**	64	70	67	78	13
	2017	**35**	35	66	40	41	38	**20**	20	62	27	25	46	**69**	70	74	69	77	19
Small Island Developing States	2000	-	65	65	-	66	17	-	41	-	-	41	25	-	82	78	-	85	11
	2017	-	68	69	-	64	22	-	46	-	-	42	26	-	82	83	-	78	19
WORLD	2000	**61**	61	74	62	57	27	**39**	39	62	42	33	40	**86**	87	88	86	85	12
	2017	**71**	75	82	71	64	29	**53**	60	74	53	40	46	**85**	87	88	85	83	15

Annex 8: Regional and global 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 (basic)	Annual rate of change (open defecation)	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change (basic)	Annual rate of change (open defecation)	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change (basic)	Annual rate of change (open defecation)
SDG REGIONS																					
Australia and New Zealand	2000	22 925	85	>99	<1	<1	<1	-0	0	-	-	-	-	-	-	-	-	-	-	-	-
	2017	29 156	86	>99	<1	<1	<1			-	-	-	-			-	-	-	-		
Central and Southern Asia	2000	1 508 317	30	25	6	10	58	2	-2	12	2	11	75	3	-3	57	14	10	19	1	-1
	2017	1 939 824	36	61	12	6	20			55	9	7	29			74	19	5	3		
Eastern and South-Eastern Asia	2000	2 037 035	41	61	5	28	7	1	-0	47	3	39	11	2	-0	80	6	11	2	1	-0
	2017	2 296 945	58	84	6	7	2			75	7	14	4			91	6	3	<1		
Europe and Northern America	2000	1 040 046	73	96	<1	4	<1	0	-0	89	1	10	<1	0	-0	98	<1	1	<1	0	-0
	2017	1 103 282	77	98	<1	2	<1			94	<1	5	<1			99	<1	<1	<1		
Latin America and the Caribbean	2000	525 795	76	73	5	11	10	1	-0	47	3	20	30	1	-1	82	6	9	3	1	-0
	2017	645 593	80	87	5	6	2			70	6	16	9			91	4	4	<1		
Northern Africa and Western Asia	2000	357 578	56	78	5	8	9	1	-0	64	5	13	19	1	-1	88	5	5	2	0	-0
	2017	501 263	62	88	4	5	4			76	5	9	10			95	3	2	<1		
Oceania	2000	8 305	23	38	4	45	13	-0	0	26	3	55	16	-0	0	75	8	13	4	-0	-0
	2017	11 534	23	30	4	52	14			18	3	62	17			70	9	19	2		
Sub-Saharan Africa	2000	645 007	31	23	15	29	32	0	-1	17	9	32	43	0	-1	37	29	24	10	0	-0
	2017	1 022 664	40	31	18	31	20			22	9	40	29			44	32	18	6		
OTHER REGIONAL GROUPINGS																					
Least Developed Countries	2000	664 805	25	22	10	33	35	1	-1	16	6	34	43	1	-1	39	21	30	11	0	-0
	2017	1 002 486	33	34	15	32	18			28	9	38	25			47	28	21	4		
Landlocked Developing countries	2000	335 283	27	34	7	22	37	0	-1	24	4	24	48	0	-1	60	17	17	7	0	-0
	2017	503 550	30	41	11	30	19			32	6	36	26			61	22	15	3		
Small Island Developing Statess	2000	56 534	57	66	8	15	11	0	-0	44	7	27	22	0	-0	82	9	6	2	0	-0
	2017	69 024	62	69	9	15	7			46	7	31	16			83	10	5	2		
WORLD	2000	6 145 007	47	56	5	17	21	1	-1	36	4	24	36	1	-1	79	8	8	5	0	-0
	2017	7 550 262	55	74	8	9	9			59	7	16	18			85	9	4	1		

COUNTRY, AREA OR TERRITORY	Year	NATIONAL							RURAL							URBAN						
		Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)			Proportion of population using improved sanitation facilities (excluding shared)				Proportion of population using improved sanitation facilities (including shared)		
		Safely managed	Disposed of in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed of in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed of in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
SDG REGIONS																						
Australia and New Zealand	2000	61	-	-	61	1	12	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	72	-	-	72	<1	12	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and Southern Asia	2000	-	-	-	3	11	11	9	7	6	-	<1	8	4	1	-	-	-	10	17	26	28
	2017	-	-	-	5	33	28	13	40	39	-	<1	39	23	1	-	-	-	13	22	38	33
Eastern and South-Eastern Asia	2000	32	18	-	13	21	18	27	27	24	-	3	31	15	4	28	-	-	28	5	22	60
	2017	64	21	-	42	19	23	48	52	28	-	24	30	24	28	72	17	-	55	11	22	63
Europe and Northern America	2000	69	-	-	68	7	10	79	-	-	-	39	18	27	44	79	-	-	79	3	4	92
	2017	76	-	-	76	6	9	84	48	-	-	48	16	26	53	85	-	-	85	3	3	93
Latin America and the Caribbean	2000	12	-	-	12	12	18	49	-	-	-	2	22	19	9	15	-	-	15	9	17	62
	2017	31	-	-	31	9	17	66	-	-	-	8	25	33	18	37	-	-	37	6	13	77
Northern Africa and Western Asia	2000	26	-	-	26	13	25	45	-	-	-	8	18	35	15	40	-	-	40	8	17	68
	2017	38	-	-	38	10	23	59	-	-	-	18	16	36	29	49	-	-	49	6	15	77
Oceania	2000	-	-	-	5	19	14	9	-	-	-	1	19	7	2	-	-	-	16	16	38	30
	2017	-	-	-	4	12	14	8	-	-	-	1	12	7	2	-	-	-	14	11	40	28
Sub-Saharan Africa	2000	15	15	-	-	28	3	7	14	14	-	-	24	<1	1	17	17	-	-	39	8	20
	2017	18	18	-	-	31	10	8	18	18	-	-	27	3	1	20	20	-	-	38	22	17
OTHER REGIONAL GROUPINGS																						
Least Developed Countries	2000	-	-	-	-	24	5	3	11	11	-	-	20	2	<1	-	-	-	-	37	14	9
	2017	-	-	-	-	34	12	4	21	21	-	<1	30	6	<1	-	-	-	-	43	22	9
Landlocked Developing countries	2000	-	-	-	5	28	3	10	-	-	-	<1	25	2	1	-	-	-	18	37	7	33
	2017	-	-	-	5	36	7	9	-	-	-	<1	33	4	<1	-	-	-	14	42	13	27
Small Island Developing States	2000	-	-	-	14	25	18	30	-	-	-	2	33	13	6	23	-	-	23	19	23	49
	2017	-	-	-	16	22	25	30	-	-	-	2	30	18	6	-	-	-	25	17	30	45
WORLD	2000	28	9	-	19	15	14	32	22	17	-	5	21	12	7	36	-	-	36	10	16	62
	2017	45	14	-	31	21	20	41	43	30	-	12	31	21	15	47	-	-	47	13	19	63

Annex 9: Regional and global 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	2017	29 156	86	-	-	-	-	-	-	-	-	-
Central and Southern Asia	2017	1 939 824	36	**58**	37	4	**47**	47	6	**78**	19	3
Eastern and South-Eastern Asia	2017	2 296 945	58	-	-	-	-	-	-	-	-	-
Europe and Northern America	2017	1 103 282	77	-	-	-	-	-	-	-	-	-
Latin America and the Caribbean	2017	645 593	80	-	-	-	**59**	22	19	-	-	-
Northern Africa and Western Asia	2017	501 263	62	**77**	12	11	**64**	17	19	-	-	-
Oceania	2017	11 534	23	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	2017	1 022 664	40	**25**	34	41	**17**	38	45	**37**	29	34
OTHER REGIONAL GROUPINGS												
Least Developed Countries	2017	1 002 486	33	**28**	36	37	**22**	39	39	**39**	29	32
Landlocked Developing countries	2017	503 550	30	**34**	36	30	**25**	40	35	**55**	25	19
Small Island Developing States	2017	69 024	62	**51**	28	20	**33**	38	29	**63**	22	15
WORLD	2017	7 550 262	55	**60**	22	18	**46**	31	23	-	-	-

UN WATER

UN-Water coordinates the efforts of United Nations entities and international organizations working on water and sanitation issues. 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 and sanitation. UN-Water publications draw on the experience and expertise of UN-Water's Members and Partners.

PERIODIC REPORTS:

Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation

The SDG 6 Synthesis Report 2018 on Water and Sanitation was published in June 2018 ahead of the High-level Political Forum on Sustainable Development where Member States reviewed SDG 6 in-depth. Representing a joint position from the United Nations family, the report offers guidance to understanding global progress on SDG 6 and its interdependencies with other goals and targets.

Sustainable Development Goal 6 Indicator Reports

This series of reports shows the progress towards targets set out in SDG 6 using the SDG global indicators. The reports are based on country data, compiled and verified by the United Nations agencies serving as custodians of each indicator.

UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS)

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).

United Nations World Water Development Report

This annual report, published by UNESCO on behalf of UN-Water, represents the coherent and integrated response of the United Nations system to freshwater-related issues and emerging challenges. The theme of the report is harmonized with the theme of World Water Day (22 March) and changes annually.

Policy and Analytical Briefs

UN-Water's Policy Briefs provide short and informative policy guidance on the most pressing freshwater-related issues that draw upon the combined expertise of the United Nations system. Analytical Briefs provide an analysis of emerging issues and may serve as basis for further research, discussion and future policy guidance.

The progress report of the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)

This report is affiliated with UN-Water and presents the results of the global monitoring of progress towards access to safe and affordable drinking-water, and adequate and equitable 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.

UN-WATER PLANNED PUBLICATIONS 2019

- **Update of UN-Water Policy Brief on Water and Climate Change**
- **UN-Water Policy Brief on the Water Conventions**
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DRINKING WATER

In 2017:

- 5.3 billion people used safely managed services. An additional 1.4 billion used at least basic services.
- 206 million people used limited services, 435 million used unimproved sources, and 144 million still used surface water.
- Eight out of ten people still lacking even basic services lived in rural areas. Nearly half lived in Least Developed Countries.
- In 24 out of 90 countries with disaggregated data, basic water coverage among the richest wealth quintile was at least twice as high as coverage among the poorest quintile.
- 80 countries had >99% basic water coverage and one in three countries with <99% were on track to achieve

SANITATION

In 2017:

- 3.4 billion people used safely managed services. An additional 2.2 billion used at least basic services.
- 627 million people used limited services, 701 million used unimproved facilities, and 673 million still practised open defecation.
- Seven out of ten people who still lacked even basic services lived in rural areas. One third lived in Least Developed Countries.
- In 48 out of 90 countries with disaggregated data, basic service coverage among the richest wealth quintile was at least twice as high as coverage among the poorest quintile.
- 51 countries had >99% basic sanitation coverage. One in four countries with <99% were on track to achieve 'nearly universal' coverage by 2030.
- Fewer than one in three 'high burden' countries with >5% open defecation were on track to achieve 'near elimination' (<1%) of open defecation by 2030.

HYGIENE

In 2017:

- 60% of the global population had basic handwashing facilities with soap and water available at home.
- 78 countries (and three out of eight SDG regions) had estimates for basic handwashing facilities, representing 52% of the global population. Many high income countries lacked data on hygiene.
- 3 billion people still lacked basic handwashing facilities at home: 1.6 billion had limited facilities lacking soap or water, and 1.4 billion had no facility at all.
- Nearly three quarters of the population of Least Developed Countries lacked handwashing facilities with soap and water.
- In 51 out of 82 countries with disaggregated data, basic handwashing coverage among the richest wealth quintile was at least twice as high as coverage among the poorest quintile.

unicef

WHO UNICEF JMP

World Health Organization