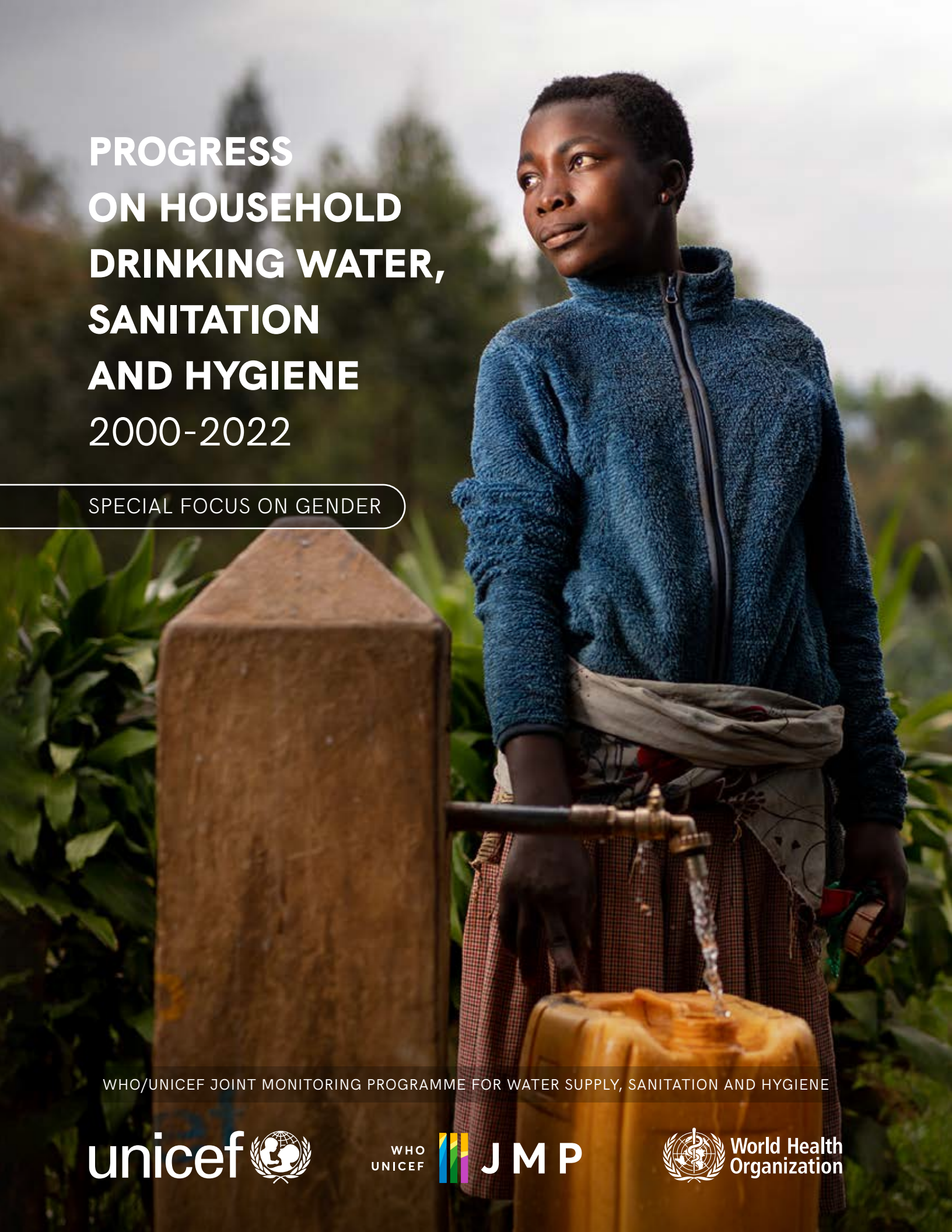

PROGRESS ON HOUSEHOLD DRINKING WATER, SANITATION AND HYGIENE 2000-2022

SPECIAL FOCUS ON GENDER

WHO/UNICEF JOINT MONITORING PROGRAMME FOR WATER SUPPLY, SANITATION AND HYGIENE

unicef

WHO UNICEF JMP

World Health Organization

Progress on household drinking water, sanitation and hygiene 2000–2022: special focus on gender

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PROGRESS ON HOUSEHOLD DRINKING WATER, SANITATION AND HYGIENE | 2000-2022

SPECIAL FOCUS ON GENDER

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Highlights

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 progress on drinking water, sanitation and hygiene (WASH) and is responsible for global monitoring of the Sustainable Development Goal (SDG) targets related to WASH. In 2022, the JMP released updated estimates for WASH in schools and WASH in health care facilities (2000–2021). This report presents updated national, regional and global estimates for WASH in households for the period 2000 to 2022.

The 2030 Agenda for Sustainable Development 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), and sanitation and hygiene (6.2). Data for the corresponding global indicators are now available for more than 50% of the world's population but, as we approach the mid-point of the SDG period, the world is not on track to achieve SDG targets 6.1 and 6.2. Achieving universal coverage by 2030 will require a sixfold increase in current rates of progress for safely managed drinking water, a fivefold increase for safely managed sanitation and a threefold increase for basic hygiene services (Figure 1).

The importance of progress on drinking water, sanitation and hygiene for achieving SDG 5, which aims to 'realize gender equality and empower all women and girls', is widely recognized and this report has a special focus on gender to reflect this. Each chapter examines available data related to gender and WASH, indicates how addressing gender inequalities can accelerate progress on WASH, and highlights opportunities for enhanced national and global monitoring in the future (Box 1).

Achieving SDG WASH targets by 2030 will require a three- to sixfold increase in current rates of progress

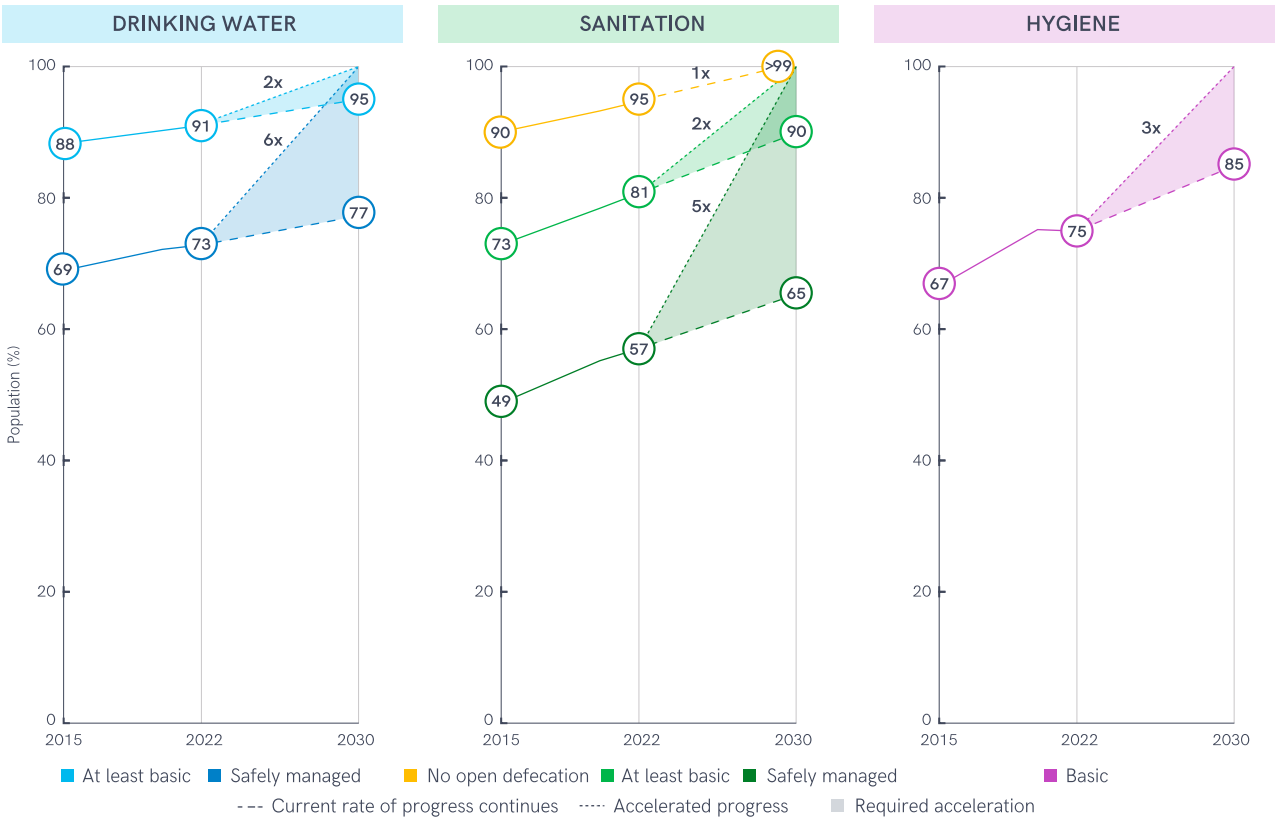


FIGURE 1 Global coverage of WASH services, 2015–2022 (%), and acceleration required to reach universal coverage (>99%) by 2030

BOX 1

Gender and WASH

The importance of progress on drinking water, sanitation and hygiene for achieving SDG 5, which aims to 'realize gender equality and empower all women and girls', is widely recognized. Gender inequalities also impede realization of the SDG 6 targets on WASH. This report has a special focus on gender and WASH and shows that:

- 1.8 billion people collect drinking water from supplies located off premises,[1] and in seven out of ten households women and girls are primarily responsible for water collection.
- In almost all countries with comparable data, the burden of water carriage remains significantly heavier for women and girls than for men and boys.
- Over half a billion people share sanitation facilities with other households and emerging data show that among these, women are more likely than men to feel unsafe walking alone after dark.
- Lack of handwashing facilities disproportionately impacts adolescent girls and women who are primarily responsible for child care and domestic chores in many countries around the world.
- Inadequate WASH services limit the ability of adolescent girls and women, and other persons who menstruate, to safely and privately manage their periods.

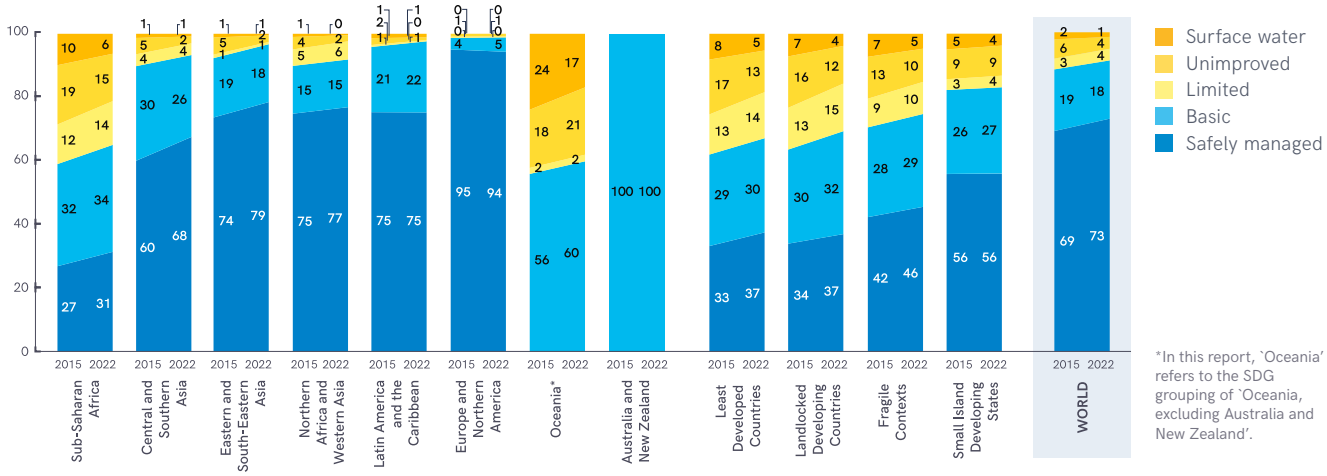
[1] Estimate includes collection from improved and unimproved drinking water sources.

DRINKING WATER

- Since 2015, coverage of safely managed drinking water has increased from 69% to 73%, rising from 56% to 62% in rural areas and from 80% to 81% in urban areas.
- In 2022, 32 countries[2] were on track to achieve universal access (>99%) by 2030, 78 were progressing too slowly and in 16 countries, coverage was decreasing.
- No SDG region is on track to achieve universal access by 2030 and the overall rate of progress will need to increase sixfold to meet the SDG global target.
- In 2022, 2.2 billion people still lacked safely managed drinking water, including 1.5 billion with basic services, 292 million with limited services, 296 million with unimproved and 115 million drinking surface water.
- This report includes estimates of safely managed services for 142 countries and for six out of eight SDG regions (compared with 95 countries and four regions in the 2017 SDG baseline report).

[2] The JMP produces internationally comparable estimates for 234 countries, areas and territories including all UN Member States. Statistics in this report refer to countries, areas and territories.

In 2022, one in four people lacked safely managed drinking water and regional coverage varied widely



*In this report, `Oceania' refers to the SDG grouping of `Oceania, excluding Australia and New Zealand'.

FIGURE 2 Global and regional drinking water coverage, 2015-2022 (%)

In 2022, 142 countries had estimates for safely managed drinking water

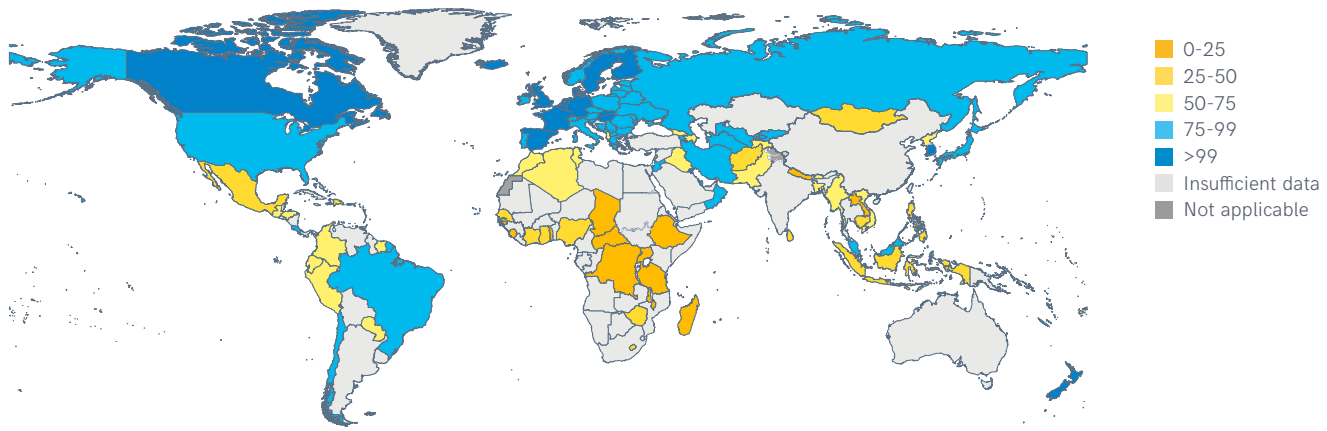


FIGURE 3 Proportion of population using safely managed drinking water services, 2022 (%)

SANITATION

- Since 2015, coverage of safely managed sanitation has increased from 49% to 57%, rising from 36% to 46% in rural areas and from 60% to 65% in urban areas.
- In 2022, 17 countries were on track to achieve universal access (>99%) by 2030, 84 were progressing too slowly and in 24 countries, coverage was decreasing.
- No SDG region is on track to achieve universal access by 2030 and the overall rate of progress will need to increase fivefold to meet the SDG global target.
- In 2022, 3.5 billion people still lacked safely managed sanitation, including 1.9 billion with basic services, 570 million with limited services, 545 million with unimproved and 419 million practising open defecation.
- This report includes estimates of safely managed services for 135 countries and for seven out of eight SDG regions (compared with 84 countries and five regions in the 2017 SDG baseline report).

In 2022, two out of five people lacked safely managed sanitation and regional coverage varied widely

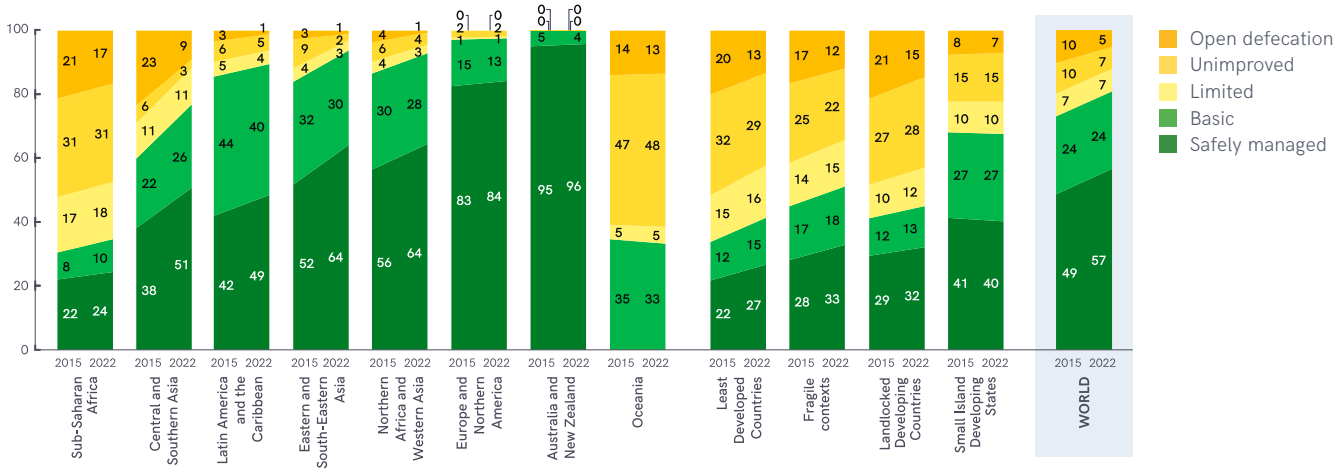


FIGURE 4 Global and regional sanitation coverage, 2015–2022 (%)

In 2022, 135 countries had estimates for safely managed sanitation services

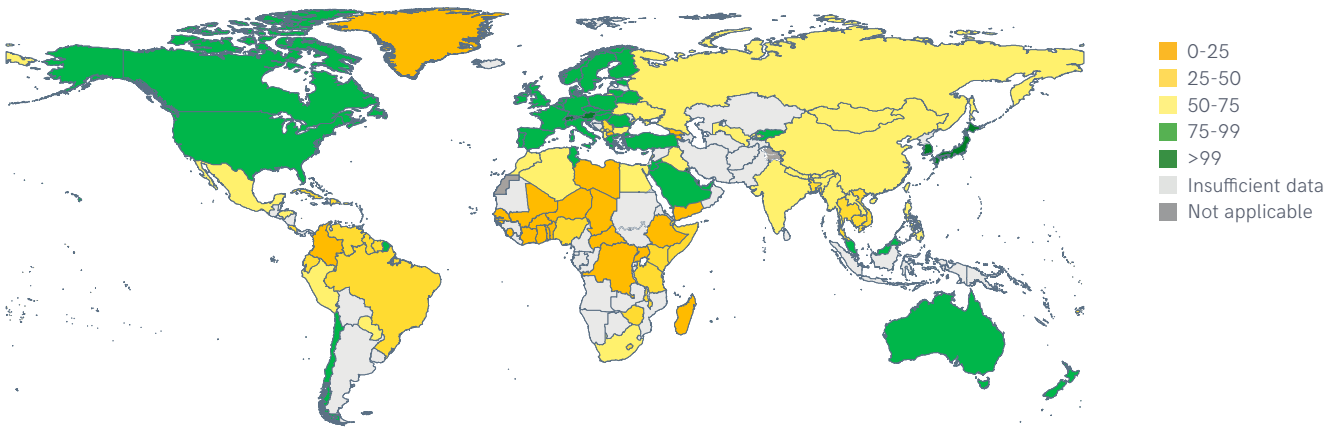


FIGURE 5 Proportion of population using safely managed sanitation services, 2022 (%)

HYGIENE

- Since 2015, coverage of basic hygiene services has increased from 67% to 75%, rising from 53% to 65% in rural areas but remaining largely unchanged at 83% in urban areas.
- In 2022, 11 countries were on track to achieve universal access (>99%) by 2030, 56 were progressing too slowly and in seven countries, coverage was decreasing.
- No SDG region is on track to achieve universal access by 2030 and the overall rate of progress will need to increase threefold to meet the SDG global target.
- In 2022, 2 billion people still lacked basic hygiene services, including 1.3 billion with limited services and 653 million with no facility.
- This report includes estimates of basic services for 84 countries and for four out of eight SDG regions (compared with 70 countries and two regions in the 2017 SDG baseline report).

In 2022, one in four people lacked basic hygiene services but four SDG regions had insufficient data

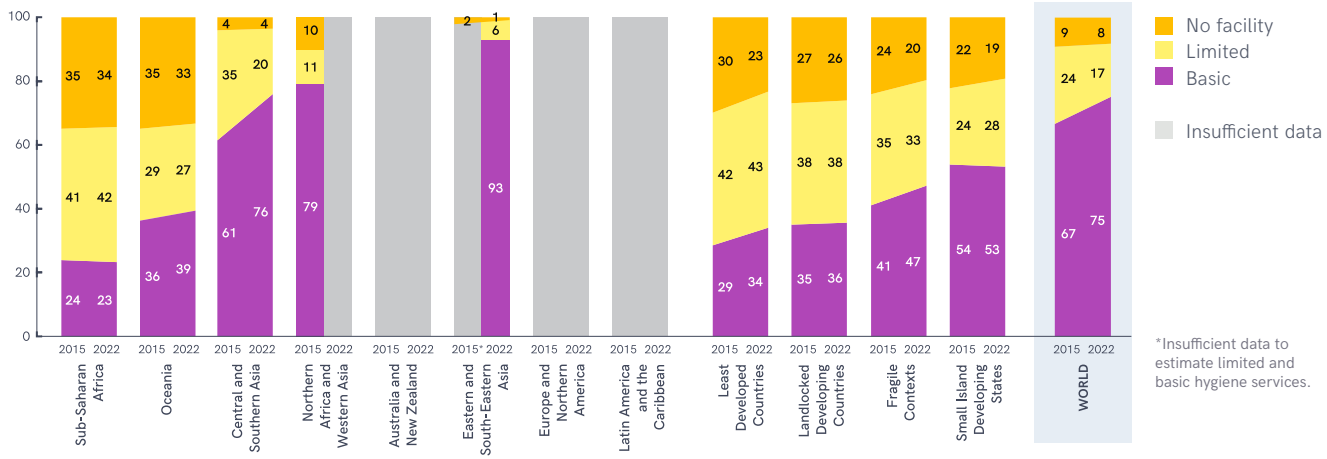


FIGURE 6 Global and regional hygiene coverage, 2022 (%)

In 2022, 84 countries had estimates available for basic hygiene services

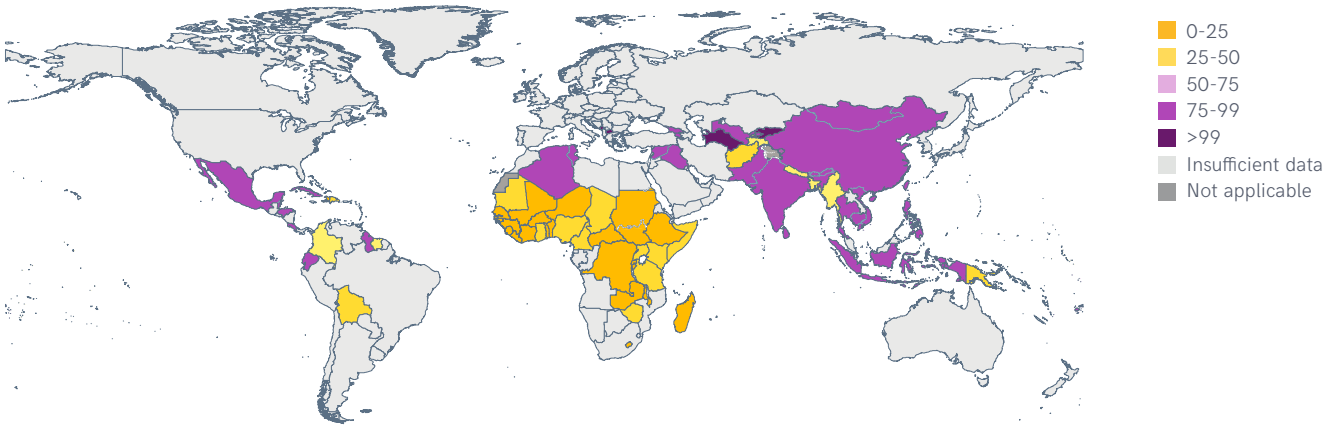


FIGURE 7 Proportion of population with basic hygiene services, 2022 (%)

MENSTRUAL HEALTH

- 53 countries had data for at least one menstrual health indictor in 2022, and three quarters were low-income or lower-middle-income.
- Adolescent girls and women living in rural areas were more likely to use reusable menstrual materials or no materials at all.
- Adolescent girls and women in the poorest wealth quintile and those with functional difficulties were more likely to lack a private place to wash and change their menstrual materials at home.
- Many adolescent girls and women did not participate in school, work or social activities during menstruation but there is significant variation between and within countries.
- Awareness of menstruation before menarche varied widely in the two countries that have data. Girls who were unaware were much more likely to have negative experiences.

Adolescent girls and women in most countries have access to materials and a private place to wash and change, but often do not participate in school, work and social activities during menstruation

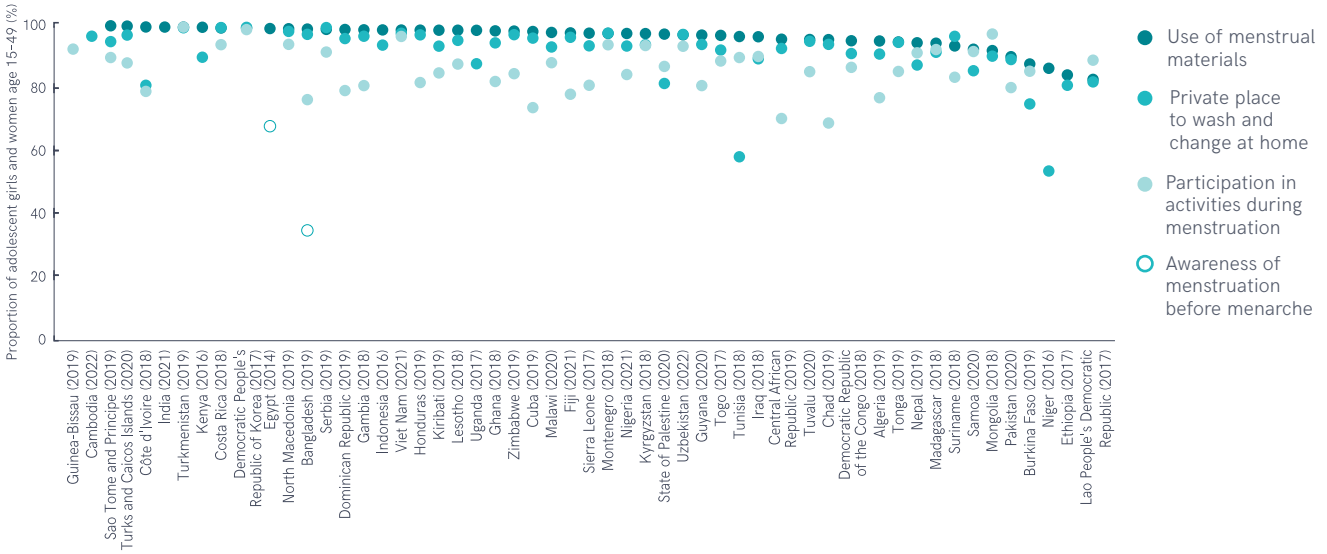


FIGURE 8 Proportion of adolescent girls and women age 15-49 by menstrual health indicator, selected countries, 2014-2022 (%)

In 2022, 53 countries had nationally representative data on at least one menstrual health indicator

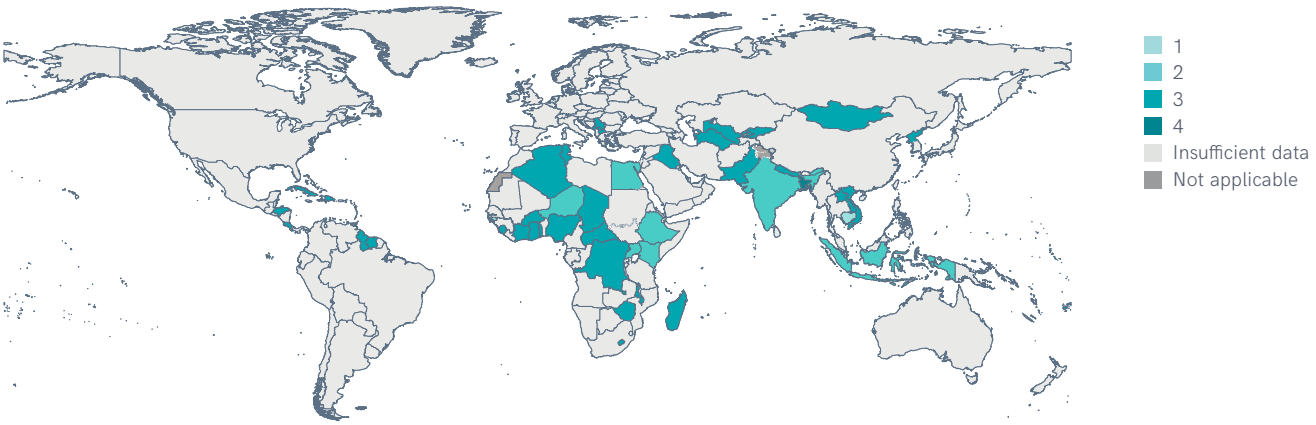


FIGURE 9 Number of menstrual health indicators with national data available, by country, 2022

INEQUALITIES

- Achieving SDG targets in low-income countries will require current rates of progress to increase sixfold, 13-fold and 16-fold for basic water, sanitation and hygiene, respectively, and 20-fold and 21-fold for safely managed water and safely managed sanitation services, respectively.
- The 1.9 billion people living in fragile contexts were twice as likely to lack safely managed drinking water and basic hygiene, and one and a half times as likely to lack safely managed sanitation services.
- Out of 105 countries with data, coverage of basic drinking water, sanitation and hygiene among the richest was more than double that of the poorest in 27, 54 and 64 countries, respectively.
- Emerging data from Multi-Sector Needs Assessments (MSNAs) in emergency settings show that displaced populations often have lower coverage of basic WASH services than non-displaced populations.

In low-income countries, achieving universal coverage of basic WASH services by 2030 will require a dramatic acceleration in current rates of progress

FIGURE 10 Coverage of basic WASH services by income group, 2015-2022 (%), and acceleration required to reach universal coverage (>99%) by 2030

*Insufficient data to estimate current rate of progress in basic hygiene coverage for upper middle income and high income.

Displaced populations often have lower coverage than non-displaced, but the impact of displacement on WASH service levels is highly context specific

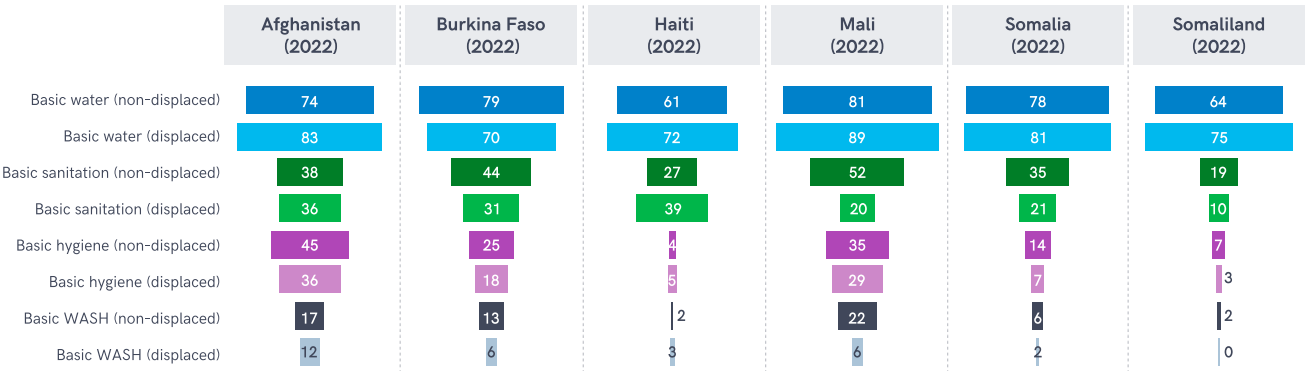
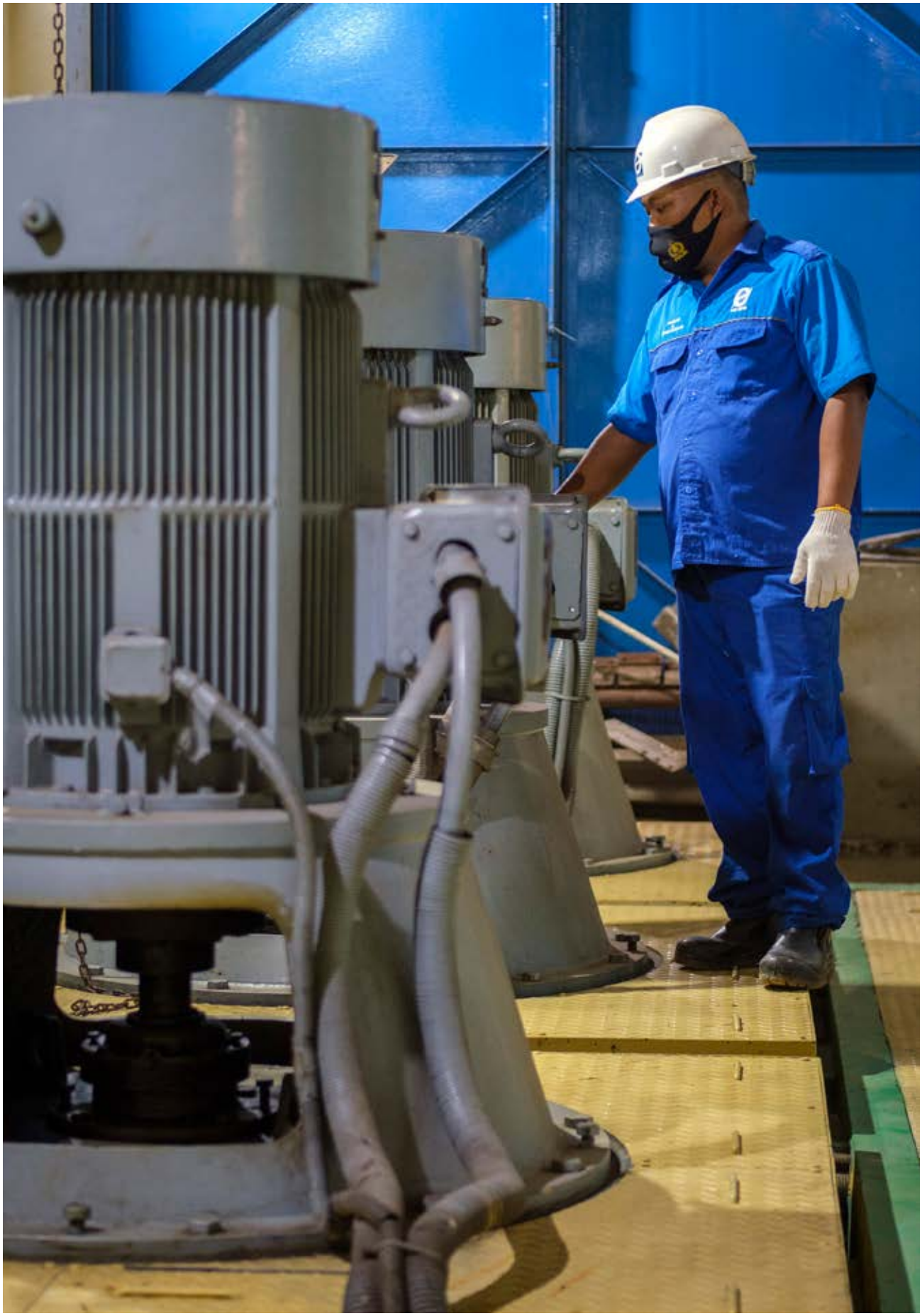


FIGURE 11 Proportion of population with basic drinking water, sanitation and hygiene services, and basic WASH combined, by displacement status, from selected Multi-Sector Needs Assessments surveys, 2022 (%)



1 Introduction

GLOBAL PROGRESS

Between 2000 and 2022, the global population increased from 6.1 billion to 8 billion people,[3] and billions of people gained access to WASH services (Figure 12). Since 2000, 2.1 billion people have gained access to safely managed drinking water (687 million since 2015) and the number of people without access has decreased by 247 million. Among the 2.2 billion still lacking safely managed drinking water in 2022, two thirds (1.5 billion) had a basic service, 292 million used limited services, 296 million used unimproved sources and 115 million used surface water. Compared with 2000, 583 million fewer people used unimproved sources and surface water.

Since 2000, 2.5 billion people have gained access to safely managed sanitation (902 million since 2015). Over the same period, the number of people without access has decreased from 4.2 billion to 3.5 billion. By 2022, more than half of these people (1.9 billion) had a basic service and 570 million used limited services. Since 2000, the number of people using unimproved facilities has been halved (from 1.1 billion to 545 million) and the number practising open defecation has reduced by over two thirds (from 1.3 billion to 419 million).

Because of data limitations, basic hygiene estimates do not extend back to 2000. But since 2015, the number of people with basic hygiene services has increased by over 1 billion, and the number of people without basic services has fallen by half a billion (from 2.5 billion to 2 billion). Among the 2 billion people who still lacked basic hygiene services in 2022, two thirds (1.3 billion) had a limited service and 653 million had no handwashing facility.

[3] The population data used in this report are published by the United Nations Population Division (World Population Prospects, 2022 Revision).

Billions of people have gained access to drinking water, sanitation and hygiene services since 2000

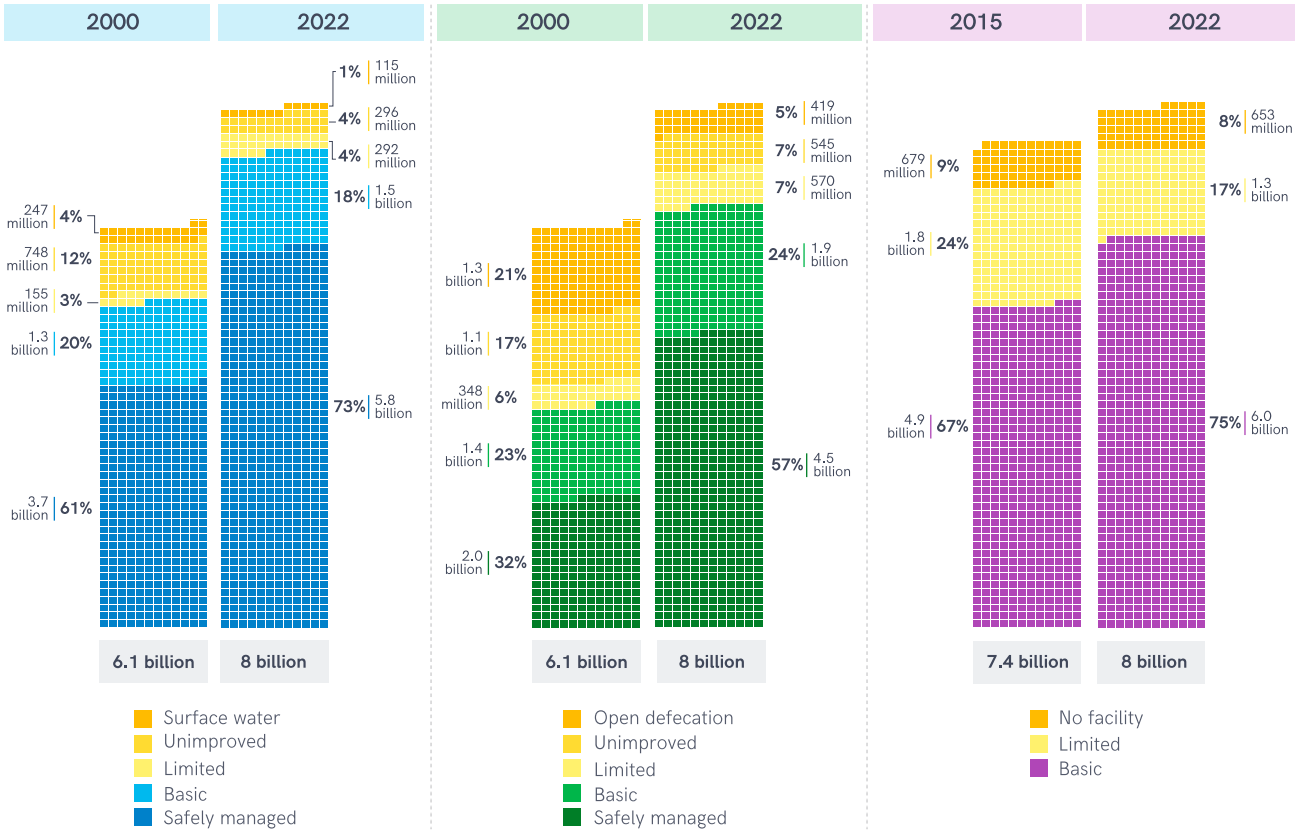


FIGURE 12 Global population by drinking water, sanitation and hygiene service levels, 2000/2015 and 2022 (each unit represents 10 million people)

GLOBAL DATA AVAILABILITY AND GAPS

Since the publication of the JMP SDG global baseline report in 2017, both the total number of countries, areas and territories with estimates and the proportion of the global population for which estimates are available have increased steadily with each progress update (Figure 13). Data for all three SDG global indicators are now available for over 50% of countries and over 50% of the population, and they are therefore classed as Tier 1 in the SDG global database.[4]

During the SDG period, the number of countries with total estimates available for indicator 6.1.1 (safely managed drinking water) has increased by half, from 95 to 142, and the population with data has risen from 34% to 51%. The increase in data coverage has been similar in rural and urban areas, with more than 50 countries producing new baseline estimates in rural areas (from 20 to 75) and urban areas (from 42 to 96). Low-income countries have achieved the largest increases in the number of rural, urban and total estimates since 2017, partly due to the integration of water quality testing into household surveys. While over 50 high-income countries now have total estimates, fewer than 25 have rural and urban estimates for safely managed drinking water. Partial estimates are available for the two most populous countries: for rural (but not urban) India, and urban (but not rural) China, with the result that the data coverage for total population is lower than for rural and urban populations.

[4] United Nations Statistics Division SDG Indicators Database <https://unstats.un.org/sdgs/dataportal>.

The number of countries with data for indicator 6.2.1a (safely managed sanitation) has increased from 84 to 135 and population coverage has nearly doubled from 48% to 86%. While more countries have estimates for urban areas (116) than for rural areas (89), the number of countries with rural estimates has almost tripled as household surveys have integrated indicators on safe management of on-site sanitation. Low-income and lower-middle-income countries have achieved the largest increases in the number of rural, urban and total estimates for safely managed sanitation.

Since 2017, the number of countries with total estimates for indicator 6.2.1b (basic hygiene) has increased slowly but population coverage has more than doubled due to the addition of estimates for populous countries, including India in 2019 and China in 2023. While there has been modest growth in the number of low-income and lower-middle-income countries with estimates, there are still very few high-income countries with estimates for basic hygiene. By 2023, only three high-income countries had total estimates and none of them had estimates for rural or urban areas.

Data availability for this report varies widely between SDG regions and between the core indicators used by the JMP for global monitoring of WASH services (Table 1). By 2022, estimates for open defecation, at least basic drinking water and at least basic sanitation were available for >90% of the population in all SDG regions, except for Northern Africa and Western Asia, and Latin America and the Caribbean (86% and 88% for open defecation). By contrast, there was only one SDG region with >90% data coverage for basic hygiene. Data coverage ranged from 95% in Central and Southern Asia to <1% in Europe and Northern America.

Global data availability for SDG WASH indicators has increased steadily since 2017

FIGURE 13 Percentage of population and number of countries with rural, urban and total estimates available for SDG WASH indicators in JMP progress updates, 2017–2023

Data coverage for safely managed drinking water remained below 50% in five of the eight SDG regions. While all regions met this threshold for accessibility on premises, and all except Europe and Northern America (44%) met it for availability when needed, data coverage for drinking water quality ranged from 100% in Europe and Northern America to just 16% in Oceania. While data coverage for safely managed sanitation is above 50% in seven out of eight SDG regions, critical data gaps remain. Oceania is the only region which did not meet the data coverage threshold for wastes safely disposed of in situ, but three out of eight regions were below the threshold for wastewater treated, and none of the regions had estimates for 50% of the population using on-site systems emptied and treated off-site. In 2022, such estimates were only available for five high-income countries, representing 18% of the population in that income group.

In 2022, data coverage for SDG WASH indicators varied widely between regions

% of population (number of countries, areas and territories) in 2022	DRINKING WATER					SANITATION						HYGIENE
	At least basic	Safely managed	Accessible on premises	Available when needed	Free from contamination	Open defecation	At least basic	Safely managed	Safely disposed of in situ	Emptied and treated	Wastewater treated	Basic
World (234)	99% (207)	51% (142)	99% (207)	86% (139)	51% (142)	96% (198)	98% (206)	86% (135)	85% (137)	1% (5)	59% (110)	69% (84)
Rural	98% (164)	64% (75)	98% (162)	91% (111)	64% (75)	97% (156)	98% (161)	80% (89)	84% (89)	0% (1)	9% (4)	82% (82)
Urban	94% (175)	63% (96)	93% (173)	76% (124)	63% (96)	94% (172)	94% (172)	81% (116)	83% (118)	24% (2)	44% (24)	59% (80)
SDG REGIONS												
Australia and New Zealand (2)	100% (2)	17% (1)	100% (2)	83% (1)	17% (1)	100% (2)	100% (2)	100% (2)	100% (2)	0% (0)	100% (2)	0% (0)
Central and Southern Asia (14)	99% (13)	31% (11)	99% (13)	95% (12)	31% (11)	96% (13)	100% (14)	80% (6)	92% (7)	0% (0)	13% (3)	95% (11)
Eastern and South-Eastern Asia (18)	100% (18)	35% (14)	100% (18)	93% (12)	35% (14)	99% (17)	100% (18)	87% (14)	77% (15)	2% (1)	17% (7)	89% (8)
Europe and Northern America (53)	100% (49)	100% (46)	100% (49)	44% (16)	100% (46)	99% (47)	99% (47)	99% (42)	99% (42)	1% (4)	99% (46)	0% (2)
Latin America and the Caribbean (50)	92% (37)	79% (20)	92% (37)	90% (27)	79% (20)	88% (37)	92% (39)	82% (17)	80% (17)	0% (0)	86% (18)	40% (14)
Northern Africa and Western Asia (25)	100% (24)	36% (16)	100% (24)	82% (20)	36% (16)	86% (21)	90% (22)	85% (20)	95% (20)	0% (0)	94% (21)	33% (9)
Oceania (21)	93% (17)	16% (12)	93% (17)	85% (10)	16% (12)	92% (15)	94% (18)	11% (6)	33% (6)	0% (0)	8% (4)	87% (7)
Sub-Saharan Africa (51)	99% (47)	64% (22)	99% (47)	98% (41)	64% (22)	99% (46)	99% (46)	83% (28)	81% (28)	0% (0)	53% (9)	87% (33)
OTHER REGIONAL GROUPINGS												
Landlocked Developing Countries (32)	97% (31)	71% (21)	97% (31)	92% (29)	71% (21)	98% (31)	98% (31)	71% (19)	65% (19)	0% (0)	39% (10)	91% (25)
Least Developed Countries (46)	100% (43)	69% (24)	100% (43)	98% (40)	69% (24)	95% (42)	95% (42)	77% (30)	79% (30)	0% (0)	25% (5)	90% (37)
Small Island Developing States (53)	96% (38)	36% (18)	96% (38)	83% (26)	36% (18)	94% (36)	94% (39)	51% (14)	50% (14)	0% (0)	80% (12)	70% (16)
Fragile contexts (60)	99% (54)	74% (29)	99% (54)	94% (50)	74% (29)	89% (50)	97% (53)	63% (32)	79% (34)	0% (0)	37% (11)	84% (42)
INCOME GROUPINGS												
Low income (28)	100% (27)	59% (13)	100% (27)	98% (26)	59% (13)	90% (25)	93% (26)	66% (16)	68% (17)	0% (0)	22% (2)	87% (24)
Lower middle income (54)	100% (49)	50% (33)	100% (49)	95% (43)	50% (33)	97% (48)	100% (49)	78% (33)	83% (34)	0% (0)	41% (17)	90% (37)
Upper middle income (54)	97% (46)	31% (30)	97% (46)	87% (42)	31% (30)	96% (43)	97% (45)	95% (32)	96% (32)	0% (0)	38% (29)	71% (20)
High income (80)	100% (71)	93% (56)	100% (71)	50% (26)	93% (56)	99% (68)	99% (70)	98% (51)	93% (51)	18% (5)	99% (59)	0% (3)

>50% coverage 0-49% coverage

TABLE 1 Percentage of population and number of countries with estimates available for SDG WASH indicators in 2022, by regional grouping

BOX 2

Localizing SDG global targets and indicators related to WASH

The 2030 Agenda for Sustainable Development[5] is intended to be implemented by all countries and all stakeholders, acting in collaborative partnership. The SDG global targets are considered aspirational and each government is expected to set their own national targets 'guided by the global level of ambition but taking account of national circumstances'. The United Nations General Assembly resolution approving the official list of SDG global indicators encouraged Member States to integrate them into national data systems and noted that they may be further complemented by additional regional and national indicators. All governments are therefore expected to localize the SDG global targets by establishing ambitious but realistic national targets for progressive reduction of inequalities in WASH services, collecting the information needed to progressively report on SDG global indicators for WASH and developing additional regional and national WASH indicators where needed. As the custodian agencies for SDG global indicators on WASH, WHO and UNICEF are expected to maintain global databases, lead methodological work and develop data standards, contribute to statistical capacity building, establish mechanisms to compile and verify national data, and provide internationally comparable data to the United Nations Statistical Division for inclusion in the SDG global database and annual SDG progress report.

[5] Transforming our world: the 2030 Agenda for Sustainable Development <https://sdgs.un.org/2030agenda>.

GENDER IN WASH

Goal 5 of the 2030 Agenda for Sustainable Development aims to 'achieve gender equality and empower all women and girls'. It includes six targets focused on ending discrimination and violence against women and girls, eliminating harmful practices such as child marriage and female genital mutilation, recognizing and valuing unpaid care and domestic work, ensuring participation and equal opportunities at all levels of decision-making, ensuring access to sexual and reproductive health, and undertaking policy and legal reforms to give women equal rights and access to resources.[6] The 2030 Agenda further recognizes that realizing gender equality and the empowerment of women and girls will make a crucial contribution to progress across all of the SDG goals and targets, including those related to WASH.

The importance of progress on drinking water, sanitation and hygiene in realizing gender equality and the empowerment of women and girls is already widely recognized. The SDG global target for sanitation and hygiene (6.2) includes an explicit reference to 'paying special attention to the needs of women and girls', but there remains a lack of commonly agreed indicators for national and global monitoring of gender in WASH. The JMP and the UN-Water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS), in collaboration with Emory University, have therefore undertaken a joint review of opportunities for enhanced monitoring of gender in relation to SDG WASH targets.[7]

The first phase of the JMP/GLAAS gender review involved consultations with key stakeholders, a review of existing literature and technical guidance developed by United Nations agencies, synthesis of key terms related to monitoring gender in WASH (Table 2),[8] and the development of a conceptual framework identifying 15 dimensions of gender equality related to WASH across four interrelated domains (Table 3). An inventory of existing indicators and tools was prepared and a series of expert group meetings were held to assess their potential for measuring each dimension. Detailed briefs were prepared summarizing key findings for each dimension, including major gaps and opportunities to leverage existing data collection at national and subnational levels. The GLAAS 2021/2022 questionnaire was later updated to include additional gender-relevant indicators, and the resulting GLAAS 2022 report includes a chapter on gender and WASH.[9]

[6] Sustainable Development Goal 5 <https://sdgs.un.org/goals/goal5>.

[7] JMP/GLAAS Gender Review <https://washdata.org/monitoring/inequalities/gender>.

[8] The review noted that gender also intersects with myriad other forms of discrimination, including but not limited to sexual orientation and gender identity, age, ability, income, caste, race, ethnicity, geography, religion, origin, nationality, and indigenous, marital, family, immigration and HIV status.

[9] World Health Organization. UN-Water global analysis and assessment of sanitation and drinking-water (GLAAS) 2022 report: strong systems and sound investments - evidence on and key insights into accelerating progress on sanitation, drinking-water and hygiene. Geneva: World Health Organization; 2022 <https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-(glaas)-2022-report>.

KEY TERMS RELATED TO MONITORING GENDER IN WASH	
Gender[10]	A social and cultural construct that distinguishes differences in the attributes of men and women, girls and boys, and accordingly refers to the roles and responsibilities of men and women. Gender-based roles and other attributes, therefore, change over time and vary with different cultural contexts. The concept of gender includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity). This concept is useful in analysing how commonly shared practices legitimize discrepancies between sexes.
Sex-disaggregated data	Data that are collected and reported separately for males and females. Sex-disaggregated data enable understanding of differences by sex and the unique needs of males and females. They can also reflect differences by gender and the socially and culturally constructed roles, responsibilities and expectations of women and men, and girls and boys. However, these definitions do not adequately acknowledge sexual and gender minorities, including people who are intersex or transgender.
Gender statistics[11]	Gender statistics are inclusive of: • data that are collected and presented by sex as a primary and overall classification; • data that reflect gender issues; • data that are based on concepts and definitions that adequately reflect the diversity of women and men [all genders] and capture all aspects of their lives; • data collection methods that take into account stereotypes and social and cultural factors that may induce gender bias in the data; and • data analyses and presentation of data that reveal meaningful similarities and differences between women and men [individuals of different genders].
Gender integration	The WHO Gender Responsive Assessment Scale[12] uses the following categories to assess gender integration into policy and programming: • Gender-unequal: perpetuates gender inequalities • Gender-blind: ignores gender inequalities • Gender-sensitive: acknowledges but does not address gender inequalities • Gender-specific: addresses the specific needs of women and men [all genders] • Gender-transformative: addresses the underlying causes of gender-based inequalities
Gender identity	A person's perceptions of having a particular gender, which may or may not correspond with their sex assigned at birth. There are no international standards on measuring gender identity and data are limited but there is growing recognition of the importance of understanding the unique needs of gender-diverse and non-conforming persons in relation to WASH.

TABLE 2 Definitions of key terms related to monitoring gender in WASH[13]

[10] UNICEF. Gender Equality: Glossary of Terms and Concepts. Nepal: UNICEF Regional Office for South Asia; 2017 <https://www.unicef.org/rosa/reports/gender-equality>.
[11] United Nations Statistics Division (UNSD). Integrating a gender perspective into statistics. New York: Department of Economic and Social Affairs; 2016 ST/ESA/STAT/SER.F/111.
[12] World Health Organization. Gender mainstreaming for health managers: a practical approach. Geneva: World Health Organization; 2011 <https://apps.who.int/iris/handle/10665/44516>.
[13] Based on: Caruso BA, Salinger A, Patrick M, Conrad A, Sinharoy S. A Review of Measures and Indicators for Gender in WASH. WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene; 2021 <https://washdata.org/reports/gender-review-final-report>.

The final report included a traffic light assessment which shows that while at least one relevant measure exists for almost all of the identified dimensions and topic areas (water, sanitation, hygiene and menstruation), most have so far only been collected at subnational level and relatively few have been systematically collected at national level. The second phase of the review will aim to consolidate technical recommendations from the first phase, and to build consensus around a core set of priority indicators and tools for enhanced national and global monitoring of gender in WASH that can be piloted in a small number of countries and validated prior to integration and scale up within national monitoring systems.

One key finding of the gender review is that national data on WASH services are typically collected at household level rather than individual level and therefore cannot be disaggregated by sex or gender. These indicators can be considered gender-blind because they treat all members of the household the same and ignore differences between women and men. Nonetheless, some of the indicators used for national and global monitoring take account of the fact that the burden of inadequate WASH services is unevenly distributed between women and men, and can therefore be considered gender-sensitive. For example, accessibility of drinking water sources and use of private sanitation facilities are both gender-sensitive indicators, but cannot be disaggregated by individual household members (see Sections 2 and 3). However, there are relatively few examples of indicators that directly address the specific WASH needs of women and men, and girls and boys, and can therefore be categorised as gender-specific, and still fewer gender-transformative indicators that address the underlying causes of gender-based inequalities.

This JMP 2023 progress update on household drinking water, sanitation and hygiene has a special focus on gender. Each section analyses currently available national statistics related to gender and WASH and highlights opportunities for enhanced national and global monitoring of gender and WASH in the future.

DOMAIN/DIMENSION	DEFINITION
ABILITY TO MEET WASH NEEDS	
Ability to meet WASH needs	Refers to women and men, boys and girls, and sexual and gender minorities experiencing equity of access to water, sanitation and hygiene facilities, with their different needs and vulnerabilities accounted for and addressed.
ACCESS TO RESOURCES	
Safety and freedom from violence	Freedom from interpersonal and gender-based violence, including women's freedom from both violent acts and threats of violence (both physical and sexual), coercion, harassment or force when accessing and using sanitation and hygiene locations or water collection points.
Privacy	An individual's ability to feel free from observation or being heard or disturbed by others when accessing and using sanitation locations and water sources, including for hygiene (e.g. menstruation, bathing) purposes.
Health	Includes physical, mental and social well-being as they affect and are affected by WASH options and conditions. Health can be viewed as both an outcome of WASH, such as illness linked to unsafe water consumption, and as a resource for accessing WASH, such as the physical ability to walk to water points or sanitation facilities.
Time and labor	Individuals' time and labor (paid or unpaid) spent on WASH-related tasks and activities and meeting their own WASH-related needs, as well as satisfaction with and control over the time and labor spent.
Financial resources and physical assets	Individuals' control over economic resources and long-term stocks of value, such as land, for the purposes of meeting individual and household WASH needs.
Knowledge and information	Individuals' knowledge and access to information related to water, sanitation and hygiene, including WASH improvements and maintenance.
Social capital	Individuals' membership in trusting and cooperative social networks that provide tangible (economic and material) and intangible (emotional and instrumental) support. This includes relationships or social ties with individuals or groups that help individuals access water, sanitation and hygiene, and complete WASH-related tasks and activities.
ABILITY TO EXERCISE AGENCY	
Household decision-making	Individuals' opportunities to influence and make decisions about water, sanitation and hygiene within their homes.
Public participation	Individuals' ability to participate in WASH-related public activities, including influencing decisions at a public level, participating in committees, assuming both formal (elected) and informal (positions of influence) leadership positions, and participating in WASH-related income-generating activities; and the impact of WASH conditions and responsibilities on individuals' abilities to participate in public life.
Freedom of movement	Individuals' autonomy to move freely both to access water, sanitation and hygiene facilities (including accessing resources to meet menstrual needs) and without hindrance as a result of limited WASH access.
MULTILEVEL ENABLING ENVIRONMENT	
Social context	Relationships, interactions and intergroup dynamics and social rules (including social inclusion, social cohesion, social norms and community solidarity) that may impact access to WASH.
Political context	Legal structures, including laws and policies, budgets and local leadership that can influence the realization of individuals' WASH-related rights and access.
Economic context	Inclusive of both physical market places and market systems, an enabling environment in which individuals can access the goods and services that they need for WASH, as well as participate for economic benefit.
Environmental context	The context in which individuals move and operate that can be enabling by providing individuals with safe, accessible conditions, or can pose a barrier to individuals' WASH access.

TABLE 3 Definitions of dimensions identified for assessing gender in WASH[13]

2 Drinking water services

INTRODUCTION

The JMP uses service ladders to benchmark and compare progress across countries and these have been updated and expanded for SDG monitoring. The drinking water ladder defines five levels of service, ranging from 'surface water' (no service) to 'safely managed' which is the global indicator for SDG target 6.1 (Figure 14).

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

FIGURE 14 SDG ladder for drinking water services

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

The SDG service ladder builds on the established improved/unimproved source type classification and introduces additional criteria related to the level of service provided. Households using improved sources are divided into three categories. If a round trip to collect water, including queuing, exceeds 30 minutes, it counts as a 'limited' service, and if it takes no more than 30 minutes, it counts as a 'basic' service. To meet the SDG standard for a 'safely managed' service, improved sources must be accessible on premises, available when needed and free from contamination. Since households with 'safely managed' services also meet the criteria for 'basic' services, these two categories can also be grouped together as 'at least basic services'. This is one of the tracer indicators used for monitoring progress towards SDG target 1.4 on universal access to basic services.

Between 2000 and 2022, the global population increased from 6.1 billion to 8 billion people. During this period, 2.1 billion people gained access to safely managed drinking water and the number of people lacking at least basic drinking water services decreased from 1.2 billion to 703 million (Figure 15). Two thirds (1.4 billion) of those that gained safely managed services lived in urban areas, but the urban population increased by 1.7 billion (from 2.9 billion to 4.5 billion). While a further 283 million people gained access to a basic drinking water service, the number of people lacking at least basic services in urban areas increased slightly, from 136 to 152 million.

Since 2000, 2 billion people have gained access to safely managed services, two out of three live in urban areas

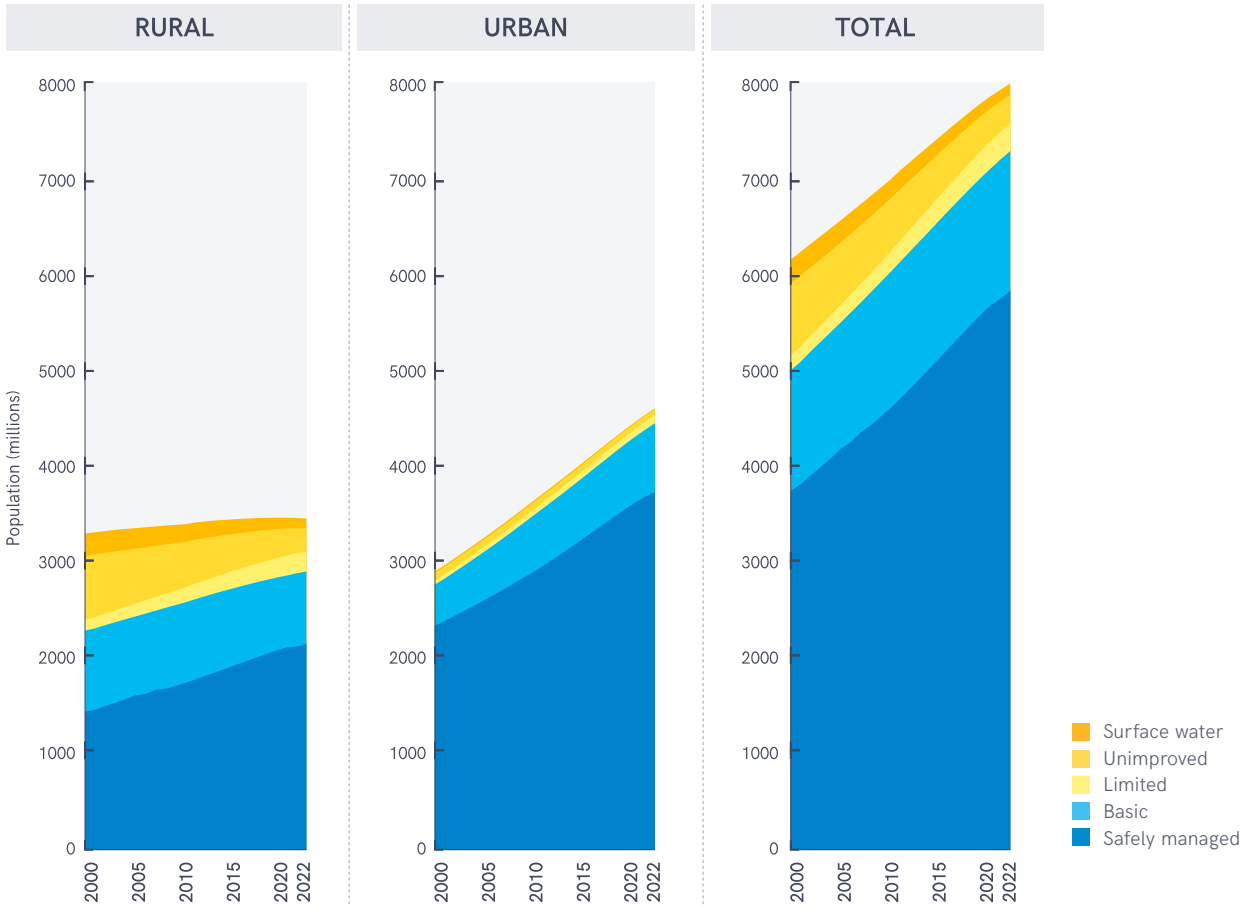


FIGURE 15 Rural, urban and total populations, by drinking water service level, 2000–2022 (millions)

By contrast, the rural population changed less between 2000 and 2022 (rising from 3.3 billion to 3.4 billion). Over this period 704 million people gained access to safely managed services and the number of people lacking at least basic services fell from 1 billion to 549 million. While the number of people using limited services increased by 92 million, the number using unimproved sources fell by 422 million and the number using surface water fell by 127 million. However, rural areas still accounted for four out of five people lacking at least basic drinking water services in 2022.

Between 2015 and 2022, global coverage of safely managed drinking water increased from 69% to 73%. Rural coverage increased rapidly, from 56% to 62%, while urban coverage increased more slowly, from 80% to 81% (Figure 16). Urban estimates for safely managed drinking water were available for all eight SDG regions but only five had estimates for rural areas. In most regions, urban coverage remains higher, but rural coverage has generally increased faster. The coverage gap between urban and rural was greatest in sub-Saharan Africa (38 % pts) and in Latin America and the Caribbean (27 % pts), while Central and Southern Asia recently closed the gap due to a faster rate of change in rural areas (1.39 % pts/yr) compared to urban areas (0.21 % pts/yr). Rural coverage also increased steadily in Latin America and the Caribbean, and Eastern and South-Eastern Asia. Sub-Saharan Africa was the only region with a faster annual rate of change in urban areas (0.56 % pts/yr) compared to rural areas (0.42 % pts/yr). Urban coverage of at least basic drinking water was higher than rural coverage in all SDG regions. The coverage gaps for at least basic drinking water were smaller than for safely managed drinking water, but in Oceania there remained a 42 % pt gap between urban areas (93%) and rural areas (51%).

In most SDG regions, rural coverage of basic and safely managed services has increased while urban coverage has stagnated

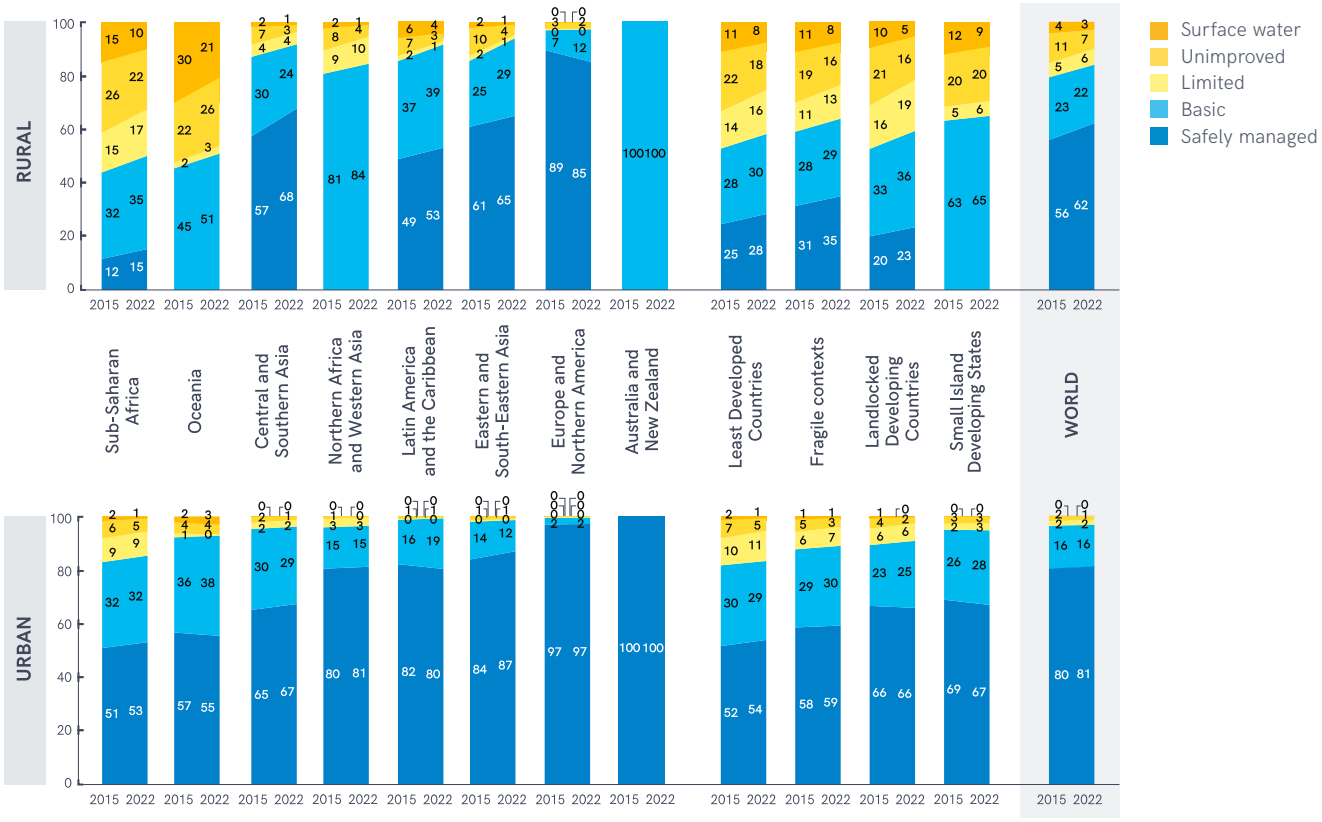


FIGURE 16 Regional drinking water coverage in rural and urban areas, 2015-2022 (%)

GENDER AND DRINKING WATER

Access to safe drinking water is a universal human right, but 2 billion people around the world still lacked safely managed drinking water services in 2022. The JMP 2023 progress update on WASH in households highlights inequalities in service levels between and within countries. However, the impact of inadequate drinking water on health, welfare and productivity varies across population subgroups.

Inequalities in the accessibility, availability and quality of drinking water services impact women and men in different ways. This is due partly to differences in the specific needs of women and men, but also to differences in gender norms and roles and responsibilities related to the provision of services. Inadequate service levels disproportionately affect women and girls who remain primarily responsible for domestic chores in many parts of the world. Women and girls are more likely to be responsible for ensuring the household has sufficient water for drinking, cooking, cleaning and caring for children, older people and those with disabilities. In many countries, accessing sufficient quantities of safe drinking water is both a physical burden and a source of psychosocial stress.

National data on drinking water are typically collected at household level, rather than individual level, but some indicators take account of gender inequalities and can therefore be considered gender-sensitive. In a small number of cases, national data can be disaggregated by sex or gender and are therefore considered gender-specific, but further work is required to develop indicators that address other dimensions of gender inequality related to drinking water.

Improving the accessibility of drinking water is a well established priority for achieving gender equality and empowering women and girls. Gender inequalities related to accessibility were also a key consideration in the construction of the SDG service ladder for drinking water which distinguishes households using improved sources accessible on premises from those that spend up to 30 minutes or more collecting water from improved sources located elsewhere. While these indicators are not gender-specific, they are gender-sensitive.

In 2022, there were 152 countries where more than three quarters of the population already had improved water accessible on premises (Figure 17). But there were still 41 countries with less than 50% coverage, including 17 countries where fewer than one in four people used improved sources accessible on premises (except for Haiti, the latter are all in sub-Saharan Africa). The burden associated with not having water on premises is likely to disproportionately impact women and girls in these countries. The most extreme cases were Central African Republic, Chad, Haiti and South Sudan, where more than nine out of ten people still lacked an improved water source accessible on premises in 2022.

In 41 countries less than half the population used an improved source accessible on premises in 2022

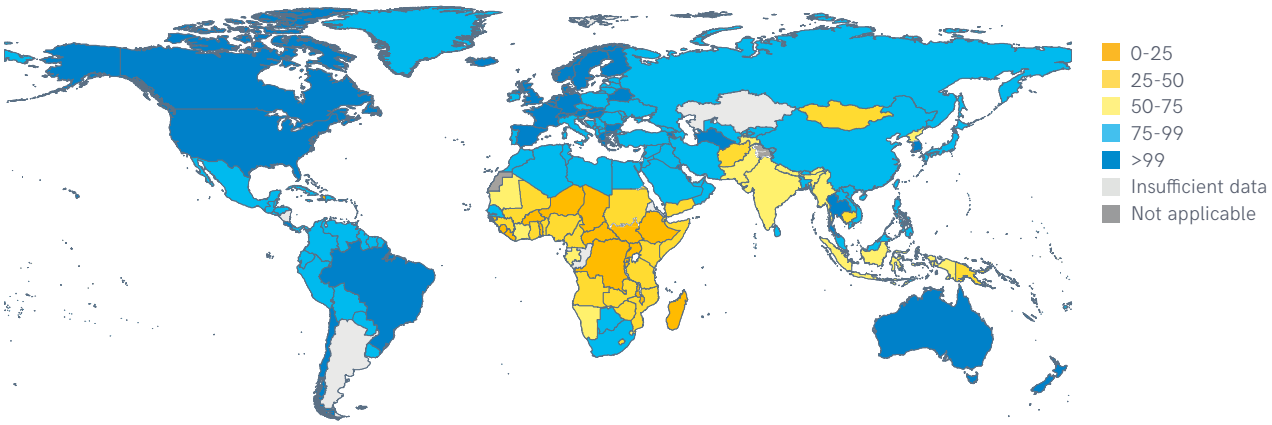


FIGURE 17 Proportion of population using an improved water source accessible on premises, 2022 (%)

Accessibility of drinking water is closely correlated with income (Figure 18). In high-income and upper-middle-income countries, almost all improved sources were either accessible on premises or within 30 minutes. By contrast, in lower-middle-income countries, around two thirds were accessible on premises. However, the accessibility gap was greatest in low-income countries where just over half the improved sources were accessible within 30 minutes and less than a third were accessible on premises. For example, in Afghanistan, while almost all improved sources (83%) were within 30 minutes (82%), just over half (47%) were accessible on premises. In Burundi, Liberia, Malawi, Rwanda, South Sudan and Uganda, the gap between coverage of improved sources and improved sources accessible on premises exceeded 60 % pts in 2022.

In low-income countries improved sources were far less likely to be accessible on premises or within 30 minutes in 2022

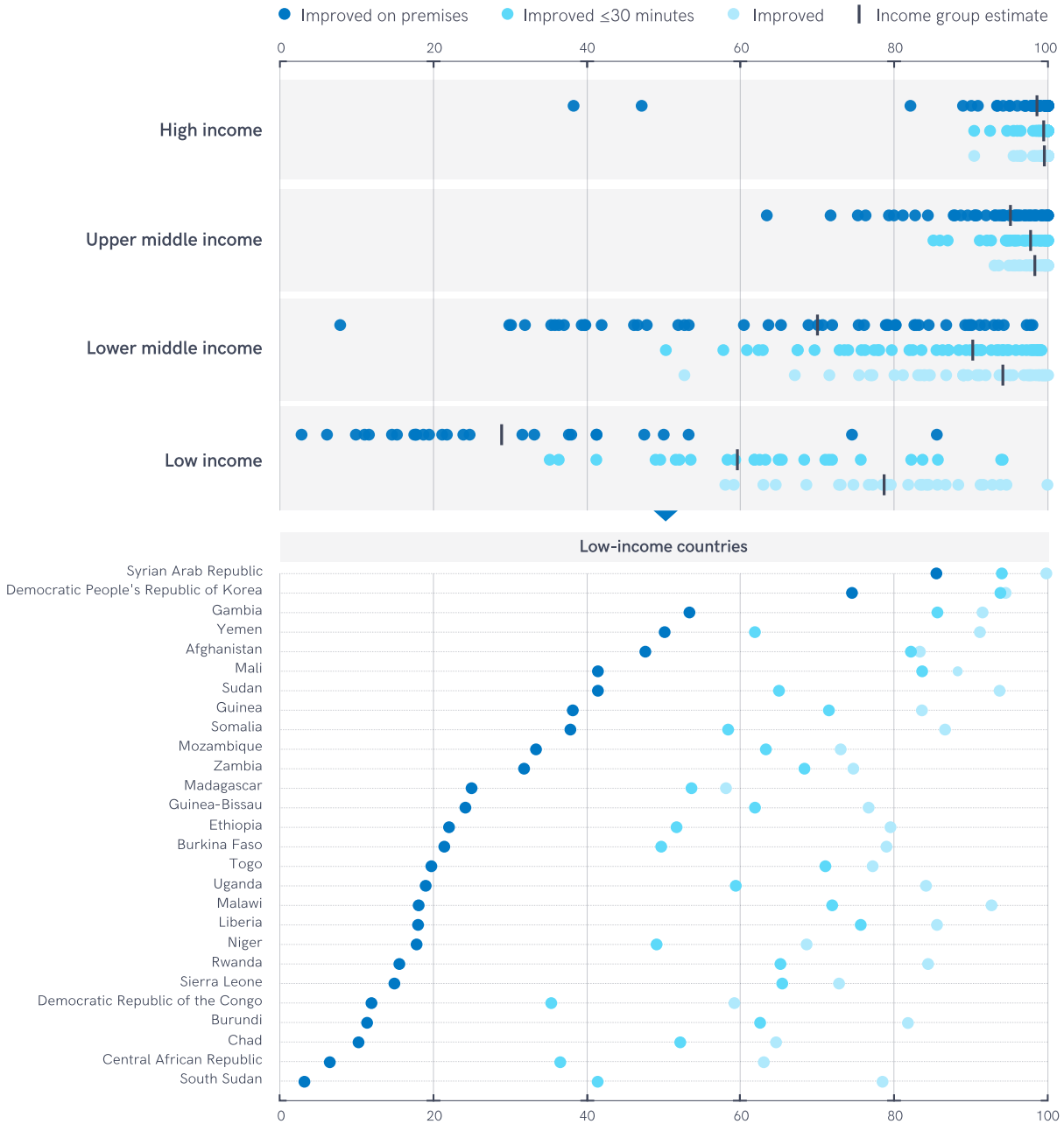


FIGURE 18 Proportion of population using improved sources, improved sources within 30 minutes, and improved sources on premises, by income group and country, 2022 (%)

Women are mainly responsible for water carriage in most countries with disaggregated data

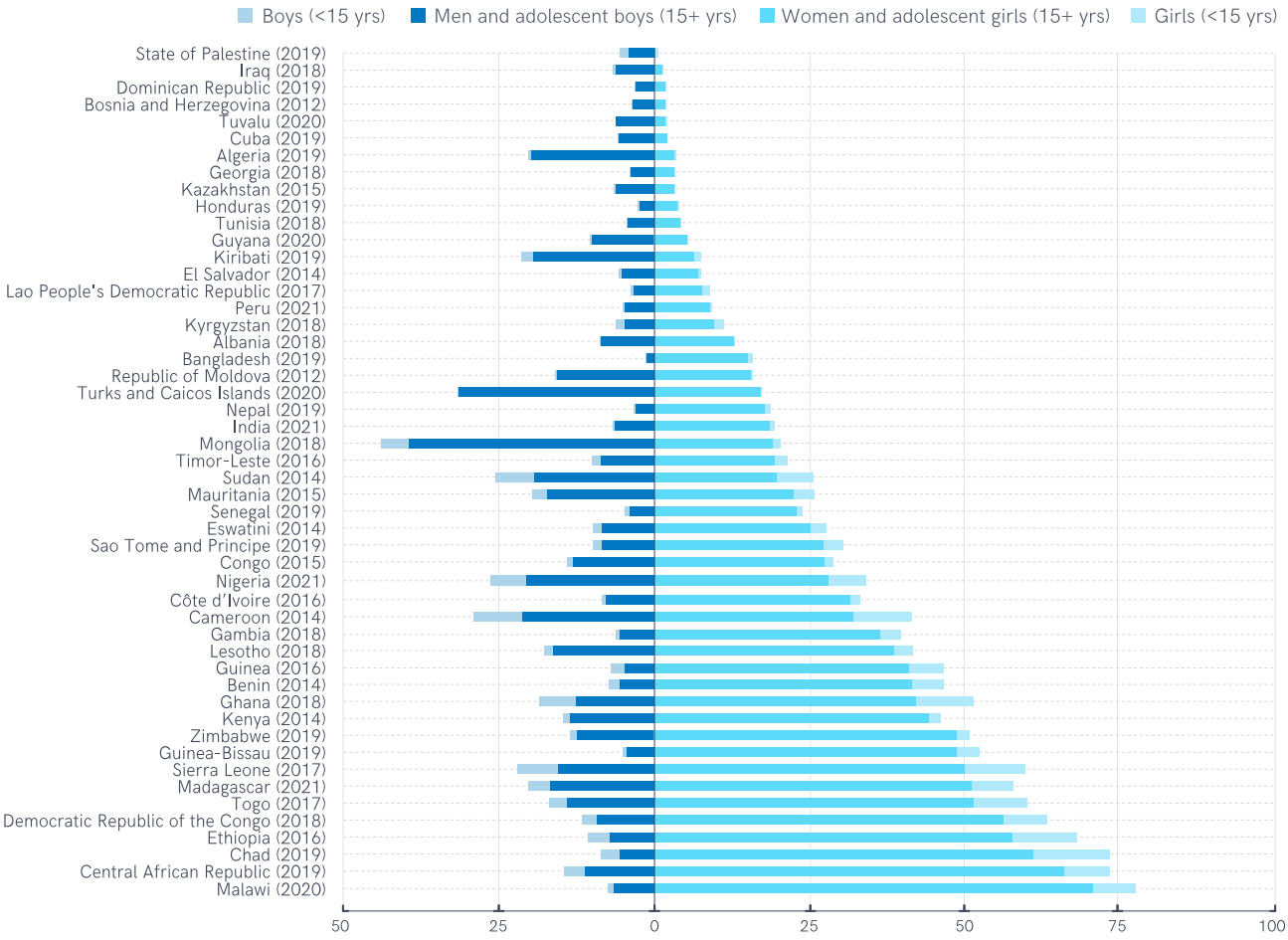


FIGURE 19 Proportion of households in which women, men, girls and boys are primarily responsible for water collection, by country, selected surveys where at least 10% of households collect water, 2012–2022 (%)

Figure 19 shows that responsibility for collecting drinking water from sources located off premises is often a highly gendered activity. Analysis of harmonized data from 50 recent surveys showed that primary responsibility for fetching drinking water fell mainly to women (35 countries).[14] In eight countries (Central African Republic, Chad, Democratic Republic of the Congo, Ethiopia, Madagascar, Malawi , Sierra Leone and Togo), over half of households relied on women to collect water. All 22 of the countries where at least a quarter of households relied on women were located in sub-Saharan Africa. In Bangladesh, Chad, Guinea-Bissau and Malawi, women were more than ten times more likely than men to be responsible for fetching water. The distribution of responsibility was most unequal in Malawi, where women and men were responsible for fetching water in 71% and 7% of households, respectively.

Over a quarter of households relied on men to collect water in Mongolia and Turks and Caicos Islands, and there were 13 other countries where more men collected water than women. Men were more likely to fetch water than girls in all countries (except for Chad, where men and girls were responsible in 6% and 12% of households, respectively, and Ethiopia, where men and girls were responsible in 7% and 10% of households, respectively). However, in two thirds of countries with data available, girls were more likely than boys to be responsible for water carriage. The largest differences were in Chad and Ethiopia, where girls were four and three times as likely as boys to be responsible for collecting water, respectively.

[14] Household surveys often use the terms 'adult men' and 'adult women' to describe individuals age 15 years and older, and 'female child' and 'male child' to describe individuals under 15 years of age. The United Nations defines individuals age 0–18 as children, and those age 10–19 as adolescents. Accordingly, the group of 'adult women (aged 15+ years)' would more correctly be termed 'women and girls age 15+ years', or 'women and adolescent girls age 15+ years'. Likewise, 'female child' would be more accurately termed 'girls <15 years'. This report uses these terms in the Figures, but uses the shortened terms 'women', 'men', 'girls' and 'boys' in the text.

The burden and responsibility for water carriage also varied between regions (Figure 20). Globally, it was estimated that 16% of the population (1.8 billion people) live in households where water is collected from sources located off premises (both improved and unimproved). In two thirds of these households (63%), women were primarily responsible for water carriage, compared with one in four households (26%), where men were responsible. Nearly half (45%) of the 1.2 billion people in sub-Saharan Africa and a quarter (24%) of the 2.1 billion people in Central and Southern Asia still relied on water collection, compared with only 12% of the population in Northern Africa and Western Asia (554 million), and just 3% in Latin America and the Caribbean (660 million). Women were four times as likely as men to fetch water in sub-Saharan Africa and nearly three times as likely in Central and Southern Asia. However, in Northern Africa and Western Asia, and in Latin America and the Caribbean, men were more likely to be responsible. Globally, girls (7%) were more likely than boys (4%) to fetch water and this was true for all regions except Northern Africa and Western Asia.

Figure 21 shows the average amount of time spent each day collecting water in countries with disaggregated data available for women, men, girls and boys. The average time spent per household per day on water collection ranged from 55 minutes in Malawi to less than one minute in Dominican Republic. In 20 out of 32 countries, women and girls spent more time collecting water than men and boys. In countries where men and boys were primarily responsible for water collection, the burden of water carriage was relatively light: men and boys spent four minutes per day fetching water in Kiribati and Mongolia, two minutes per day in Algeria, and one minute or less per day in the remaining eight countries. In all 12 countries where household members spent at least 10 minutes per day collecting water, women were primarily responsible for water fetching; all but one of these countries were located in sub-Saharan Africa. In 11 countries, women and girls spent more than five times as much time collecting water per day as men and boys, and in five countries (Bangladesh, Chad, Gambia, Guinea-Bissau and Malawi), women and girls spent more than ten times as much time. The biggest gender disparity was observed in Malawi, where women and girls spent 52 minutes per day collecting water while men and boys spent three minutes. In Chad, girls spent five times as much time per day (eight minutes) collecting water than boys (1.7 minutes).

Women and adolescent girls are primarily responsible for water carriage in seven out of ten households using sources located off premises

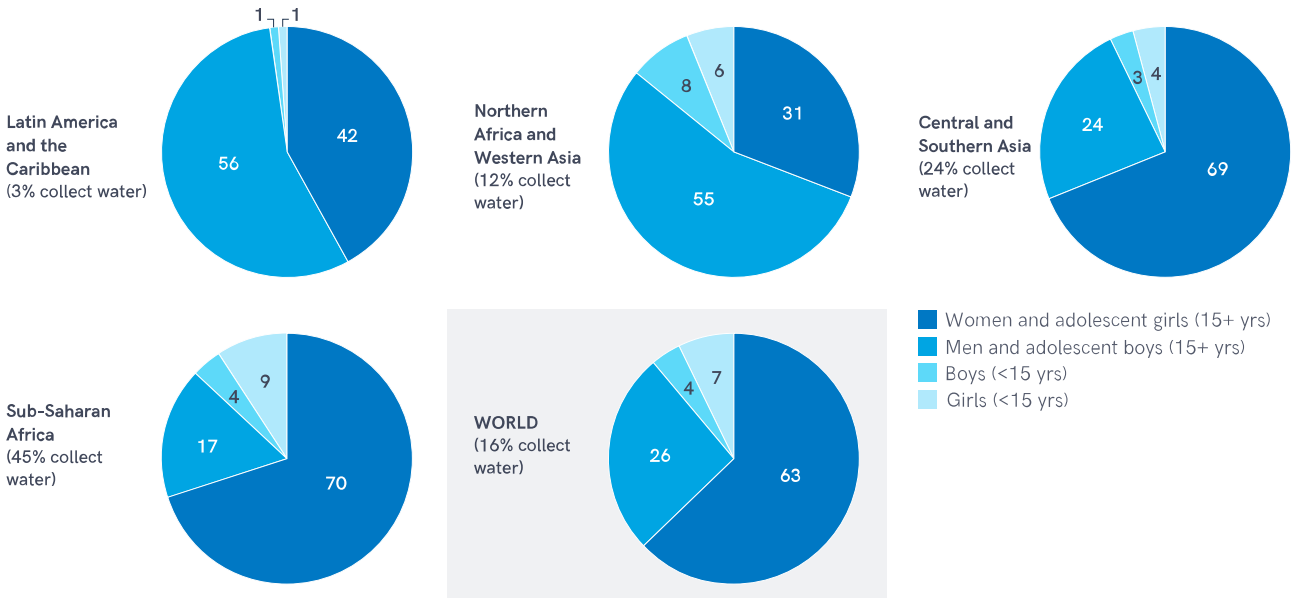


FIGURE 20 Primary responsibility for water collection among households using sources located off premises, by region (%)

In almost all countries with comparable data, the burden of water carriage remains heavier for women and girls

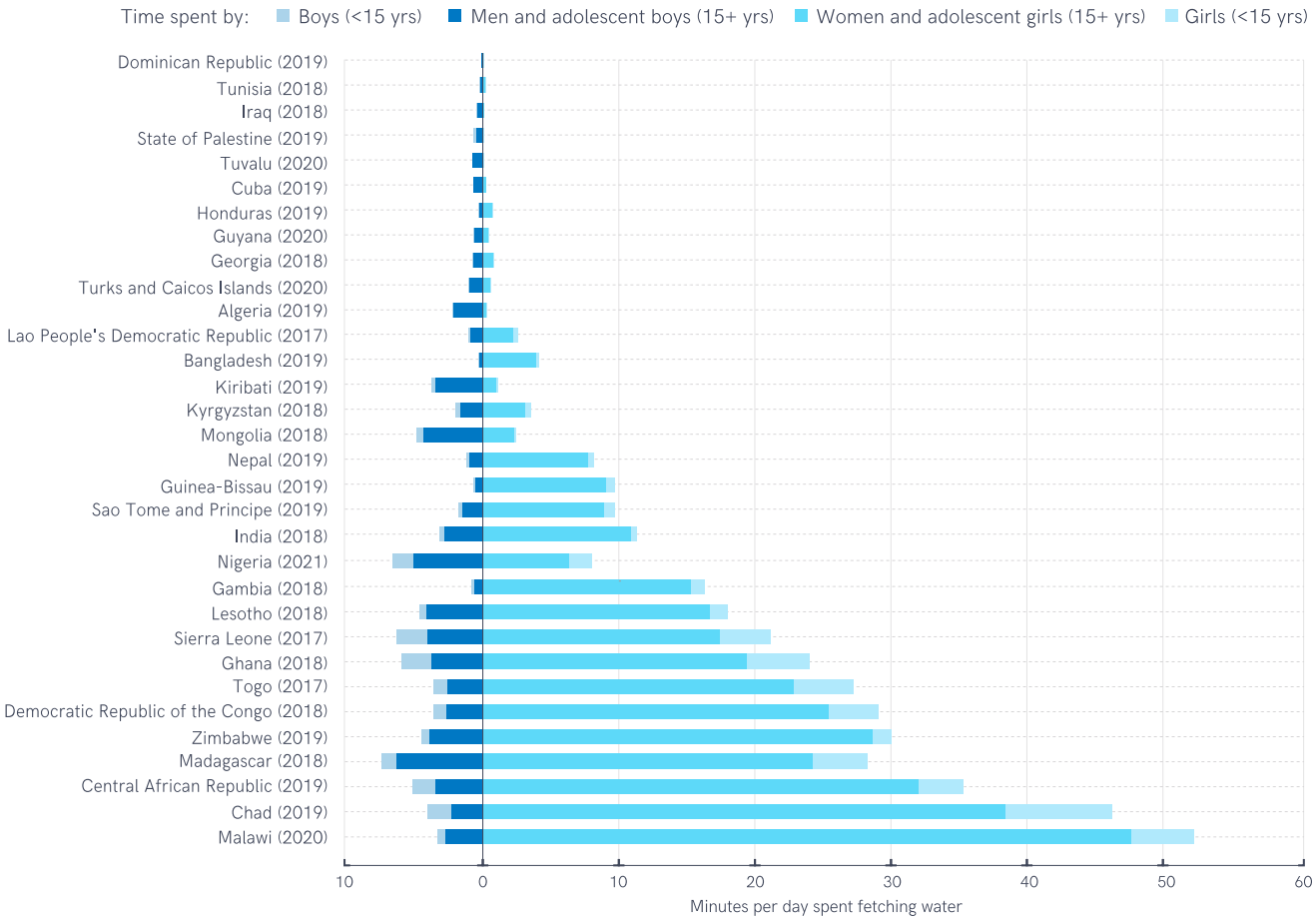


FIGURE 21 Average time spent collecting water by women, men, girls and boys, by country, selected surveys, 2012–2022 (minutes per day)

The Individual Water Insecurity Experience (IWISE) scale aims to measure individual experiences of water insecurity based on 12 questions that ask about frequency of water-related problems in the previous year. During 2020, the scale was included in Gallup World Poll phone surveys administered to nationally representative samples of adult women and men in 31 low-income and middle-income countries. Individuals with a composite IWISE score of 12 or higher (out of a possible 36) were classed as water insecure.[15] Figure 22 shows that, after adjusting for socio-economic and other differences among individuals, mean IWISE scores varied widely between countries and were higher in sub-Saharan Africa and Latin America than in North Africa and Asia. In some countries, women reported more insecurity experiences while in others, men did, with the biggest differences observed in Cameroon, Ethiopia and Ghana. In Cameroon, average IWISE scores were 2.6 points higher among women, while in Ethiopia and Ghana, scores were 2.5 points higher among men, respectively. Scores pooled across countries suggest that regional differences were small and at global level both women and men had an average IWISE score of eight.

While existing national data highlight significant gender inequalities related to drinking water, further work is required to understand sex and gender-related differences in drinking water needs and to find ways to measure inequalities in access to the knowledge, resources and social support required to satisfy them.

Individual experiences of water insecurity vary widely between countries and regions but overall differences between men and women are small

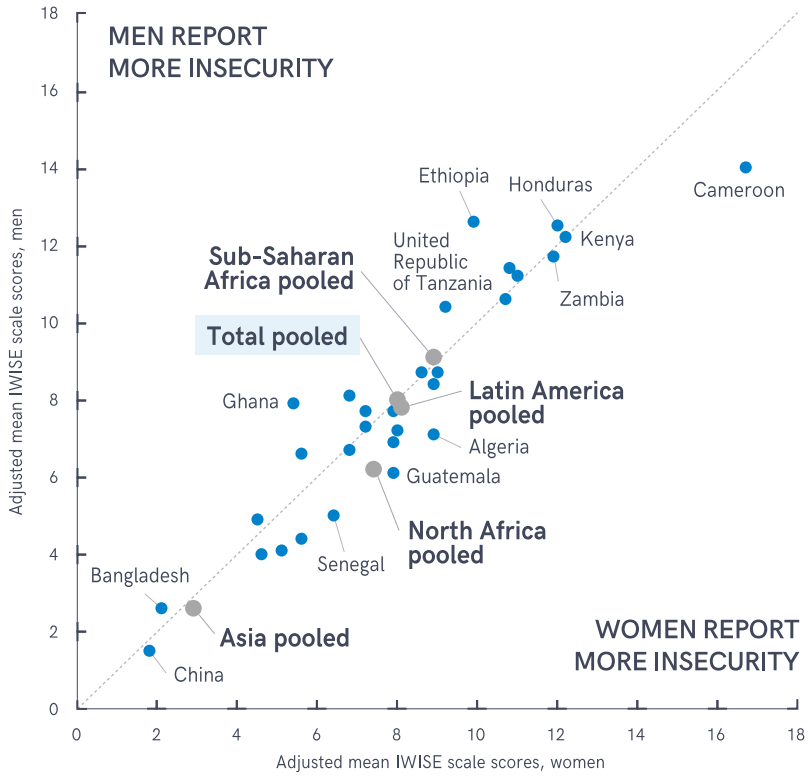


FIGURE 22 Individual Water Insecurity Experience scale (IWISE) adjusted mean scores for women and men, by country and region (countries weighted equally to produce pooled scores), 2020

[15] Young SL, Bethancourt HJ, Ritter ZR, Frongillo EA. Estimating national, demographic, and socioeconomic disparities in water insecurity experiences in low-income and middle-income countries in 2020–21: a cross-sectional, observational study using nationally representative survey data. The Lancet Planetary Health. 2022;6(11):e880-e91. <https://doi.org/10.1016/S2542-5196(22)00241-8>.

BASIC DRINKING WATER SERVICES

Between 2015 and 2022, global coverage of at least basic drinking water rose from 88% to 91%. Rural coverage increased from 79% to 84% and urban coverage increased from 96% to 97%. By 2022, 83 countries had already achieved universal coverage (>99%) of at least basic drinking water (compared with 70 countries in 2015). But in 32 countries, coverage remained below 75%, including four countries in sub-Saharan Africa where less than half the population had basic drinking water in 2022 (Figure 23).

Figure 24 shows current coverage and annual rates of change in at least basic drinking water for 183 countries with sufficient data to estimate trends between 2000 and 2022. At current rates of progress, 93 countries are on track to achieve universal coverage (>99%) by 2030, including 75 countries which had already reached >99% by 2022. However, 78 countries are progressing too slowly and in 12 countries, coverage is actually decreasing. At current rates of progress, nearly half will not reach universal coverage of basic services by 2030.

By 2022, 83 countries had already achieved >99% coverage of at least basic drinking water services

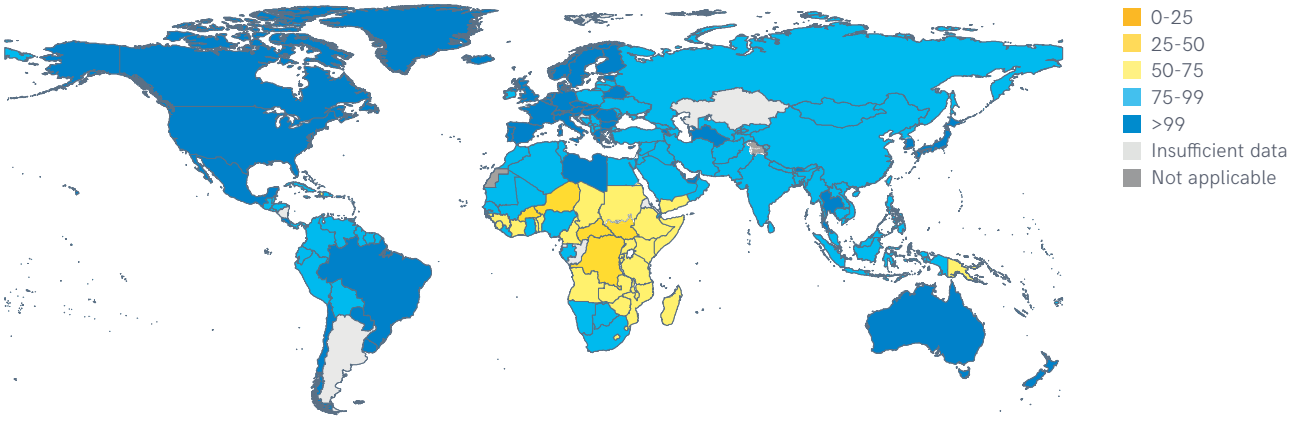


FIGURE 23 Proportion of population using at least basic drinking water services, 2022 (%)

Nearly half of the countries with trend data available are not on track to achieve universal access to at least basic drinking water by 2030

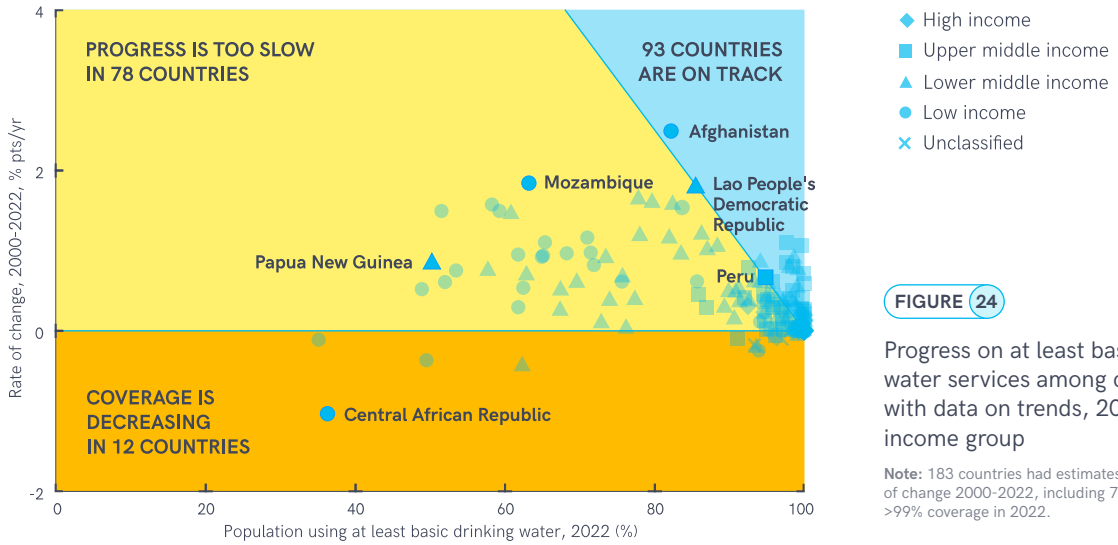


FIGURE 24

Progress on at least basic drinking water services among countries with data on trends, 2000–2022, by income group

Note: 183 countries had estimates for annual rates of change 2000-2022, including 75 countries with >99% coverage in 2022.

Since 2015, 32 countries have increased coverage of at least basic drinking water by at least 5 % pts

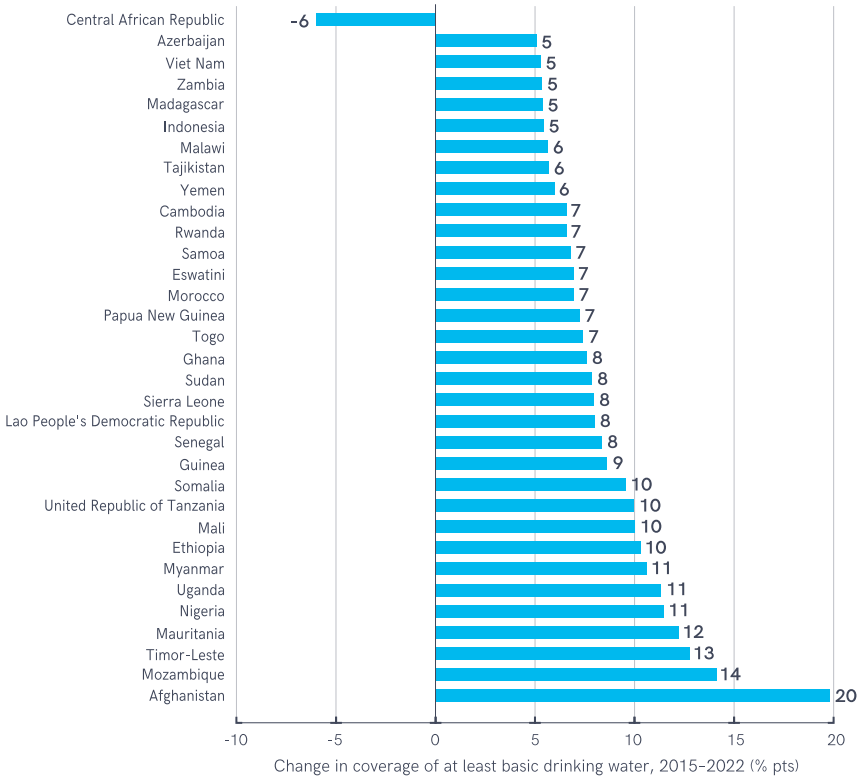


FIGURE 25 Change in proportion of population using at least basic drinking water services, among countries with at least a 5 % pts change, 2015–2022 (% pts)

In 2022, urban coverage of at least basic drinking water was higher in almost all countries

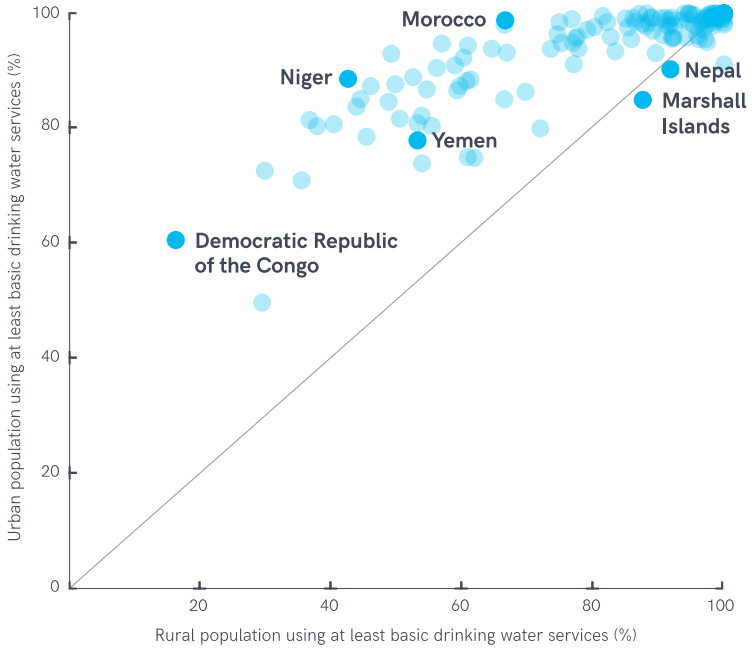


FIGURE 26 Proportion of urban and rural populations using at least basic drinking water services, by country, 2022 (%)

Figure 25 shows countries recording the biggest changes in coverage of at least basic drinking water between 2015 and 2022. Thirty-two countries increased coverage by at least 5 % pts and nine countries increased coverage by at least 10 % pts. Afghanistan achieved the biggest increase, rising from 62% to 82% (20 % pts). By contrast, Central African Republic was the only country where coverage had decreased by over 5 % pts, falling from 42% to 36% nationally (and from 58% to 48% in urban areas).

In 2022, coverage of at least basic drinking water was higher in urban areas than rural areas in almost all countries (Figure 26). For example, while Morocco had achieved 99% coverage in urban areas, rural coverage stood at 66%. In Niger, urban coverage (88%) was more than twice as high as rural coverage (41%), and in Democratic Republic of the Congo, urban coverage (59%) was four times as high as rural coverage (14%). Nepal was one of the few countries where rural coverage of basic drinking water (92%) was higher than urban coverage (90%).

Data disaggregated by wealth quintile also reveal significant disparities between the richest and poorest (Figure 27). Out of 105 countries with recent survey data for drinking water disaggregated by wealth quintile, 54 had a coverage gap between the richest and poorest of more than 20 % pts, 33 had a gap of more than 40 % pts and 10 had a gap exceeding 60 % pts. For example, in Ethiopia there was a 55 % pt gap in coverage between the richest (83%) and the poorest (29%), compared with a 9 % pt gap in Nepal (97% vs. 88%).

In 54 countries the richest-poorest coverage gap for at least basic drinking water exceeds 20 % pts

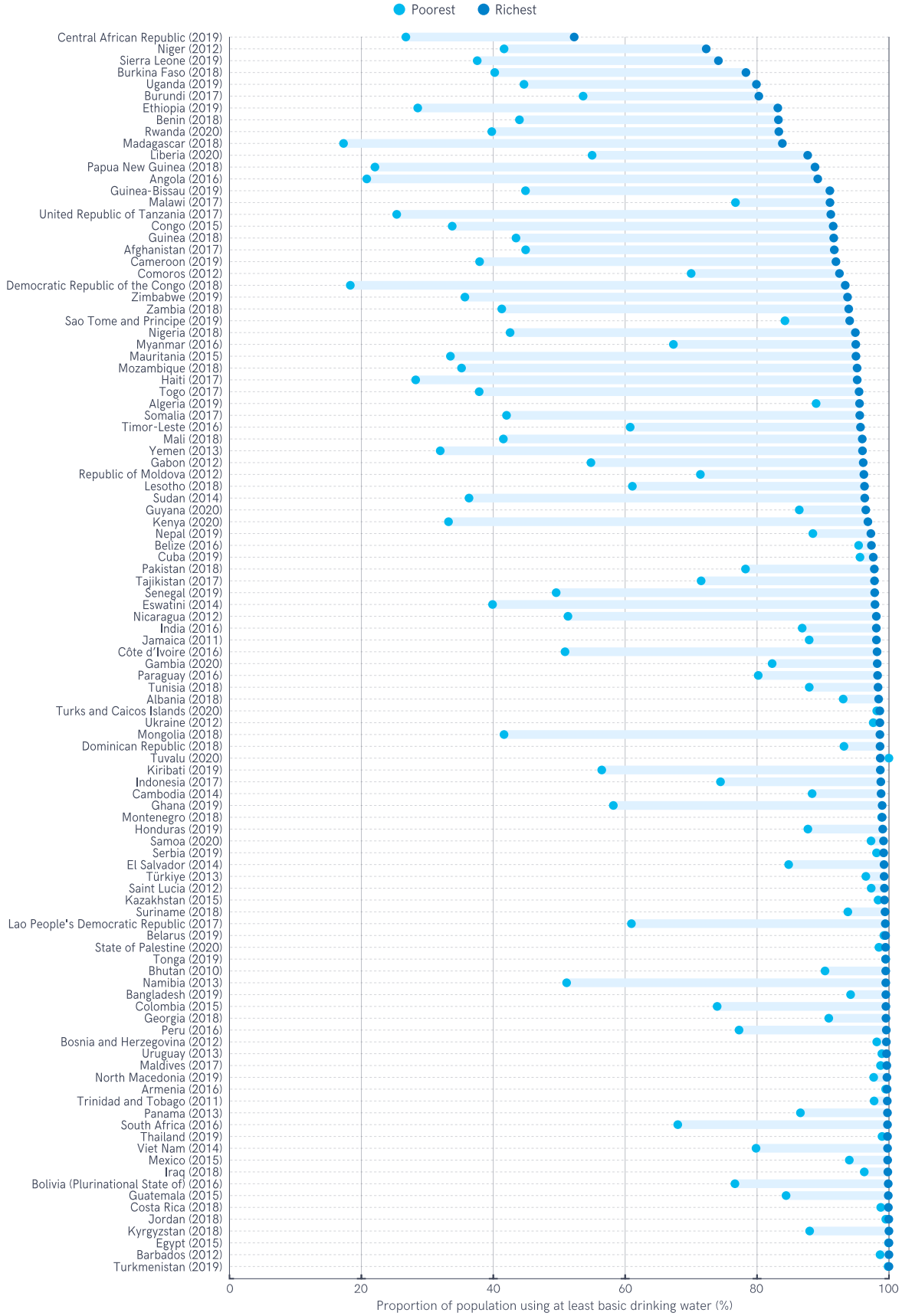


FIGURE 27 Proportion of richest and poorest wealth quintiles using at least basic drinking water services, selected surveys, 2010–2020 (%)

Between 2000 and 2022, the number of people lacking at least basic drinking water services decreased from 1.2 billion to 703 million. Over half of these (408 million) lived in sub-Saharan Africa and a fifth (140 million) lived in Central and Southern Asia. Eight out of ten (549 million) lived in rural areas and there were more people without basic drinking water in rural areas than in urban areas in all SDG regions (Figure 28). Sub-Saharan Africa had the largest number of people without basic drinking water in urban areas (73 million), more than twice as many as Central and Southern Asia (32 million). In 2022, 115 million people worldwide still used surface water. Nine out of ten (102 million) lived in rural areas and two thirds (73 million) lived in sub-Saharan Africa.

In 2022, over half of the 703 million people without at least basic drinking water lived in sub-Saharan Africa

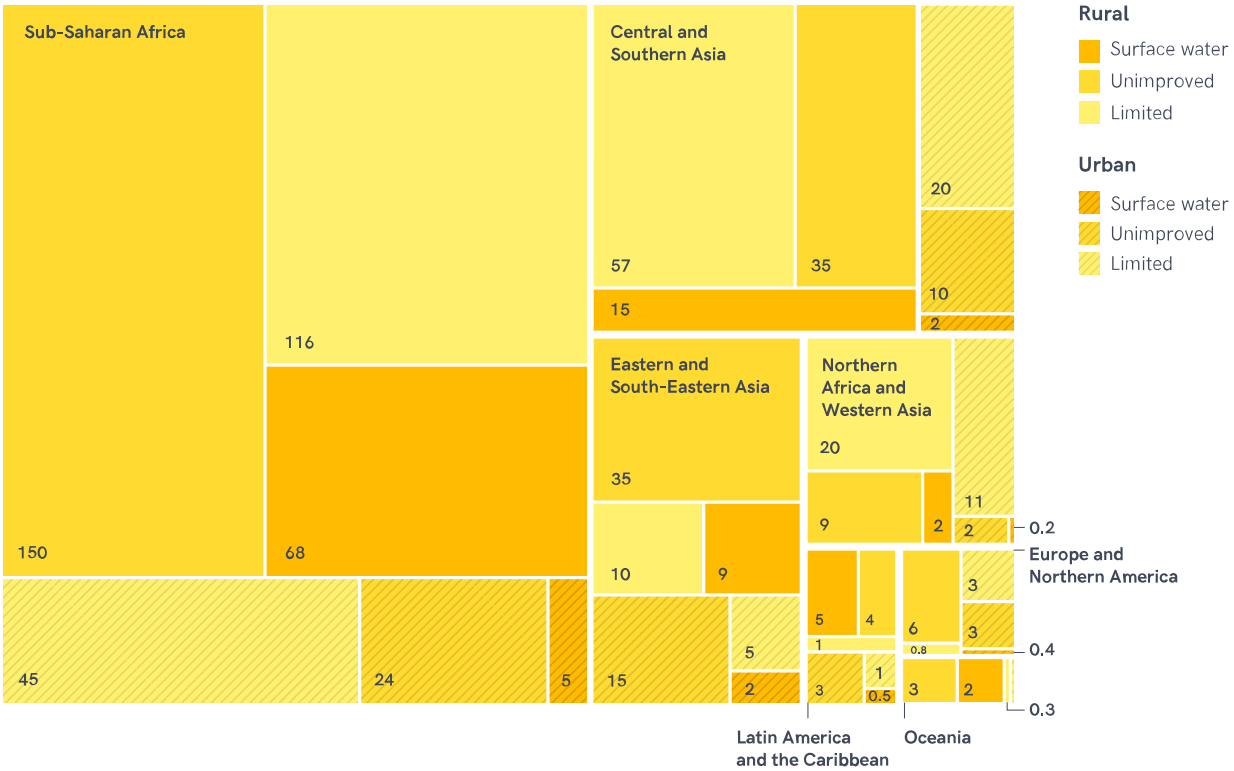


FIGURE 28 Rural and urban populations lacking at least basic drinking water services in 2022, by SDG region (millions)

SAFELY MANAGED DRINKING WATER SERVICES

Between 2015 and 2022, global coverage of safely managed drinking water increased by 4 % pts (from 69% to 73%). At current rates of progress, the world will only reach 77% coverage by 2030, leaving 2 billion people without safely managed services (Figure 29). While coverage increased in most SDG regions, it stagnated in Latin America and the Caribbean (at 75%) and decreased slightly in Europe and Northern America (from 95% to 94%). Central and Southern Asia achieved the fastest rate of progress, rising 8 % pts from 60% in 2015 to 68% in 2022. However, no SDG region is on track to achieve universal coverage by 2030. Achieving universal access to safely managed drinking water will require a sixfold increase in current rates of progress (20-fold in least developed countries, 19-fold in fragile contexts).

In 2022, 142 countries had total estimates for safely managed drinking water, representing 51% of the global population. Fifty-six countries only had total estimates (of which 19 countries had already achieved >99%), 96 had urban estimates and 75 had rural estimates. Figure 30 shows that in almost all countries with disaggregated data, coverage of safely managed drinking water was higher in urban areas in 2022 (exceptions were Bangladesh, Bhutan, Turks and Caicos Islands and Costa Rica). Sixteen countries had already achieved >99% in urban areas, but only three countries (Germany, Hungary and Israel) had achieved universal coverage in rural areas. In 2022, three SDG regions had countries with <25% coverage in urban areas and five SDG regions had countries with <25% coverage in rural areas.

No SDG region is on track to achieve universal access to safely managed drinking water services by 2030

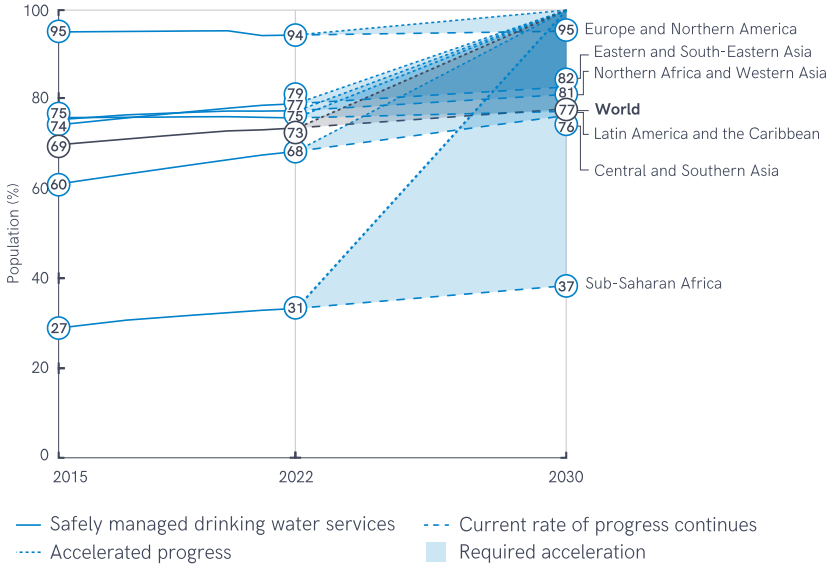


FIGURE 29 Progress on safely managed drinking water services, 2015–2022 (%), and acceleration required to reach universal coverage (>99%) by 2030, by SDG region

In 2022, urban coverage of safely managed drinking water services was higher in almost all countries

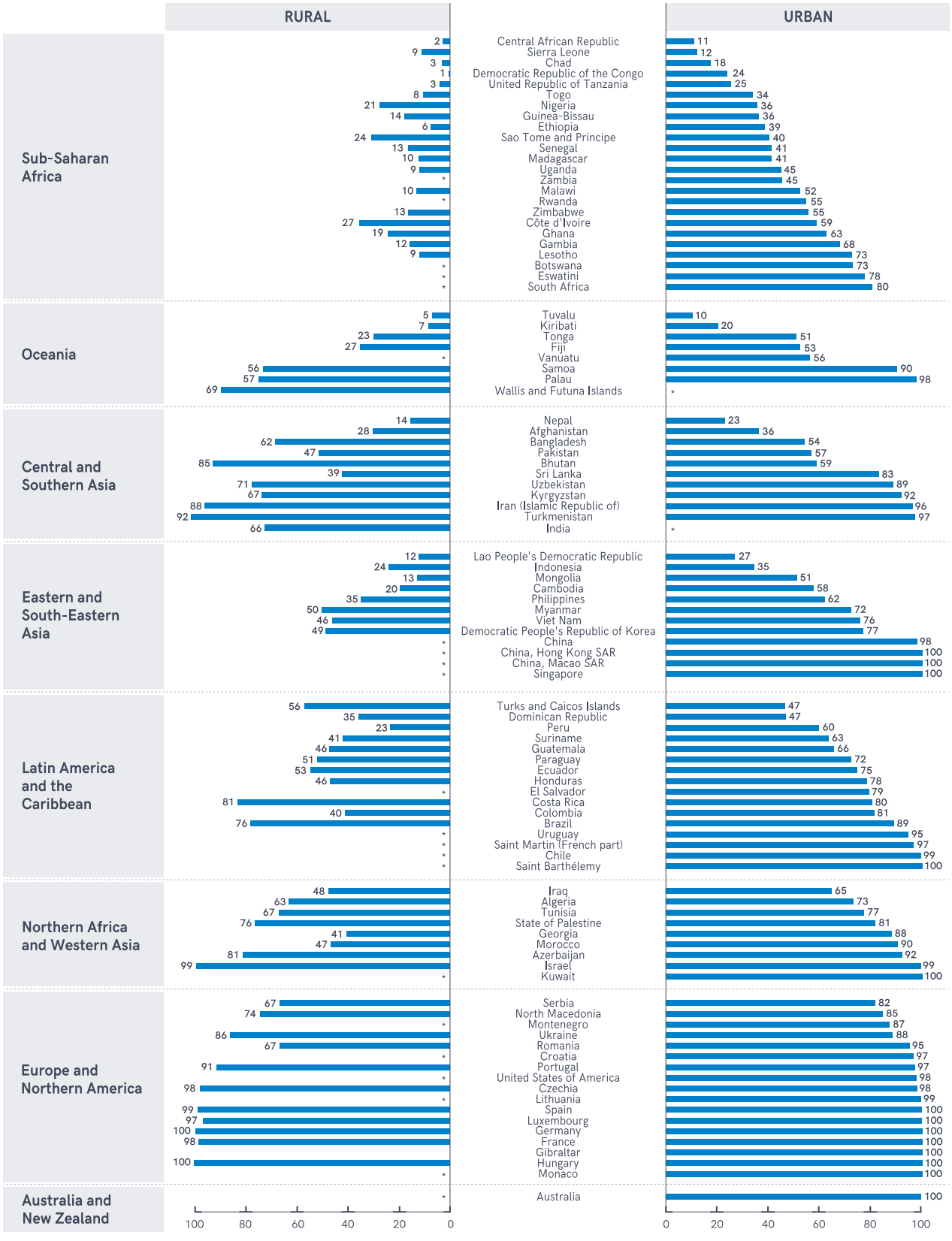


FIGURE 30 Rural and urban coverage of safely managed drinking water services, by country and SDG region, 2022 (%)

* No estimate available in 2022

Figure 31 shows current coverage and annual rates of change in safely managed drinking water for 126 countries with sufficient data to estimate trends between 2000 and 2022. At current rates of progress, 32 countries are on track to achieve universal coverage (>99%) by 2030. However, 78 countries are progressing too slowly and in 16 countries, coverage is decreasing. Bhutan recorded the fastest annual rate of progress since 2000 (2.32 % pts/yr), but current coverage is 73% so this rate of change will still not be sufficient to reach >99% by 2030. Ireland is progressing more slowly (1.44 % pts/yr) but had already achieved 96% coverage by 2022 so is on track to achieve universal access by 2030.

In 2022, 207 countries had total estimates for accessibility on premises (representing 99% of the global population), 139 countries had total estimates for availability when needed (representing 86% of the population), and 142 countries had total estimates for drinking water quality (representing 51% of the population). Figure 32 shows that estimates for each element of safely managed drinking water varied widely between countries in each SDG region in 2022. For example, in Europe and Northern America, estimates for all three elements were high and the differences between countries were relatively small. By contrast, in sub-Saharan Africa, estimates for availability were generally higher than for accessibility on premises and free from contamination, which ranged from 95% in Mayotte to less than 10% in Sierra Leone and Tanzania.

Three quarters of countries with trend estimates are not on track to achieve universal access to safely managed drinking water by 2030

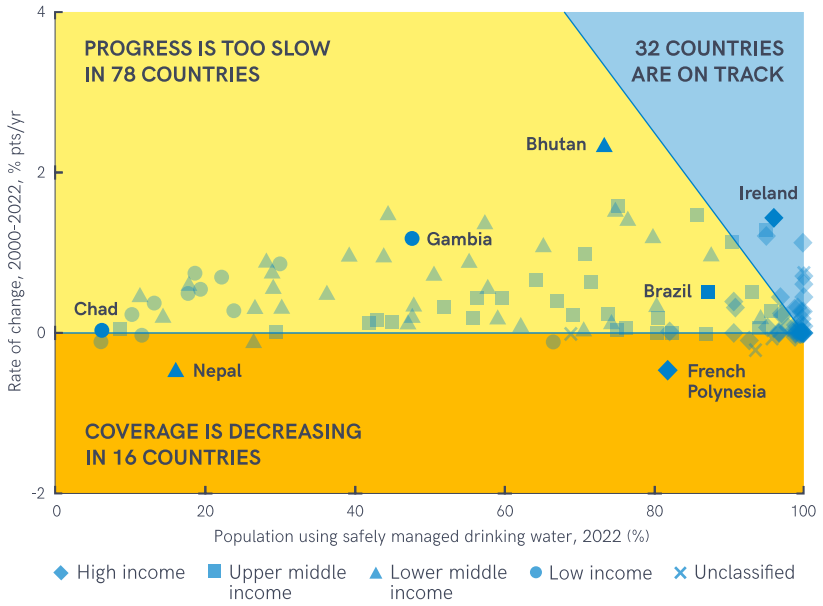


FIGURE 31 Progress on safely managed drinking water among countries with data on trends between 2000–2022, by income group

Note: 126 countries had estimates for annual rates of change 2000-2022, including 75 countries with >99% coverage in 2022.

Disparities in accessibility, availability and quality of drinking water persisted between countries and regions in 2022

FIGURE 32 Proportion of population using improved sources accessible on premises, available when needed, and free from contamination, by country and SDG region, 2022 (%)

Note: Some regions do not have enough data to produce regional estimates for all variables.

Countries recording the largest changes in coverage of safely managed drinking water are shown in Figure 33. Since 2015, 18 countries increased coverage by at least 5 % pts and three countries increased coverage by at least 10 % pts (Bhutan, Ghana and Jordan). Bhutan achieved the biggest increase, rising from 47% to 73% (26 % pts) due to improvements in drinking water quality (47% to 77%). Jordan increased coverage by 11 % pts due to improvements in availability (75% to 86%), whereas Ghana achieved the same increase by improving accessibility on premises (33% to 46%). Decreases in coverage in Nepal and French Polynesia were due to declining water quality, whereas availability when needed declined in Algeria.

Between 2000 and 2022, the number of people using piped supplies increased from 3.5 billion to 5.3 billion, and the number of people using non-piped improved supplies increased from 1.7 billion to 2.3 billion (Figure 34). Nearly three quarters (1.3 billion) of those that gained piped supplies, and two thirds (373 million) of those that gained non-piped supplies lived in urban areas. During this period, the urban population using non-piped improved supplies more than doubled from 333 million to 706 million. In rural areas, half a billion people (500 million) gained piped supplies, and 207 million gained non-piped supplies. In 2022, three quarters of the population using piped supplies lived in urban areas, while two thirds of those using non-piped supplies lived in rural areas.

Since 2015, 18 countries have increased coverage of safely managed drinking water by at least 5 % pts

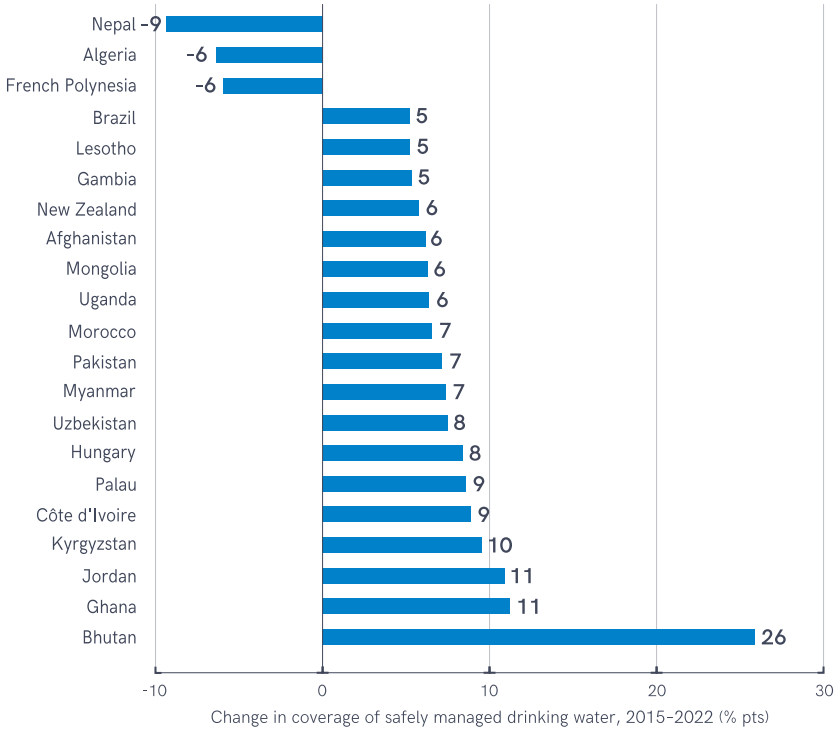


FIGURE 33 Change in the proportion of population using safely managed drinking water services, among countries with at least a 5 % pts change, 2015-2022 (% pts)

In 2022, 79% of the global population drank water from an improved source accessible on premises. This service level was higher in urban areas (89%) than in rural areas (65%). Eight hundred and fifty-five million rural residents, and 437 million urban residents collected water from an improved supply located off premises. The accessibility of drinking water services may vary throughout the year. This can be difficult to monitor because the majority of surveys report on services at one point in time, while many administrative sources provide annual average figures. In nine household surveys in West Africa, data on the accessibility of water supplies was collected in both dry and wet seasons. In all countries more households had access to improved water supplies on premises during the wet season (Figure 35), and in Benin, accessibility on premises was two times higher in the wet season (44%) than in the dry season (22%). During the dry season, people spent more time collecting water: accessibility of water supplies within a 30 minute round trip was markedly lower than in the wet season, except for in Nigeria. The seasonal difference was greatest in Burkina Faso, where accessibility within 30 minutes dropped from 81% in the wet season to 65% in the dry season.

Since 2000, 1.8 billion people have gained piped water and 574 million have gained non-piped improved water supplies

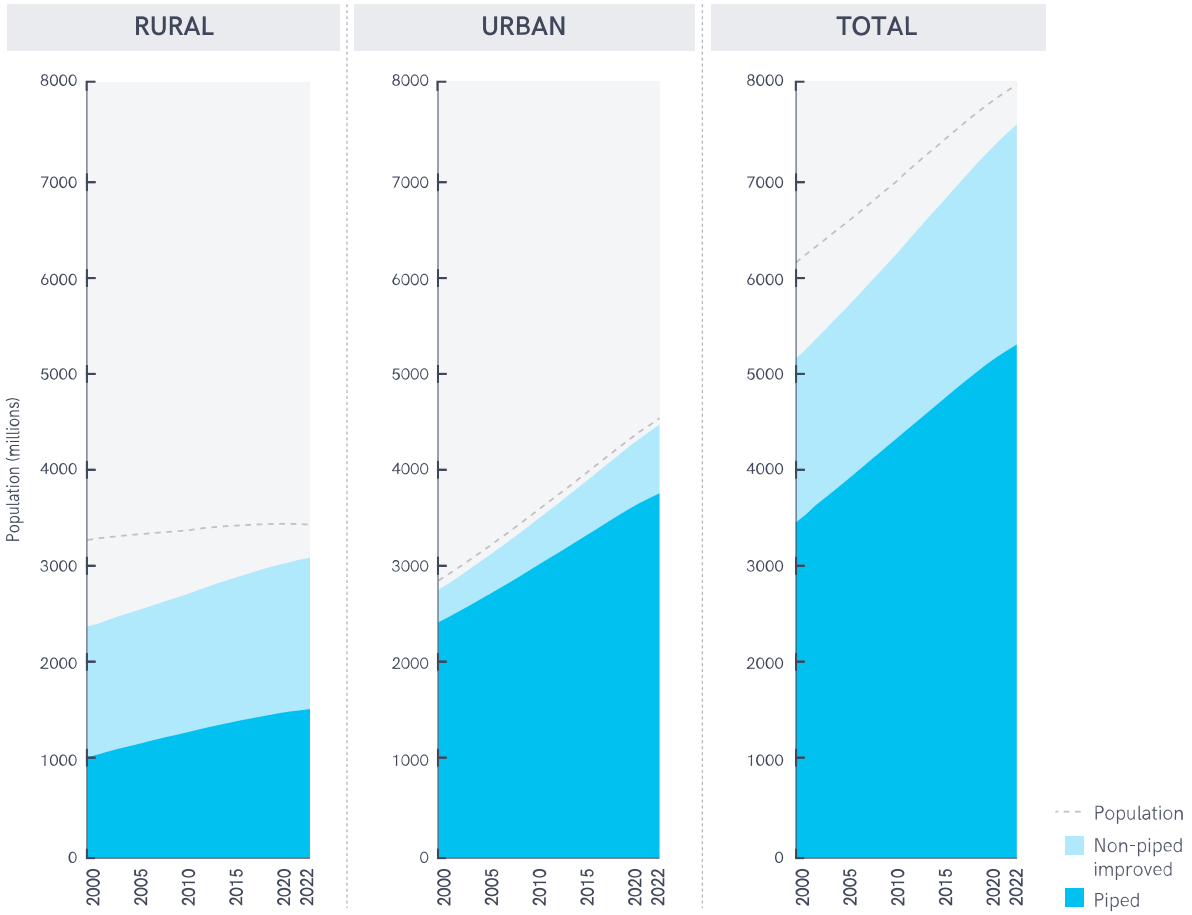


FIGURE 34 Rural, urban and total populations using piped and non-piped improved water sources, 2000-2022 (millions)

In West Africa, drinking water is less likely to be accessible on premises during the dry season

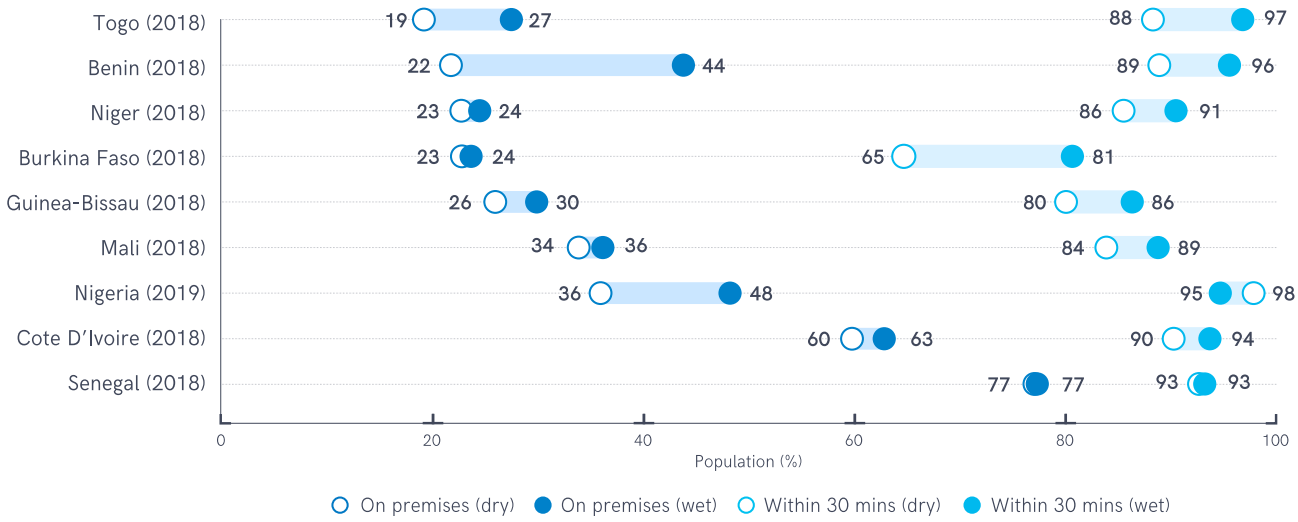


FIGURE 35 Proportion of population using improved water sources accessible on premises and within 30 minutes during wet and dry seasons, selected surveys from West Africa, 2018-2019 (%)

Globally, 81% of the total population (87% in urban areas, 74% in rural areas) took drinking water from an improved source that provided water when needed in 2022. This included households reporting having sufficient quantities, and those reporting water available most of the time (at least 12 hours per day or four days per week). Five hundred and sixty million people in rural areas, and 514 million in urban areas, got their drinking water from a source that did not always have water available when needed.

Figure 36 shows that non-piped improved supplies, such as boreholes and protected wells and springs, were often more reliable than piped supplies. Piped supplies, especially in low- and middle-income countries, are often intermittent and may provide water for only a few hours per day, or a few days per week, leading to shortages. This difference was most readily seen in areas that have a mix of piped and non-piped supplies, such as rural Nepal where the 2019 UNICEF Multiple Indicator Cluster Survey (MICS) found that 95% of non-piped improved supplies (mostly boreholes), but only 70% of piped supplies, provided sufficient water throughout the previous month. Likewise, in urban Central African Republic, the 2019 MICS found that 64% of non-piped improved supplies (mostly boreholes), but only 38% of piped supplies, had water available when needed. By contrast, in rural Samoa non-piped supplies (mostly rainwater) were less likely to have water available (53%) than piped supplies (78%).

Piped supplies are often less likely than non-piped supplies to have water available when needed

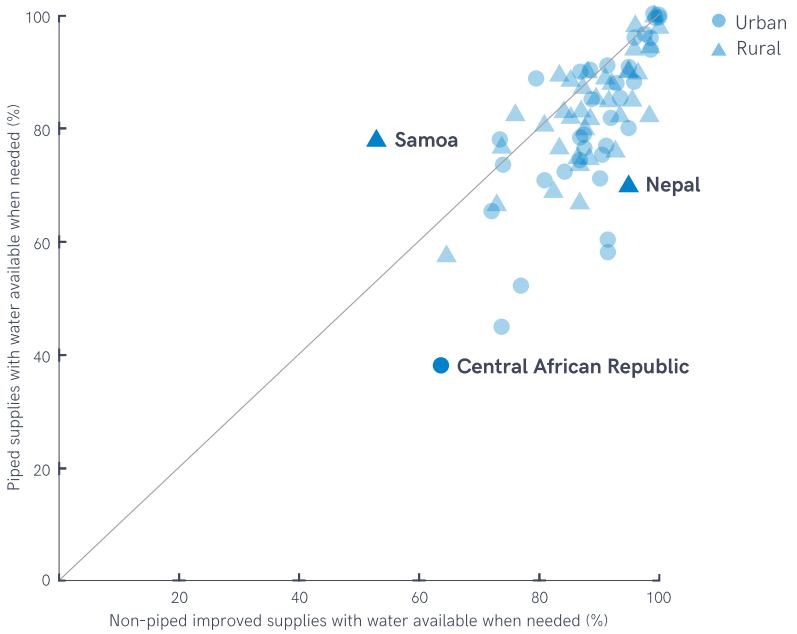


FIGURE 36 Proportion of rural and urban populations using piped and non-piped improved sources with water available when needed (%), 42 surveys, 2017–2022, restricted to supplies used by at least 5% of the population

In 2022, 73% of the global population (81% urban, 62% rural) drank water from an improved source that was free from microbiological and priority chemical contamination. At least 1.7 billion people, including 958 million rural and 790 million urban residents, drank water from an improved supply that was contaminated (a further 411 million still used unimproved sources and surface water which are known to be at higher risk of contamination in low- and middle-income countries).[16]

The burden of unsafe drinking water was not evenly distributed. People in rural areas were more likely to have contaminated water than those in urban areas.

In 33 out of 35 countries with comparable data, the wealthiest quintile experienced much lower contamination rates than the poorest quintile (Figure 37). In five countries (Congo, Fiji, Georgia, Honduras and Togo), the gap between the richest and poorest quintiles was over 50 % pts, while in Madagascar, the richest quintile were nearly ten times as likely as the poorest quintile to have water free from contamination. In Bangladesh and the State of Palestine, this wealth gradient was reversed, and in Bangladesh, the poorest quintile had the highest quality water. This paradoxical finding is explained by a relatively high rate of contamination in piped supplies in Bangladesh (used by 38% of the richest households, 54% faecally contaminated) compared to non-piped supplies such as boreholes (used by 91% of the poorest households, 36% faecally contaminated).

[16] Bain R, Johnston R, Khan S, Hancioglu A, Slaymaker T. Monitoring Drinking Water Quality in Nationally Representative Household Surveys in Low- and Middle-Income Countries: Cross-Sectional Analysis of 27 Multiple Indicator Cluster Surveys 2014-2020. Environmental Health Perspectives. 2021;129(9):097010. <https://doi.org/10.1289/EHP8459>.

The poorest are far less likely to use sources that are free from faecal contamination

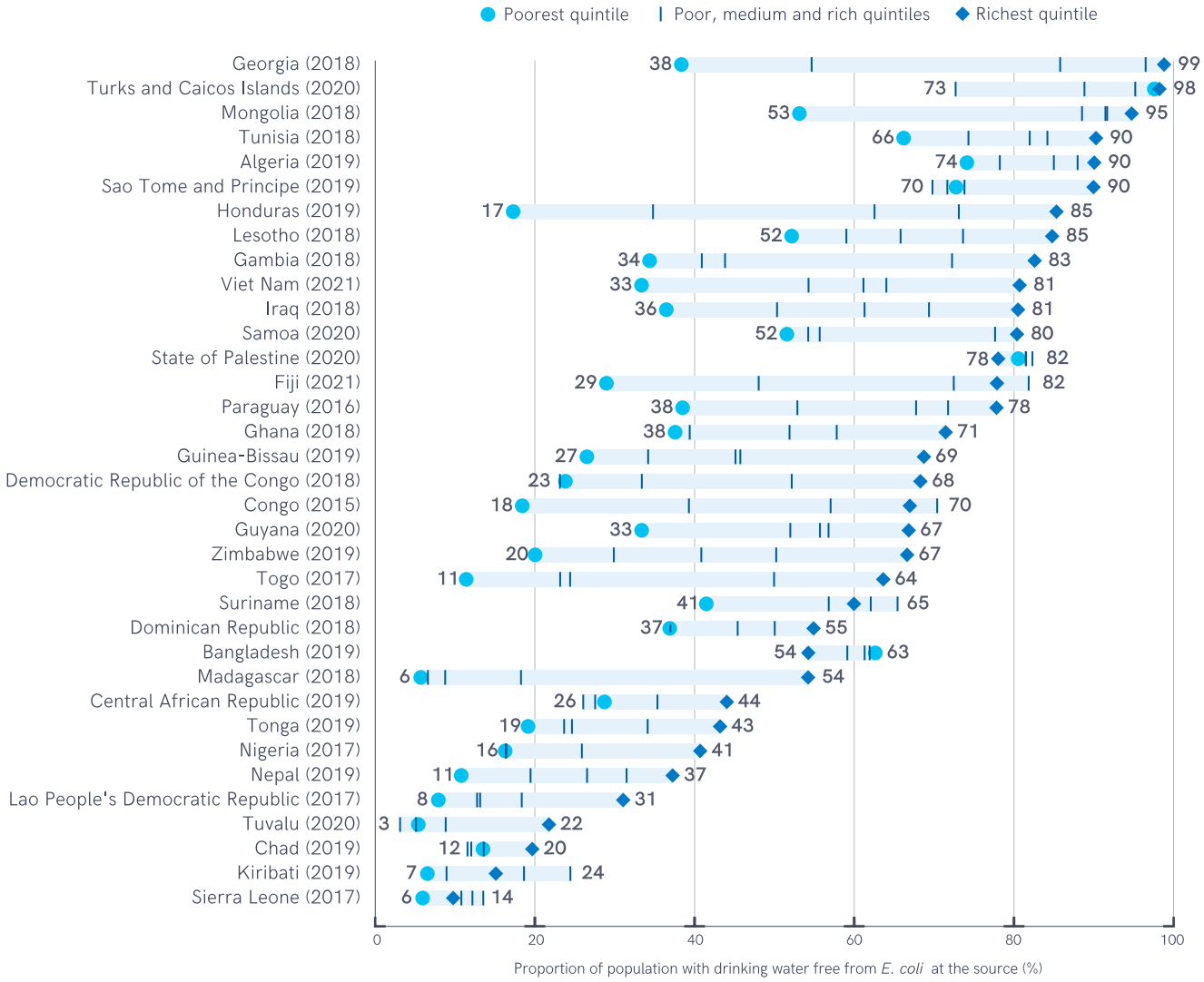


FIGURE 37 Proportion of population with drinking water free from *E. coli* at the source, by wealth quintile, selected Multiple Indicator Cluster Surveys, 2016–2021 (%)

BOX 3

Limiting factors for safely managed drinking water services

In many countries, data on the accessibility, availability and quality of drinking water come from different sources, so it is usually not possible to combine these three criteria at the household level and thereby calculate how many people drink water that meets all three criteria for safely managed drinking water. For example, data on drinking water quality are frequently available only at national level, or sometimes for urban areas, which leads to a larger number of countries having estimates for total population (142) than for urban (96) and for rural (75) populations. For the purposes of global monitoring, the JMP integrates data on the three elements at urban and rural domain level, or at national level if data are not disaggregated by urban and rural, and uses the lowest of the three criteria to determine the estimate for safely managed drinking water services. This method overestimates the proportion of the population that actually has drinking water meeting all three criteria. For example, if water quality is the lowest of the three criteria, it will be used to estimate safely managed services, but some households may have water that is free from contamination but not accessible on premises and available when needed.

In 70 of the 142 countries with total estimates for safely managed services, drinking water quality was the lowest criterion and therefore the 'limiting factor' (Figure 38). Water quality was more likely to be the limiting factor in rural areas (56%) than in urban areas (47%). Figure 39 shows that where freedom from contamination was the limiting factor, there can be a large gap between the three criteria. In Nepal, only 14% of rural and 23% of urban improved water supplies were free from contamination. The next closest criterion was accessibility on premises, at 69% in rural areas and 75% in urban areas. In most of these countries, coverage of improved water supplies was high, especially in urban areas, but water quality was frequently compromised. In Tuvalu, both urban and rural populations had universal (>99%) coverage of improved supplies, but only 10% and 5%, respectively, were free from faecal contamination.

Accessibility on premises was the limiting factor for one in five countries in urban areas (20%) and for more than a third of countries in rural areas (36%). This limiting factor was more common in sub-Saharan African countries, especially in rural areas. All but one (Mongolia) of the 17 countries where less than one in four rural residents had improved water supplies on premises were in sub-Saharan Africa, and in all but one of these countries accessibility was the limiting factor (in rural Madagascar, water quality is the limiting factor). Availability when needed was less commonly the limiting factor, but is relatively important in urban areas of middle-income countries, where coverage with piped supplies is often high but service is intermittent. In Costa Rica and El Salvador, accessibility on premises and freedom from contamination were both above 95% in urban areas, but only 80% and 79% of households had water available when needed throughout the previous month.

Water quality is the most common limiting factor for safely managed drinking water services

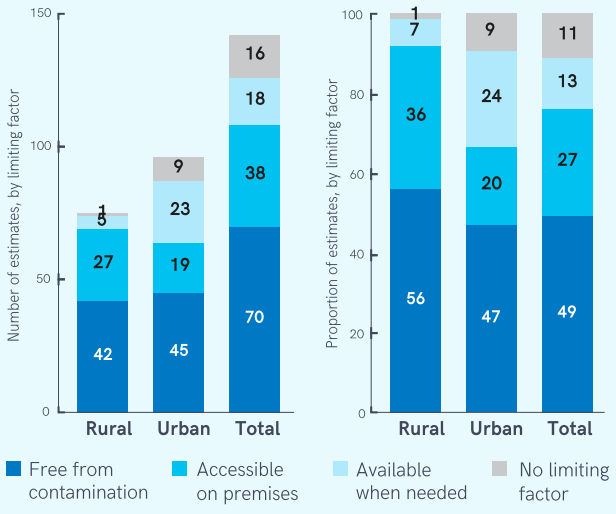


FIGURE 38 Number and proportion of countries by limiting factor for safely managed drinking water services, 2022

Limiting factors for safely managed drinking water vary between and within countries

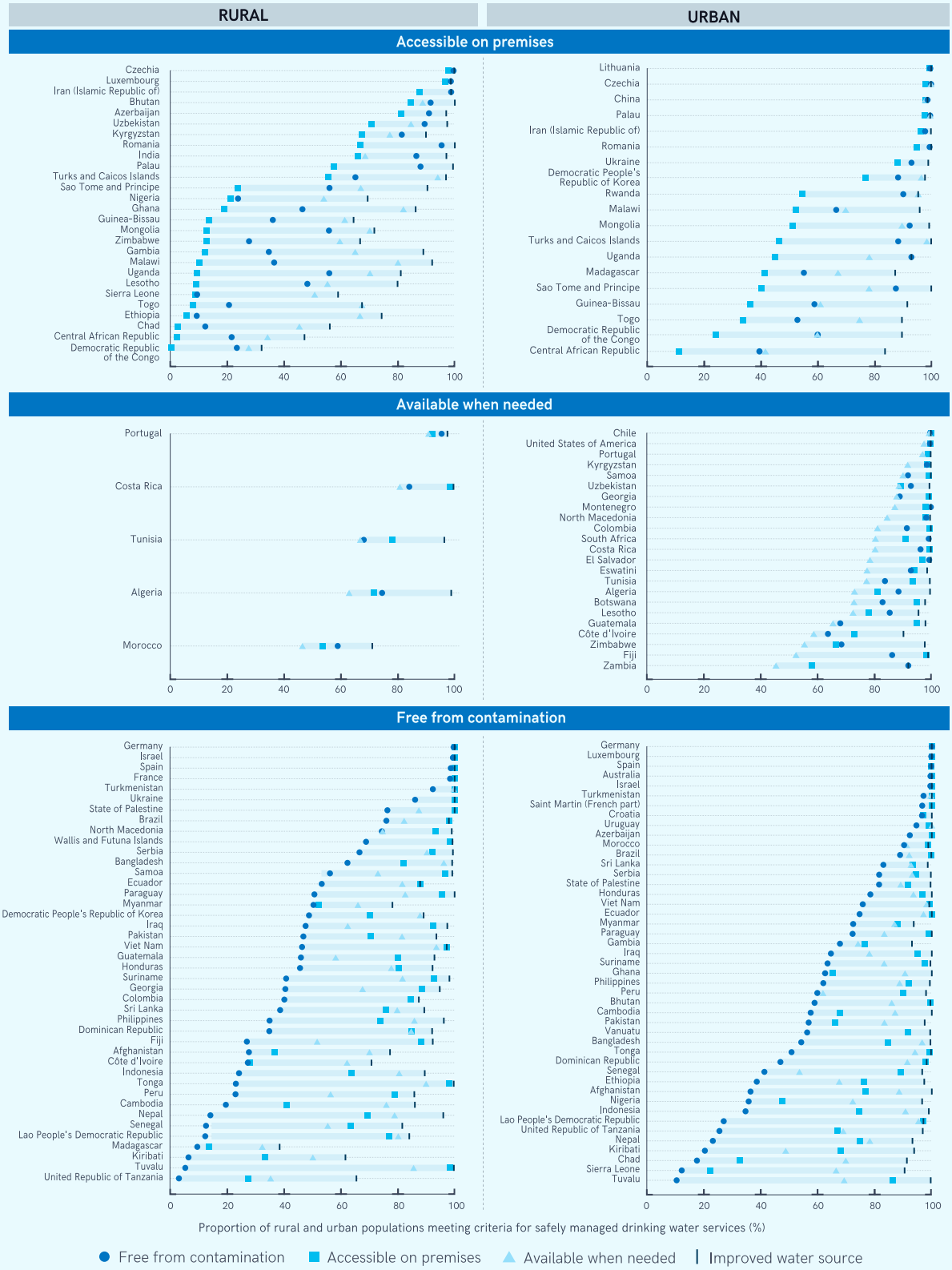


FIGURE 39 Rural and urban coverage, by limiting factor for safely managed drinking water services, 2022 (%)

DATA COVERAGE AND PROGRESSION

Global data coverage was higher for at least basic drinking water services (207 countries, representing 99% of the population) than for safely managed drinking water (142 countries, 51% of the population). Data coverage for at least basic drinking water services has been dropping slowly in Oceania and sub-Saharan Africa, and especially in Latin America and the Caribbean, as ageing data from household surveys and censuses become too old to be used for estimates (Figure 40). Nine of the 24 countries and territories that lost estimates for at least basic services between 2017 and 2023 were in the Caribbean subregion,

Data coverage for safely managed drinking water has increased in all SDG regions

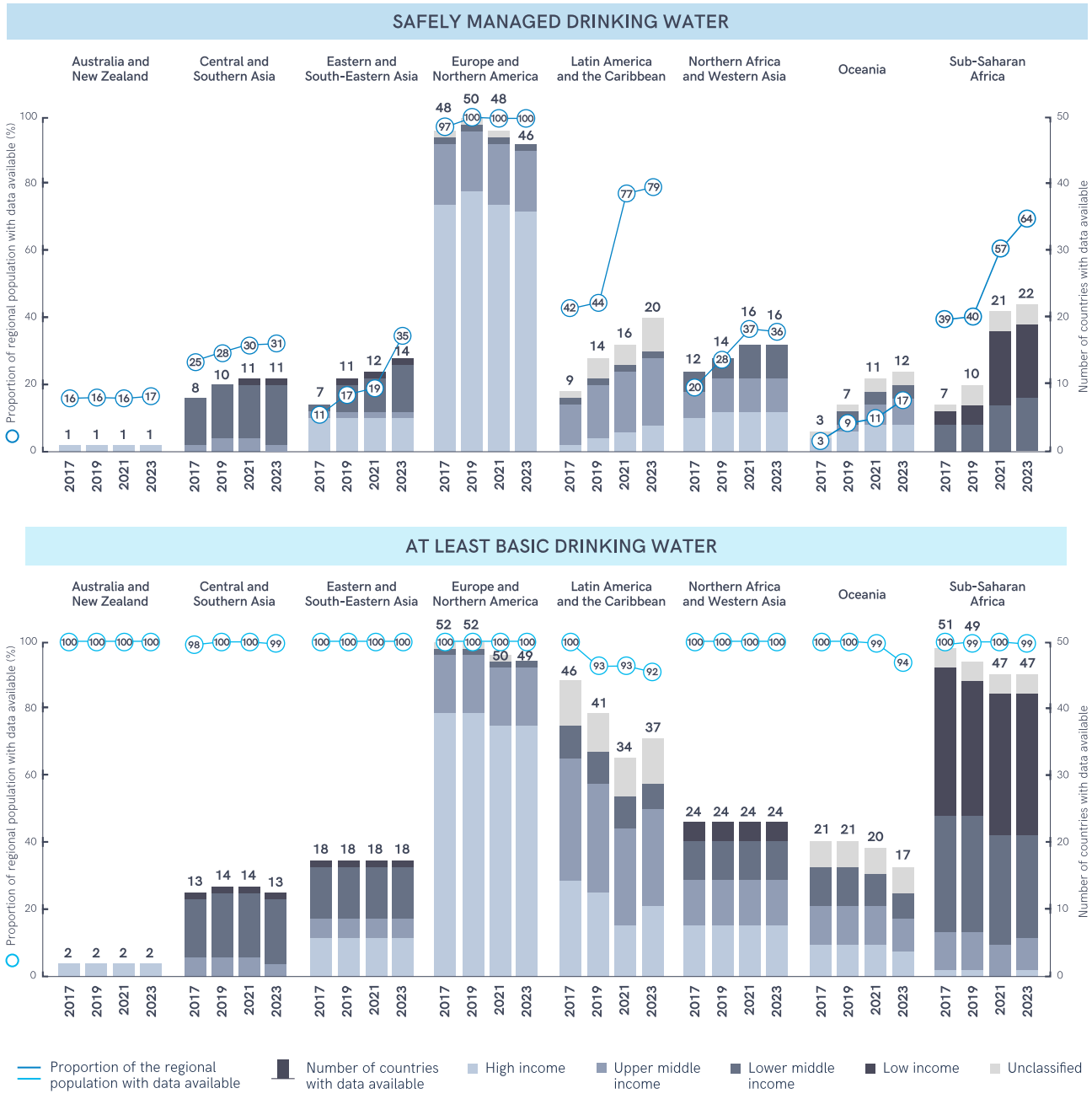
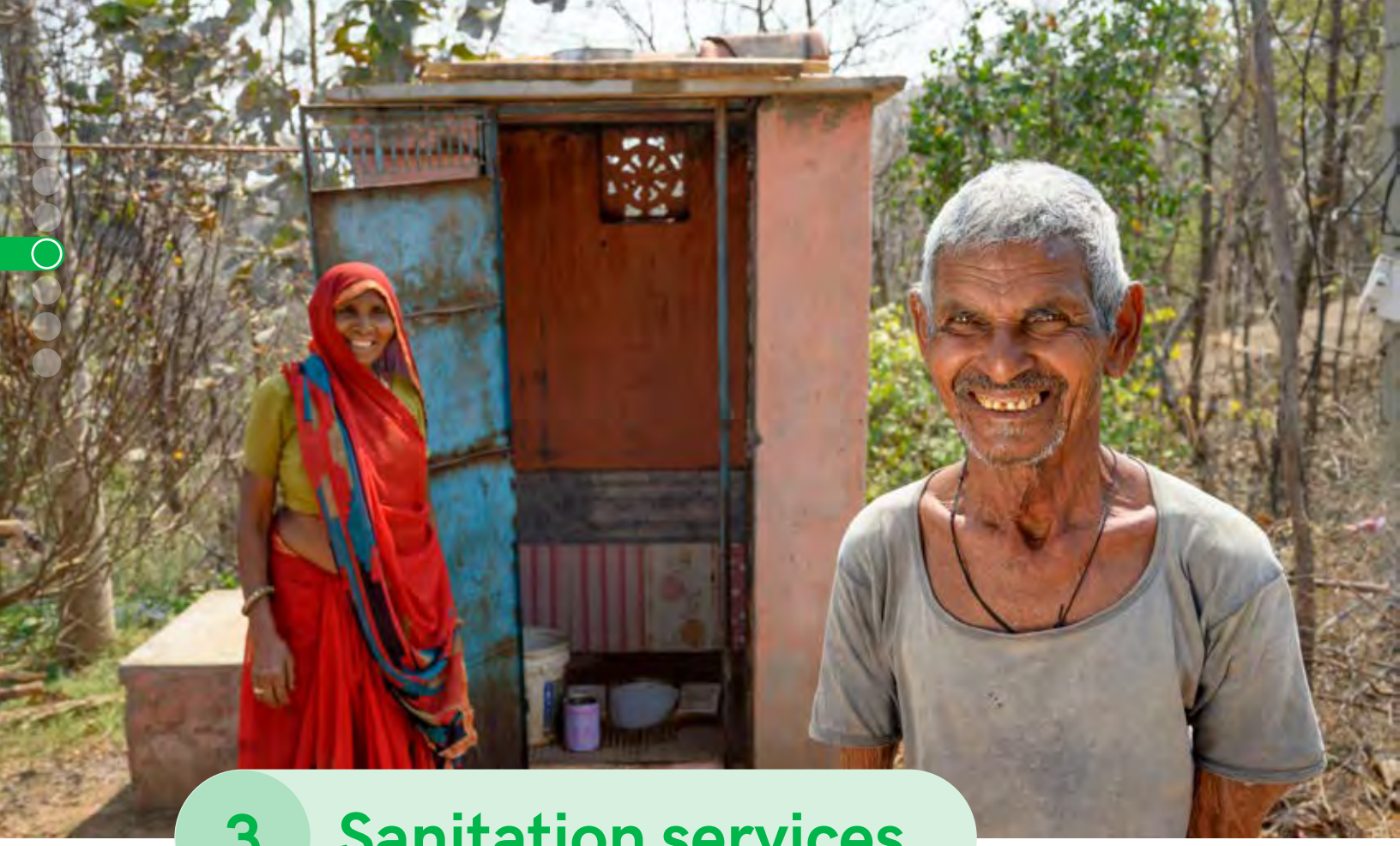


FIGURE 40 Proportion of population (%) and number of countries with estimates available for at least basic and safely managed drinking water in JMP progress updates, 2017–2023

where household surveys are uncommon and the last major round of censuses was in 2010–2012. However, the proportion of the population with data remained over 90% in all SDG regions, and >99% in all regions except for Latin America and the Caribbean, and Oceania.

In contrast, data coverage for safely managed drinking water services rose steadily in all regions except for Australia and New Zealand, and Europe and Northern America, where Channel Islands, Croatia, Greenland and Saint Pierre and Miquelon lost estimates since the 2019 progress update.

The number of countries with estimates for safely managed services doubled in Central and Southern Asia, and Eastern and South-Eastern Asia, tripled in sub-Saharan Africa, and quadrupled in Oceania between 2017 and 2023. However, in five SDG regions, data remained unavailable for more than half of the regional population.



3 Sanitation services

INTRODUCTION

The JMP service ladder for sanitation defines five levels of service, ranging from 'open defecation' (no service) to 'safely managed' which is the global indicator on sanitation for SDG target 6.2 (Figure 41). It builds on the established improved/unimproved facility type classification and includes additional aspects of the quality of service. For SDG monitoring, populations using improved facilities are divided into three categories. If the improved facility is shared with other households it counts as a 'limited' service, and if it is not shared with other households it counts as a 'basic' service.

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

FIGURE 41 SDG ladder for sanitation services

Note: Improved facilities include: flush/pour flush toilets connected to piped sewer systems, septic tanks or pit latrines; pit latrines with slabs (including ventilated pit latrines); and composting toilets.

But to meet the SDG standard for a 'safely managed' service, excreta must either be safely disposed of in situ or removed and treated off-site. Since households with 'safely managed' services also meet the criteria for 'basic' services, these two categories can also be grouped together as 'at least basic services', which is one of the tracer indicators used for monitoring progress towards SDG target 1.4 on universal access to basic services.

Between 2000 and 2022, the global population increased by 1.8 billion, with most of the growth in urban areas (increasing by 1.7 billion). Over this period, 2.5 billion people gained access to safely managed sanitation, and the number of people without at least basic sanitation decreased from 2.7 billion to 1.5 billion (Figure 42). Three out of five people (1.5 billion) that gained access to safely managed sanitation lived in urban areas. A further 503 million people in urban areas gained access to at least basic sanitation, and the number of people lacking basic sanitation decreased by 92 million (596 million to 504 million).

Nearly one third (1 billion) of the population currently living in rural areas has gained access to safely managed sanitation since 2000. An additional 257 million gained access to at least basic sanitation services, and the number of people without at least basic sanitation has been reduced by half, from 2.1 billion in 2000 to 1 billion. By 2022, 421 million fewer people used unimproved sanitation facilities and 801 million fewer people practised open defecation in rural areas. However, rural areas were still home to nine out of ten people practising open defecation in 2022 (377 out of 419 million).

Since 2000, 2.5 billion people have gained gained access to safely managed sanitation services, three out of five live in urban areas

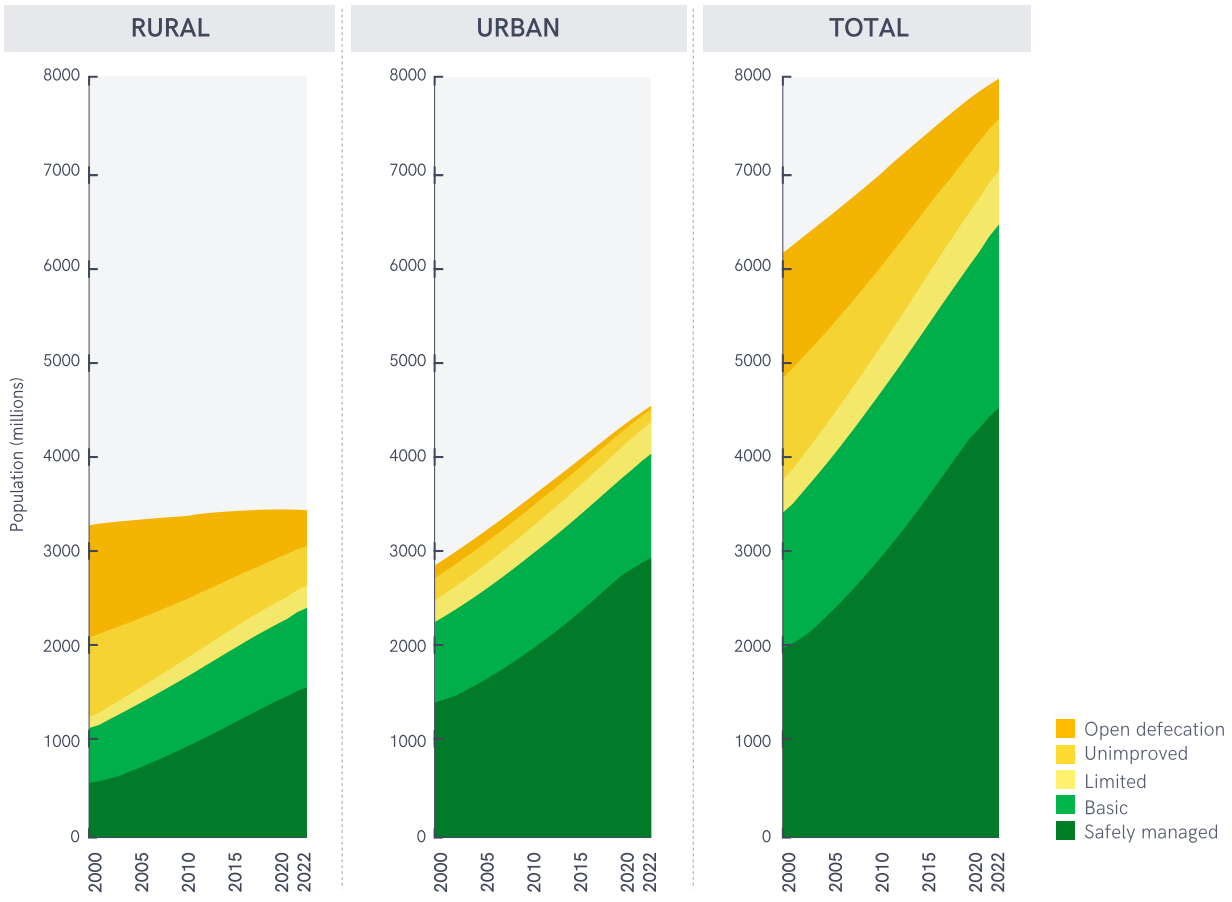


FIGURE 42 Rural, urban and total populations, by sanitation service level, 2000-2022 (millions)

Between 2015 and 2022, global coverage of safely managed sanitation increased from 49% to 57%. Rural coverage increased by 10 % pts, from 36% to 46%, while urban coverage increased by 5 % pts, from 60% to 65% (Figure 43). Seven SDG regions had urban estimates but only five had rural estimates. Safely managed sanitation coverage increased in both urban and rural areas in all SDG regions, except for Oceania where urban coverage declined from 35% to 33%. Urban coverage was higher in all SDG regions, except for Central and Southern Asia where rural coverage (2.22 % pts/yr) increased three times faster than urban coverage (0.72 % pts/yr). Eastern and South-Eastern Asia achieved the second fastest increase in rural coverage (1.33 % pts/yr), but urban coverage increased faster (1.55 % pts/yr), resulting in a 34 % pts coverage gap in 2022. Urban coverage of at least basic sanitation was significantly higher than rural coverage in all SDG regions. Oceania was the only SDG region where at least basic sanitation coverage was decreasing in rural areas.

Urban and rural coverage of basic and safely managed sanitation has increased in all SDG regions except Oceania

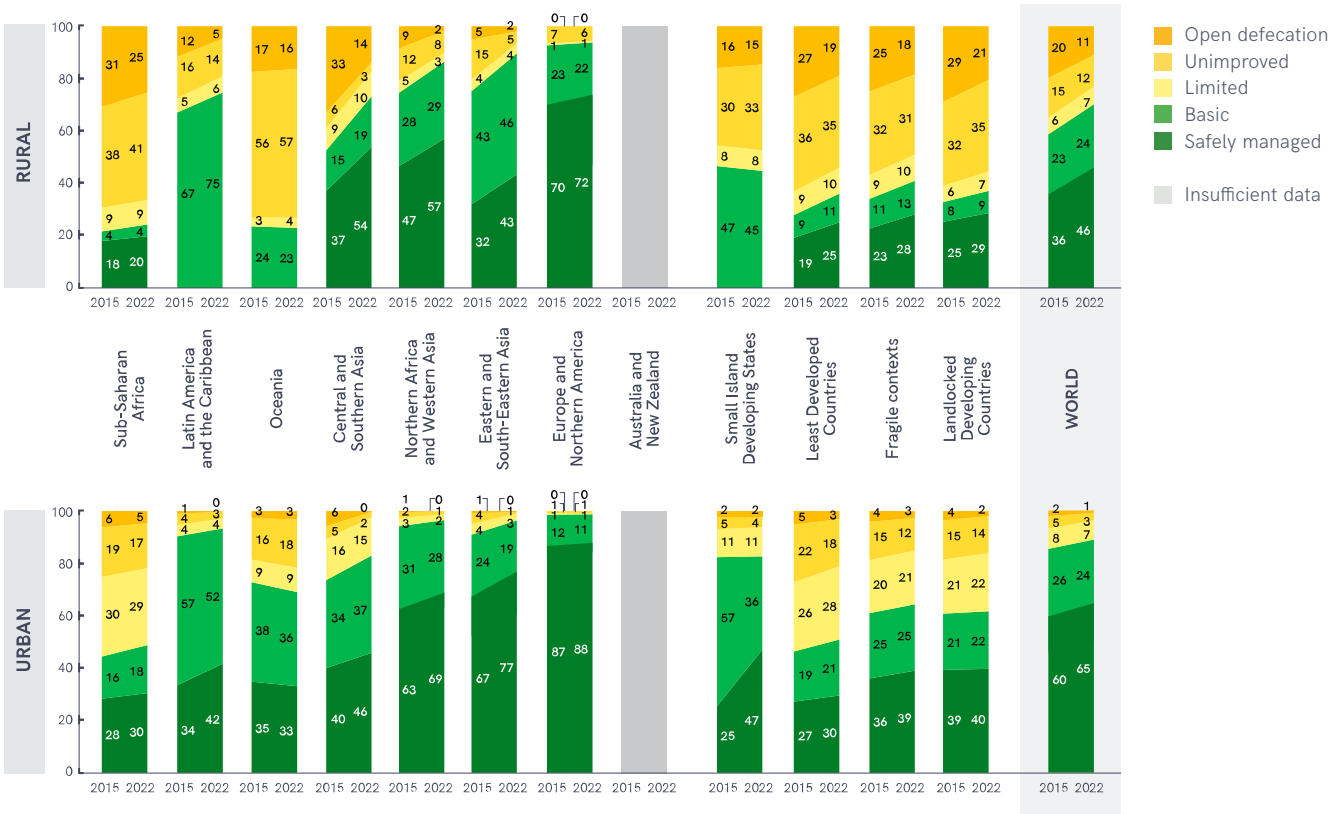


FIGURE 43 Regional sanitation coverage in rural and urban areas, 2015-2022 (%)

GENDER AND SANITATION

Access to safe sanitation is a universal human right, but in 2022, 3.5 billion people still lacked safely managed sanitation services. The JMP 2023 progress update documents inequalities in service levels between and within countries, but it is widely recognized that the impact of inadequate sanitation is not evenly distributed across the population.

Accelerating progress on sanitation is a high priority for achieving gender equality because inadequate services disproportionately impact the health, welfare and productivity of women and girls. Physical differences mean that women and girls face additional challenges when it comes to safely accessing and using toilets with privacy and dignity, and gender norms mean that women and girls are less likely to be able to influence the design and delivery of sanitation services. Inadequate sanitation poses additional health risks for pregnant women. It may also expose women and girls directly to violence, and the perceived threat of violence can add to other causes of psychosocial stress such as the perceived threat of harassment, or the threat of being unable to meet basic needs.[17]

While national data on sanitation are rarely disaggregated by sex, some indicators take account of gender inequalities and can therefore be considered gender-sensitive. For example, gender inequalities related to the accessibility of sanitation services were acknowledged in the construction of the SDG service ladder for sanitation. This distinguishes populations who practise open defecation (no service) from those using improved sanitation facilities that are private, and from those that are shared with other households. In a small number of cases, national data can be disaggregated by sex or gender and are therefore considered gender-specific, but further work is required to develop indicators that address other dimensions of gender inequalities related to sanitation.

In 2022, 419 million people worldwide did not use a toilet and practised open defecation. Women and girls who practise open defecation are less likely to be able to maintain privacy and dignity, and more likely to face physical, sexual or verbal assault than men and boys.[18] While there were still 36 countries with open defecation rates between 5% and 25%, gender inequalities were likely to be greatest in the 13 countries where at least one in four people practise open defecation. These were mostly in sub-Saharan Africa and include Chad (63%), Niger (65%) and South Sudan (60%), where more than half of the population still practised open defecation in 2022 (Figure 44).

[17] Mills JE, Cumming O. The impact of water, sanitation and hygiene on key health and social outcomes. Sanitation and Hygiene Applied Research for Equity (SHARE) and UNICEF. 2016;112.

[18] Burt Z, Nelson K, Ray I. Towards gender equality through sanitation access: UN-Women; 2016. Discussion paper no.12. <https://doi.org/10.18356/25216112/12>.

In 13 countries, more than one in four people still practised open defecation in 2022

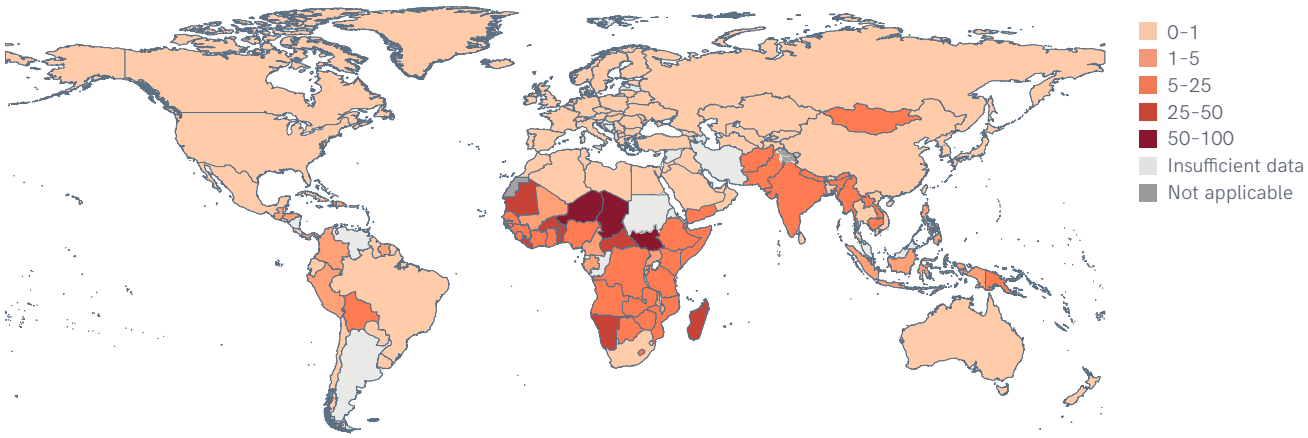


FIGURE 44 Proportion of population practising open defecation in 2022 (%)

Shared sanitation facilities are an important interim solution when individual household facilities are not feasible, but they frequently do not meet the needs of women and girls due to concerns about accessibility when needed, cleanliness, privacy and personal safety.[19] In 2022, 570 million people used improved facilties that were shared with other households and count as a 'limited' service. Three out of five (335 million) lived in urban areas. Gender inequalities related to shared sanitation were likely to be greatest in the 33 countries where more than a quarter of the urban population used limited services in 2022, of which 30 were located in sub-Saharan Africa (Figure 45). In 2022, one in five people used limited services in sub-Saharan Africa (18%), compared with one in ten in Central and Southern Asia (11%), and one in 20 in Oceania (5%).

However, Figure 46 shows that the proportion of sharing among those using improved sanitation facilities decreased in many countries and regions

[19] World Health Organization. Guidelines on Sanitation and Health. Geneva: World Health Organization; 2018 <https://apps.who.int/iris/handle/10665/274939>.

In 33 countries, more than one in four people in urban areas used limited sanitation services in 2022

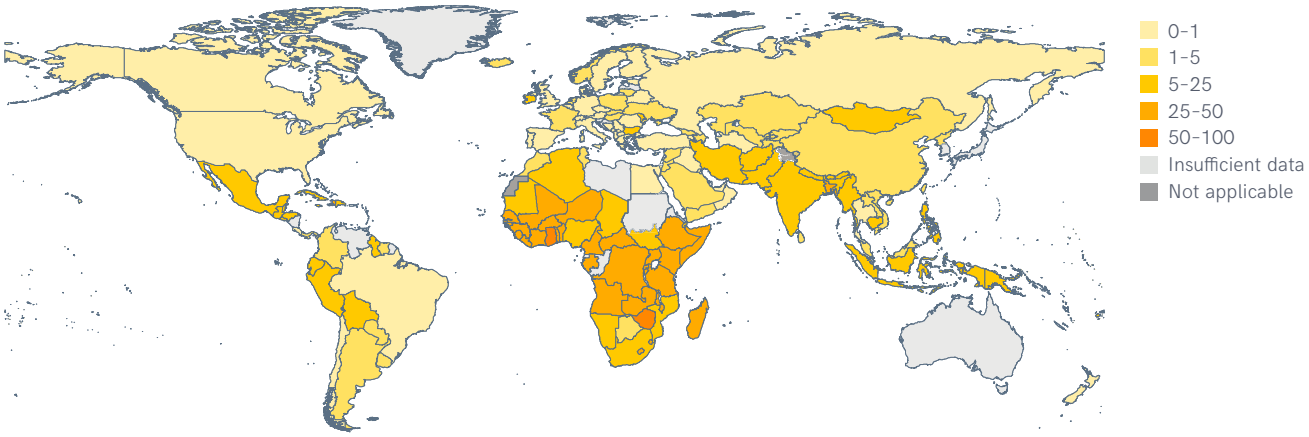


FIGURE 45 Proportion of urban population with limited sanitation services in 2022 (%)

between 2000 and 2022. In sub-Saharan Africa, sharing declined from 41% to 34%, with Ghana achieving the biggest decrease (from 89% to 61%). A similar decline was seen in Central and Southern Asia (from 21% to 13%), where Nepal recorded a reduction of over 30 % pts (from 43% to 11%). In Northern Africa and Western Asia, sharing was cut in half, from 7% to 3%, and in Iraq, the practice was eliminated, falling from 17% in 2000. All other regions achieved decreases, except for Oceania, where the proportion increased from 9% to 14%.

Since 2000, the proportion of improved sanitation facilities that are shared has fallen rapidly in many countries

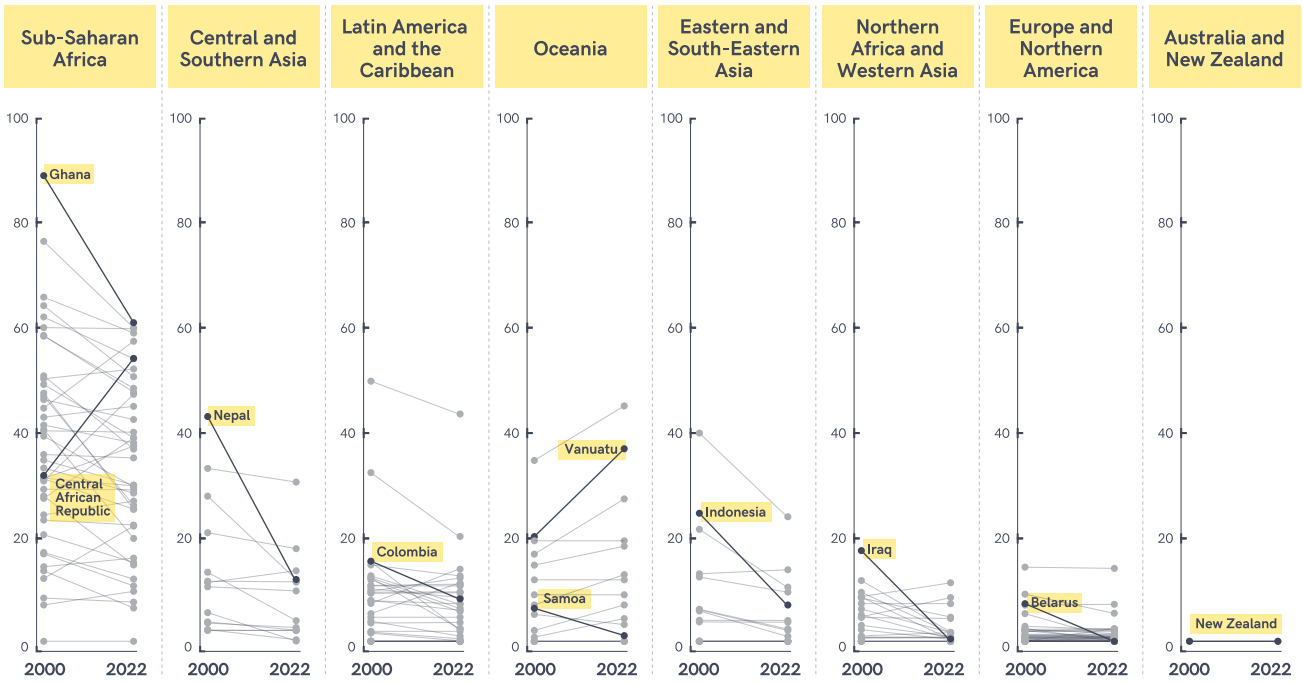


FIGURE 46 Proportion of population sharing sanitation facilities with other households among the population using improved sanitation facilities, by country, 2000 and 2022 (%)

Safety and freedom from violence (both violent acts and threats of violence) has been identified as another key dimension of gender related inequality in WASH. For example, women and girls who need to leave the household for defecation and urination may face harassment or risks of sexual violence, especially at night. The Multiple Indicator Cluster Surveys (MICS) ask women and men separately how safe they feel walking alone in their neighborhood after dark. In 22 recent surveys among households that use shared sanitation facilities, men were much more likely than women to report feeling 'very safe' (Figure 47). For example, in Georgia, 85% of men but only 47% of women said that they felt very safe, while in Belarus, men (59%) were more than four times as likely to report feeling very safe than women (13%). Far fewer respondents reported feeling 'very unsafe', but this was much more common among women than men.

In households with shared sanitation, women are less likely to feel very safe and more likely to feel very unsafe walking alone after dark

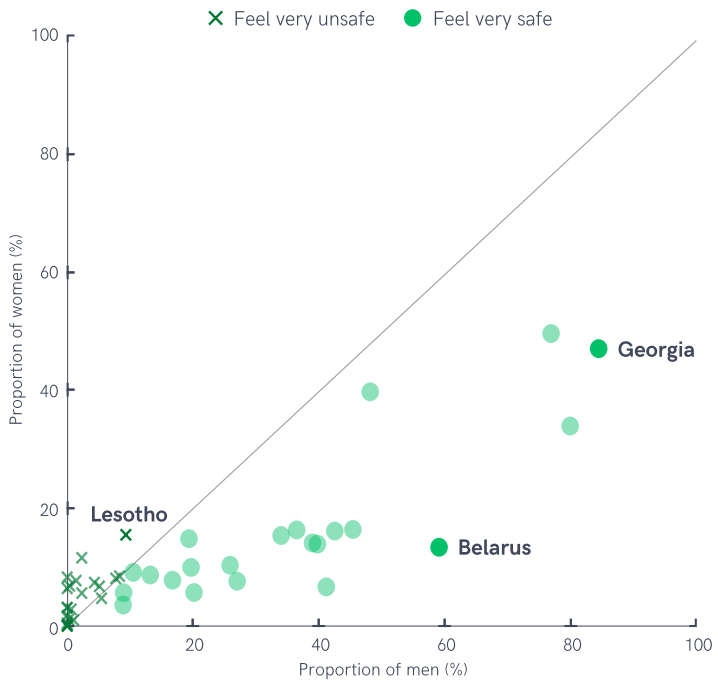


FIGURE 47 Proportion of women and men sharing sanitation facilities who report feeling very safe and very unsafe while walking alone in their neighbourhood after dark, selected Multiple Indicator Cluster Surveys, 2018-2021 (%)

Perceived risks faced while using the toilet vary widely between subnational regions in Sierra Leone and Nigeria

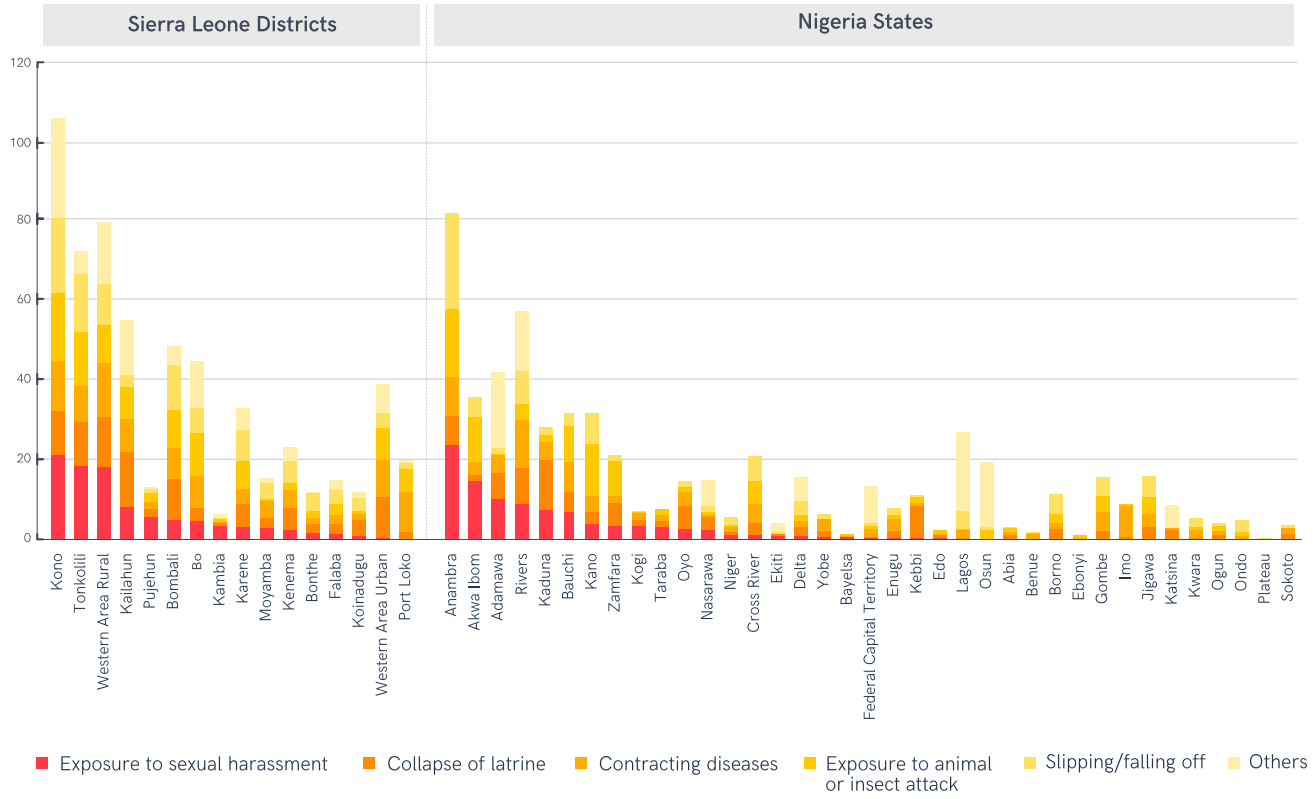


FIGURE 48 Proportion of population reporting perceived risk of exposure to sexual harassment and other risks while using the toilet, by subnational region in Sierra Leone (2022) and Nigeria (2021) (%)

Recent Water, Sanitation and Hygiene National Outcome Routine Mapping (WASHNORM) household surveys in Sierra Leone and Nigeria asked about perceived risks while using the toilet. One in five households in Sierra Leone (21%) and one in ten households in Nigeria (8%) reported perceived risks. In both countries, perceptions of risk were twice as high among households sharing sanitation facilities, and in Nigeria, households using public latrines were more likely to report risks than those sharing with other households they know. Figure 48 shows that the type and number of different risks reported varied widely across subnational regions. While exposure to sexual harassment was less commonly reported than fear of contracting diseases, collapse of latrines and exposure to insect attacks, the perceived risk was significantly higher in some regions than others.

Women's and men's perceptions of risk often differ. For example, a 2022 MUSE survey in Warangal, India found that more women (19%) than men (1%) agreed that women in their community face the risk of being physically harmed by men or boys when going to sanitation locations. Meanwhile, a MUSE 2022 survey in Kampala, Uganda found that more men (39%) than women (21%) agreed with the statement.[20]

Very few countries have national data on individual experiences/satisfaction with sanitation services. During the COVID-19 epidemic, the United States Census Bureau launched an experimental Household Pulse Survey.[21] This included data from respondents who reported having been displaced from their home in the past year because of a natural disaster, such as a hurricane, flood or

[20] Caruso et al. Measuring Urban Sanitation and Empowerment (MUSE). MUSE preliminary reports for Kampala, Uganda and Warangal, India; 2022 <https://www.museproject.org/publications-reports>.

[21] <https://www.census.gov/data/experimental-data-products/household-pulse-survey.html>.

fire. In the first month after the natural disaster, approximately half of all respondents that were displaced reported experiencing unsanitary conditions such as inadequate toilets. Cisgender males and females, and those that identified as straight, were least likely to report unsanitary conditions. In contrast, 33% of those identifying as gay or lesbian, 67% of bisexuals and 89% of transgender respondents reported experiencing unsanitary conditions 'a lot' (Figure 49).

While existing national data point to gender inequalities related to sanitation, further work is required to understand sex and gender-related differences in sanitation needs and to find ways to more systematically measure inequalities in access to the knowledge, resources and social support needed to satisfy them.

In the United States of America, persons who identify as gay or lesbian, bisexual, non-cisgender and transgender are more likely to experience unsanitary conditions after a natural disaster

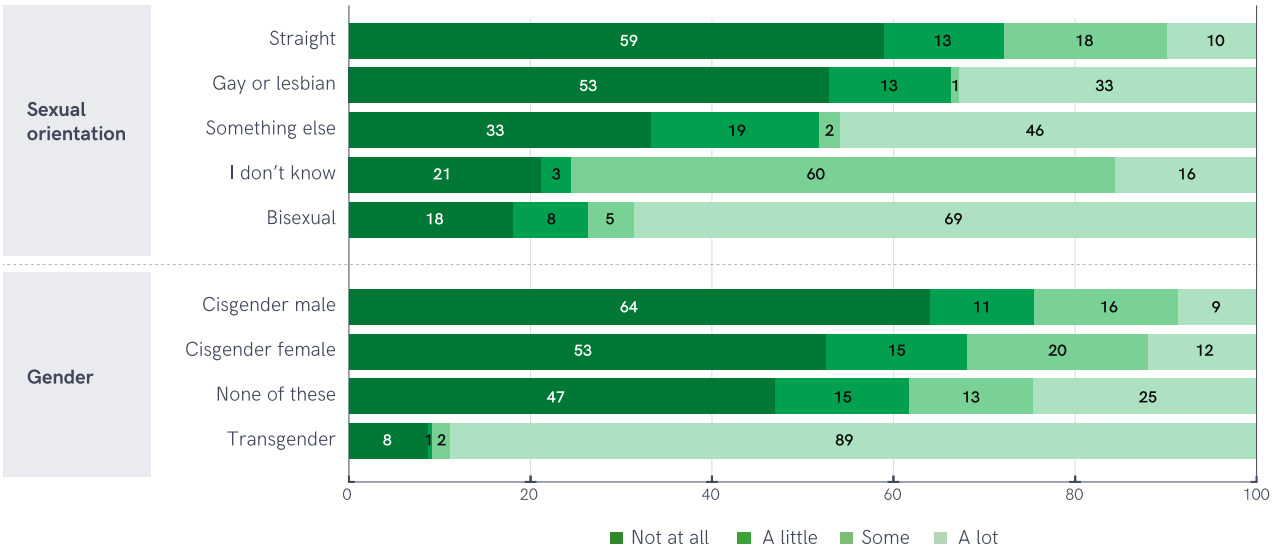


FIGURE 49 Proportion of population that reported experiencing unsanitary conditions following a disaster, by sexual orientation and gender in the United States of America, 2022 (%)

BASIC SANITATION SERVICES

Between 2015 and 2022, global coverage of at least basic sanitation increased from 73% to 81%. Rural coverage increased from 59% to 70% and urban coverage increased from 85% to 89%. By 2022, 59 countries had already achieved universal coverage (>99%) of at least basic sanitation (compared with 46 in 2015).

But coverage remained below 75% in 54 countries, and there were still 13 countries where less than half of the population had basic sanitation in 2022 (Figure 50). Figure 51 shows current coverage and annual rates of change in at least basic sanitation for 187 countries with sufficient data to estimate trends between 2000 and 2022.

At current rates of progress, 77 countries are on track to achieve universal coverage by 2030, including 59 countries that had already reached >99% by 2022. However, 85 countries are progressing too slowly and in 25 countries, coverage is decreasing.

By 2022, 59 countries had already achieved >99% coverage of at least basic sanitation services

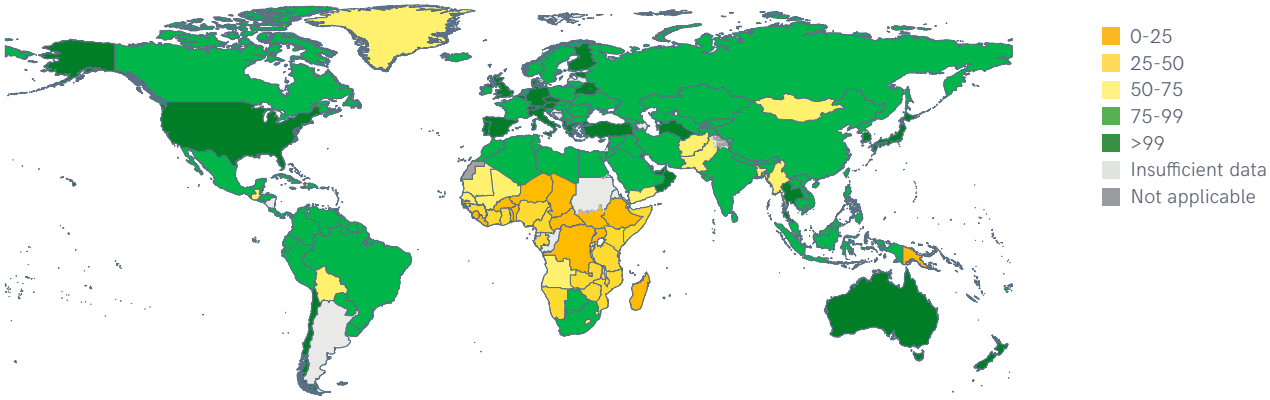


FIGURE 50 Proportion of population using at least basic sanitation services in 2022 (%)

Almost half of the countries with trend data available are not on track to achieve universal access to at least basic sanitation by 2030

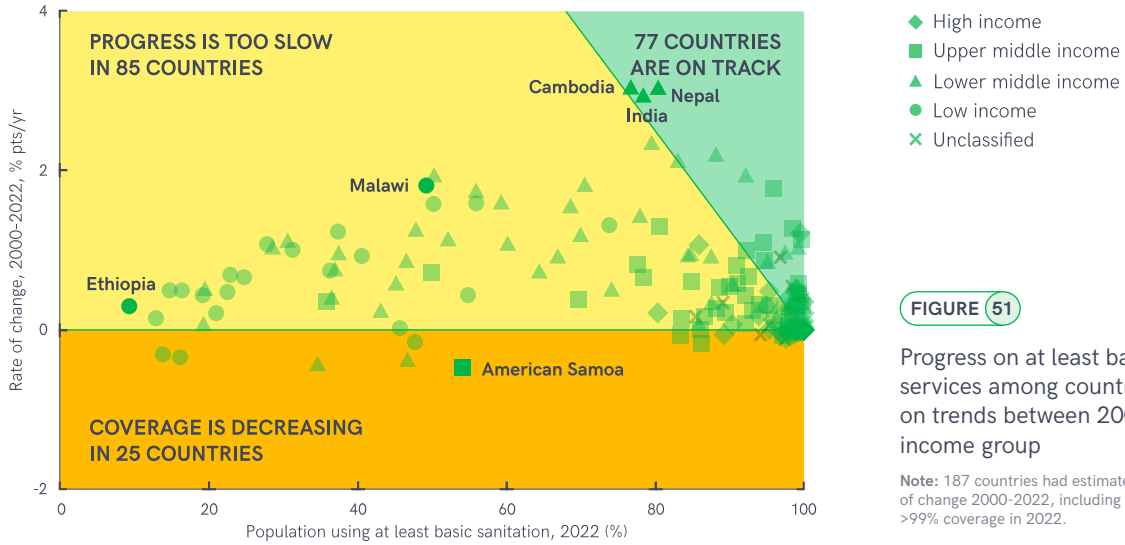


FIGURE 51

Progress on at least basic sanitation services among countries with data on trends between 2000–2022, by income group

Note: 187 countries had estimates for annual rates of change 2000-2022, including 59 countries with >99% coverage in 2022.

Since 2015, 49 countries have increased coverage of at least basic sanitation by at least 5 % pts

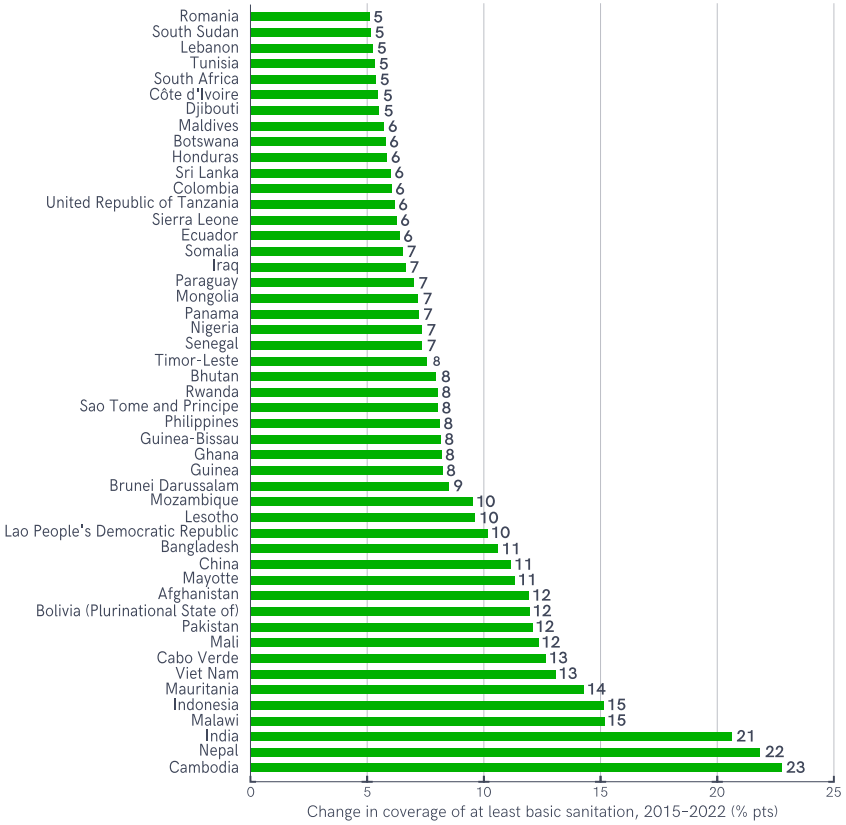


FIGURE 52 Change in the proportion of population using at least basic sanitation services, among countries with at least a 5 % pts change, 2015–2022 (% pts)

Urban coverage of at least basic sanitation was higher in almost all countries in 2022

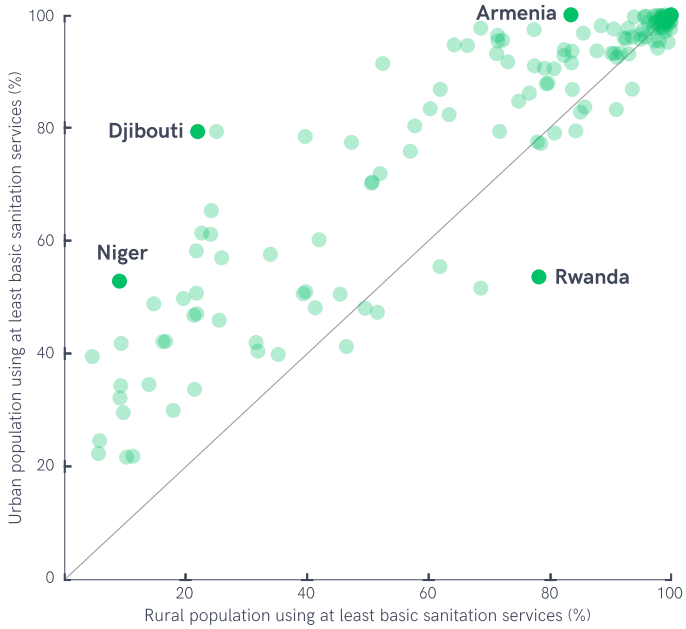


FIGURE 53 Proportion of urban and rural population using at least basic sanitation services, by country in 2022 (%)

Between 2015 and 2022, some countries achieved significant increases in coverage of at least basic sanitation (Figure 52). Forty-nine countries increased coverage by at least 5 % pts, and 16 countries increased coverage by at least 10 % pts. Cambodia increased coverage by more than 3 % pts per year during this period, rising from 54% in 2015 to 77% in 2022, and Nepal and India also achieved increases of more than 20 % pts. No country experienced a decrease of more than 5 % pts, but in Vanuatu, coverage declined from 50% in 2015 to 47% in 2022.

In 2022, urban coverage of at least basic sanitation was higher in almost all countries (Figure 53). For example, Armenia had achieved universal coverage (>99%) in urban areas, but rural coverage stood at 83%. In Djibouti, urban coverage (79%) was nearly four times higher than rural coverage (22%), and in Niger, there was a 44 % pts gap in coverage between urban (53%) and rural (9%) areas. Rwanda was among the few countries where rural coverage of at least basic sanitation was significantly higher in rural (78%) compared to urban (54%) areas, due partly to the high prevalence of sharing (38% of the urban population use limited services).

In countries with data disaggregated by wealth quintile, there were often significant disparities between the richest and the poorest (Figure 54). Among 106 countries with recent survey data available for sanitation,

73 had a coverage gap between the richest and poorest of more than 20 % pts, 43 had a gap of more than 40 % pts and 20 had a gap exceeding 60 % pts.

In Yemen, there was an 83 % pt gap in coverage between the richest (95%) and the poorest (12%), and in Bolivia, there was a 65% pt gap (88% vs. 23%).

In Nepal, the poorest had slightly higher coverage (80%) than the richest (77%) who were more likely to use shared facilities in urban areas.

In 43 countries the richest-poorest coverage gap for at least basic sanitation exceeds 40 % pts

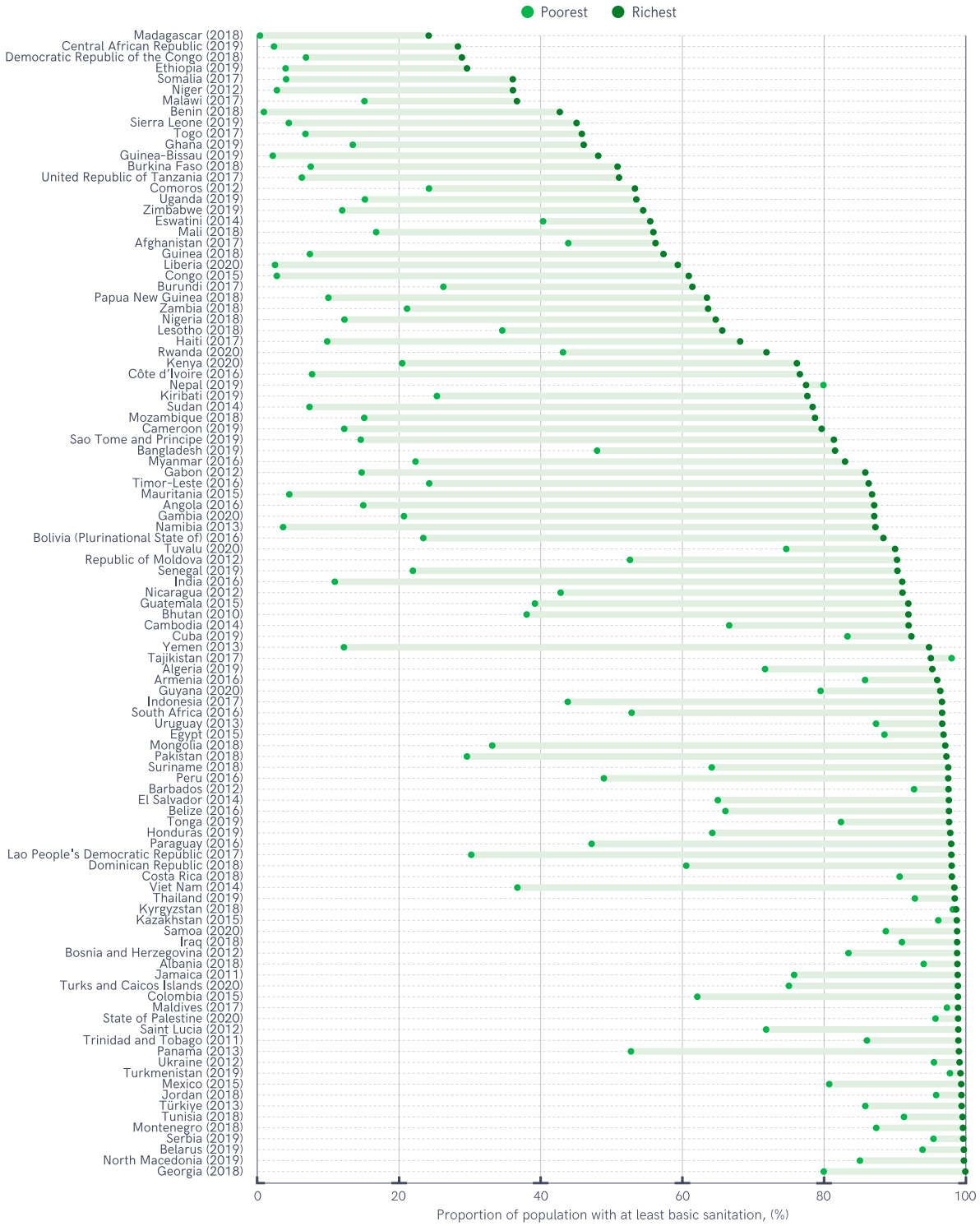


FIGURE 54 Proportion of richest and poorest wealth quintile using at least basic sanitation services, selected surveys, 2010-2020 (%)

The number of people lacking at least basic sanitation services decreased from 2.7 billion in 2000 to 1.5 billion in 2022. Over half of these people (762 million) lived in sub-Saharan Africa, and a third (482 million) lived in Central and Southern Asia (Figure 55). Two out of three people lacking at least basic sanitation services (1 billion) lived in rural areas. In sub-Saharan Africa, there were twice as many people lacking at least basic sanitation services in rural areas (506 million) than urban areas (255 million), and in Oceania, there were more than eight times as many in rural areas (8.2 million) than urban areas (955 000).

Latin America and the Caribbean was the only SDG region with more people lacking basic sanitation in urban areas (36 million) than rural areas (31 million). Sub-Saharan Africa the largest number of people without at least basic sanitation services in urban areas (255 million), followed by Central and Southern Asia (135 million). In 2022, there were more people practising open defecation in sub-Saharan Africa (193 million) than in Central and Southern Asia (187 million). Sub-Saharan Africa also had the largest number of people practising open defecation in urban areas (23 million), more than all other regions combined.

In 2022, half of the 1.5 billion people without at least basic sanitation lived in sub-Saharan Africa

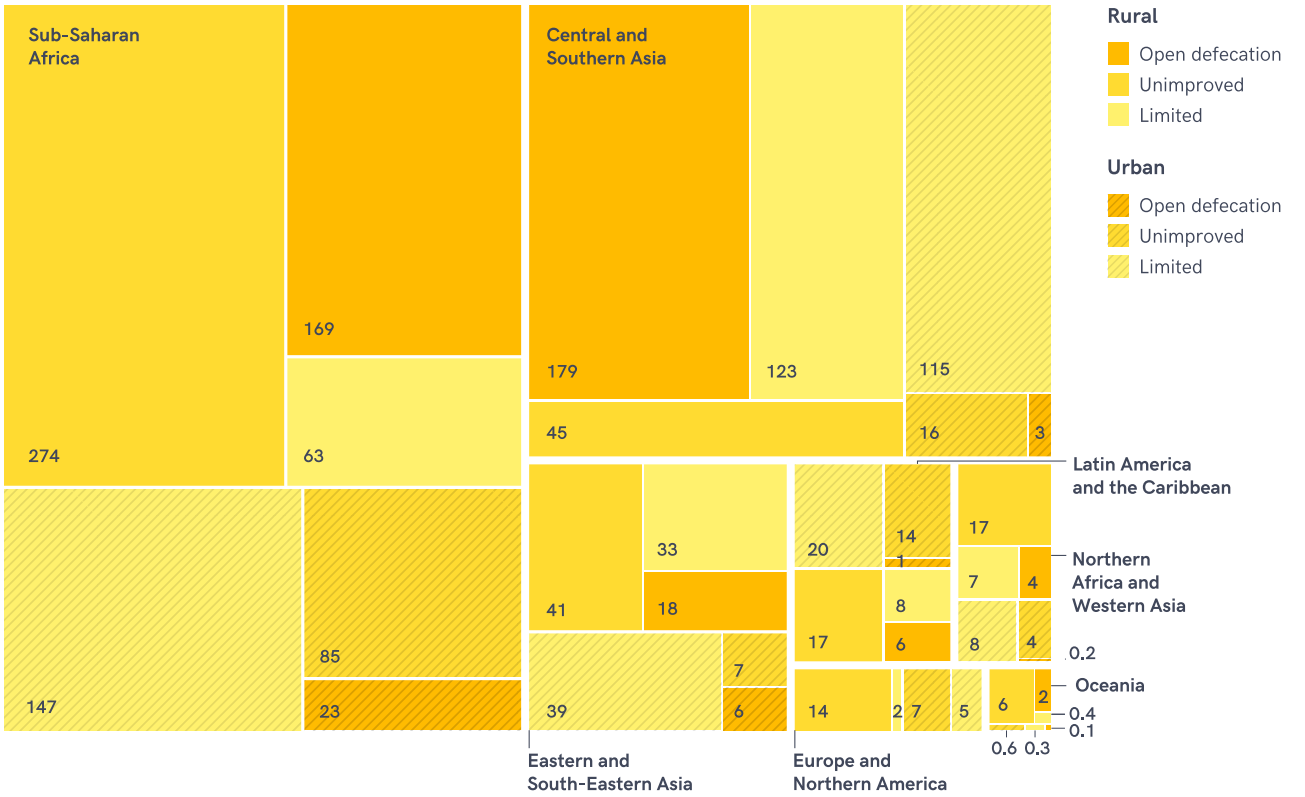


FIGURE 55 Rural and urban populations lacking basic sanitation services in 2022, by SDG region (millions)

SAFELY MANAGED SANITATION SERVICES

Between 2015 and 2022, global coverage of safely managed sanitation increased by 8 % pts (from 49% to 57%). At current rates of progress, the world will only reach 65% coverage by 2030, leaving 3 billion people without safely managed services (Figure 56). Since 2015, all SDG regions have increased coverage but rates of progress differ. Central and Southern Asia increased coverage by 13 % pts (from 38% to 51%), and Eastern and Southern Asia increased coverage by 12 % pts (from 52% to 64%), while all other regions increased coverage by less than 10 % pts. By contrast, sub-Saharan Africa only increased coverage by 2 % pts (from 22% to 24%). Despite progress, no SDG region is on track to achieve universal coverage by 2030. Achieving universal access to safely managed sanitation will require a fivefold increase in current rates of progress (16-fold in least developed countries, 15-fold in fragile contexts).

In 2022, 135 countries had total estimates for safely managed sanitation, representing 86% of the global population. Twenty-two countries only had total estimates (of which three countries had already achieved >99%), 116 countries had urban estimates and 89 had rural estimates. Seven countries had already achieved >99% in urban areas, compared with three countries in rural areas. Among the 84 countries with estimates for both, 35 had higher coverage in rural areas and 49 had higher coverage

No SDG region is on track to achieve universal access to safely managed sanitation services by 2030

FIGURE 56 Progress on safely managed sanitation services, 2015–2022 (%), and acceleration required to reach universal coverage (>99%) by 2030, by SDG region

in urban areas (Figure 57). In some countries, urban coverage was significantly higher than rural, such as China (48 % pts), Belarus (33 % pts) and Chad (28 % pts). However, in other countries, rural coverage was much higher, such as Ecuador (30 % pts), Honduras (30 % pts), Georgia (25 % pts) and Uzbekistan (23 % pts). In 2022, five SDG regions had countries with <25% coverage in urban areas and three SDG regions had countries with <25% coverage in rural areas.

In 2022, rural coverage of safely managed sanitation was higher in 35 out of 84 countries with estimates available for rural and urban areas

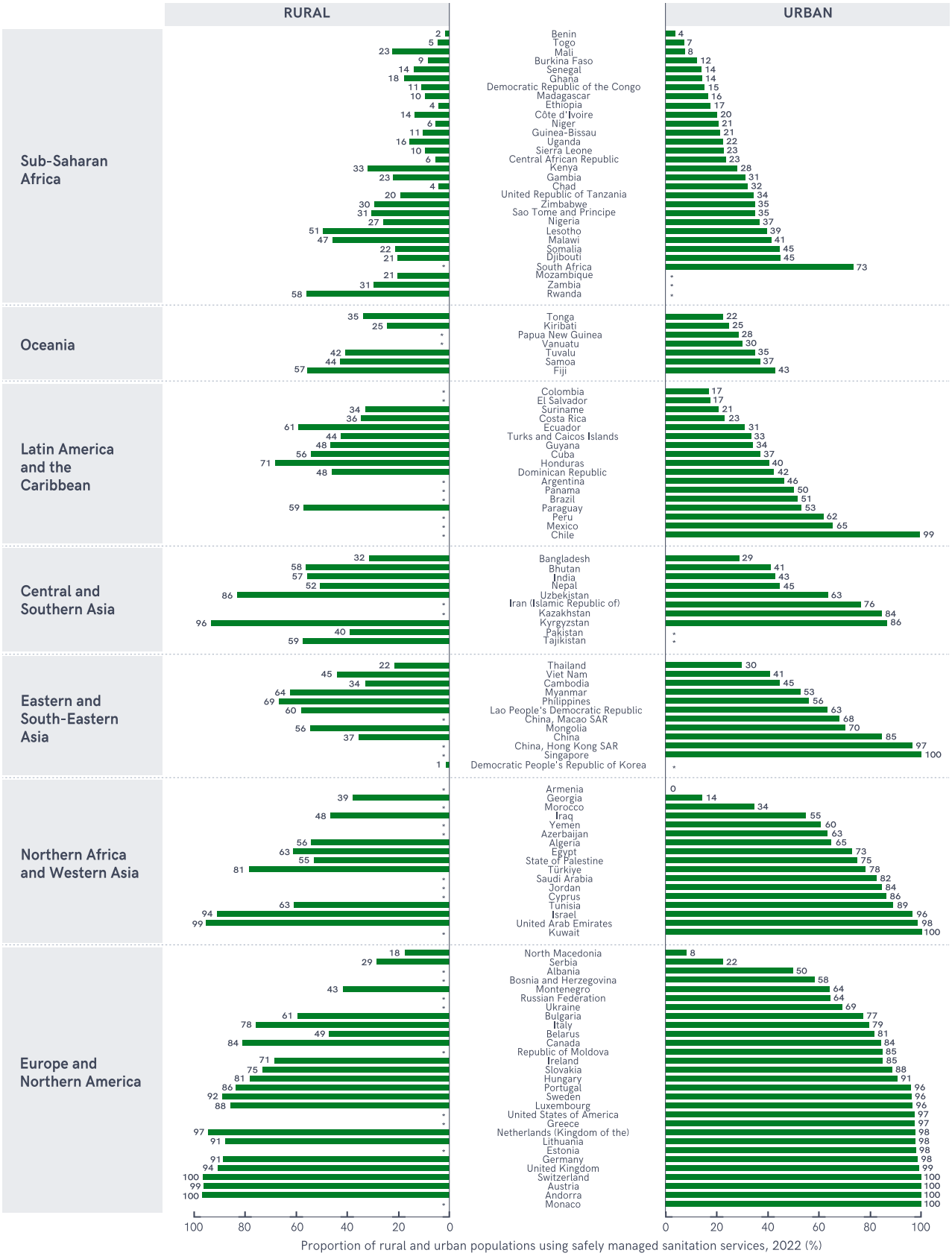


FIGURE 57 Rural and urban coverage of safely managed sanitation services, by country and SDG region in 2022 (%)

* No estimate available in 2022

Figure 58 shows progress towards current coverage and annual rates of change in safely managed sanitation for 125 countries with sufficient data to estimate trends between 2000 and 2022. At current rates of progress, 17 countries are on track to achieve universal coverage by 2030, including eight countries that had already reached >99% by 2022. However, 84 countries are progressing too slowly and in 24 countries, coverage is decreasing. For example, China recorded the fastest annual rate of progress among upper-middle-income countries (2.45 % pts/yr), rising from 13% in 2000 to 67% in 2022, but this will not be sufficient to reach >99% by 2030. South Africa achieved similar coverage (72%) but is progressing more slowly (0.78 % pts/yr). Among low-income countries, Malawi (1.75 % pts/yr) showed the fastest rate of progress but had only reached 46% coverage by 2022, so is not on track to achieve universal access by 2030.

Figure 59 shows countries recording the largest changes in coverage of safely managed sanitation between 2015 and 2022. Over this time period, 32 countries increased coverage by at least 5 % pts and 15 countries increased coverage by at least 10 % pts. While China recorded the biggest increase (18 % pts), China Hong Kong SAR, Mexico, Peru and Romania also increased coverage by more than 2 % pts/yr. Georgia was the only country to record a decrease of more than 5 % pts, dropping from 30% in 2015 to 24% in 2022.

Only one in seven countries are on track to achieve universal access to safely managed sanitation by 2030

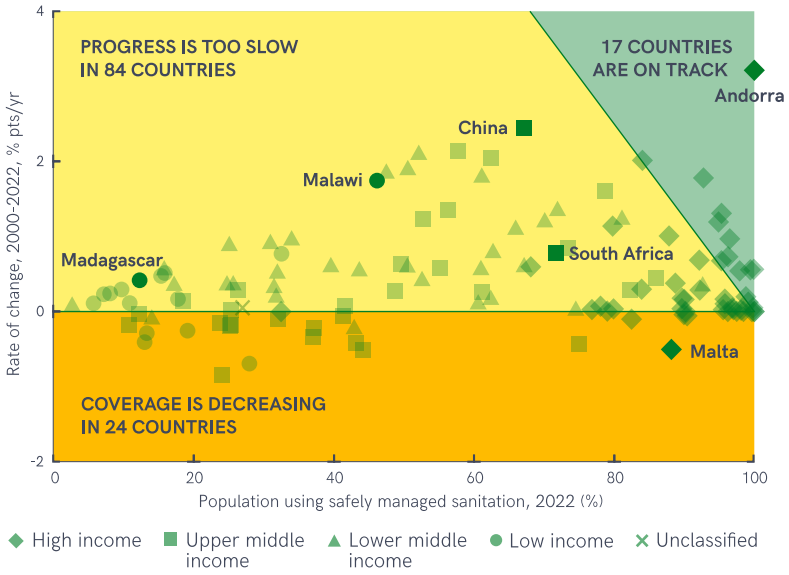


FIGURE 58 Progress on safely managed sanitation services among countries with data on trends between 2000-2022, by income group

Note: 125 countries had estimates for annual rates of change 2000-2022, including eight countries with >99% coverage in 2022.

Since 2015, 32 countries have increased coverage of safely managed sanitation by at least 5 % pts

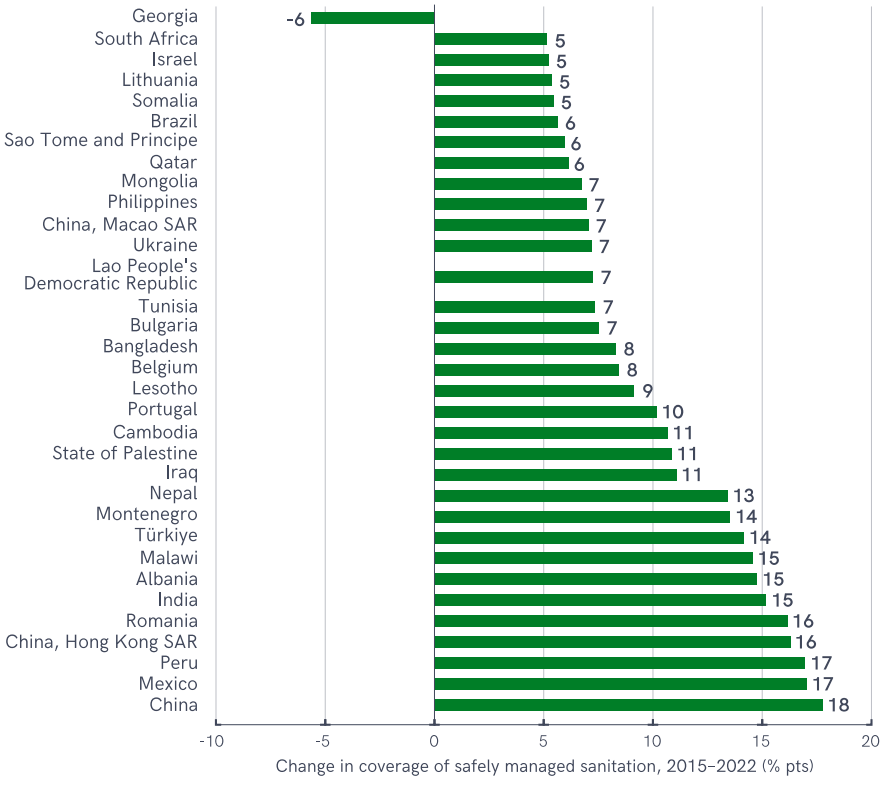


FIGURE 59 Change in proportion of population using safely managed sanitation services, among countries with at least a 5 % pts change, 2015-2022 (% pts)

Between 2000 and 2022, the number of people using improved sanitation facilities increased from 3.8 billion to 7 billion. Among the 3.3 billion people gaining access during this period, two out of five (1.3 billion) gained access to sewer connections, and three out of five (over 1.9 billion) gained access to septic tanks, improved latrines and other non-sewered sanitation (Figure 60). While the number of people gaining improved sanitation facilities was higher in urban areas (1.9 billion) than rural areas (1.4 billion), the rate of increase was more than four times faster in rural areas (1.74 % pts/yr) than urban areas (0.41 % pts/yr) (Figure 61).

This is partly explained by the fact that the urban population grew by 59% between 2000 and 2022, adding 1.7 billion residents, while the rural population increased by only 158 million, or 5%.

Since 2000, the population with sewer connections has increased at an average of 0.41 % pts/yr, but growth in on-site systems was faster, at 0.54 and 0.25 % pts/yr for septic tanks and improved latrines, respectively. In both rural and urban areas, the relative increase in non-sewered sanitation was far greater than the relative increase in sewer connections, and the rate of increase was higher for septic tanks than for latrines and other improved sanitation. In urban areas, the proportion of the population with sewer connections remained fairly constant between 2000 (62%) and 2022 (63%), while the proportion of the urban population with septic tanks increased from 15% to 22%.

Sewer connections, septic tanks, latrines and other improved sanitation facilities can all be safely managed if they are not shared, and if excreta are either safely treated and disposed of in situ or removed and treated off-site. Globally, more people used on-site sanitation (46%) than sewer connections (42%) in 2022, but the majority of safely managed sanitation services were among households with sewer connections (33%), rather than on-site facilities (24%).

Since 2000, 1.3 billion people have gained sewer connections and 1.9 billion have gained improved on-site sanitation facilities

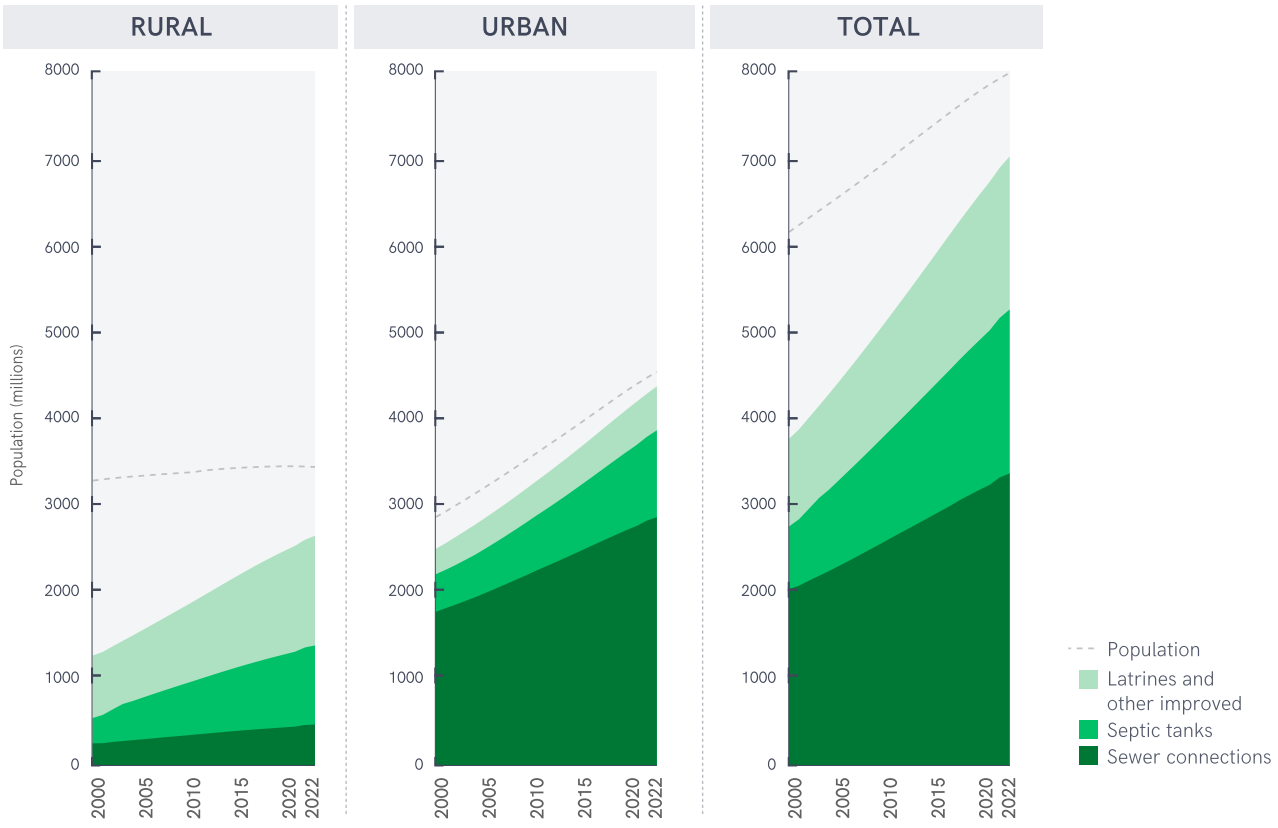


FIGURE 60 Rural, urban and total populations using sewer connections, septic tanks and other improved sanitation facilities, 2000–2022 (millions)

Since 2000, on-site sanitation has increased faster than sewered sanitation in both rural and urban areas

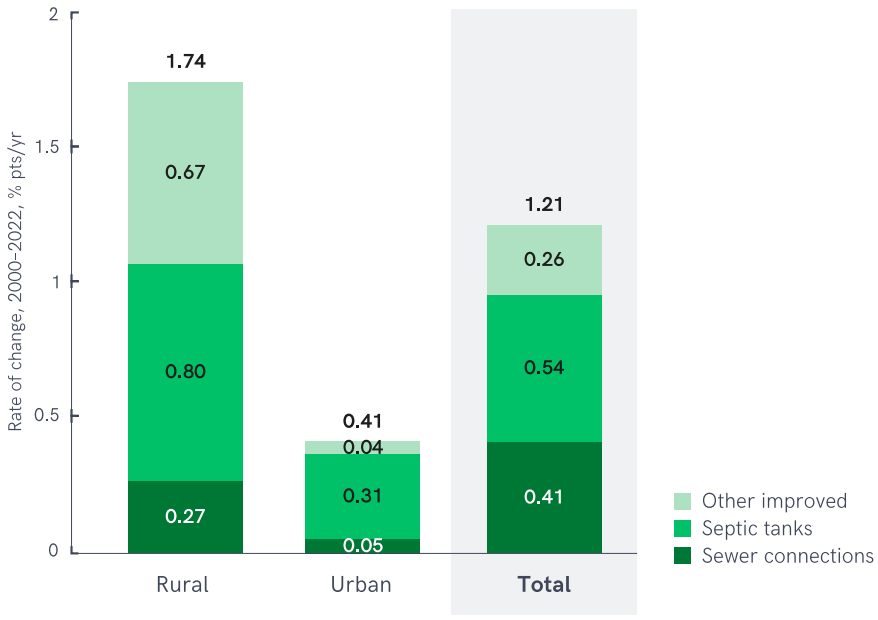


FIGURE 61 Annual rate of change in coverage of sewer connections, septic tanks and other improved sanitation facilities, 2000–2022 (% pts/yr)

Figure 62 shows large variations by region and residence. In rural areas, safely managed sanitation was dominated by on-site systems, except in Europe and North America, and Northern Africa and Western Asia. In urban areas, safely managed sanitation was mainly through sewer connections in four SDG regions (Eastern and South-Eastern Asia, Europe and Northern America, Latin America and the Caribbean, and Northern Africa and Western Asia), but was mostly via on-site sanitation in three regions (Central and Southern Asia, Oceania and sub-Saharan Africa). In least developed countries, landlocked developing countries and fragile contexts, on-site sanitation was the main contributor to safely managed sanitation in both urban and rural areas.

Safe management of on-site and sewered sanitation in rural and urban areas varies widely between regions

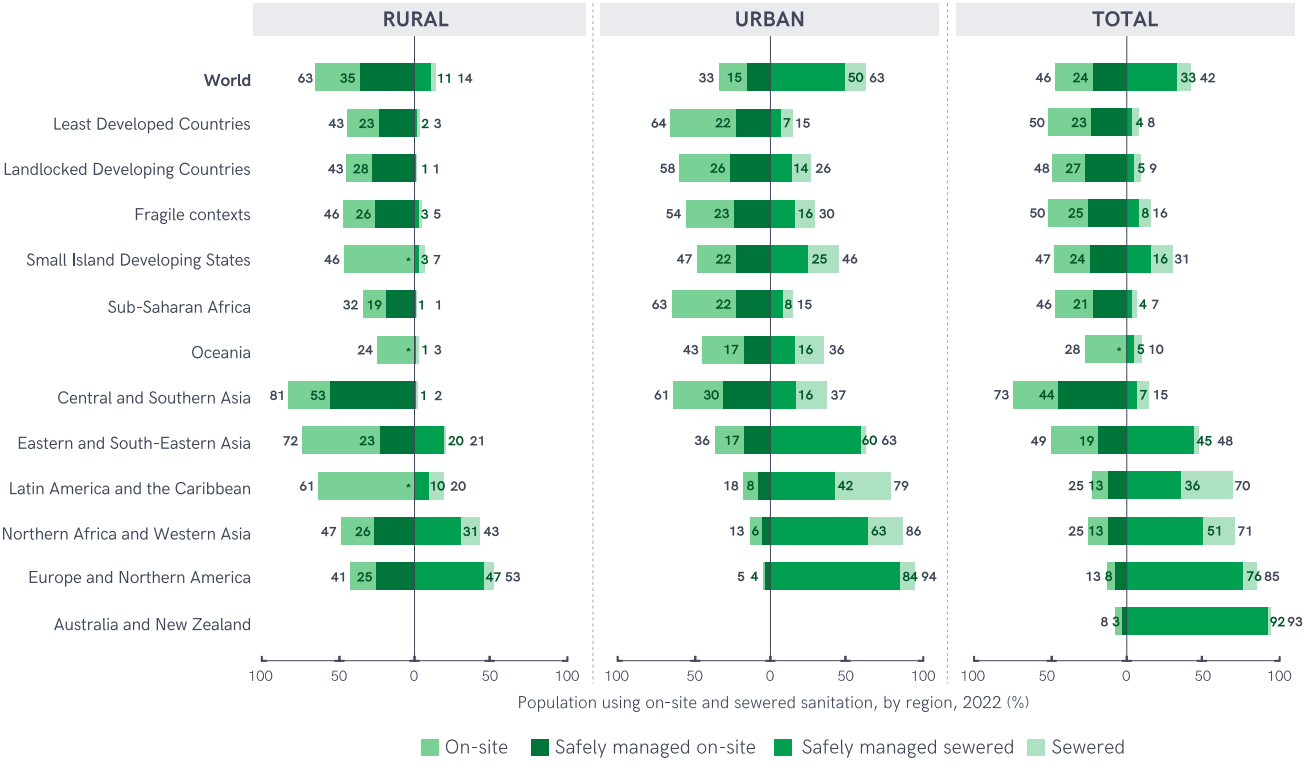


FIGURE 62 Proportion of the population using on-site and sewered sanitation facilities that are safely managed, 2022 (%)

* Insufficient data to produce regional estimates for safely managed sanitation.

On-site sanitation facilities collect, store and, to some extent, treat excreta in storage tanks or pits. These may be lined or unlined, permeable or impermeable, and may discharge liquid effluent to on-site treatment (for example, a leach field), a sewer line or into the surface environment. For on-site sanitation facilities to be counted as safely managed sanitation, they need to ensure that excreta are well contained and not discharged to the surface environment, thereby exposing humans to pathogens. Containment is simpler in dry pits (for example, VIP latrines) than in wet pits and tanks (such as, septic tanks), since liquids introduced into the pit or tank may overflow either by design or when infiltration systems are overloaded. Where available, the JMP uses national data on containment for both septic tanks and latrines. In the absence of national data, the JMP applies standard assumptions, that 100% of pit latrines and 50% of septic tanks provide effective containment.

On-site sanitation systems that are not shared, and that provide effective containment, can be considered safely managed if they are not emptied and excreta remain contained in the pit/tank. When the pit/tank is emptied, it can also be counted as safely managed if the excreta are buried on-site, or are removed off-premises and treated.[22] Among 43 countries with comparable data, households that had septic tanks were much more likely to report emptying than households with improved latrines (Figure 63). For example, in Mongolia in 2018, 63% of households with septic tanks, but only 6% of households with improved latrines, reported that these had been emptied. Households using unimproved sanitation facilities, such as pit latrines without slabs, were even less likely to report emptying.[23]

[22] Few countries have comprehensive data on safe management of on-site sanitation (SMOSS) and the JMP has supported a series of pilot countries to strengthen national monitoring systems. <https://washdata.org/monitoring/sanitation/safely-managed-on-site-sanitation>.

[23] The SDG global indicator for safely managed sanitation excludes unimproved sanitation facilities.

Septic tanks are more likely to be emptied than other sanitation facilities in most countries with disaggregated data available

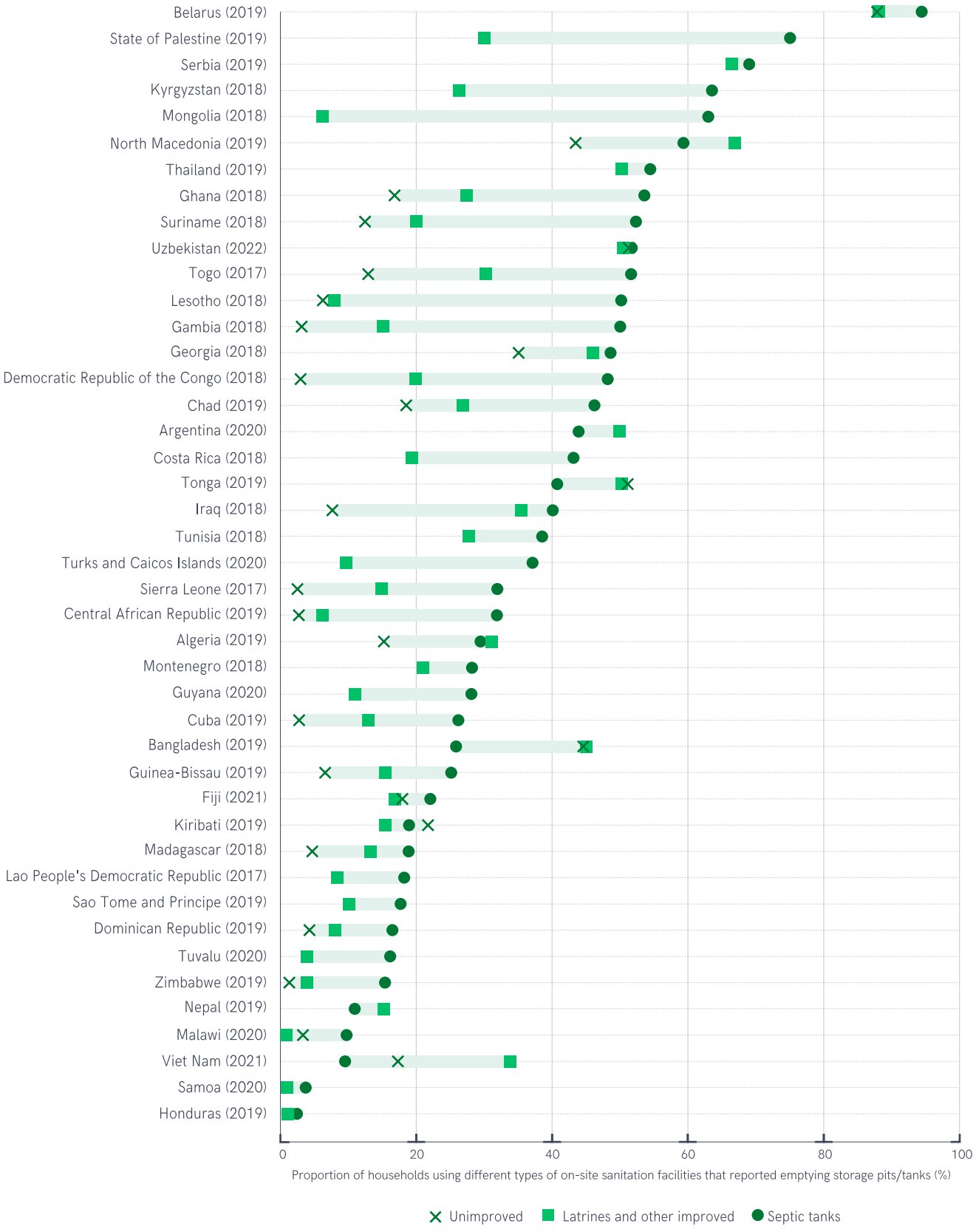


FIGURE 63 Proportion of population that reported emptying different types of on-site sanitation facilities, selected MICS surveys, 2017–2022 (%)

Once tanks and pits are emptied, faecal sludge may be buried or discharged locally, or removed off-site. On-site burial is considered safely managed, and in some countries (Bangladesh, Guyana and Zimbabwe) this practice was particularly widespread for latrines (Figure 64). Faecal sludge emptied from septic tanks was much more likely to be removed off-site than sludge removed from latrines. In Thailand, 95% of households where septic tanks had been emptied reported that the faecal sludge was removed off-site, only 1% was buried on-site. In countries that fall far from the diagonal line in Figure 64, survey respondents reported that the faecal sludge was neither removed off-site nor buried on-site. For example, in Serbia and Viet Nam, 44% and 45% of respondents with latrines, respectively, reported that these had been emptied by household members, with the contents deposited in uncovered pits, open ground, water bodies or elsewhere. None of these methods of disposal are considered safely managed.

Wastewater from households with sewer connections is considered safely managed if it is delivered to a treatment plant designed to provide secondary or higher levels of treatment. Primary treatment also meets the standard for safely managed sanitation if the primary effluent is discharged in a way that precludes further human contact (for example, through a long ocean outfall). In 2022, 152 countries had total estimates for both the proportion of the population using sewer

Faecal sludge emptied from septic tanks is more likely to be removed off-site and sludge from latrines is more often disposed of in-situ

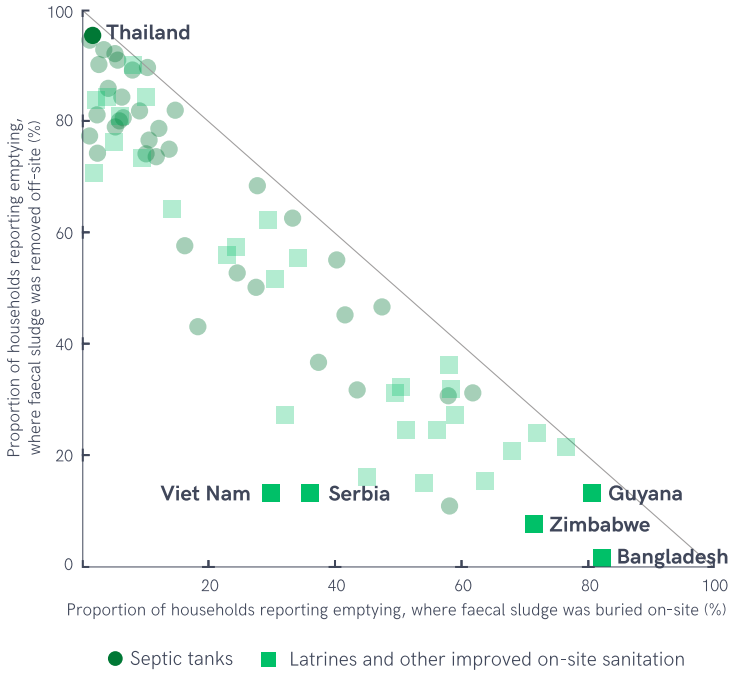


FIGURE 64 Proportion of population emptying on-site sanitation facilities where faecal sludge was disposed of in-situ and removed off-site, selected MICS surveys, 2017–2022

In many countries, wastewater treatment lags behind coverage of sewer connections

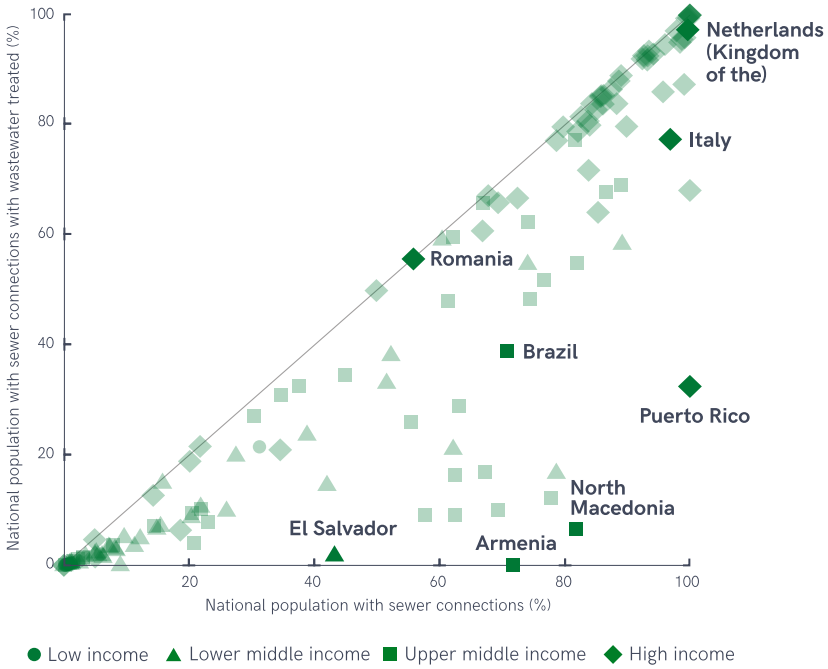


FIGURE 65 Proportion of population with sewer connections and sewer connections with wastewater treated, by country, 2022 (%)

connections and the proportion using sewer connections from which wastewater is treated and therefore safely managed. Figure 65 shows that in many countries coverage of wastewater treatment was not keeping up with coverage of sewer connections.

In 2022, the Kingdom of the Netherlands had universal coverage (>99%) of sewer connections and nearly all of these (97%) were safely managed. Puerto Rico also had universal coverage of sewer connections but only a third (33%) of sewered wastewater received secondary or higher treatment. Among upper-middle-income countries, Brazil (71%) and Armenia (72%) had similarly high coverage of sewer connections but 39% of wastewater was safely managed in the former compared to <1% in the latter.

BOX 4

Safely managed sanitation services (SDG indicator 6.2.1a) and safely treated wastewater (SDG indicator 6.3.1, domestic fraction)

Safely managed sanitation vs. safely treated wastewater

The SDG framework includes two indicators related to sanitation and wastewater. SDG indicator 6.2.1a is on the population using safely managed sanitation services, and SDG indicator 6.3.1 is on the proportion of wastewater safely treated. SDG indicator 6.3.1 can be separated into safe treatment of domestic and industrial wastewater flows, with WHO responsible for global reporting of domestic flows and UN-Habitat responsible for industrial flows. The latest available statistics for SDG indicator 6.3.1 are available online from UN-Water.[24] While safe treatment of domestic wastewater is closely related to safely managed sanitation services, and the two indicators often draw upon the same national data sources, there are also important differences.

- **Units of measurement.** Safely managed sanitation services is expressed as the proportion of the population having a certain level of service, while safely treated wastewater reflects the proportion of volumetric flows (for example, in cubic metres per year) safely treated.
- **Acceptable sanitation facilities.** Any kind of improved sanitation facility can potentially be safely managed, but only septic tanks and sewer lines are included in the definition of safely treated wastewater. This is because all households generate wastewater, including blackwater (from defecation and urination) as well as greywater (from other domestic uses, including washing and bathing). Safely managed sanitation is concerned with safe management of blackwater, but safely treated wastewater considers both blackwater and greywater. Sewer lines and septic tanks, unlike pit latrines, have the potential to manage greywater as well as blackwater flows. In principle, greywater could also be safely treated separately from blackwater (for example, through household or community soak pits).
- **Acceptable treatment.** Secondary treatment processes or higher are adequate for safely managed sanitation services and are sometimes also used for calculation of safely treated wastewater. However, additional data on compliance of treated wastewater with relevant limits (for example, effluent quality standards) are used for SDG indicator 6.3.1 when available.
- **Shared sanitation facilities.** Shared facilities are excluded from safely managed sanitation services because of human rights concerns about accessibility, privacy and health impacts. These factors are not considered for wastewater flows, so shared facilities can lead to safely treated wastewater.
- **Estimation method.** The JMP uses linear regression among all available data points to produce estimates of safely managed sanitation over a range of years (see Annex 1), while WHO uses the most recent available data points to produce estimates of safely treated wastewater for a single year.

Estimates for safely managed sanitation services and safely treated domestic wastewater are closely correlated, but because of the above methodological differences, estimates for individual countries can be significantly different (Figure 66). The impact of differences in the types of sanitation facilities counted is evident in many low- and

[24] UN Water SDG 6 Data Portal <https://sdg6data.org/en/indicator/6.3.1>.

lower-middle-income countries such as Kyrgyzstan, Lao People's Democratic Republic and Malawi, where large proportions of the population use improved pit latrines, particularly in rural areas. When these are not shared, and have not been emptied (or have been emptied and the contents either buried on-site or removed off-site where they receive treatment), they count as safely managed sanitation, but are not considered to safely treat domestic wastewater. The impact of wastewater effluent standards is seen in more upper-middle-income and high-income countries, such as Malta and the Russian Federation. In these countries sewer coverage is high, and much of the wastewater receives secondary treatment (qualifying as safely managed sanitation) but does not meet relevant discharge standards, and so is not counted as safely treated. Finally, the impact of shared sanitation is evident in American Samoa where almost everyone uses sewer connections or septic tanks, and nearly all sewage is treated with primary processes followed by a long ocean outfall, which is adequate for both safely treated wastewater and safely managed sanitation. However, nearly half of the population uses shared sanitation facilities. These are excluded from safely managed sanitation, but not from safely treated wastewater.

Estimates for safely treated domestic wastewater (SDG indicator 6.3.1) are often lower than for safely managed sanitation (SDG indicator 6.2.1a) in countries with data on both indicators

FIGURE 66 Comparison of SDG indicators 6.2.1a (safely managed sanitation services) and 6.3.1 (safely treated wastewater, domestic fraction) for 2022

DATA COVERAGE AND PROGRESSION

While all SDG regions had near-universal data coverage (>99%) for at least basic sanitation at the time of the 2017 global baseline report, data coverage has since dropped to 94%, 92% and 90% in Oceania, Latin America and the Caribbean, and Northern Africa and Western Asia, respectively (Figure 67). Most countries and territories that lost estimates for at least basic sanitation due to ageing data were small islands, but Argentina, Azerbaijan, Congo, Nicaragua and Sudan are larger countries (with a 2022 population of at least five million) that substantially reduced regional population data coverage.

In some SDG regions, data coverage for at least basic sanitation has decreased

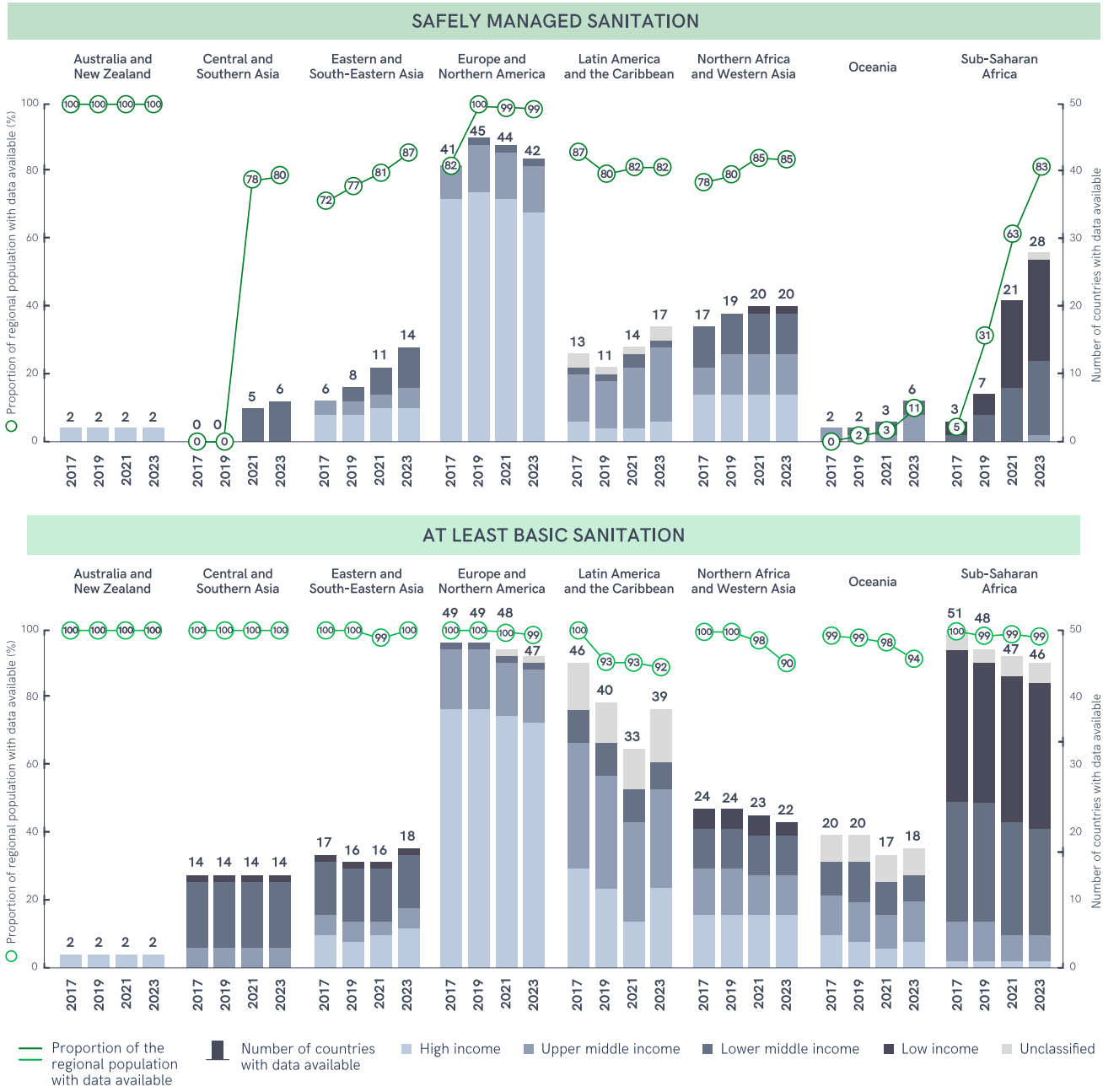


FIGURE 67 Proportion of population (%) and number of countries with estimates available for at least basic and safely managed sanitation in JMP progress updates, 2017–2023

Although the population of Solomon Islands was only 724 000 in 2022, this represents 5% of the population of Oceania. With the most recent data for at least basic sanitation coming from the 2015 Solomon Islands Demographic and Health Survey, estimates could not be produced beyond 2021.

While data coverage declined for at least basic sanitation, it increased for safely managed sanitation, most notably among low- and lower-middle-income countries. In sub-Saharan Africa, 25 countries gained estimates between 2017 and 2022, including four countries with 2022 populations greater than 50 million (Democratic Republic of the Congo, Kenya, South Africa and United Republic of Tanzania). As a result, the regional population data coverage increased from 5% in 2017 to 83% in 2023. Central and Southern Asia (and the world) also saw a major jump in population data coverage in 2021, when India produced its first national baseline for safely managed sanitation. By 2023, all SDG regions except for Oceania had data on safely managed sanitation for at least 80% of the regional population. However, many of these estimates rely on single data points from newly developed sources and methods. As data systems mature, coverage estimates may evolve in future progress updates.

4 Hygiene services

INTRODUCTION

The JMP service ladder for hygiene defines three levels of service ranging from 'no facility' to 'basic' which is the global indicator on hygiene for SDG target 6.2 (Figure 68). Households that have a handwashing facility with both soap and water available at home meet the SDG standard for a 'basic' hygiene service. If households have a handwashing facility but lack water and/or soap, it counts as a 'limited' service. If households do not have any facility for washing hands within their dwelling, yard or plot, it counts as 'no facility'.

The basic hygiene indicator is also used for monitoring progress towards SDG target 1.4 on universal access to basic services.

Between 2015 (when the SDG target on hygiene was established) and 2022, the global population increased by 548 million people. Over this same period

SERVICE LEVEL	DEFINITION
BASIC	Availability of a handwashing facility with soap and water at home
LIMITED	Availability of a handwashing facility lacking soap and/or water at home
NO FACILITY	No handwashing facility at home

FIGURE 68 SDG service ladder for hygiene

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

1 billion people gained access to basic hygiene services, and the number of people without dropped from 2.5 billion to 2 billion (Figure 69). Among the 1 billion that gained access, two fifths (415m) lived in rural areas. It was estimated that 629 million gained access in urban areas, but there were insufficient data to generate estimates for basic hygiene in urban areas prior to 2017.[25]

Since 2015, the number of people using limited services fell by 470 million, from 1.8 billion to 1.3 billion, but the number with no facility fell by just 25 million. The 653 million who still had no hygiene facility in 2022 were fairly evenly divided between rural (360 million) and urban (293 million). But since 2015, the rural population with no facility decreased by 49 million while the urban population with no facility increased by 23 million.

Between 2015 and 2022, global coverage of basic hygiene services rose from 67% to 75%, and rural coverage increased from 53% to 65% (Figure 70). Both urban and rural estimates were available for four SDG regions but there were insufficient data to generate baseline estimates for urban and rural areas of Eastern and South-Eastern Asia in 2015, or current estimates for Australia and New Zealand, Europe and Northern America, Latin America and the Caribbean, or Northern Africa and Western Asia in 2022.

By 2022, coverage of basic hygiene services was higher in urban than rural settings in all regions (Figure 70). Oceania had the largest gap in coverage between urban areas (71%) and rural areas (30%). In sub-Saharan Africa, urban coverage decreased from 36% in 2015 to 32% in 2022. Rural coverage increased in all regions with data available, with Central and Southern Asia achieving the biggest increase, from 52% in 2015 to 70% in 2022. Since 2015, 250 million people in rural areas gained access to basic hygiene services.

[25] Regional and global estimates for basic hygiene are only made when data are available for at least 50% of the regional or global population.

Since 2015, 1 billion people have gained basic hygiene services, nearly half live in rural areas

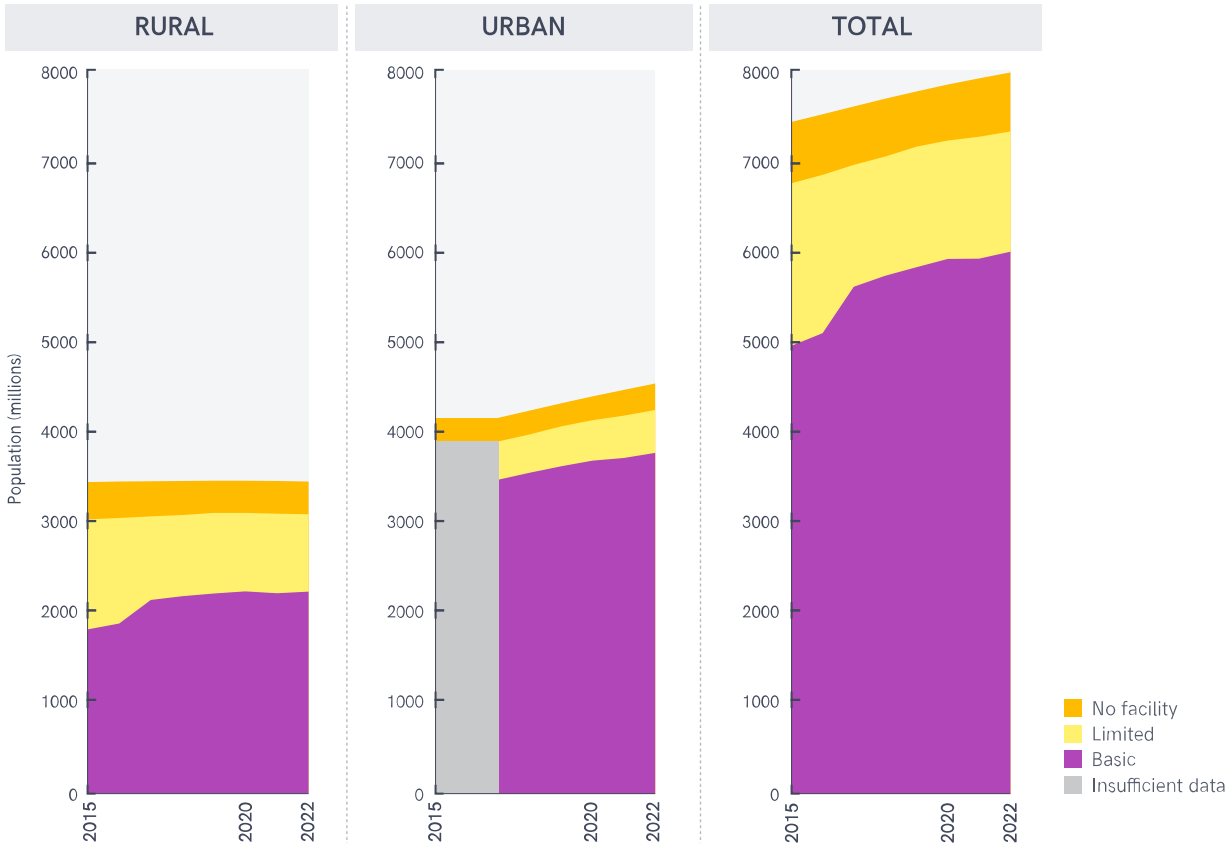


FIGURE 69 Rural, urban and total populations, by hygiene service level, 2015-2022 (millions)

Rural and urban coverage of basic hygiene services has increased in most SDG regions, but in sub-Saharan Africa, urban coverage has declined

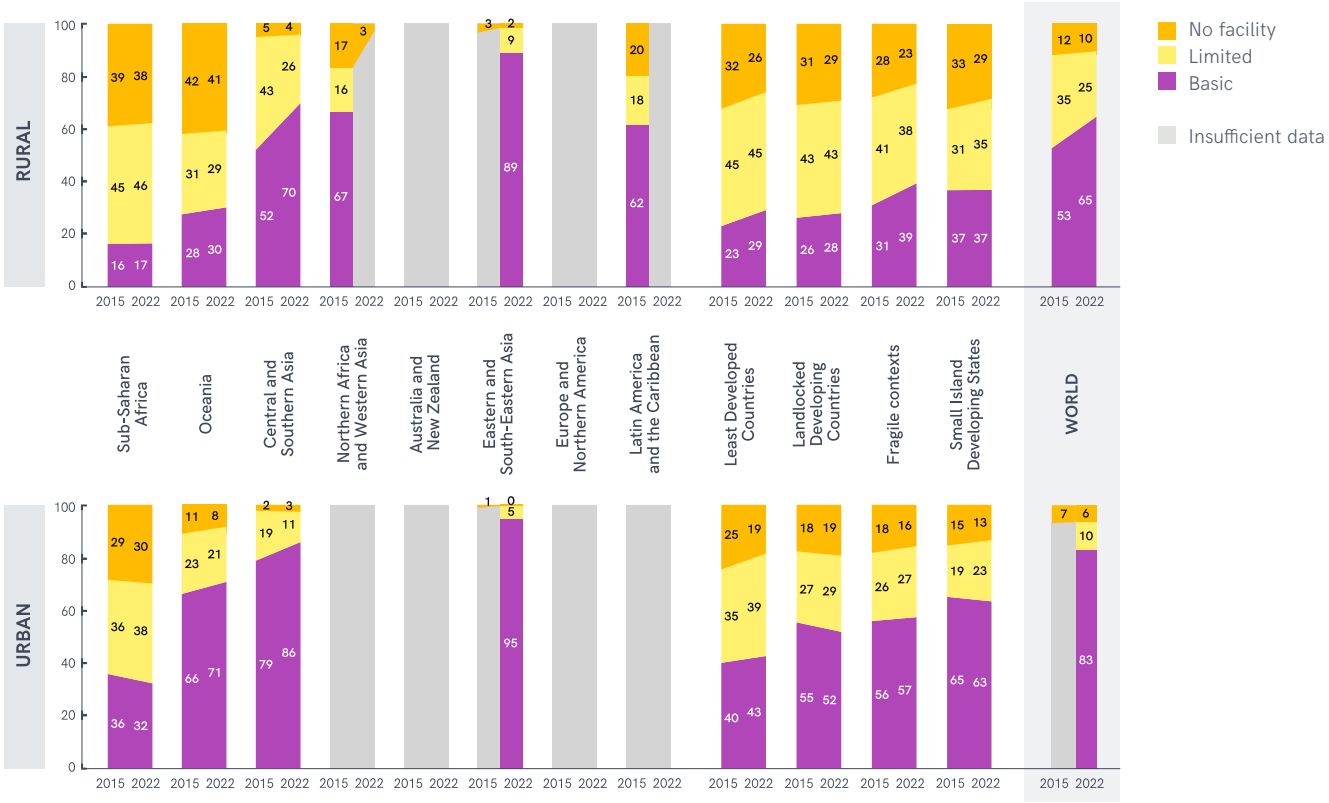


FIGURE 70 Regional hygiene coverage in rural and urban areas, 2015–2022 (%)

BOX 5

WHO Guidelines on Hand Hygiene in Community Settings

Hand hygiene is critical to reducing transmission of infectious diseases and is foundational to a resilient health system. Despite being such an important preventative health measure, it suffers from chronic under-prioritization and insufficient investment by governments and external support agencies. The lack of consistent, evidence-based global recommendations may be constraining efforts to ensure effective hand hygiene across community settings. In response to heightened demand for guidance on this topic during the COVID-19 pandemic, WHO is developing new global Guidelines on Hand Hygiene in Community Settings in partnership with UNICEF.

The Guidelines will be published in 2024, and will provide evidence-based recommendations on:

- global standards on minimum requirements for practising effective hand hygiene in community settings;
- effective behaviour change approaches to sustaining effective hand hygiene practices in community settings; and
- a framework for government-led implementation of global standards and sustained behaviour adoption.

WHO recommendations are informed by systematic evidence reviews and developed through a consensus-based process by a vetted group of external experts, end-users and representatives of beneficiaries.

GENDER AND HYGIENE

Hand hygiene is a top priority for improving global health. However, in 2022, 2 billion people worldwide still lacked access to a handwashing facility with soap available at home. The JMP 2023 progress update highlights inequalities in service levels between and within countries. But the burden of inadequate hygiene also varies widely across population subgroups.

It is widely recognized that inequalities in hygiene services impact women and men in different ways. This is partly due to differences in the specific needs of females and males, but also due to differences in gender norms, roles and responsibilities related to hygiene. Inadequate hand hygiene is likely to disproportionately impact women and girls because they remain primarily responsible for child care and domestic chores in many countries around the world. Access to handwashing facilities is also important for maintaining personal hygiene, and women and girls, and other persons who menstruate, have specific additional hygiene needs related to menstrual health (Section 5).

National data on hand hygiene are typically collected at household rather than individual level, but some indicators take account of gender inequalities and can therefore be considered gender-sensitive. In a small number of cases, national data can be disaggregated by sex or gender and are therefore considered gender-specific, but further work is required to develop indicators that address the specific hygiene needs of women and girls.

In 2022, 84 countries had estimates for basic hygiene services (access to handwashing facilities with soap and water available at home). Among these were 25 countries where more than one in four people had no handwashing facility at all. The most extreme cases in 2022 were ten countries where more than half the population still had no handwashing facility at home (Figure 71). Over two thirds of the population had no facility in Guinea-Bissau (66%), Liberia (73%), Sierra Leone (70%) and Togo (75%). The burden associated with not having handwashing facilities is likely to disproportionately impact women and girls in these countries.

People were much more likely to report washing their hands at key times than to consistently practise proper hand hygiene. However, it is time consuming and difficult to objectively measure handwashing practices.

In ten countries, more than half the population still had no handwashing facility in 2022

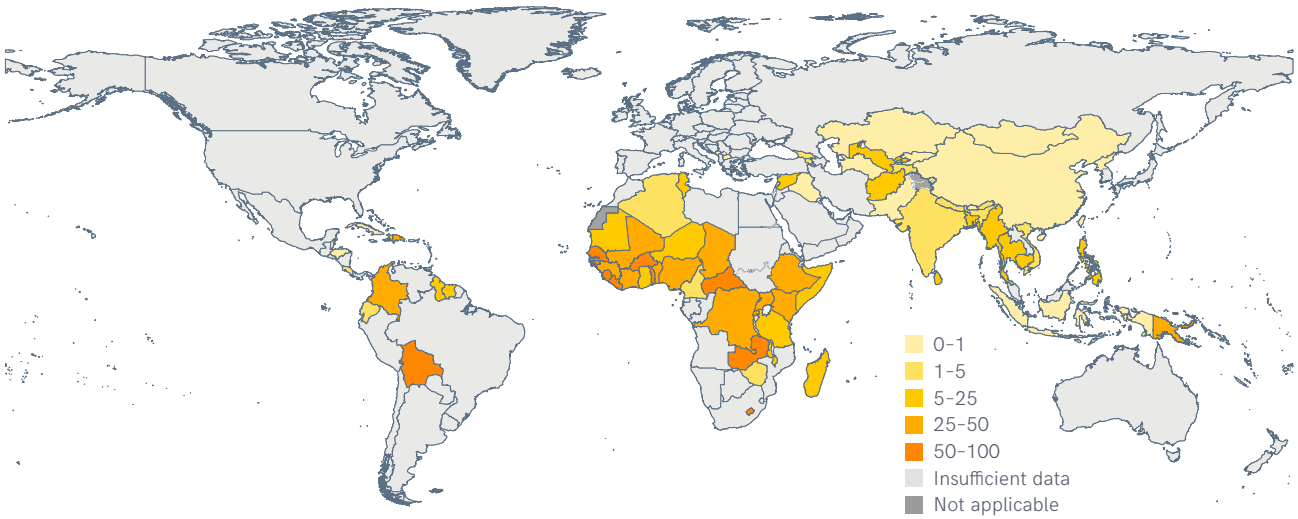


FIGURE 71 Proportion of population with no handwashing facility at home, by country, 2022 (%)

Studies in high-income countries find that women are more likely than men to wash their hands

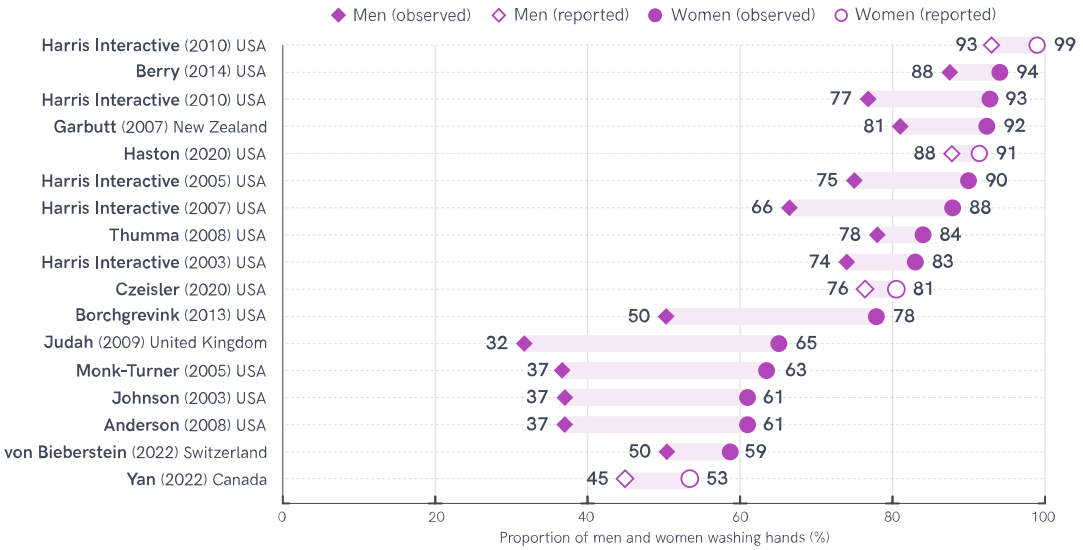


FIGURE 72 Proportion of women and men observed or reporting washing their hands with soap and water, selected studies, 2003–2022 (%)

A small number of studies in high-income countries have either asked people about their reported handwashing practices, or observed actual handwashing behaviour in public settings, such as bathrooms in universities, transport hubs or museums.[26] These studies are often small-scale, not nationally representative and not fully comparable due to methodological differences. However, they consistently show that, while people do not always wash their hands after using public bathrooms, women are more likely to do so than men (Figure 72). In one study of motorway rest stop bathrooms in United Kingdom, women were more than twice as likely as men to be observed washing their hands with soap and water after using the toilet. However, in most other studies, gender gaps were smaller, at around 10–25 % pts. Women were also more likely to self-report handwashing than men, but this gap was smaller. In 2010, a Harris Interactive study found that 99% of women and 93% of men in the United States of America reported 'always' washing their hands after using public toilets, but structured observation in four major cities showed that only 93% of women and 77% of men actually did so. A similar study in shopping malls in New Zealand found that males (81%) not only washed their hands less frequently than females (92%), but also washed their hands for a shorter period of time and were less likely to use soap (66% vs. 77%).

Further work is required to understand sex and gender-related differences in personal hygiene needs and to find ways to measure inequalities in access to the knowledge, resources and social support needed to satisfy them.

[26] Anderson JL, Warren CA, Perez E, Louis RI, Phillips S, Wheeler J, et al. Gender and ethnic differences in hand hygiene practices among college students. Am J Infect Control. 2008;36(5):361-8.
Berry TD, Mitteer DR, Fournier AK. Examining hand-washing rates and durations in public restrooms: a study of gender differences via personal, environmental, and behavioral determinants. Environ Behav. 2015;47(8):923-44.
Borchgrevink CP, Cha J, Kim S. Hand washing practices in a college town environment. J Environ Health. 2013;75(8):18-25.
Czeisler MÉ, Garcia-Williams AG, Molinari N-A, Gharpure R, Li Y, Barrett CE, et al. Demographic characteristics, experiences, and beliefs associated with hand hygiene among adults during the COVID-19 pandemic — United States, June 24–30, 2020. Morb Mortal Weekly Rep. 2020;69(41):1485.
Garbutt C, Simmons G, Patrick D, Miller T. The public hand hygiene practices of New Zealanders: a national survey. The New Zealand Medical Journal (Online). 2007;120(1265).
Harris Interactive. A survey of hand washing behavior (trended): Prepared for the American Microbiology Society and the American Cleaning Institute. 2010. <https://www.cleaninginstitute.org/sites/default/files/assets/1/AssetManager/2010%20Hand%20Washing%20Findings.pdf>.
Haston JC, Miller GF, Berendes D, Andújar A, Marshall B, Cope J, et al. Characteristics associated with adults remembering to wash hands in multiple situations before and during the COVID-19 pandemic — United States, October 2019 and June 2020. Morb Mortal Weekly Rep. 2020;69(40):1443.
Johnson HD, Sholcosky D, Gabello K, Ragni R, Ogonosky N. Sex differences in public restroom handwashing behavior associated with visual behavior prompts. Percept Mot Skills. 2003;97(3):805-10.
Judah G, Aunger R, Schmidt W-P, Michie S, Granger S, Curtis V. Experimental pretesting of hand-washing interventions in a natural setting. Am J Public Health. 2009;99(S2):S405-S11.
Monk-Turner E, Edwards D, Broadstone J, Hummel R, Lewis S, Wilson D. Another look at hand-washing behavior. Social Behavior and Personality: an international journal. 2005;33(7):629-34.
Thumma J, Aiello AE, Foxman B. The association between handwashing practices and illness symptoms among college students living in a university dormitory. Am J Infect Control. 2009;37(1):70-2.
von Bieberstein F, Kulle A-C, Schumacher S. Large gender and age differences in hand disinfection behavior during the COVID-19 pandemic: Field data from Swiss retail stores. arXiv preprint arXiv:221009094. 2022.
Yan AP, Howden K, Mahar AL, Glidden C, Garland SN, Oberoi S. Gender differences in adherence to COVID-19 preventative measures and preferred sources of COVID-19 information among adolescents and young adults with cancer. Cancer Epidemiol. 2022;77:102098.

BASIC HYGIENE SERVICES

Between 2015 and 2022, global coverage of basic hygiene services increased by 8 % pts (from 67% to 75%). If current rates of progess continue, the world will reach 85% coverage by 2030, leaving around 1.3 billion people without basic hygiene services (Figure 73). Achieving universal coverage by 2030 will require a threefold increase in current rates of progress (12-fold in least developed countries and eightfold in fragile contexts). However, current estimates of regional and global trends should be used cautiously until more data become available. Only three regions had sufficient data to estimate trends between 2015 and 2022. Central and Southern Asia increased coverage at 2.07 % pts/yr and is on track to achieve 93% coverage by 2030. By contrast, Oceania progressed more slowly at 0.45 % pts/yr and coverage in sub-Saharan Africa decreased by 0.09 % pts/yr.

Figure 74 shows current coverage and annual rates of change in basic hygiene for 74 countries with sufficient data to estimate trends between 2015 and 2022. At current rates of progress, 11 countries are on track to achieve universal coverage by 2030, including five countries that had already reached >99% by 2022. However, 56 countries are progressing too slowly and in seven countries, coverage is decreasing. Vanuatu increased coverage at 4.41 % pts/yr, rising from 45% in 2015 to 76% in 2022, and is therefore on track to reach universal coverage by 2030. Pakistan (2.92 % pts/yr) and Bangladesh

Only three SDG regions have sufficient data to estimate trends and none are on track to achieve universal coverage of basic hygiene services by 2030

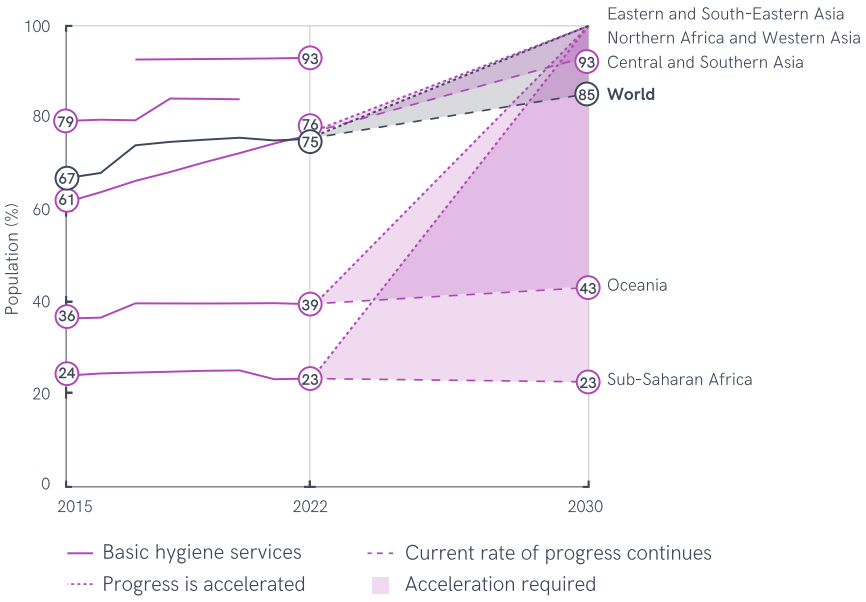


FIGURE 73 Progress on basic hygiene services, 2015–2022 (%), and acceleration required to reach universal coverage (>99%) by 2030, by SDG region

Note: Insufficient data to estimate progress and acceleration required for Eastern and South-Eastern Asia, and Northern Africa and Western Asia.

Only one in seven countries are on track to achieve universal access to basic hygiene by 2030

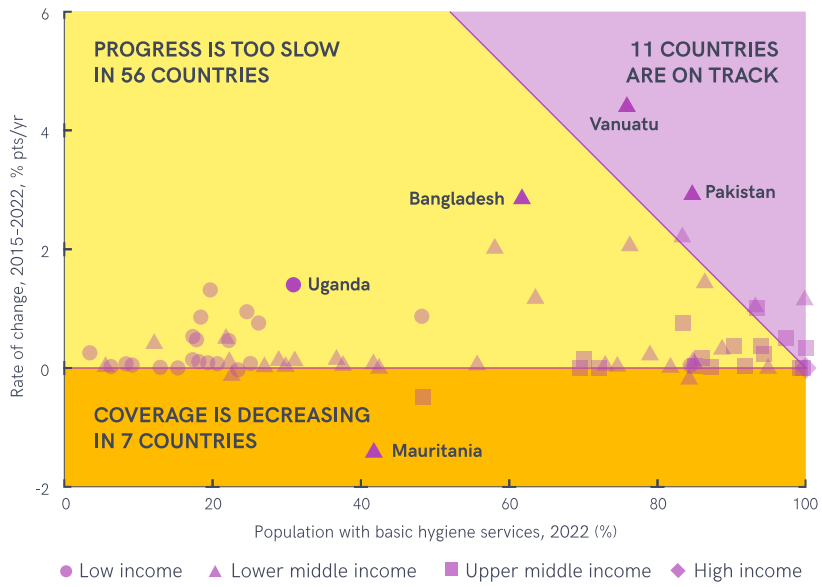


FIGURE 74 Progress on basic hygiene services among countries with data on trends between 2015–2022, by income group

Note: 74 countries have estimates for annual rates of change 2015-2022, including 5 countries with >99% coverage in 2022.

Since 2015, 18 countries have increased coverage of basic hygiene services by at least 5 % pts

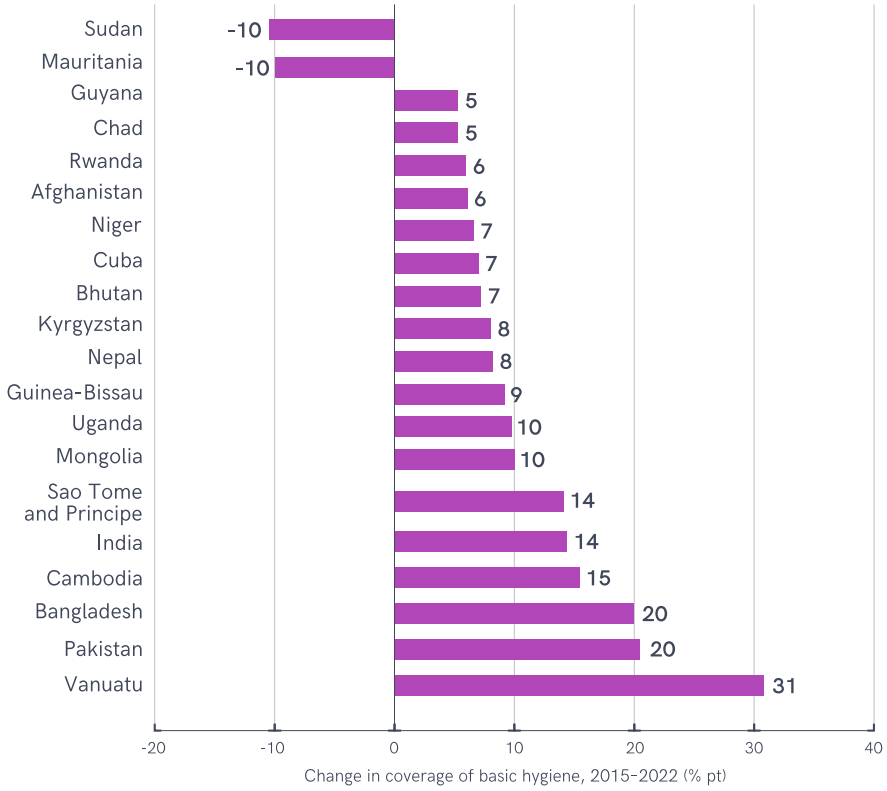


FIGURE 75 Change in proportion of population with basic hygiene services, among countries with at least a 5 % pts change, 2015–2022 (% pts)

(2.85 % pts/yr) had similarly high annual rates of change, but by 2022, Bangladesh had only reached 62% coverage, compared to 85% in Pakistan. Uganda recorded the fastest increase among low-income countries (1.41 % pts/yr), rising from 11% to 21%, but still has a long way to go to achieve universal coverage.

Figure 75 shows countries recording the largest changes in coverage of basic hygiene between 2015 and 2022. Of these, 18 countries increased coverage by at least 5 % pts and seven countries increased coverage by at least 10 % pts. Vanuatu achieved the biggest increase in coverage (31 % pts) but Pakistan, Bangladesh, Cambodia, India, Sao Tome and Principe and Mongolia also increased coverage by more than 2 % pts/yr. By contrast, Mauritania and Sudan were the only countries where coverage decreased by over 5 % pts, falling from 52% to 42% and from 21% to 11%, respectively, since the start of the SDG period.

In 2022, 84 countries had total estimates for basic hygiene services, 82 countries had urban estimates and 80 countries had rural estimates. Figure 76 shows that urban coverage was higher in 71 out of 80 countries with disaggregated estimates available. The exceptions were Bhutan, Guyana, Kyrgyzstan, Montenegro, North Macedonia, State of Palestine and Tuvalu. Four countries had already achieved >99% in urban areas, compared with five countries in rural areas. In 2022, only two SDG regions had countries with <50% coverage in urban areas, but four regions had countries with <50% coverage in rural areas.

In 2022, urban coverage of basic hygiene was higher in 71 out of 80 countries with comparable data

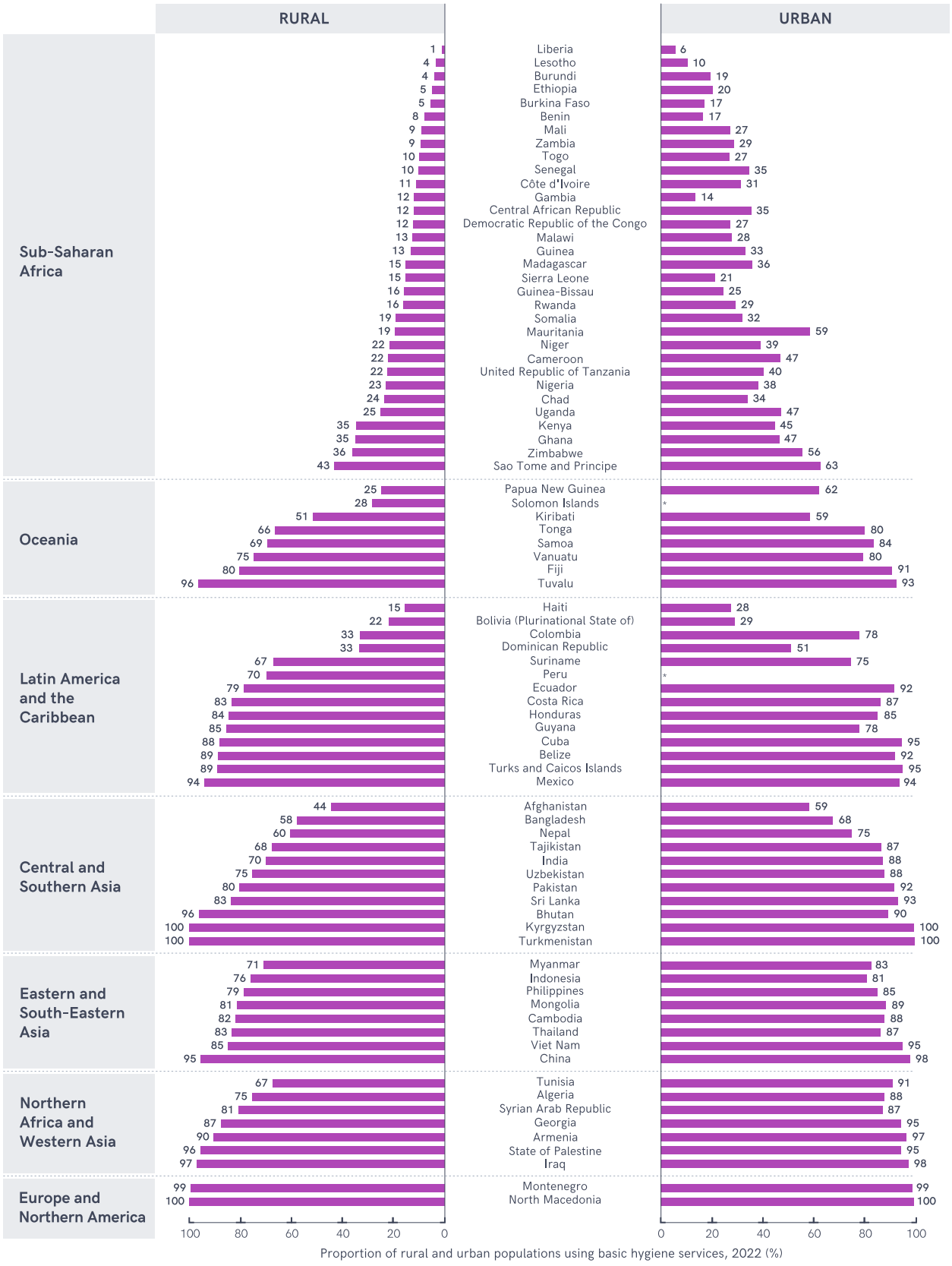


FIGURE 76 Proportion of urban and rural populations with basic hygiene services, 2022 (%)

* No estimate available in 2022

Data disaggregated by wealth quintile highlight large disparities between the richest and poorest (Figure 77). Among 78 countries with disaggregated hygiene data available from recent household surveys, 48 had a coverage gap between the richest and poorest of more than 20 % pts, 19 had a gap of more than 40 % pts and six had a gap exceeding 60 % pts. For example, in Angola there was a 48 % pts gap in coverage between the richest (57%) and the poorest (9%), compared with a gap of just 12 % pts in Iraq (>99% vs 88%).

In 48 countries the richest-poorest coverage gap for basic hygiene exceeds 20 % pts

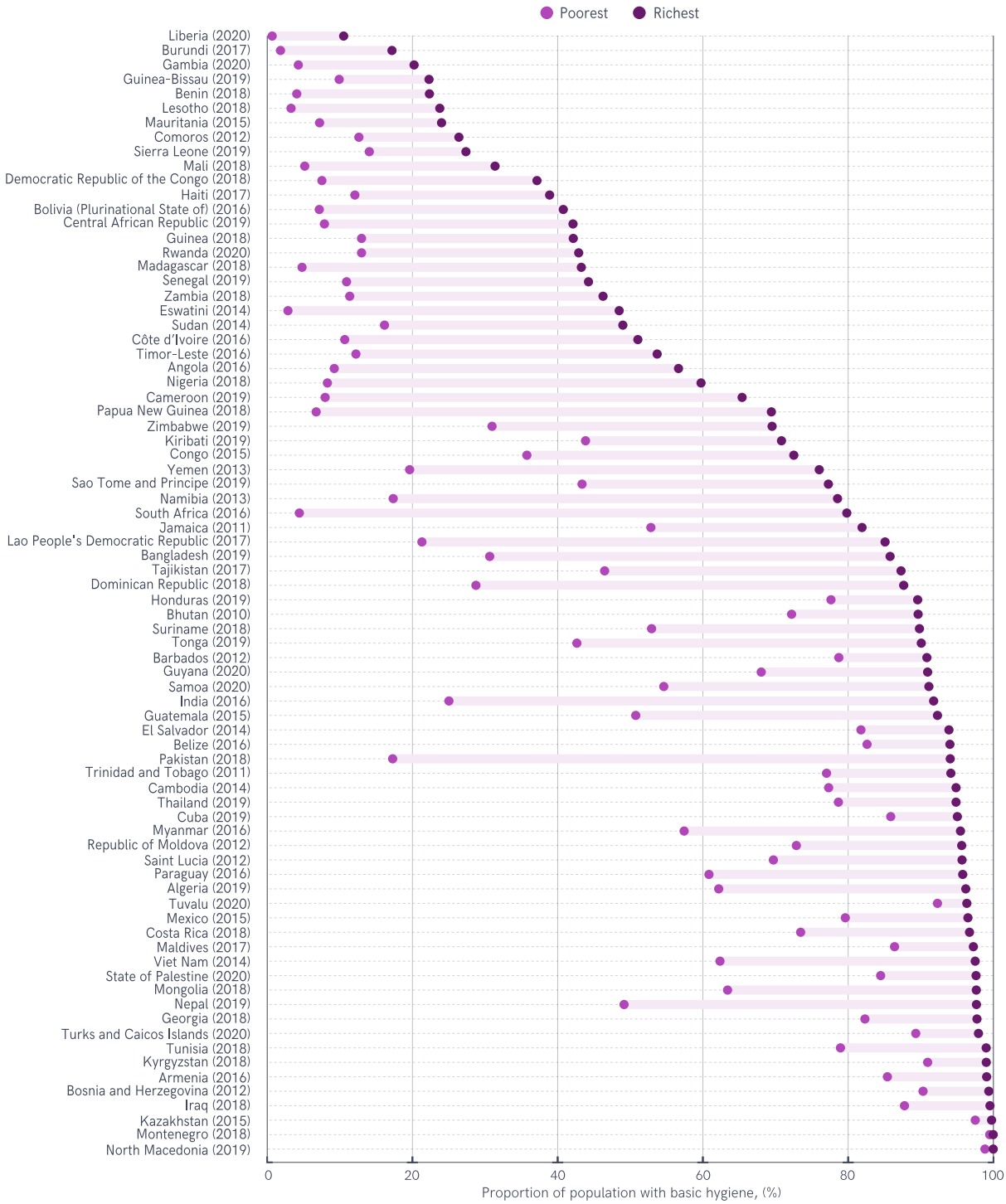


FIGURE 77 Proportion of richest and poorest wealth quintiles with basic hygiene services, selected surveys, 2010-2020 (%)

In many countries there were also significant differences in basic hygiene coverage between subnational regions. Among 75 countries with recent survey data disaggregated by subnational region, the gap in coverage between the highest and lowest subnational regions varied widely (Figure 78). Surveys that disagreggate into larger numbers of subnational regions can highlight large gaps, such as, in Lao People's Democratic Republic (18 regions, from 87% to 17%) and Cambodia (19 regions, 98% to 30%). Differences were smaller in neighbouring countries with fewer subnational regions such as Viet Nam (six regions, 91% to 75%) and Thailand (five regions, 90% to 84%).

In some countries, basic hygiene coverage varies widely between subnational regions

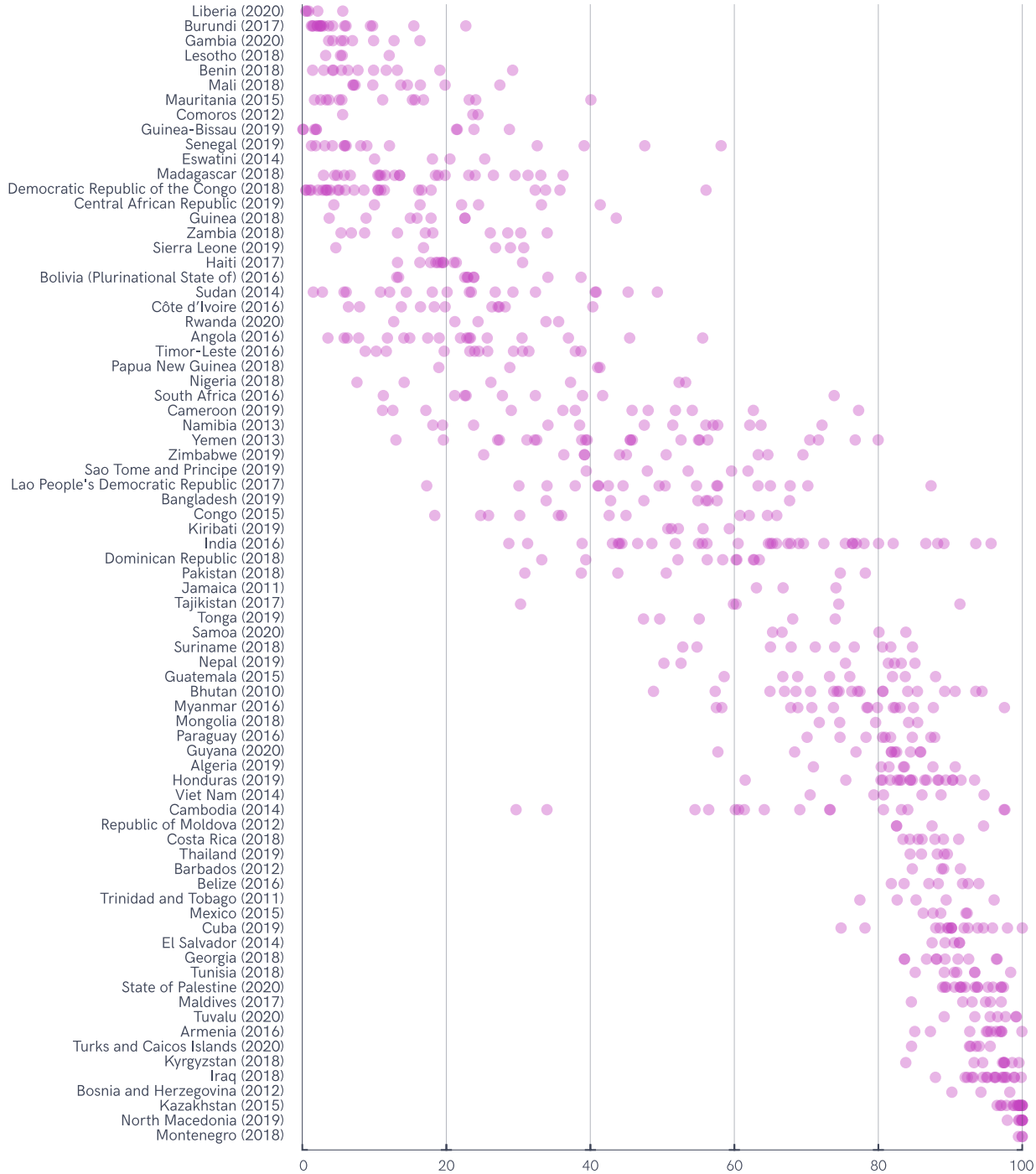


FIGURE 78 Proportion of population with basic hygiene services, by subnational region and country, 2010–2020 (%)

Between 2015 and 2022, the number of people lacking basic hygiene services decreased from 2.5 billion to 2 billion (Figure 79). Nearly half (895 million) lived in sub-Saharan Africa and a quarter (502 million) lived in Central and Southern Asia. Three out of five (1.2 billion) lived in rural areas and there were more people without basic drinking water in rural areas than in urban areas in all SDG regions. In urban areas, sub-Saharan Africa (338 million) had three times as many people without basic hygiene as Central and Southern Asia (112 million), and five times as many people as Eastern and South-Eastern Asia (73 million). In 2022, 653 million people worldwide still had no hygiene facility, half of them lived in rural areas and three out of five lived in sub-Saharan Africa.

In 2022, nearly half of the 2 billion people without basic hygiene lived in sub-Saharan Africa

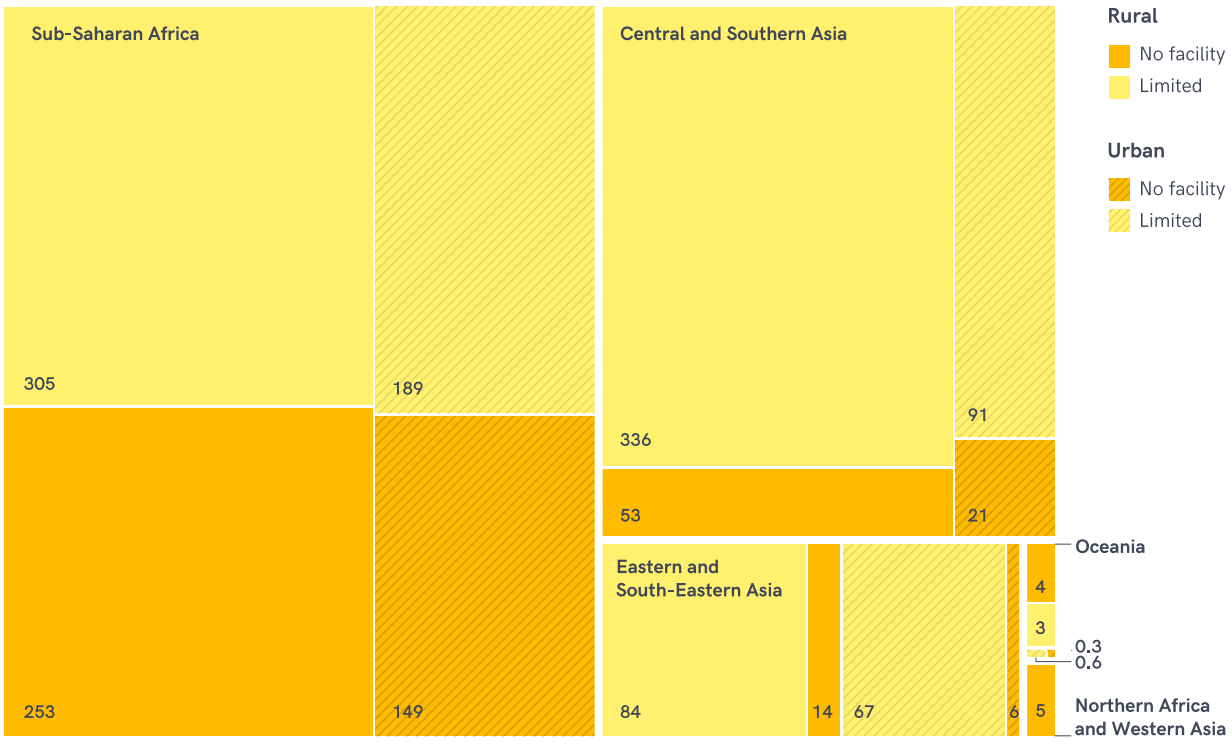


FIGURE 79 Rural and urban populations lacking basic hygiene services in 2022, by SDG region (millions)

BOX 6

Personal hygiene and bathing

A growing number of countries monitor the availability of bathing facilities but national indicator definitions vary, making cross-country comparison difficult (Figure 80). Many countries simply monitor the presence of 'bathing facilities' (China, Finland) or 'bath or shower' (Latvia, Mayotte, Reunion, Spain). Others focus on the presence of (at least one) 'bathroom' (Bermuda, Cayman Islands, Costa Rica, Hungary) and sometimes also specify a shower or WC (Brazil). Some countries distinguish facilities that are inside the dwelling (Denmark, Greece, Republic of Moldova, New Caledonia, Tokelau), while others monitor whether they are for exclusive use of household members (Georgia, Ghana, India) or shared (Bonaire, Sint Eustatius and Saba). Existing data suggest that the availability of a bath or shower within a dwelling, yard or plot varies across countries and could be a useful additional indicator of hygiene inequalities. Access to bathing facilities has also been identified as an important dimension of gender-related inequalities in the ability of women and girls to meet their hygiene needs.

Definitions and indicators vary for availability of bathing facilities at home

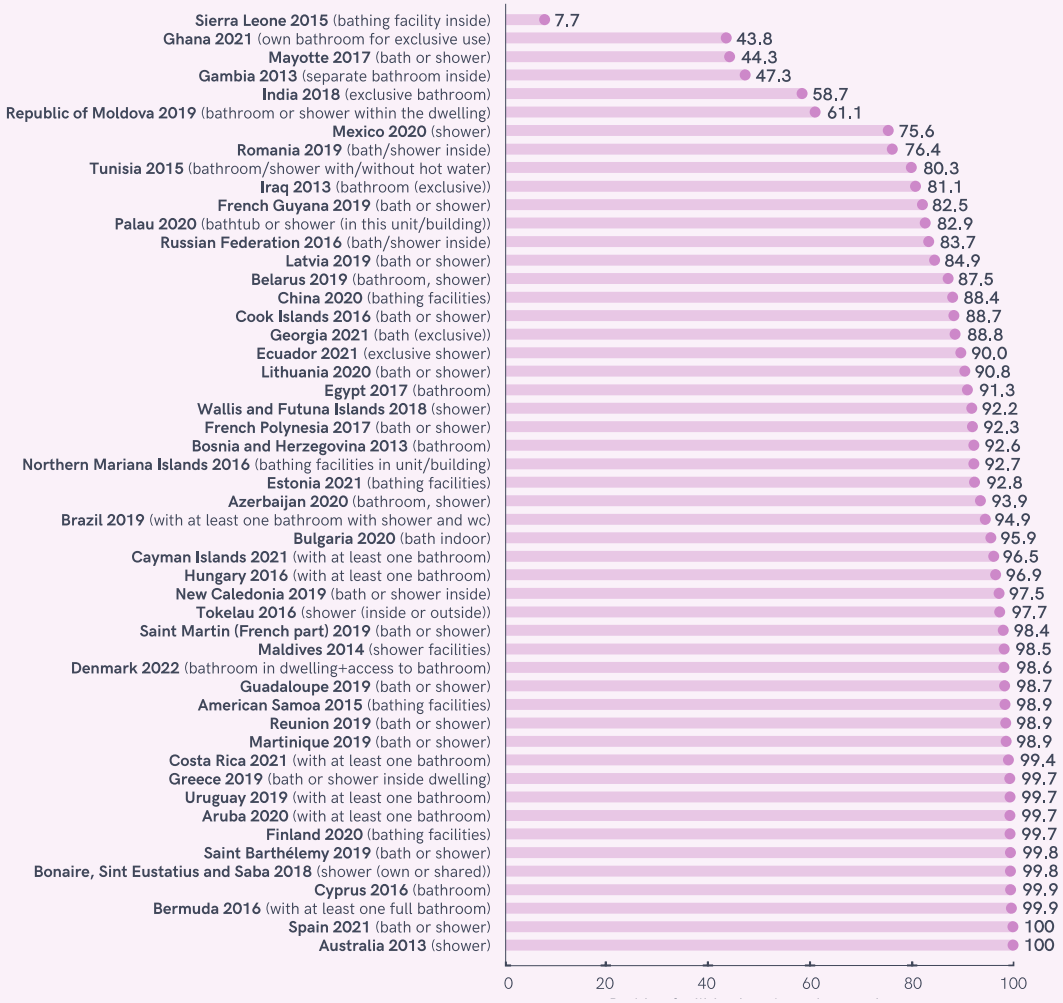


FIGURE 80 Proportion of population with bathing facilities available at home, selected surveys 2013-2021 (%)

DATA COVERAGE AND PROGRESSION

Between 2017 and 2023, 30 countries gained estimates for basic hygiene, but 16 countries lost estimates due to ageing data. The establishment of baseline estimates for India in 2019, and for China in 2023, had large impacts on regional as well as global estimates (Figure 81). Regional data coverage also jumped in 2021 in Oceania, with the first baseline for Papua New Guinea, the largest country in the region. However, regional data coverage declined in Northern Africa and Western Asia with the loss of estimates for Azerbaijan in 2021, and for both Egypt and Oman in 2023.

By 2023, data coverage was over 80% for four of the SDG regions. Within Europe and Northern America, only Montenegro and North Macedonia, representing 2% of the regional population, had data on basic hygiene services. No estimates were available in Australia and New Zealand.

Data coverage for basic hygiene has increased in some SDG regions and decreased in others

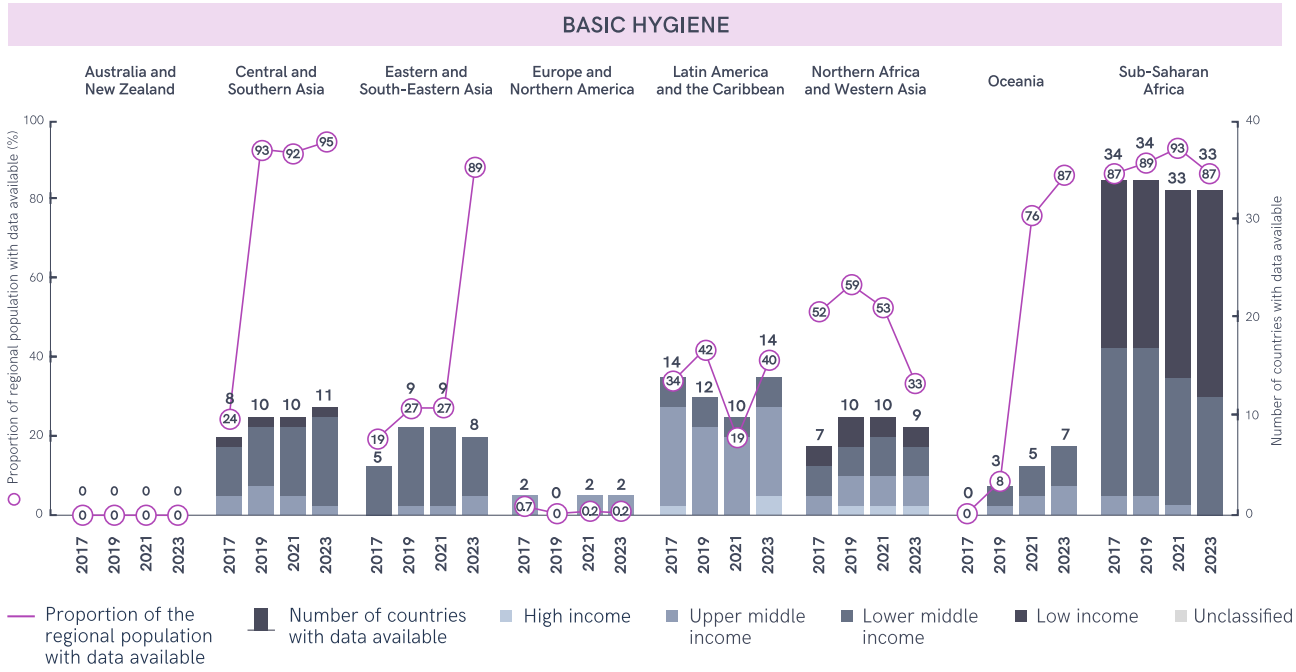


FIGURE 81 Proportion of population (%) and number of countries with estimates available for basic hygiene in JMP progress updates, 2017–2023

5 Menstrual health

INTRODUCTION

A large proportion of the global population experience menstruation and, since the start of the SDG period, there has been a concerted effort to develop definitions and indicators for monitoring menstrual health. Menstrual health is linked to SDG target 6.2 which aims to achieve 'access to adequate sanitation and hygiene for all… paying special attention to the needs of women and girls', and there has been an increased focus on menstrual health and hygiene within national WASH policies and programmes. The JMP has expanded its global databases to incorporate emerging national data on menstrual health and this is the second JMP progress update to include it as a dedicated section.

The JMP does not currently use a menstrual health service ladder because norms and standards for monitoring menstrual health are still evolving. However, a growing number of national household surveys include new questions on menstrual health in questionnaires for adolescent girls and women age 15-49. These are typically administered by female enumerators and questions on menstrual health are only asked of those who have menstruated in the last year.

For the purposes of global monitoring, harmonized data are now available for four main indicators:

- **awareness** of menstruation before menarche;
- **use of menstrual materials** to capture and contain blood, such as sanitary pads, cloth, tampons or cups;
- access to a **private place to wash and change** while at home; and
- **participation** in activities during menstruation, such as school, work and social activities.

Menstrual health indicators are sex-specific and highly gender-relevant, and therefore provide a useful measure of gender-related inequalities in WASH. They address both the specific sanitation and hygiene-related needs of women and girls, and other persons who menstruate, and also wider gender norms, taboos and stigma that surround menstruation in many parts of the world.

Existing menstrual health data typically refer to adolescent girls and women age 15-49. Globally, this age group comprised nearly 2 billion females in 2022. As these indicators are collected through household surveys, they can also be disaggregated by geographic, socio-economic and individual characteristics to better understand inequalities in menstrual health. However, the experience of many adolescents who start menstruating before the age of 15 is not captured in these data. Furthermore, it is not currently possible to disaggregate information for gender and sexual minorities from existing national datasets on menstrual health. Further work is therefore required to monitor menstrual health among these groups (Box 7).

BOX 7

Not all people who menstruate are women; not all women menstruate

While much of the literature about menstruation refers to 'women and girls', it is considered more inclusive to refer to 'people who menstruate', or 'women, adolescent girls and people who menstruate'.[27] Some women do not have periods due to menopause, stress or having had a hysterectomy. Likewise, people who are not cisgender women (for example, transgender men, intersex and non-binary) can menstruate. Some gender-diverse people experience feelings of gender dysphoria, which can be exacerbated by menstruation and by some aspects of menstrual hygiene management, such as the use of tampons or menstrual cups.

Menstrual products are often branded and designed with traditionally feminine imagery, such as pink colours and flowers, which may be unattractive or offensive to gender-diverse people who menstruate. Tampons and pads are increasingly available (either for free, or through vending machines) in women's toilets in public areas, and women's toilets also frequently have sanitary bags and bins for disposal of used menstrual materials. However, these amenities are not available in men's or many gender-neutral bathrooms.

[27] Babbar K, Martin J, Varanasi P, Avendaño I. Inclusion means everyone: standing up for transgender and non-binary individuals who menstruate worldwide. The Lancet Regional Health-Southeast Asia. 2023;13:100177.

Furthermore, transgender and non-binary people who menstruate may feel uncomfortable using 'men's' rooms when menstruating, for fear of being identified as a non-cisgender man, with potentially dangerous consequences.[28]

[28] Barrington DJ, Robinson HJ, Wilson E, Hennegan J. Experiences of menstruation in high income countries: A systematic review, qualitative evidence synthesis and comparison to low-and middle-income countries. PLoS One. 2021;16(7):e0255001.

By 2022, nationally representative data on menstrual health were available for 53 countries, representing seven out of eight SDG regions, of which 44 countries had data for at least three of the four harmonized indicators (Figure 82). Fifty-one countries had data for use of materials, 50 countries had data for a private place to wash and change, and 46 countries had data on participation in activities during menstruation. Only two countries had national data on awareness of menstruation before menarche, Egypt and Bangladesh, the latter of which was the only country with data for all four indicators.

Sub-Saharan Africa had the largest number of countries with data (20), more than Europe and Northern America (three), Northern Africa and Western Asia (five), Oceania (five), and Eastern and South-Eastern Asia (six) combined. Since the 2021 progress update, the total number of countries with data on menstrual health has increased by more than a quarter, from 42 to 53. Most of the growth has been in lower-middle-income countries where the number of countries with data rose from 18 in 2021 to 25 in 2023 (Figure 83). Turks and Caicos Islands was the only high-income country, area or territory with menstrual health data available for this 2023 upate.

National data for menstrual health indicators are available from seven out of eight SDG regions

FIGURE 82 Number of countries with national data on menstrual health indicators, by SDG region

*Awareness data from one country in the region.

The number of countries with menstrual health data available has increased since the JMP 2021 update

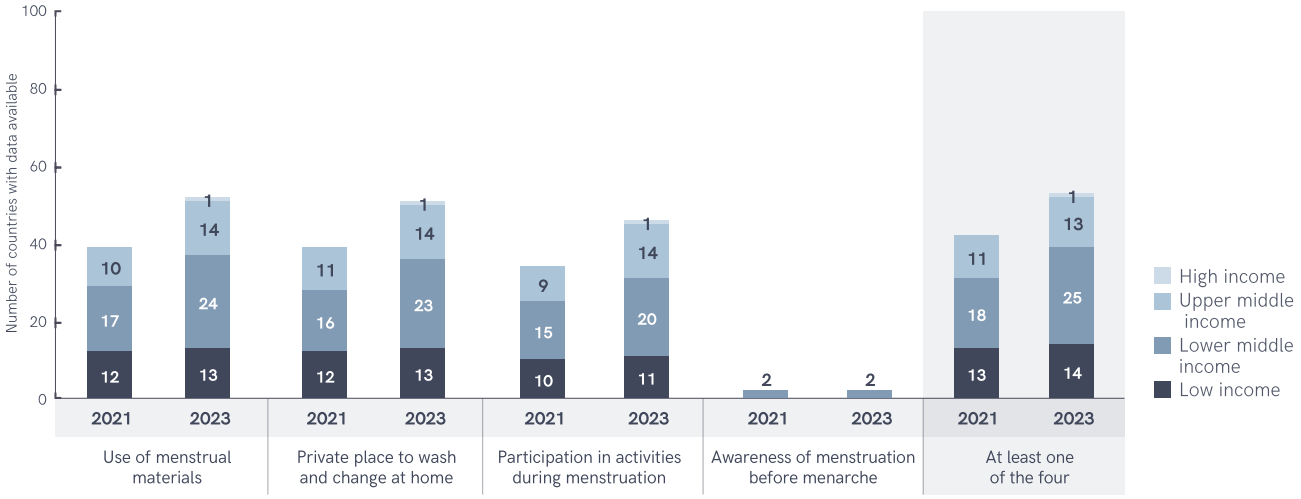


FIGURE 83 Number of countries with data on menstrual health indicators in the 2021 and 2023 JMP progress updates, by income

Very few indicators relating to menstruation can be disaggregated by sex, but Demographic and Health Surveys (DHS) include a common set of questions for adult women and men on knowledge and attitudes to reproductive health. Analysis of disaggregated data from 46 countries shows that in almost all countries, women were more likely than men to correctly identify the fertile period (the middle of the menstrual cycle) (Figure 84). This highlights the importance of involving men and boys in campaigns to promote menstrual health. In 33 countries, fewer than one in five men correctly identified the fertile period, compared with just 15 countries with fewer than one in five women. In Armenia, twice as many women (50%) had correct knowledge than men (25%), and in Liberia, women (12%) were four times as likely to have correct knowledge than men (3%). In Mozambique, men and women were both equally unlikely to correctly identify the fertile period (3%).

Women were more likely than men to correctly identify the fertile period in almost all countries

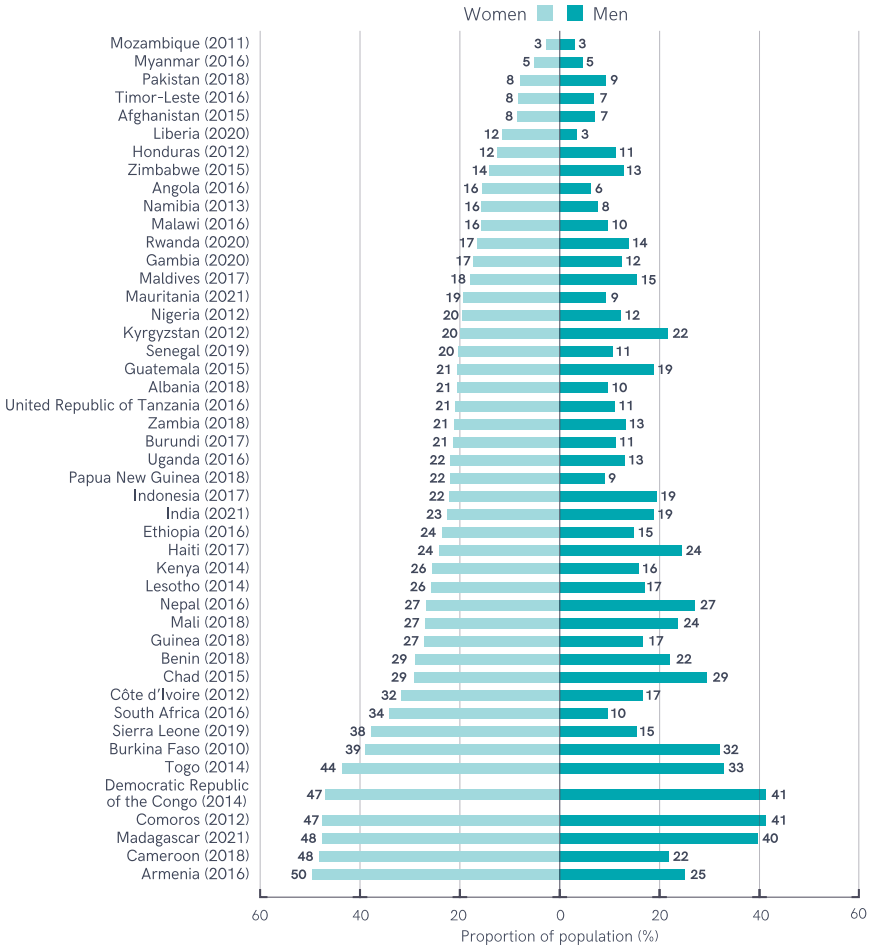


FIGURE 84 Proportion of women and men with correct knowledge of the fertile period, selected Demographic and Health Surveys, 2010–2021 (%)

AWARENESS

Awareness of menstruation before menarche has been identified as a useful indicator of changing gender and social norms related to menstruation, but only a small number of countries have collected this information to date. While Bangladesh and Egypt were the only countries with nationally representative data, subnational surveys were available for Magway region in Myanmar and for Soroti district in Uganda. Disaggregated data enables analysis of awareness among girls age '11 and younger', 12, 13, 14 and '15 and older' at menarche. Figure 85 shows that awareness among the oldest age group in Myanmar (85%) was significantly higher than in Egypt (70%) and Uganda (54%), and more than twice as high as in neighbouring Bangladesh (41%). Uganda had the largest gap (22 % pts) in awareness between girls aged '15 and older' and girls aged '11 and younger' at menarche, but there were also large gaps in Bangladesh (16 % pts) and Egypt (13 % pts).

The same survey in Egypt included a follow up question: 'The first time you got your menstrual cycle, what was your reaction?'. Those who were not aware of menstruation prior to having their first period were nearly twice as likely to experience shock, upset and fear as those who were already aware of menstruation at menarche (74% vs. 40%). Thirty-seven percent of girls who were already aware were either happy or indifferent, compared with just 7% of those who were unaware (Figure 86).

Awareness of menstruation before menarche varies by country and also by age at menarche

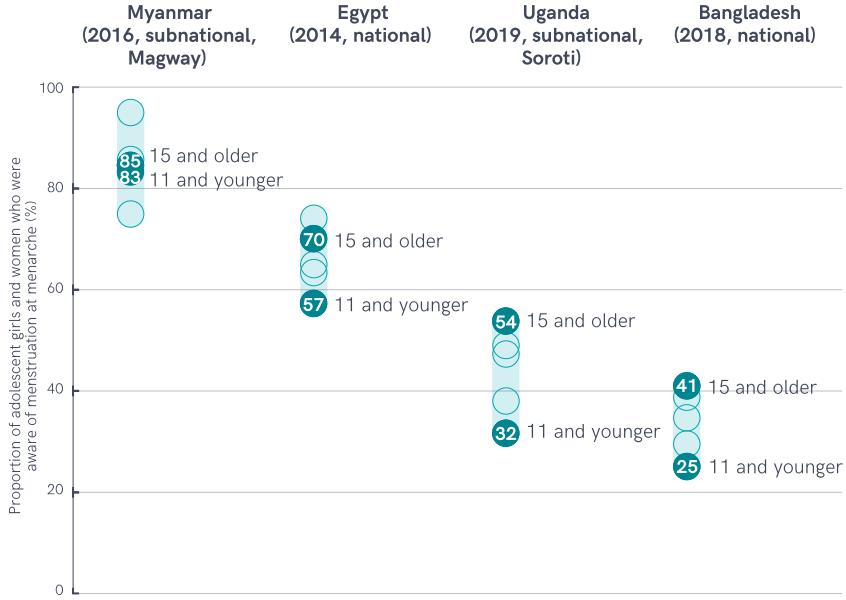


FIGURE 85 Proportion of adolescent girls and women who knew about menstruation before menarche, by age at menarche, selected surveys, 2014–2019 (%)

Note: Subnational surveys focused on schoolgirls.

In Egypt, adolescent girls who were unaware of menstruation at menarche were nearly twice as likely to experience shock, upset and fear

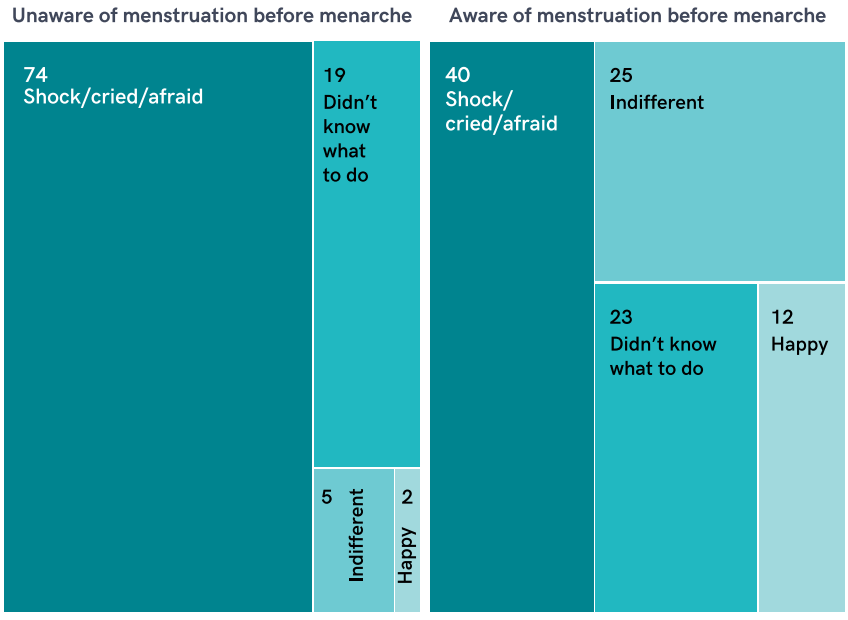


FIGURE 86 Proportion of adolescent girls and women in Egypt, by awareness and experience at menarche, 2014 (%)

MATERIALS

Various types of materials may be used to capture and contain menstrual blood, including single use and reusable materials. For the purposes of global monitoring, adolescent girls and women who used materials such as sanitary pads, tampons, menstrual cups, cloth or cotton wool during their last period are counted as 'using menstrual materials'. Those who only used toilet paper, underwear alone or nothing, are counted as 'not using menstrual materials'. Those reporting that they used reusable materials during their last period are counted as 'using reusable materials'.

The total proportion using menstrual materials was high in most of the 51 countries with data, but further disaggregation reveals differences between population subgroups (Figure 87). The differences between rural and urban areas, between adolescent girls age 15–19 and women age 20–49, and between those with and without functional difficulties, were mostly small. However, in some countries, usage was lower among adolescent girls and women in the poorest quintile. The gap in usage between richest and poorest exceeded 5 % pts in Democratic Republic of the Congo, Madagascar, Nepal, Tuvalu and Lao People's Democratic Republic, where there was a gap of 50 % pts between use of materials among the richest (97%) and the poorest (47%).

Use of menstrual materials is high for all population subgroups

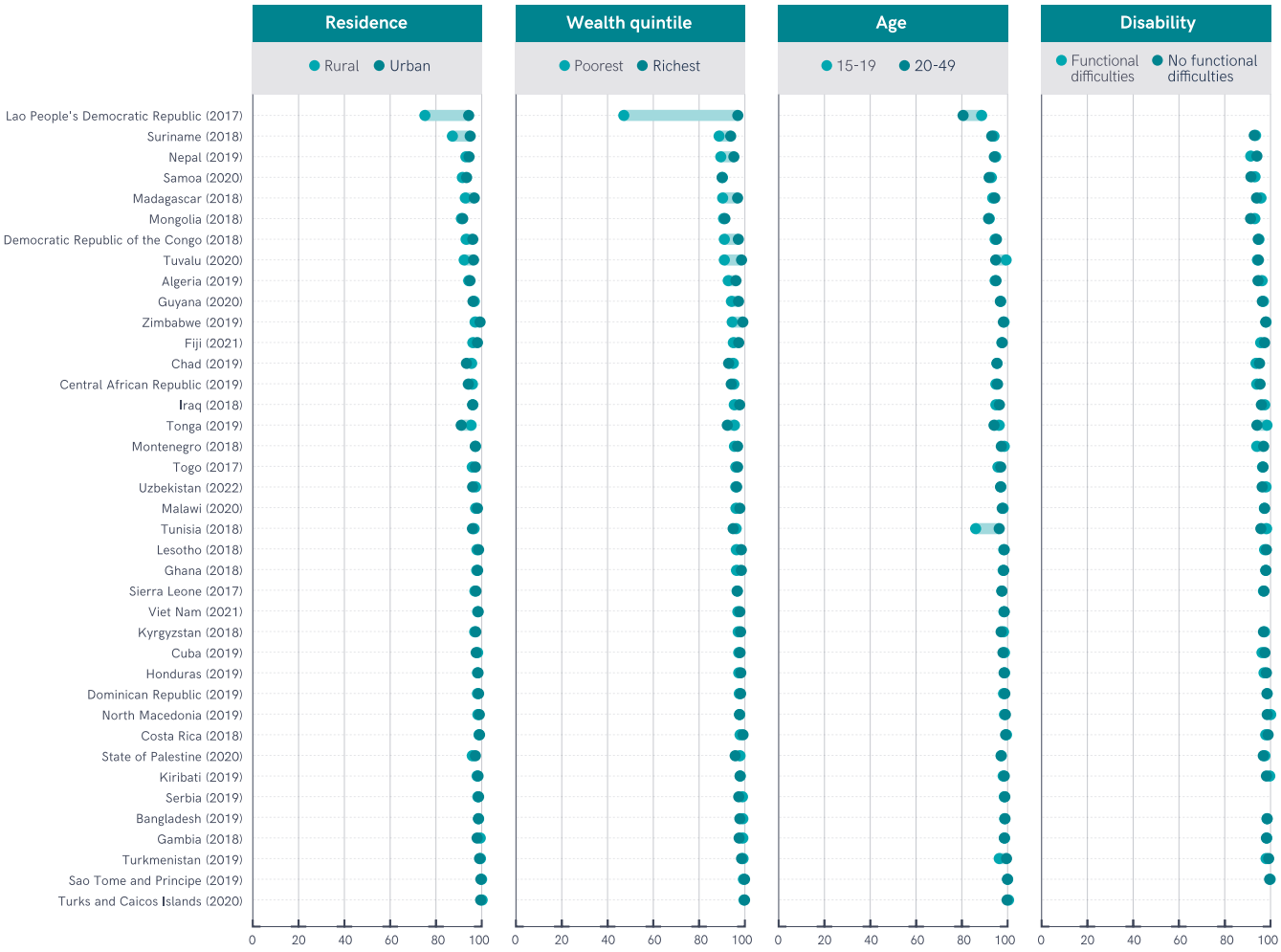


FIGURE 87 Proportion of adolescent girls and women age 15–49 who used menstrual materials during their last period, by residence, wealth, age and disability, selected surveys, 2016–2022 (%)

The types of menstrual materials used are often country context specific. However, a small number of national household surveys collected data on types of menstrual materials which also revealed differences between urban and rural areas (Figure 88). In all five countries with comparable data, sanitary pads were more commonly used in urban areas, and cloth was more commonly used in rural areas. The biggest differences were observed in Madagascar where pads were three times as likely to be used in urban areas, and in India where cloth was nearly twice as likely to be used in rural areas. In rural areas of Zimbabwe, adolescent girls and women were twice as likely to use cotton wool, while in rural areas of Madagascar, they were five times as likely to not use any menstrual materials and to only use underwear.

In five countries with comparable data, adolescent girls and women in urban areas were more likely to use sanitary pads compared to those in rural areas, who were more likely to use cloth

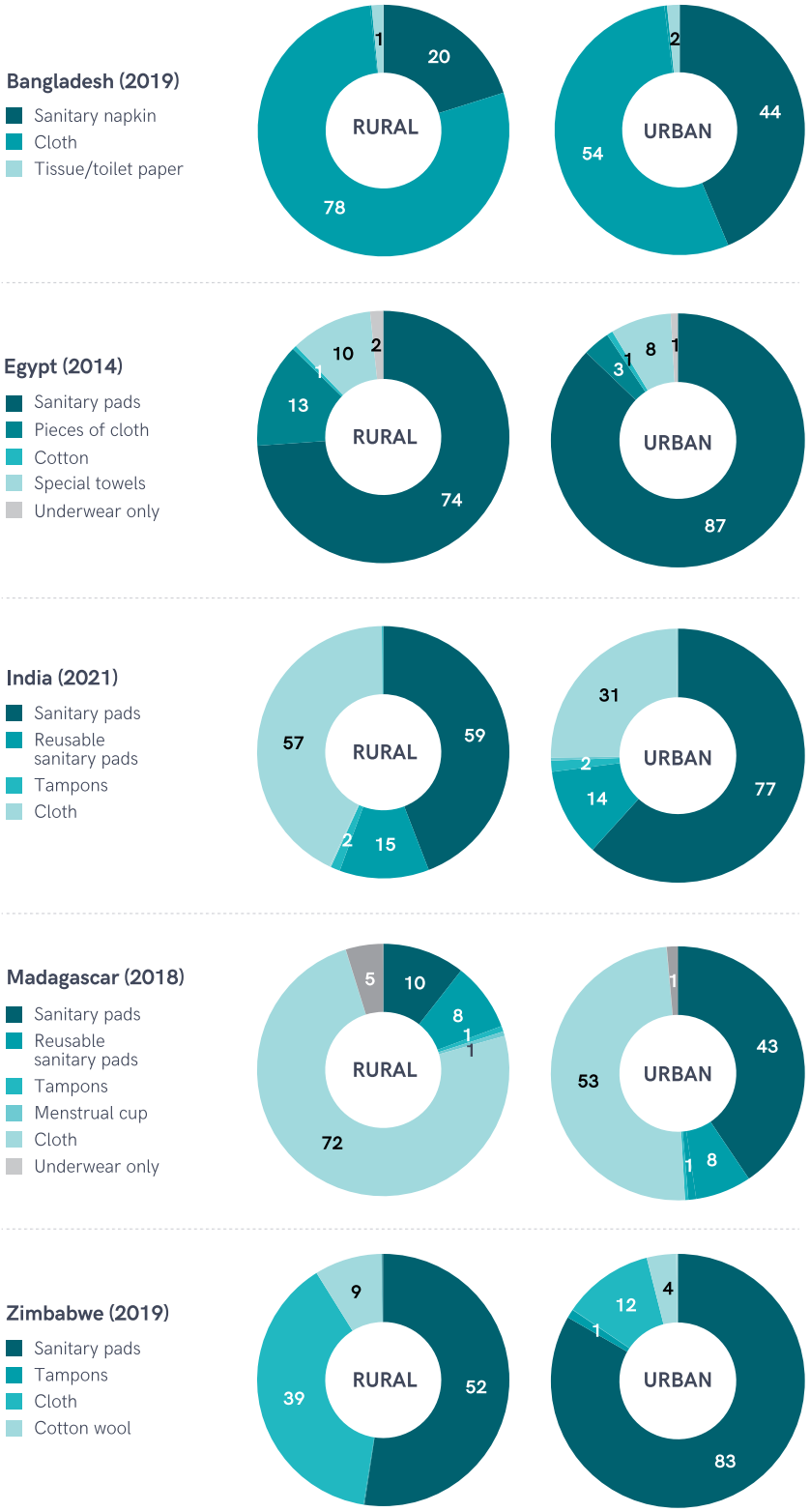


FIGURE 88 Proportion of adolescent girls and women age 15-49 in rural and urban areas, by type of menstrual material they typically use, selected surveys, 2014-2021 (%)

Adolescent girls and women living in rural areas are more likely than those living in urban areas to use reusable menstrual materials or no materials at all

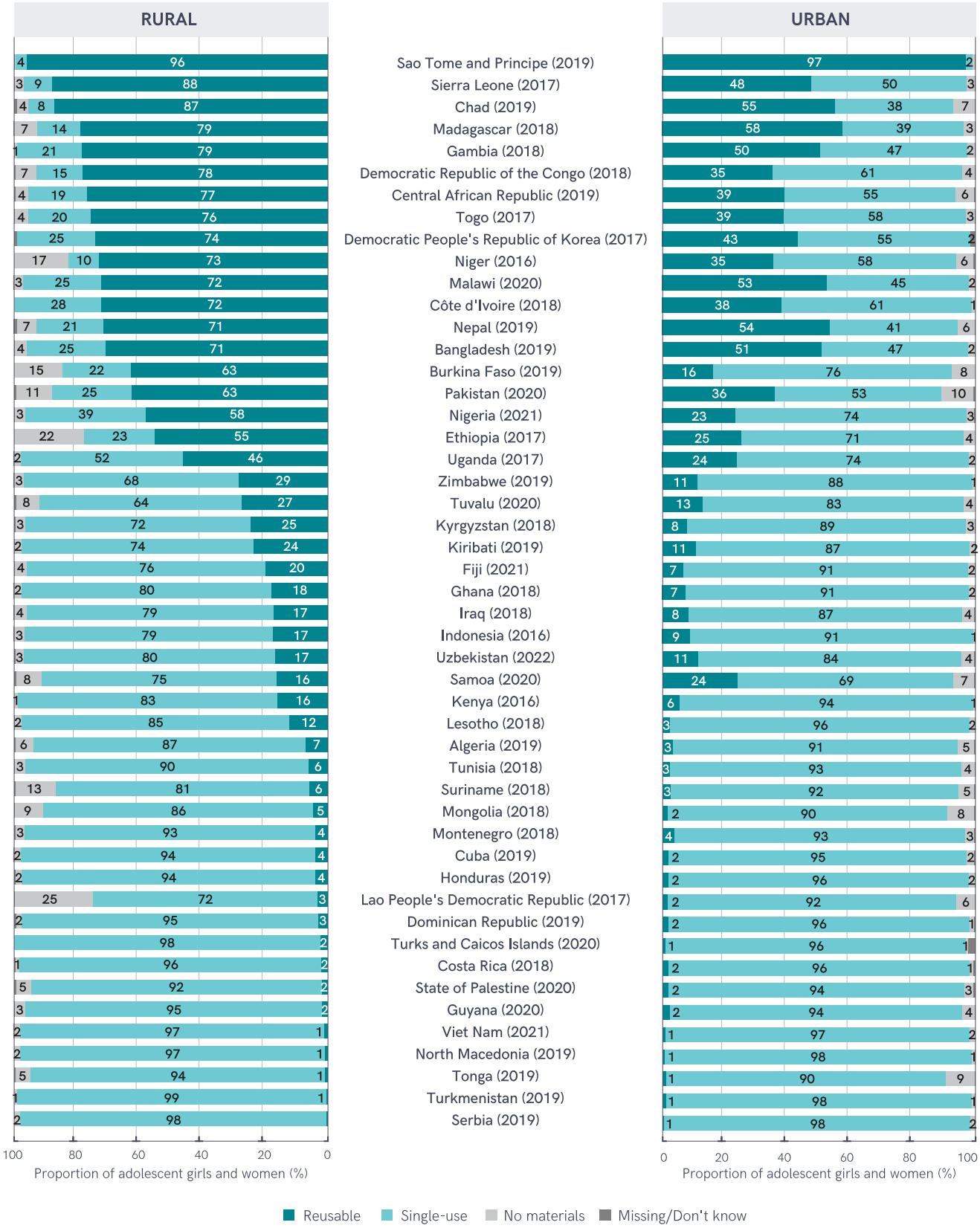


FIGURE 89 Proportion of adolescent girls and women age 15-49 who mainly use reusable and single-use materials, in rural and urban areas by country, selected surveys, 2016-2022 (%)

The proportion of the population using reusable materials also varies widely between and within countries (Figure 89). In most countries, reusable materials were more commonly used in rural areas. In Sierra Leone, 88% used reusable materials in rural areas, compared with just 48% in urban areas, while in Indonesia, 17% used reusable materials in rural areas, and 9% in urban areas. Adolescent girls and women in rural areas were also more likely to report using no materials. There were seven countries where more than one in ten of those living in rural areas used no materials, and no countries where more than one in ten of those living in urban areas used no materials. One in five used no materials in rural Ethiopia, compared with one in twenty in urban areas. Pakistan was the only country where at least 10% of girls and women used no materials in either rural or urban areas. In a few countries, such as Tonga, more women and girls used no materials in urban areas compared to rural areas.

The type of menstrual materials used also has implications for WASH-related needs such as water and soap to wash hands, provision of reusable materials and a safe place to dispose of single-use materials. Figure 90 shows that many adolescent girls and women who used reusable materials lacked a handwashing facility with soap and water at home. In 15 countries, more than a quarter lacked facilities with soap and water, and in eight countries, more than half lacked facilities with soap and water, making it more difficult to meet hygiene needs related to menstruation.

In eight countries, less than half the adolescent girls and women who used reusable materials had a handwashing facility with soap and water available at home

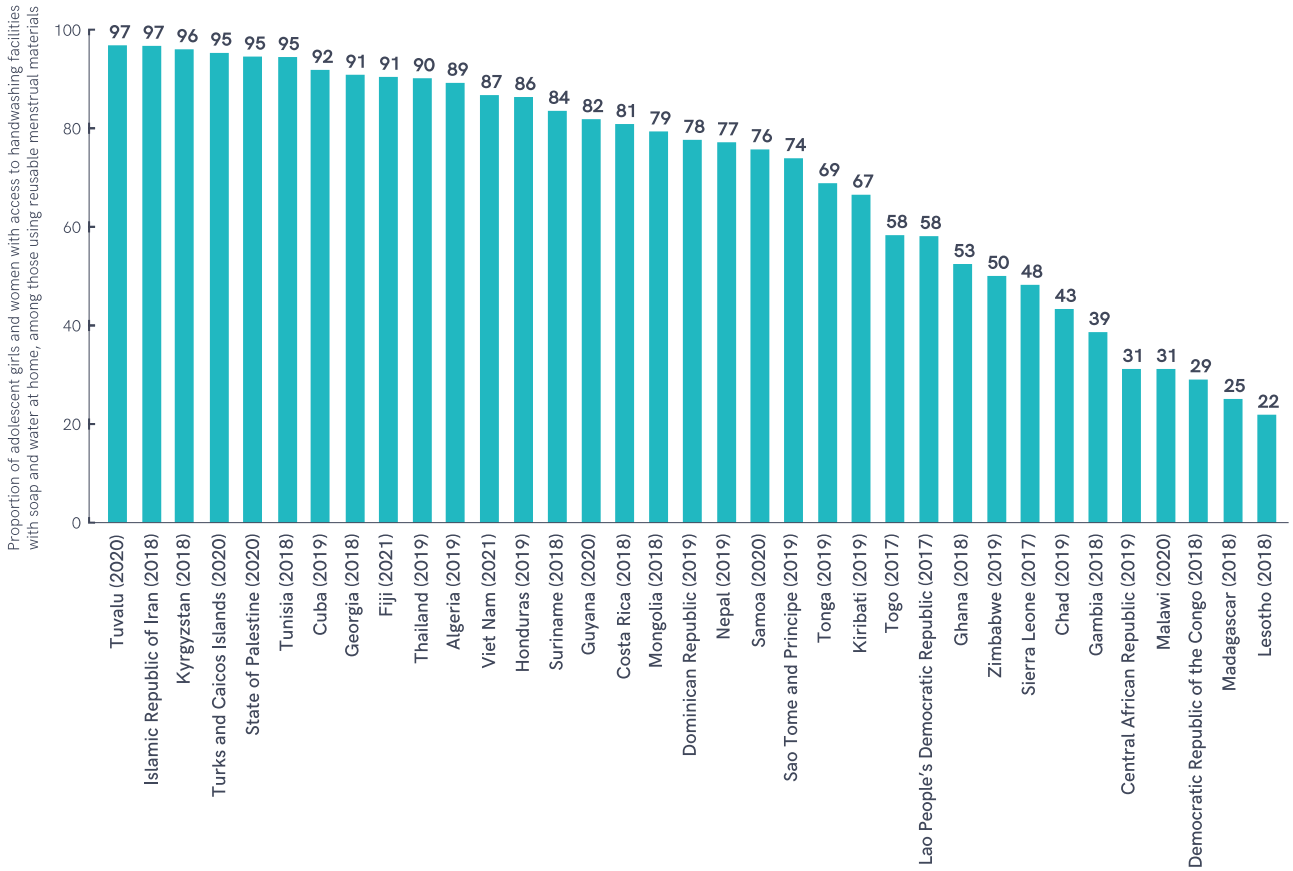


FIGURE 90 Proportion of adolescent girls and women age 15-49 with access to handwashing facilities with soap and water at home, among those mainly using reusable menstrual materials, selected Multiple Indicator Cluster Surveys, 2017-2021 (%)

Safe disposal of single-use materials is also a growing concern. In four out of nine countries with data available on methods of disposal, the majority of adolescent girls and women used a waste bin. But in five countries, the majority of single-use materials were disposed of in latrines or flush toilets. In Kenya, Uganda and Burkina Faso, over 80% of adolescent girls and women who used single-use materials directly disposed of them in latrines. In Ghana, Indonesia and Nigeria, over 10% of those who used single-use materials disposed of them by burning (Figure 91).

Few countries had data on whether adolescent girls and women were satisfied with menstrual materials. However, a recent survey of women in Ugandan refugee camps by the United Nations High Commissioner for Refugees (UNHCR) included questions on satisfaction with Menstrual Hygiene Management kits (Figure 92). While less than half of the women surveyed reported receiving sufficient quantities, three quarters said that the kits were very useful and four out of five said they were very good quality. Only 4% of women reported exchanging, gifting or selling the kits to others.

In five out of nine countries, more than half of adolescent girls and women who used single-use materials disposed of them in latrines or flush toilets

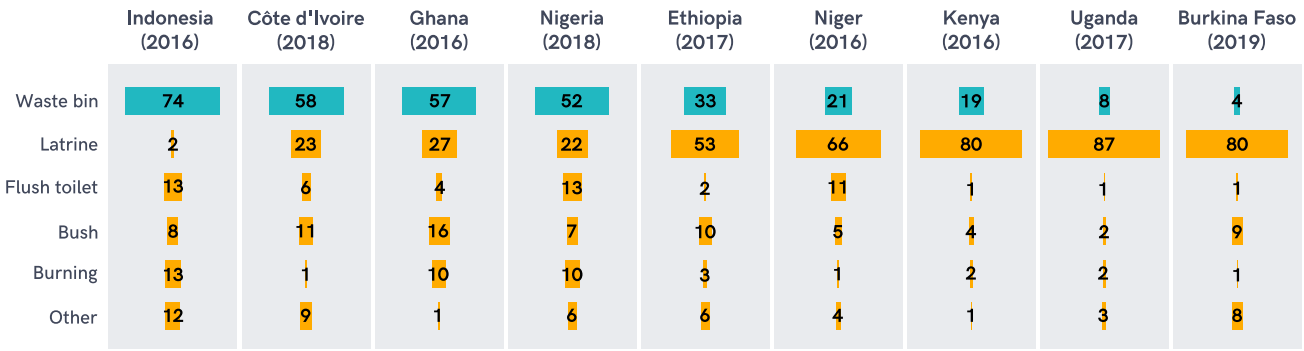
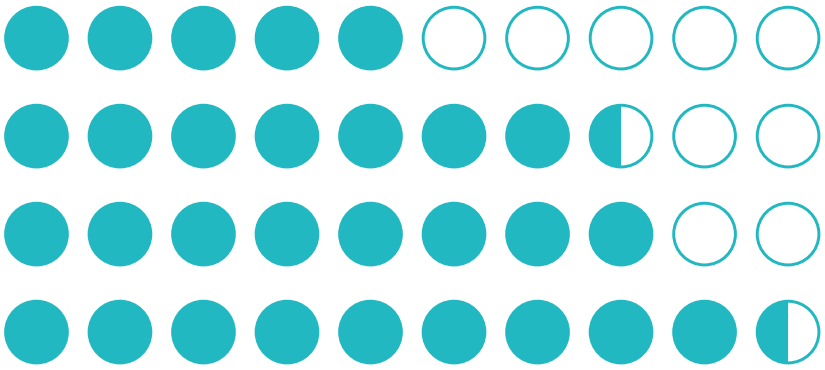


FIGURE 91 Proportion of adolescent girls and women age 15-49, who mainly used single-use menstrual materials during their last period, by method of disposal, selected surveys, 2016-2019 (%)

In refugee camps in Uganda, only half of the women received sufficient quantities of menstrual hygiene materials but over three quarters said they were very useful or very good quality



49% reported receiving a sufficient quantity

75% said they were very useful

81% said they were good or very good quality

96% reported they did not sell, gift or exchange them

FIGURE 92 Post-distribution monitoring of menstrual hygiene management kits in refugee camps, subnational survey in Uganda, 2020

PRIVATE PLACE TO WASH AND CHANGE

A growing number of household surveys ask about the ability to wash and change in privacy during menstruation. In most of the 50 countries with data available in 2022, over 80% of adolescent girls and women reported having a private place to wash and change at home. However, further analysis showed that in some countries there were significant differences between the richest and poorest, and between those with and without functional difficulties (Figure 93). The gap between poorest and richest having access to a private place to wash and change was more than 5 % pts in Algeria, Democratic Republic of the Congo, Kyrgyztan and Mongolia, and more than 10 % pts in Guinea-Bissau, Kiribati and Nepal. In Lao People's Democratic Republic, there was a gap of 56 % pts between the richest (97%) and the poorest (41%). Not all countries had data disaggregated by disability but in Nepal, only 77% of those with functional difficulties had a private place to wash and change at home, compared with 87% of those without functional diffulties. Cuba, Guyana, Mongolia and Uzbekistan had gaps of more than 5 % pts.

Performance Monitoring and Accountability surveys from seven countries collected additional information about the condition of the place that adolescent girls and women use

In some countries, the poorest adolescent girls and women, and those with functional difficulties, were less likely to have a private place to wash and change at home during their last period

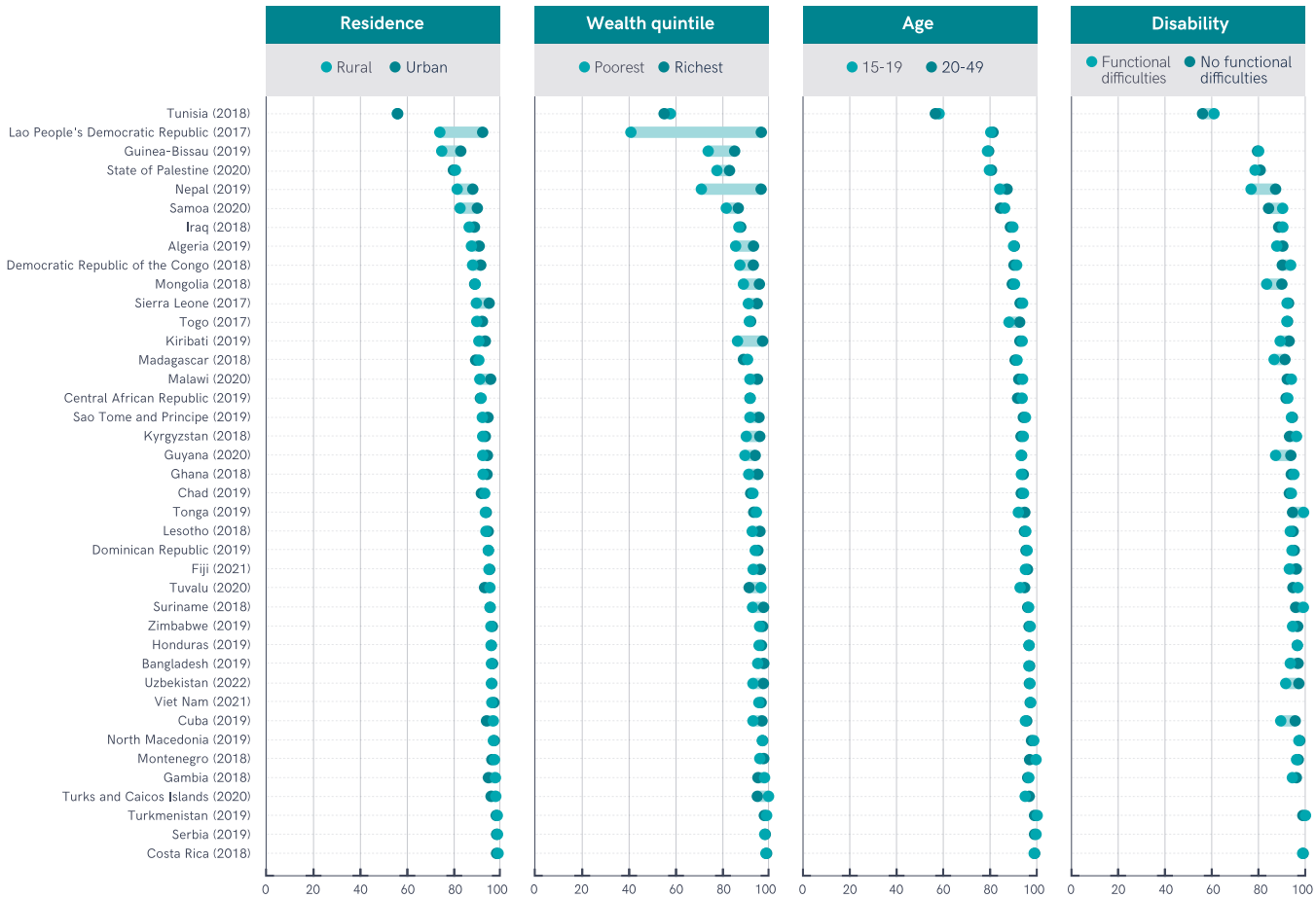


FIGURE 93 Proportion of adolescent girls and women age 15–49, with a private place to wash and change at home during their last period, by residence, wealth, age and disability, selected surveys, 2016–2022 (%)

to change menstrual materials while at home. They were generally more likely to be private, clean and safe, than to have a lock, water, or soap available (Figure 94), but there was wide variation between countries. For example, 95% of women and girls in Indonesia reported that their places were private, compared with just 52% in Niger. Private places in Ethiopia were significantly less likely to be clean and safe. In all countries, except for Indonesia and Uganda, fewer than half of the adolescent girls and women had water and soap available in the place they changed menstrual materials.

Sixty-six percent of adolescent girls and women in Indonesia reported that the places where they changed menstrual materials met all six criteria, compared with just 1% in Niger.

Bathing practices during menstruation have been identified as an important dimension of gender inequality related to WASH, especially in countries where gender norms restrict women's and girls' ability to bathe during their period. A 2021 National Family Health Survey in India asked women whether they usually took a bath during their menstrual period and whether they used the same bathroom as other family members (Figure 95). While 89% of women reported usually taking a bath in the same bathroom as other household members, bathing practices varied widely across States and Union Territories. In Gujurat, Odisha, Puducherry, Tamil Nadu and Uttarakhand, more than one in ten women reported taking a bath, but not in the same bathroom as other household members. In India as a whole, just 3% of women reported not taking a bath during menstruation, rising to over half the women in Jammu and Kashmir (57%), and more than two thirds in Ladakh (67%).

Adolescent girls and women reported that their places to wash and change during their last period were more likely to be private, clean and safe than to have a lock, water or soap available

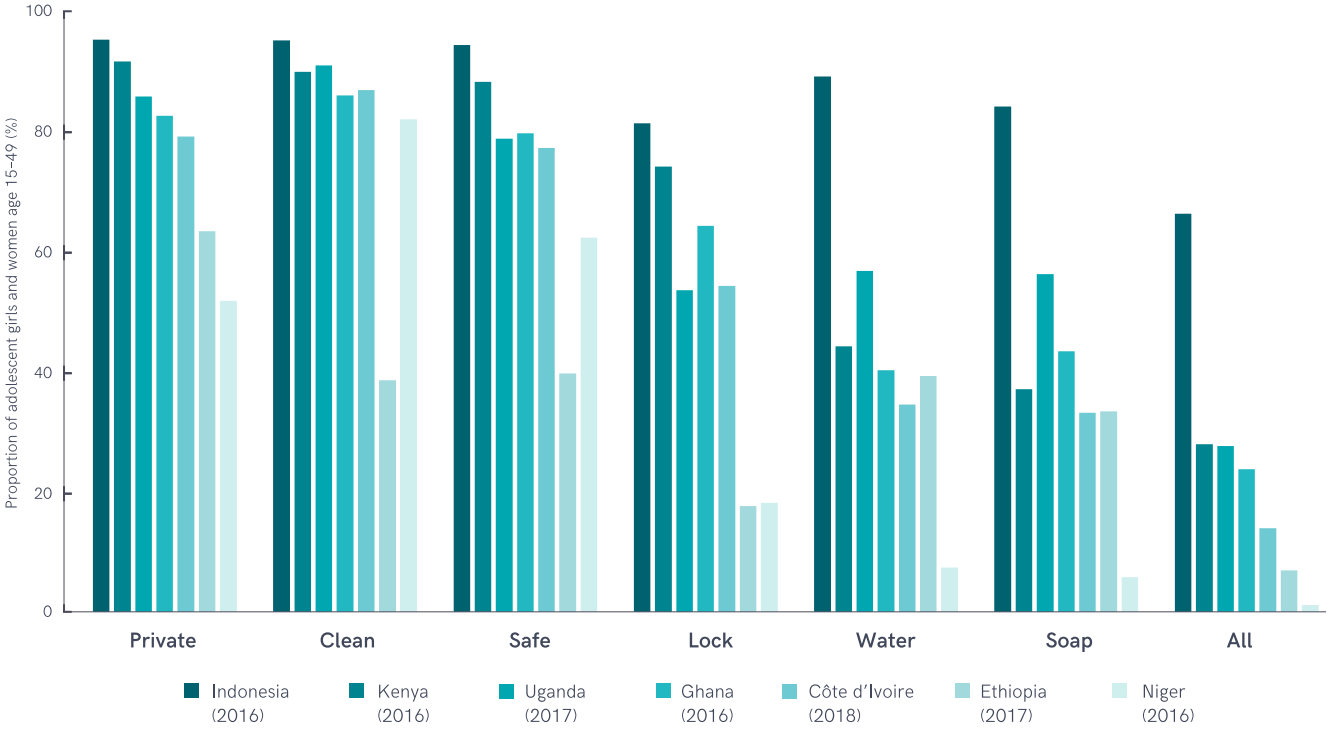


FIGURE 94 Proportion of adolescent girls and women age 15–49, by adequacy of private place to wash and change at home, selected Performance Monitoring and Accountability surveys, 2016–2018 (%)

In five states in India, more than 10% of adolescent girls and women reported taking a bath during their last menstrual period, but not in the same bathroom as other household members

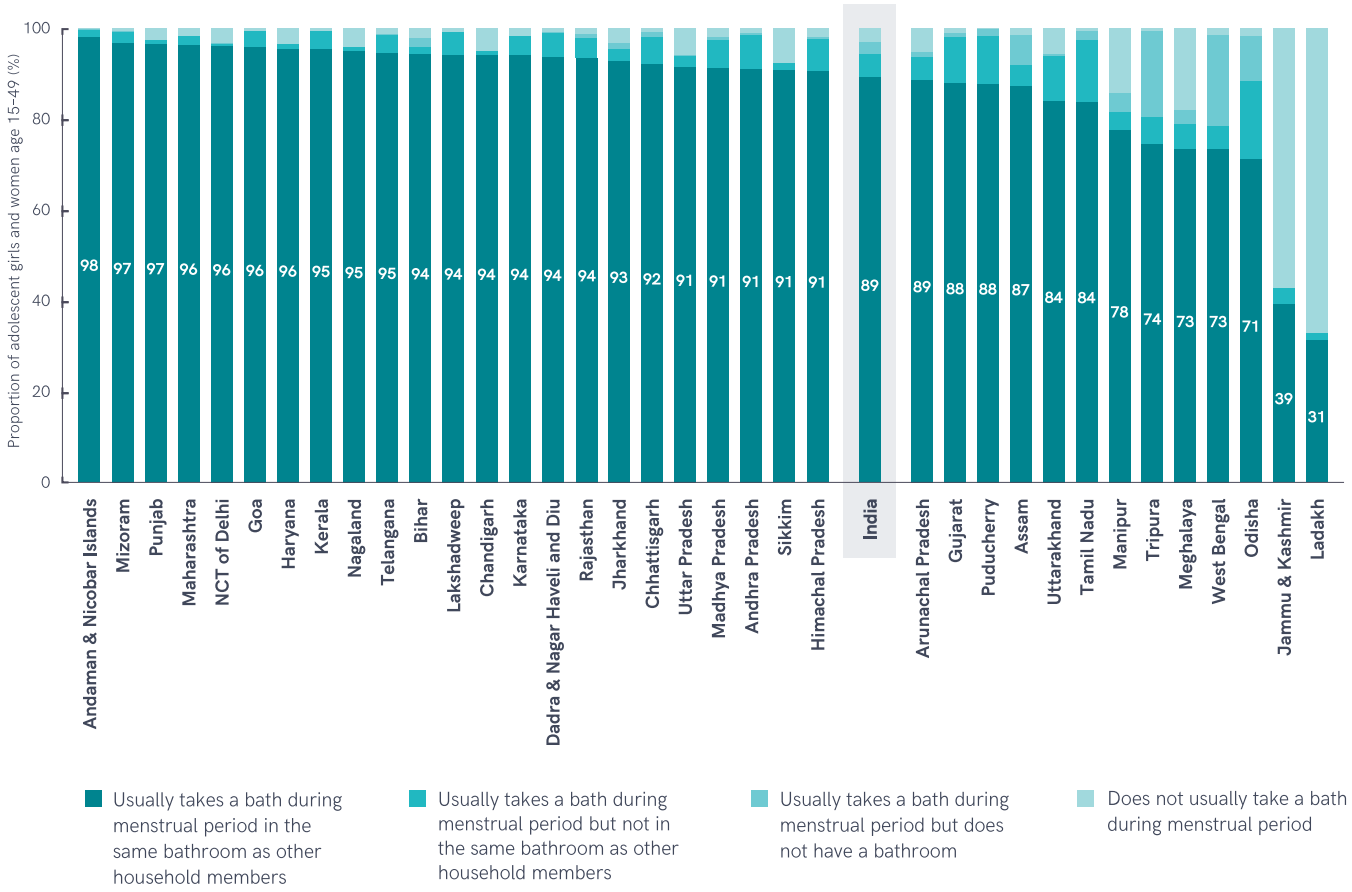


FIGURE 95 Proportion of adolescent girls and women age 15-49, by bathing practices during their menstrual period, by States and Union Territories of India, National Family Health Survey, 2021 (%)

PARTICIPATION

By 2022, 46 countries had data on the population of adolescent girls and women participating in school, work and social activities during menstruation. Harmonized data from 40 UNICEF Multiple Indicator Cluster Surveys (MICS) datasets enable further disaggregation by population subgroups (Figure 96). In most countries, participation was slightly higher in urban areas, but the differences were small. However, in Turks and Caicos Islands, adolescent girls and women were less likely to participate in school work and social activities in urban areas (87%), compared to rural areas (96%).

In Nepal, the richest (95%) were far more likely to participate than the poorest (79%). In Gambia, adolescent girls age 15-19 (67%) were less likely to participate than adult women age 20-49 (83%), with similar patterns in Central African Republic, Malawi, Montenegro, Sao Tome and Principe and Sierra Leone. The lowest levels of participation were observed among girls and women with functional difficulties. Participation rates were 22 % pts lower in North Macedonia, 19 % pts lower in Guyana, and 15 % pts lower in Tonga. Gaps of more than 10 % pts were also observed in Democratic Republic of the Congo, Iraq, Nepal, State of Palestine and Uzbekistan.

Adolescent girls and women with functional difficulties are often less likely to participate in work, school and other social activities during menstruation

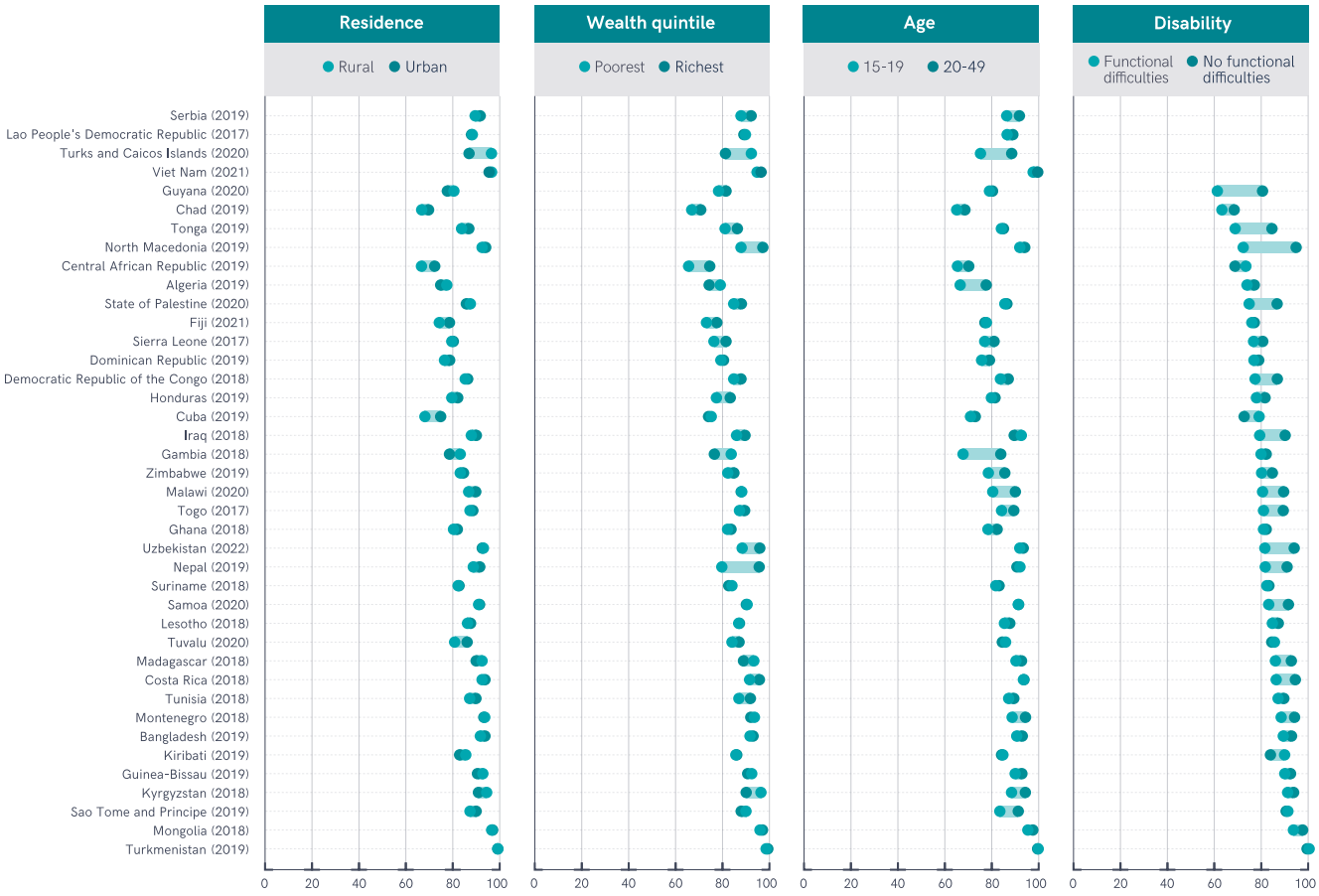


FIGURE 96 Proportion of adolescent girls and women age 15-49 participating in work, school or other social activities during their last period, by residence, wealth, age and disability, selected Multiple Indicator Cluster Surveys, 2016-2022 (%)

Mongolia is one of the few countries which has collected information on the reasons for non-participation in school, work or social activities during menstruation. In a 2018 MICS, three quarters of respondents reported feeling unwell or in pain and a fifth reported heavy bleeding (Figure 97). Less than 1% cited poor sanitation facilities outside the home or fear of degrading treatment by others, but 4% cited 'other' (unspecified) reasons.
In countries with data available

In Mongolia, three out of four adolescent girls and women cited feeling unwell or in pain as the main reason for non-participation in school, work or social activites during their last period

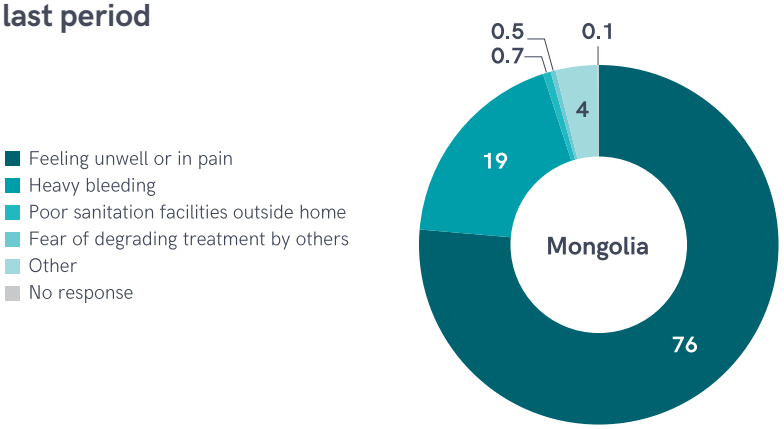


FIGURE 97 Proportion of adolescent girls and women age 15-49 reporting main reason for non-participation in school, work or social activities, Mongolia MICS, 2018 (%)

on use of materials, a private place to wash and change, and participation in school, work and social activities during menstruation, it was possible to analyse all three indicators together. Figure 98 shows that in most countries, coverage of use of materials and a private place to wash and change was higher than participation, and in some countries the proportion of adolescent girls and women meeting all three criteria was significantly lower still. For example, in Madagascar, 94% used materials, 91% had a private place to wash and change, and 92% participated in activities during menstruation, but only 79% satisfied all three needs.

Figure 99 gives an overview of inequalities in menstrual health between population subgroups. It shows that adolescent girls and women living in rural areas, those in the poorest quintile, adolescents aged 15–19, and those with disabilities were less likely to be able to meet their needs. It also shows that, while most women and girls in each group were able to meet at least some of their menstruation-related needs, far fewer were able to meet all of them in combination.

In countries with data on all three indicators, the proportion of adolescent girls and women meeting all three criteria for menstrual health is often significantly lower than for individual criteria

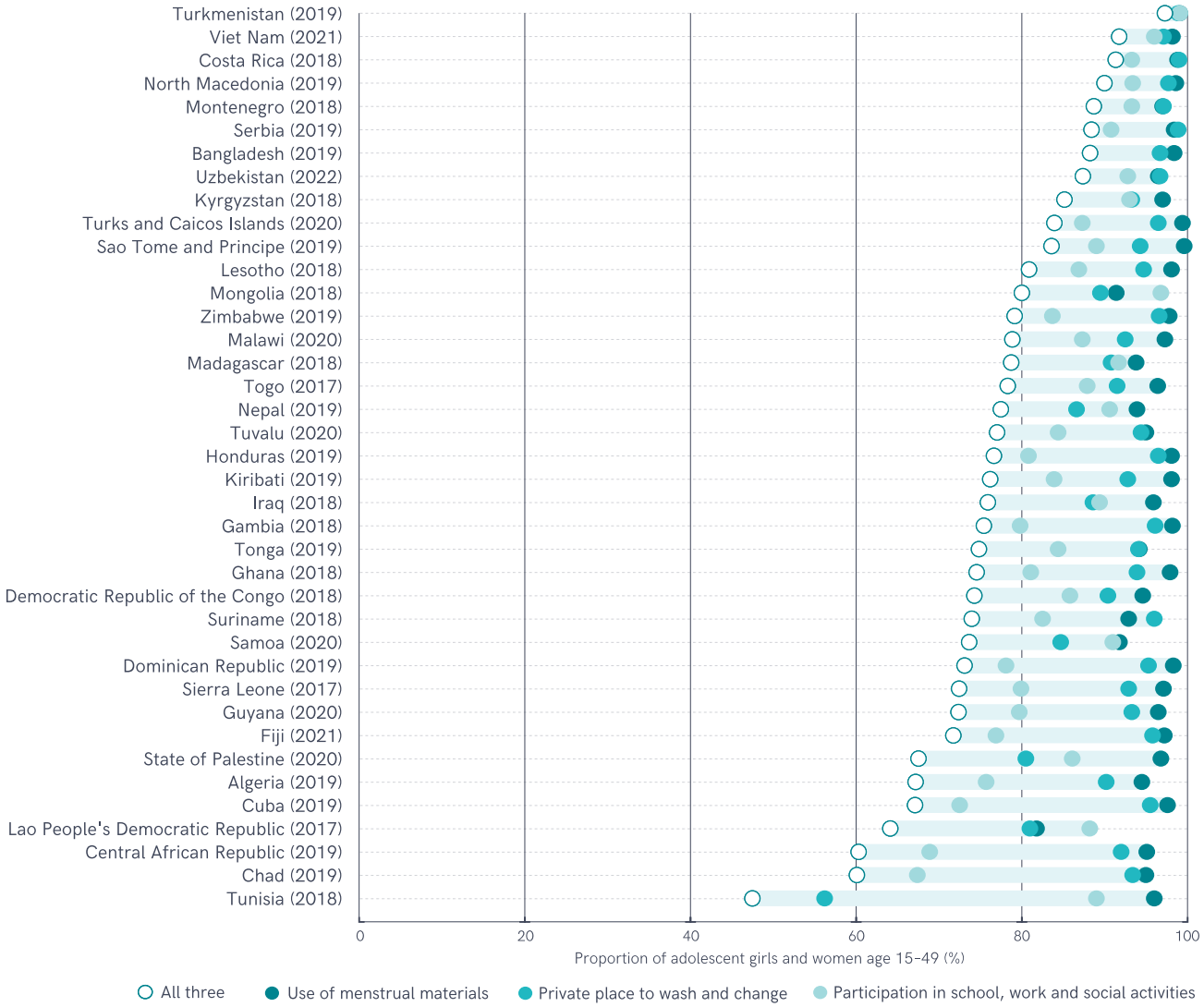


FIGURE 98 Proportion of adolescent girls and women age 15–49 who used menstrual materials, had a private place to wash and change, and participated in work, school and social activities during their last period, selected MICS, 2016–2022 (%)

Adolescent girls and women living in rural areas, in the poorest quintile, age 15–19 and living with disabilities were less likely to meet the criteria for all three harmonized menstrual health indicators

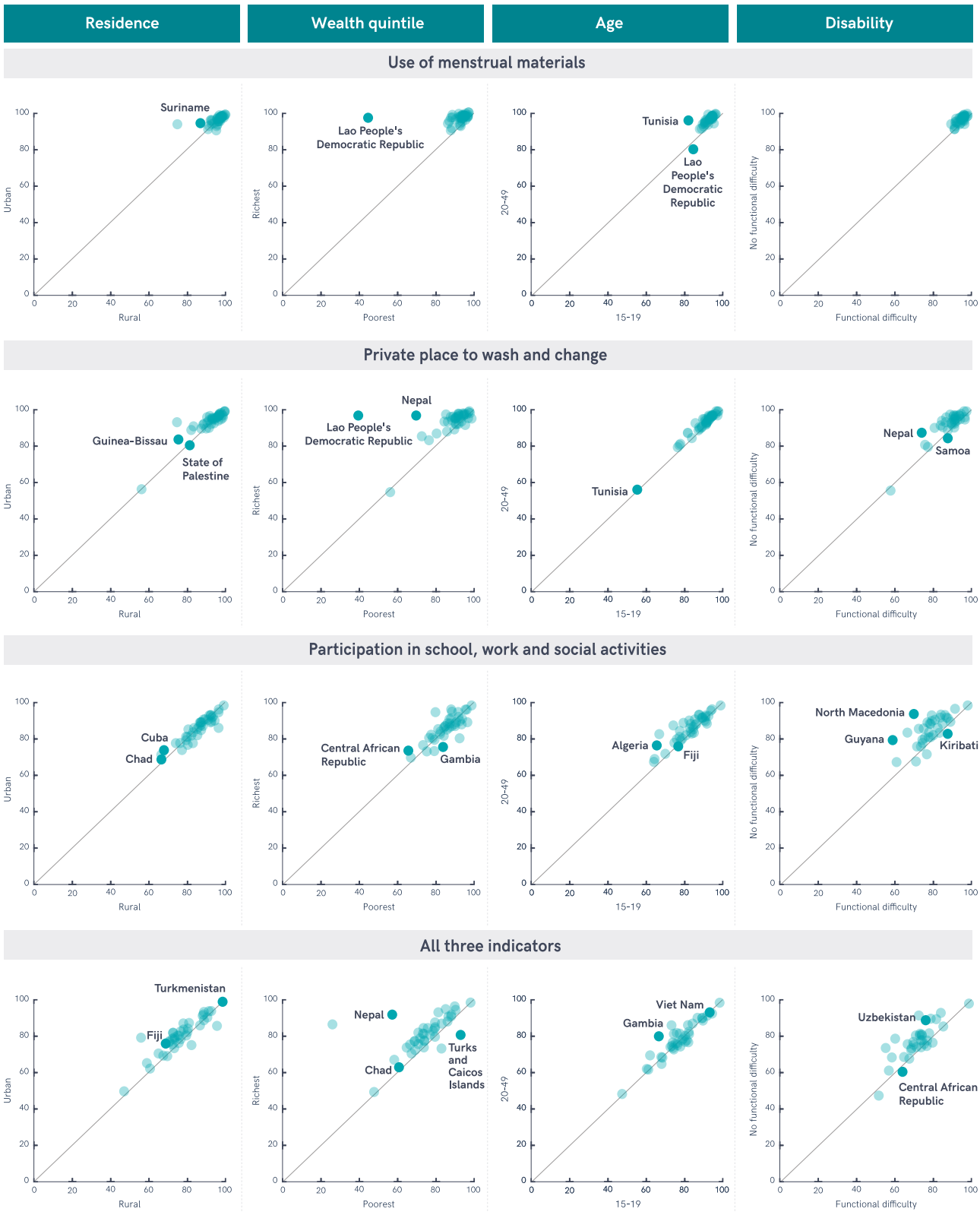


FIGURE 99 Proportion of adolescent girls and women age 15–49 who used menstrual materials, had a private place to wash and change, and participated in work, school and social activities during their last period, by residence, wealth quintile, age and disability, selected MICS, 2016–2022 (%)

BOX 8

Ongoing development of indicators for national and global monitoring of menstrual health

Menstrual health is a broad term that includes various factors that influence the experience of those who menstruate, as defined by the Terminology Action Group of the Global Menstrual Collective in 2021.[29] This new definition reflects a wider range of domains that are critical to menstrual health (including discomfort and a supportive environment), in addition to materials and facilities that have been more commonly monitored to date. As noted in a recent review of countries in East Asia and the Pacific, monitoring of menstrual health has often focused on what is provided to those who menstruate, rather than their experiences and needs.[30] The new definition has informed ongoing development of menstrual health indicators, including a priority list for monitoring girls' menstrual health and hygiene,[31] and updated JMP indicators for household surveys (Table 4).[32]

The proposed indicators aim to cover elements from previous household surveys (such as those included in this report), while also addressing emerging elements on unmet material needs, menstrual pain and social support. They are based on questions used in previous surveys, including for other settings, such as the USAID 2021 survey of women in workplaces in Kenya and Nepal, which is one of the few surveys to include questions on discomfort, supportive environment and quantity of materials (Figure 100).[33] Based on previous data, most women in Kenya and Nepal used menstrual materials but this survey suggests that many of these women did not have enough materials to change them whenever they wanted. While nearly all women reported that they were able to reduce menstrual pain when they needed, more than one in ten respondents in both countries said they would not feel comfortable seeking help from a health care provider for menstrual health problems.

[29] Hennegan J, Winkler IT, Bobel C, Keiser D, Hampton J, Larsson G, et al. Menstrual health: a definition for policy, practice, and research. Sexual and Reproductive Health Matters. 2021;29(1):31-8. <https://doi.org/10.1080/26410397.2021.1911618>.

[30] Head A, Huggett C, Chea P, Suttor H, Yamakoshi B, Hennegan J. Menstrual Health in East Asia and the Pacific: Regional Progress Review. Bangkok; United Nations Children's Fund, Burnet Institute and WaterAid, Bangkok; 2023. <https://www.unicef.org/eap/media/13341/file/MenstrualHealthreport.pdf>.

[31] Global MHH Monitoring Group. Priority List of Indicators for Girls' Menstrual Health and Hygiene: Technical Guidance for National Monitoring. New York; Columbia University; 2022 <https://www.publichealth.columbia.edu/file/8002/download?token=AViwoc5e>.

[32] UNICEF and WHO. Proposed questions on menstrual health for inclusion in household survey questionnaires for individual women – zero draft. December 2022. <https://washdata.org/reports/proposed-questions-menstrual-health-household-surveys-dec-2022>.

[33] USAID. Advancement of Metrics for Menstrual Hygiene Management in the Workplace: Final Report. Washington, DC, USAID Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) Project; 2021 <https://www.globalwaters.org/sites/default/files/washpals_mhh_metrics_report_final_jan2022_1.27_final_1.pdf>.

DOMAIN	PROPORTION OF WOMEN AGE 15–49 WHO HAVE MENSTRUATED IN THE PAST YEAR WHO:
Materials	reported having enough menstrual materials throughout their last menstrual period;
Facilities	had a private place to change their menstrual materials at home;
Knowledge	knew about menstruation before their first menstrual period;
Discomfort/ disorders	were able to reduce their menstrual (menstruation-related) pain during their last menstrual period when they needed to;
Supportive environment	would feel comfortable seeking help for menstrual problems from a health care provider; and
Menstrual health impacts	did not have trouble participating in school, paid work or social activities due to their last menstrual period.

TABLE 4 Indicators proposed by the JMP-convened global expert group on monitoring menstrual health for inclusion in household survey questionnaires for individual women

A fifth of women in Nepal and a third of women in Kenya did not always have enough menstrual materials while working outside the home during their last period

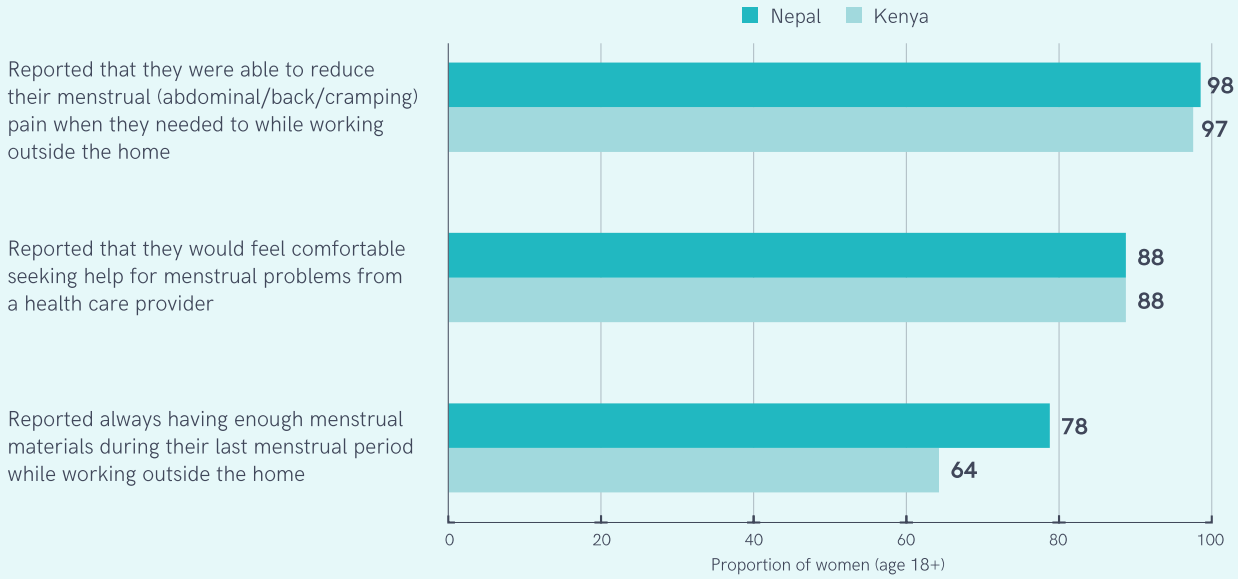


FIGURE 100 Proportion of women able to reduce pain, who felt comfortable seeking help from a health care provider, and always had enough menstrual materials while working outside the home during their last period, USAID workplace surveys in Nepal and Kenya, 2021 (%)

Note: Subnational surveys focused on women in the workplace.

6 Annexes

ANNEX 1
Methods

Since it was established in 1990, the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has been instrumental in developing global norms to benchmark progress on drinking water, sanitation and hygiene, and has produced regular progress updates on country, regional and global trends. The JMP is responsible for global monitoring of Sustainable Development Goal (SDG) targets related to WASH and collaborates with other custodian agencies through the UN-Water Integrated Monitoring Initiative for SDG 6 (IMI-SDG6).

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 global monitoring programme. The JMP works with a wide range of WASH sector stakeholders to progressively improve the availability and quality of national data on WASH services, and on disaggregations to highlight inequalities.[34]

The following is a brief summary of the JMP methodology used for the 2023 progress update.[35] Methodological refinements since the 2021 progress update are listed in Box A1.

[34] For further details on how the JMP works, see: <https://washdata.org/how-we-work/about-jmp>.
[35] WHO and UNICEF. JMP Methodology: 2017 update and SDG baselines. 2017. <https://washdata.org/reports/jmp-methodology-2017-update>.

BOX A1

Refinements to JMP methods in the 2023 update

1. Increase in number of datasets used to generate estimates, from 4426 to 5340.
2. Refinement and standardization of method for producing regional aggregates (see Regional and Global Estimates).
3. Shift in terminology from 'national' to 'total'. JMP estimates are produced for countries, areas and territories. Estimates representative of entire populations within those areas have been called 'national estimates' in previous reports, but are now called 'total estimates', to better reflect that some of these estimates apply to areas and territories rather than to nations and countries.
4. Presentation of emerging national statistics for a subset of countries with harmonized survey data available on gender-responsive and gender-specific indicators of inequalities in WASH services.

DATA COLLECTION AND VALIDATION

JMP estimations begin with the compilation of official data sources that contain information about household drinking water, sanitation and hygiene services within a country, area or territory. The JMP also expanded its databases to incorporate harmonized indicators on menstrual health which are increasingly included in household surveys.

The biennial data collection cycle for JMP household estimates begins in the fourth quarter of an even year and estimates are published in the second quarter of the following year. The data search involves systematically visiting the websites of national statistical offices, key sector institutions, such as ministries of water and sanitation, and regulators of WASH services. Other regional and global databases are also reviewed for new datasets. UNICEF and WHO regional and country offices provide support to identify newly available datasets in consultation with relevant authorities.

The JMP maintains Excel country files for each of the 234 countries, areas and territories for which population data are available.[36] These files provide a list of the data sources available to the JMP and show how individual data inputs have been used to generate internationally comparable estimates. Before publication, draft estimates are circulated to WHO and UNICEF country offices for a two-month period for technical consultation and feedback from relevant authorities.[37]

The primary purpose of global monitoring is to generate internationally comparable estimates that can be used to benchmark and compare progress across countries. The JMP uses a standard methodology to generate estimates for all countries. These sometimes differ from national statistics, which may use different definitions and/or methods.[38] The purpose of the consultation is not to compare JMP and national statistics on WASH coverage, but to review the completeness or correctness of the datasets in the JMP country file and verify the interpretation of national data in the JMP estimates.

[36] JMP country files can be downloaded from <https://washdata.org/data/downloads#>.

[37] For further details on JMP country consultations, see <https://washdata.org/how-we-work/jmp-country-consultation>.

[38] The JMP produces modelled estimates based on a regression of all available data points, whereas national statistics are often based on the most recent data point from a single data source. The JMP uses standardized population estimates produced by the United Nations Population Division which may differ from national figures.

JMP DEFINITIONS

While compiling all relevant data from official national sources, 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 A1.1). 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. These are used to subdivide the population using improved facilities into those with safely managed, basic or limited drinking water and sanitation services. In addition, data are collected on the availability of handwashing facilities with soap and water at home, which are used to categorize populations as having basic, limited or no handwashing services.

DATA SOURCES AND COVERAGE

The JMP global database includes primary data sources such as censuses, household surveys and administrative data; secondary datasets compiled by international or regional initiatives (for example, European Protocol on Water and Health, Statistical Office of the European Union and the International Benchmarking Network); studies conducted by research institutes; and technical information received during country consultations.

The 2023 JMP update drew on a total of 7894 distinct data sources, 5340 of which were used to produce estimates (Figure A1.1). Similar numbers of datasets were used for drinking water services (n=3894) and sanitation services (n=3831), but there were comparatively few datasets with information on hygiene (n=269) and menstrual health (n=61).

	DRINKING WATER	SANITATION
IMPROVED FACILITIES	**Piped supplies** • Tap water in the dwelling, yard or plot, including piped to a neighbour • Public taps or standpipes **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/tank/drum • Water kiosk	**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 (VIP) latrines • Pit latrines with slabs (constructed from materials that are durable and easy to clean) • Composting toilets, including twin pit latrines with slabs and container-based systems
UNIMPROVED FACILITIES	**Non-piped supplies** • Unprotected wells and springs	**Networked sanitation** • Flush and pour-flush toilets flushed to open drain or elsewhere* **On-site sanitation** • Flush and pour-flush toilets or latrines flushed to open drain or elsewhere* • Pit latrines without slabs • Open pits • Hanging toilets/latrines • Bucket latrines, including pans, trays or other unsealed containers
NO FACILITY	**Surface water** • Open water sources located above ground including rivers, lakes, ponds, streams, canals, reservoirs and irrigation channels	**Open defecation** • Defecation in the bush, field or ditch • Defecation into surface water, including beaches, rivers, streams, drainage channels or the sea

TABLE A1.1 JMP classification of improved and unimproved facility types

* A survey response of 'flush/pour-flush to elsewhere' suggests that excreta are not being discharged into a sewer, septic tank or pit latrine but into the local environment, and that the facility should therefore be classified as unimproved. However, a response of 'flush/pour-flush to unknown place' suggests that the respondent does not know where the wastewater is directed. These cases are classified as improved.

Data sources used for the JMP 2023 progress update

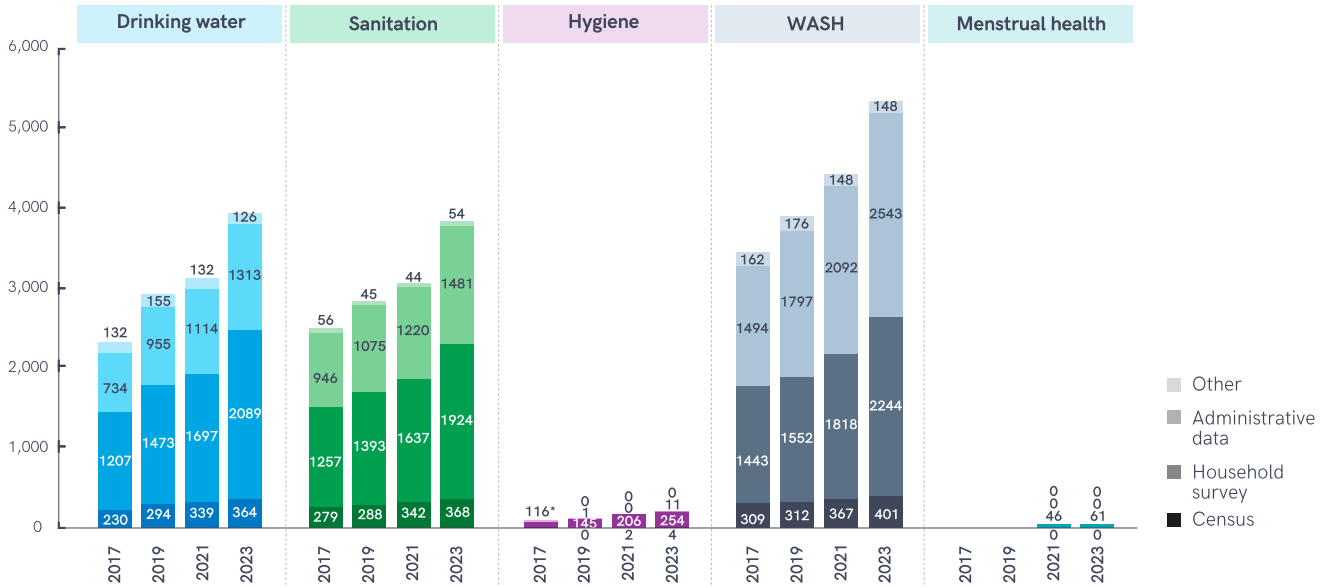


FIGURE A1.1 Number of data sources used in JMP progress updates (2017-2023)

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 2022 Revision of World Population Prospects (Standard Projections for estimates up to 2021 and medium variant projections for later years) and represent the total population as of 1 July for the relevant year. The proportion of the population living in urban and rural areas was taken from the 2018 Revision of World Urbanization Prospects.

DATA DISAGGREGATION

JMP estimates are routinely disaggregated by service level (no service, unimproved, limited, basic, and safely managed services) based on the SDG service ladders presented in the main report. Where possible, estimates are also disaggregated by other relevant geographic, socio-economic and individual stratifiers of inequality. The JMP global database includes 'inequalities files' for 108 countries that contain harmonized facility type and service level estimates disaggregated by subnational region and by wealth quintile, where possible, for 450 household surveys from 1997-2020.

Subnational regions refer to administrative regions below the national level, such as divisions, provinces, states and regions. Often, the subnational regions available in household surveys correspond to 'admin1' regions, the largest subnational administrative units within a country. Due to the limited number of surveys with disaggregated data available for the same subnational regions, trends were not estimated for this update.

Wealth quintiles (richest, rich, middle, poor, poorest) can be calculated based on the set of domestic assets as recorded in household surveys, using Principle Component Analysis. For monitoring inequalities in WASH, the JMP creates customized wealth quintiles based on domestic assets but excluding WASH infrastructure. These calculations are shown in the JMP inequalities files, along with trends produced through JMP regression rules. Data on access to WASH services are typically collected at the household level rather than the individual level, which means it is not possible to routinely analyse intra-household inequalities. However, menstrual health indicators can be disaggregated by the individual characteristics of women and girls age 15-49 (for example, age, functional difficulties, ethnicity, education level).

The JMP seeks to highlight datasets that allow other types of disaggregation. For example, this report presents data from REACH-supported Multi-Sector Needs Assessments of vulnerable populations in emergency settings that can be further disaggregated into displaced and non-displaced populations,[39] as well as Office of the United Nations High Commissioner for Refugees (UNHCR) data on WASH services in refugee camps.[40]

DATA ANALYSIS AND COUNTRY ESTIMATES

For each country, the JMP develops estimates for WASH indicators by fitting regression lines to the collected data inputs, using data from 2000 onwards. If a country has only one data point or two data points less than five years apart, the JMP creates estimates using a simple average that is extended for four years beyond the most recent data point. If there are two or more data points, covering a span of at least five years, the JMP applies linear regression with extrapolation for up to two years forwards and backwards from the last data point, and extends estimates for up to four more years.[41]

Ordinary least squares regression is used to estimate the proportion of the population using improved drinking water sources, as well as the population collecting drinking water directly from surface water sources. The population using unimproved drinking water sources is calculated by difference. Similarly, linear regressions estimate the proportion of the population using improved sanitation facilities (including shared facilities), and the proportion of the population practising open defecation, with the population using unimproved sanitation facilities calculated by difference. 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.

Additional regressions are 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 are estimated for the proportion of the population using improved drinking water sources requiring more than 30 minutes for collection. These are subtracted from the trend estimates of improved drinking water sources to generate estimates of the population using at least **basic drinking water** services.[42]

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

Where possible, separate regressions are made for urban and rural areas, and the resulting population estimates are combined to generate total estimates for basic services.

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, and sometimes data are not representative of entire populations. The JMP only makes country-level 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 that are:

- accessible on premises, and
- 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

[39] REACH Resource Centre. Multi-sector assessments. <www.reachresourcecentre.info/theme/multi-sector-assessments>.

[40] UNHCR. WASH Indicators Dashboard. <https://wash.unhcr.org/dashboard/>.

[41] WHO and UNICEF. JMP methodology: 2017 update and SDG baselines. 2017. <https://washdata.org/reports/jmp-methodology-2017-update>.

[42] 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.

safely managed drinking water services. Where possible, estimates are produced separately for rural and urban populations and then combined to produce total estimates. Many countries lack data on one or more criteria for safely managed drinking water. The JMP only produces estimates for safely managed drinking water services 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 that 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 only produces total estimates when data are available for the dominant type of sanitation system (sewered or on-site sanitation). If data are available for the dominant but not for the non-dominant type of sanitation system, the JMP assumes that 50% of the non-dominant type of sanitation is safely managed.

REGIONAL AND GLOBAL ESTIMATES

Regional and global estimates for basic water, sanitation and hygiene services are only reported 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 and assigns these to any countries without a national estimate for the reference year. The JMP does not use these imputed statistics to produce country-level estimates.

In the 2021 and earlier reports, regional population-weighted averages of M49 subregions (n=22)[43] were used to impute missing values for water and sanitation variables, while M49 regions (n=7) were used to impute missing values for hygiene variables, since some M49 subregions had no hygiene estimates at all. In the 2023 report, an iterative approach was applied to all water, sanitation and hygiene variables:

1. If any estimates were available within an M49 subregion, the subregion average was used for imputation.
2. If estimates were available at the regional but not subregion level, the M49 regional average was used.
3. If no estimates were available for any country or territory in the M49 region, the global average was used for imputation.

For example, none of the five countries and territories in the M49 region of Northern America had data on basic hygiene, so the global average was used to impute values for these countries and territories. This change in methodology has only very minor impacts on the regional and global estimates, which are not published unless actual data are available from a sufficient proportion of the regional or global population.

Populations using basic, limited, unimproved and no services 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 tank, latrine; piped, non-piped improved), with estimates weighted by the population using improved drinking water and sanitation facilities rather than the total population.

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

The three criteria for **safely managed drinking water services** are calculated as weighted averages among 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.

For **safely managed sanitation services**, regional estimates are calculated based on the populations using sewer connections or improved on-site sanitation systems (septic tanks, 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

[43] See <https://unstats.un.org/unsd/methodology/m49/overview/ for lists of M49 regions and sub-regions>.

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.

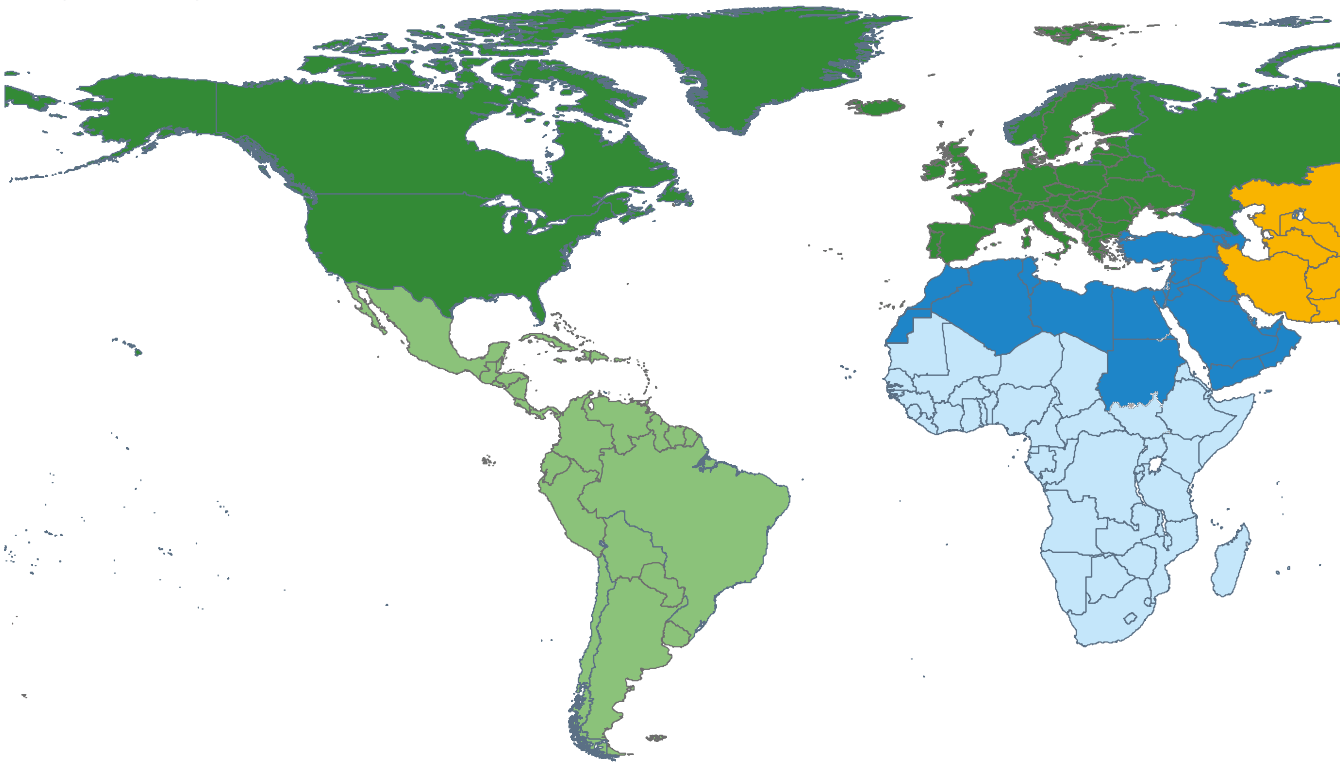
Regional and global estimates of the population using safely managed sanitation services are calculated by adding together the populations with wastewater treated and excreta disposed of in situ for rural and urban areas. Where data coverage is below 30% for the non-dominant form of sanitation, estimates 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.

CROSS-CUTTING	• JMP website **<https://washdata.org>** • JMP reports **<https://washdata.org/reports>** • JMP data **<https://washdata.org/data>** • JMP country files and inequalities files **<https://washdata.org/data/downloads#>** • JMP methodology for WASH in households **<https://washdata.org/reports/jmp-methodology-2017-update>** • Core questions on drinking water, sanitation and hygiene for household surveys 2018 update **<https://washdata.org/reports/jmp-2018-core-questions-household-surveys>** • A comprehensive set of tools to guide survey teams through every step of the MICS process – including survey questions, snapshots and manuals for WASH **<https://mics.unicef.org/tools>** • The measurement and monitoring of water supply, sanitation and hygiene (WASH) affordability– a missing element of monitoring of Sustainable Development Goal (SDG) Targets 6.1 and 6.2 **<https://washdata.org/reports/unicef-who-2021-affordability-wash-services-full>**
DRINKING WATER	• Integrating water quality testing into household surveys **<https://washdata.org/report/jmp-2020-water-quality-testing-household-surveys>** • WHO Guidelines for Drinking Water Quality, 4th edition, incorporating the 1st and 2nd addenda **<https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/water-safety-and-quality/drinking-water-quality-guidelines>** • Bain R, Johnston R, Khan S, Hancioglu A, Slaymaker T. Monitoring drinking water quality in nationally representative household surveys in low- and middle-income countries: cross-sectional analysis of 27 Multiple Indicator Cluster Surveys, 2014-2020. 2021 **<https://doi.org/10.1289/EHP8459>**
SANITATION	• WHO. Guidelines on sanitation and health. 2018 **<https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/sanitation-safety/guidelines-on-sanitation-and-health>** • WHO. Ending the neglect to attain the Sustainable Development Goals: a global strategy on water, sanitation and hygiene to combat neglected tropical diseases, 2021-2030. 2021 **<https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/burden-of-disease/wash-and-neglected-tropical-diseases>**
HYGIENE SERVICES	• Ram P. Practical guidance on measuring hand hygiene behaviour. WSP. 2013 **<https://www.scribd.com/document/469101426/WSP-Practical-Guidance-Measuring-Handwashing-Behavior-2013-Update-pdf>** • Hand Hygiene for All Global Initiative **<https://www.who.int/initiatives/hand-hygiene-for-all-global-initiative>**
MENSTRUAL HEALTH	• UNICEF. Guidance for monitoring menstrual health and hygiene. 2020 **<https://washdata.org/reports/unicef-2020-guidance-monitoring-mhh-v1>** • The Global Menstrual Collective **<http://www.globalmenstrualcollective.org>** • Hennegan J, Winkler IT, Bobel C, Keiser D, Hampton J, Larsson G, et al. Menstrual health: a definition for policy, practice, and research. Sexual and Reproductive Health Matters. 2021;29(1):31-8. **<https://doi.org/10.1080/26410397.2021.1911618>** • Proposed questions on menstrual health for inclusion in household survey questionnaires for individual women - zero draft, December 2022 **<https://washdata.org/reports/proposed-questions-menstrual-health-household-surveys-dec-2022>**.

TABLE A1.2 Useful sources for further detailed information related to JMP definitions and methods

ANNEX 2

Regional groupings



SUSTAINABLE DEVELOPMENT GOALS: REGIONAL GROUPINGS[44]

AUSTRALIA AND NEW ZEALAND: Australia, New Zealand.

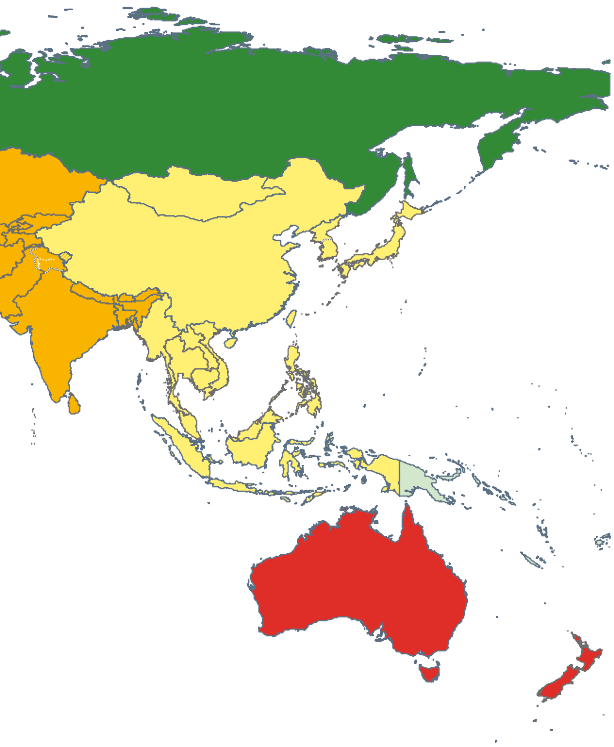
CENTRAL ASIA AND SOUTHERN ASIA: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Kazakhstan, Kyrgyzstan, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan, Uzbekistan.

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, Czechia, 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 (Kingdom of the), 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, 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 Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint Martin (French part), 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).

[44] SDG regional groupings, as well as classifications of landlocked developing countries, least developed countries and small island developing states, come from United Nations Statistics Division <https://unstats.un.org/sdgs/indicators/regional-groups/>. Fragile contexts are taken from OECD https://www.oecd.org/dac/states-of-fragility-fa5a6770-en.htm (2022 grouping as of March 2023). This report also uses income categories as classified by the World Bank (fiscal year 2023) https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups.



NORTHERN AFRICA AND WESTERN ASIA: Algeria, Armenia, Azerbaijan, Bahrain, Cyprus, Egypt, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, State of Palestine,[45] Sudan, Syrian Arab Republic, Tunisia, Türkiye, United Arab Emirates, Western Sahara, Yemen.

OCEANIA (EXCLUDING AUSTRALIA AND NEW ZEALAND):[46] 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.

[45] WHO reports refer to 'occupied Palestinian territory, including east Jerusalem'.
[46] 'Oceania (excluding Australia and New Zealand)' is referred as 'Oceania' throughout this report.

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, Yemen, Zambia.

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

FRAGILE CONTEXTS (OECD)
Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic People's Republic of Korea, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gambia, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, Iran (Islamic Republic of), Iraq, Kenya, Lao People's Democratic Republic, Lesotho, Liberia, Libya, Madagascar, Mali, Mauritania, Mozambique, Myanmar, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Sierra Leone, Solomon Islands, Somalia, South Sudan, State of Palestine, Sudan, Syrian Arab Republic, Tajikistan, United Republic of Tanzania, Timor-Leste, Togo, Turkmenistan, Uganda, Venezuela (Bolivarian Republic of), Yemen, Zambia, Zimbabwe.

ANNEX 3

Drinking water estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Afghanistan	2015	33 753	25	**55**	4	25	16	2.56	**84**	3	10	2	2.02	**62**	4	21	12	2.49
	2022	41 129	27	**76**	1	14	8		**99**	1	<1	<1		**82**	1	10	6	
Albania	2015	2 882	57	**91**	5	4	<1	0.62	**95**	2	2	<1	0.04	**93**	4	3	<1	0.40
	2022	2 842	64	**94**	2	4	<1		**96**	2	3	<1		**95**	2	3	<1	
Algeria	2015	39 543	71	**88**	9	3	<1	0.32	**95**	4	<1	<1	0.09	**93**	5	1	<1	0.22
	2022	44 903	75	**90**	9	<1	<1		**96**	4	<1	<1		**95**	5	<1	<1	
American Samoa	2015	51	87	-	-	-	-	-	-	-	-	-	-	**99**	<1	1	<1	-
	2021	45	87	-	-	-	-		-	-	-	-		**>99**	<1	<1	<1	
Andorra	2015	72	88	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	80	88	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Angola	2015	28 128	63	**27**	10	22	42	0.30	**70**	12	15	3	0.49	**54**	11	17	17	0.75
	2022	35 589	68	**28**	9	23	41		**72**	10	18	<1		**58**	9	19	14	
Anguilla	2015	15	100	-	-	-	-	-	**97**	<1	3	<1	-	**97**	<1	3	<1	-
	2022	16	100	-	-	-	-		-	-	-	-		-	-	-	-	
Antigua and Barbuda	2015	90	25	**98**	<1	1	<1	-	**98**	<1	1	<1	-	**98**	<1	1	<1	-
	2022	94	24	**98**	<1	1	<1		**98**	<1	1	<1		**98**	<1	1	<1	
Argentina	2015	43 257	92	**93**	<1	3	4	-	**>99**	<1	<1	<1	0.05	**99**	<1	<1	<1	-
	2022	45 510	92	-	-	-	-		**>99**	<1	<1	<1		-	-	-	-	
Armenia	2015	2 879	63	**>99**	<1	<1	<1	0.50	**>99**	<1	<1	<1	0.05	**>99**	<1	<1	<1	0.21
	2022	2 780	64	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Aruba	2015	104	43	-	-	-	-	-	-	-	-	-	-	**98**	<1	2	<1	-
	2016	105	43	-	-	-	-		-	-	-	-		**98**	<1	2	<1	
Australia	2015	23 820	86	**>99**	<1	<1	<1	0.04	**>99**	<1	<1	<1	0.01	**>99**	<1	<1	<1	0.01
	2022	26 177	86	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Austria	2015	8 642	58	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	-0.00
	2022	8 940	59	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Azerbaijan	2015	9 863	55	**85**	2	8	5	1.83	**>99**	<1	<1	<1	0.38	**93**	1	4	2	1.10
	2022	10 358	57	**94**	2	3	<1		**>99**	<1	<1	<1		**98**	1	1	<1	
Bahamas	2015	393	83	-	-	-	-	-	-	-	-	-	-	**99**	<1	1	<1	-
	2019	405	83	-	-	-	-		-	-	-	-		**99**	<1	1	<1	
Bahrain	2015	1 362	89	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	-0.00
	2022	1 472	90	-	-	-	-		-	-	-	-		**>99**	<1	<1	<1	
Bangladesh	2015	157 830	34	**97**	1	<1	1	0.21	**98**	1	<1	<1	-0.03	**97**	1	<1	1	0.15
	2022	171 186	40	**98**	<1	<1	<1		**98**	2	<1	<1		**98**	1	<1	<1	
Barbados	2015	278	31	-	-	-	-	-	-	-	-	-	-	**98**	<1	1	<1	0.01
	2022	282	31	-	-	-	-		-	-	-	-		**99**	<1	1	<1	
Belarus	2015	9 701	77	**98**	<1	1	<1	-0.06	**99**	1	<1	<1	0.07	**98**	1	<1	<1	0.04
	2022	9 535	80	**98**	<1	2	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Belgium	2015	11 248	98	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	11 656	98	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Belize	2015	360	45	**96**	1	3	<1	0.62	**>99**	<1	<1	<1	0.35	**97**	1	2	<1	0.50
	2022	405	46	**98**	1	<1	<1		**99**	1	<1	<1		**98**	1	<1	<1	
Benin	2015	10 933	46	**58**	10	24	8	0.39	**75**	5	18	2	-0.14	**66**	8	21	5	0.26
	2022	13 353	50	**61**	11	24	5		**74**	5	20	<1		**67**	8	22	3	
Bermuda	2015	63	100	-	-	-	-	-	**>99**	<1	<1	<1	-0.00	**>99**	<1	<1	<1	-0.00
	2022	64	100	-	-	-	-		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Bhutan	2015	743	39	**97**	1	<1	1	0.95	**98**	<1	<1	<1	0.18	**97**	1	<1	<1	0.76
	2022	782	44	**99**	1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	

'-' = no estimate. For JMP estimate methods see Annex 1. For unrounded estimates see <www.washdata.org>.

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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	2015	**21**	25	54	21	11	48	**32**	68	77	32	35	53	**24**	36	60	24	17	50
	2022	**28**	37	70	28	17	61	**36**	77	89	36	42	58	**30**	47	75	30	23	60
Albania	2015	-	66	68	-	73	23	-	89	72	-	87	11	**71**	79	71	96	81	16
	2022	-	70	68	-	76	21	-	87	72	-	84	14	**71**	81	71	97	81	16
Algeria	2015	**66**	66	79	73	62	35	**82**	82	82	88	80	19	**77**	77	81	84	75	24
	2022	**63**	72	63	75	60	40	**73**	81	73	89	75	24	**71**	79	71	85	71	28
American Samoa	2015	-	-	-	-	-	-	-	-	-	-	-	-	**89**	97	89	98	98	<1
	2021	-	-	-	-	-	-	-	-	-	-	-	-	**90**	99	90	98	>99	<1
Andorra	2015	-	>99	>99	-	>99	<1	-	>99	>99	-	>99	<1	**91**	>99	>99	91	>99	<1
	2022	-	>99	>99	-	>99	<1	-	>99	>99	-	>99	<1	**91**	>99	>99	91	>99	<1
Angola	2015	-	7	24	-	9	28	-	48	35	-	55	27	-	33	31	-	38	28
	2022	-	7	23	-	8	28	-	55	35	-	59	22	-	40	31	-	43	24
Anguilla	2015	-	-	-	-	-	-	-	88	88	-	97	<1	-	88	88	-	97	<1
	2022	-	-	-	-	-	-	-	-	-	-	>99	-	-	-	-	-	>99	-
Antigua and Barbuda	2015	-	39	-	-	98	<1	-	35	-	-	98	<1	-	38	91	-	98	<1
	2022	-	39	-	-	98	<1	-	35	-	-	98	<1	-	38	91	-	98	<1
Argentina	2015	-	86	-	-	82	11	-	98	-	-	98	2	-	97	-	-	96	2
	2022	-	-	-	-	-	-	-	>99	-	-	>99	<1	-	-	-	-	-	-
Armenia	2015	-	96	91	-	93	6	-	99	91	-	>99	<1	**83**	98	91	83	97	3
	2022	-	>99	92	-	>99	<1	-	>99	91	-	>99	<1	**82**	>99	92	82	>99	<1
Aruba	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	96	-	-	94	4
	2016	-	-	-	-	-	-	-	-	-	-	-	-	-	96	-	-	94	4
Australia	2015	-	>99	-	-	87	13	**>99**	>99	-	>99	>99	<1	-	>99	96	-	97	3
	2022	-	>99	-	-	-	-	**>99**	>99	-	>99	-	-	-	>99	96	-	-	-
Austria	2015	-	>99	>99	-	-	-	-	>99	99	-	-	-	**99**	>99	99	>99	-	-
	2022	-	>99	>99	-	-	-	-	>99	99	-	-	-	**99**	>99	99	>99	-	-
Azerbaijan	2015	**73**	73	-	81	64	23	**92**	>99	-	92	95	4	**68**	87	68	87	81	13
	2022	**81**	81	-	91	86	11	**92**	>99	-	92	>99	<1	**72**	92	72	92	94	5
Bahamas	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-	97	2
	2019	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-	97	2
Bahrain	2015	-	-	-	-	-	-	-	-	-	-	-	-	**99**	99	>99	99	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**99**	99	>99	>99	>99	<1
Bangladesh	2015	**61**	74	95	61	2	96	**47**	82	96	47	33	66	**56**	77	95	56	13	86
	2022	**62**	82	96	62	3	96	**54**	85	97	54	33	67	**59**	83	96	59	15	84
Barbados	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	98	89	-	99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	98	89	-	99	<1
Belarus	2015	-	86	76	-	73	26	-	97	97	-	97	3	**92**	94	92	99	92	8
	2022	-	98	75	-	89	9	-	>99	97	-	>99	<1	**93**	>99	93	99	97	2
Belgium	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
Belize	2015	-	93	-	-	75	22	-	98	-	-	93	7	-	95	-	-	83	15
	2022	-	96	-	-	79	20	-	98	-	-	96	4	-	97	-	-	87	12
Benin	2015	-	20	38	-	28	40	-	49	54	-	54	26	-	33	45	-	40	33
	2022	-	20	45	-	30	42	-	44	55	-	48	32	-	32	50	-	39	37
Bermuda	2015	-	-	-	-	-	-	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
	2022	-	-	-	-	-	-	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1
Bhutan	2015	**49**	83	87	49	97	2	**45**	91	86	45	>99	<1	**47**	86	87	47	98	1
	2022	**85**	85	89	91	>99	<1	**59**	>99	86	59	>99	<1	**73**	91	87	77	>99	<1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Bolivia (Plurinational State of)	2015	11 090	68	**73**	<1	6	20	1.08	**98**	<1	1	<1	0.19	**90**	<1	3	7	0.61
	2022	12 224	71	**81**	<1	4	15		**>99**	<1	<1	<1		**94**	<1	1	4	
Bonaire, Sint Eustatius and Saba	2015	23	75	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.06
	2022	27	75	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Bosnia and Herzegovina	2015	3 524	47	**97**	3	<1	<1	0.05	**95**	5	<1	<1	-0.17	**96**	4	<1	<1	-0.05
	2022	3 234	50	**97**	3	<1	<1		**95**	5	<1	<1		**96**	4	<1	<1	
Botswana	2015	2 305	67	**72**	22	3	3	1.19	**97**	2	1	<1	0.15	**89**	8	2	1	0.79
	2022	2 630	72	**80**	15	3	2		**98**	<1	2	<1		**93**	5	2	<1	
Brazil	2015	205 188	86	**89**	3	<1	8	1.12	**>99**	<1	<1	<1	0.08	**98**	<1	<1	1	0.28
	2022	215 313	88	**98**	<1	2	-		**>99**	<1	<1	<1		**>99**	<1	<1	-	
British Virgin Islands	2015	29	47	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.21
	2022	31	49	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Brunei Darussalam	2015	421	77	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.00
	2022	449	79	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Bulgaria	2015	7 309	74	**98**	<1	2	<1	-0.11	**>99**	<1	<1	<1	-0.01	**>99**	<1	<1	<1	-0.03
	2022	6 782	76	**97**	<1	3	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Burkina Faso	2015	18 718	28	**40**	29	29	3	-0.82	**80**	13	6	<1	0.09	**51**	25	23	2	-0.37
	2022	22 674	32	**35**	37	28	<1		**81**	14	5	<1		**50**	29	21	<1	
Burundi	2015	10 727	12	**56**	21	17	7	0.45	**89**	8	2	1	0.39	**60**	20	15	6	0.54
	2022	12 890	14	**58**	21	17	4		**91**	8	1	<1		**62**	19	15	4	
Cabo Verde	2015	552	64	**74**	17	10	<1	0.61	**92**	7	1	<1	0.26	**85**	10	4	<1	0.49
	2022	593	68	**83**	9	8	<1		**93**	7	<1	<1		**90**	7	3	<1	
Cambodia	2015	15 418	22	**66**	7	11	16	1.24	**90**	4	2	4	0.64	**71**	6	9	13	1.19
	2022	16 768	25	**73**	13	4	10		**94**	6	<1	<1		**78**	12	3	7	
Cameroon	2015	23 013	55	**47**	12	29	12	0.83	**82**	11	6	<1	-0.05	**66**	12	16	6	0.60
	2022	27 915	59	**52**	16	23	9		**82**	13	4	1		**70**	14	12	4	
Canada	2015	35 732	81	**99**	<1	1	<1	0.04	**>99**	<1	<1	<1	-0.01	**>99**	<1	<1	<1	-0.00
	2022	38 454	82	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Cayman Islands	2015	61	100	**-**	-	-	-	-	**96**	<1	4	<1	-	**96**	<1	4	<1	-
	2022	69	100	**-**	-	-	-		**95**	<1	4	<1		**95**	<1	4	<1	
Central African Republic	2015	4 819	40	**32**	17	44	7	-0.77	**58**	27	15	<1	-1.60	**42**	21	32	4	-1.03
	2022	5 579	43	**27**	20	47	6		**48**	36	16	<1		**36**	27	34	3	
Chad	2015	14 140	23	**39**	13	39	9	0.68	**77**	10	12	<1	0.16	**48**	12	33	7	0.61
	2022	17 723	24	**44**	12	35	9		**78**	13	8	<1		**52**	13	28	7	
Channel Islands	2015	-	-	**-**	-	-	-	-	**-**	-	-	-	-	**94**	<1	6	<1	-
	2017	-	-	**-**	-	-	-		**-**	-	-	-		**94**	<1	6	<1	
Chile	2015	17 870	87	**97**	<1	3	<1	1.13	**>99**	<1	<1	<1	0.04	**>99**	<1	<1	<1	0.19
	2022	19 604	88	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
China	2015	1 417 228	56	**86**	2	11	1	1.27	**98**	<1	1	<1	0.03	**93**	<1	6	<1	0.85
	2022	1 449 781	64	**96**	<1	3	<1		**98**	<1	1	<1		**98**	<1	2	<1	
China, Hong Kong SAR	2015	7 400	100	**-**	-	-	-	-	**>99**	<1	<1	<1	0.06	**>99**	<1	<1	<1	0.06
	2022	7 489	100	**-**	-	-	-		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
China, Macao SAR	2015	615	100	**-**	-	-	-	-	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	695	100	**-**	-	-	-		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Colombia	2015	47 120	80	**83**	<1	7	10	0.58	**>99**	<1	<1	<1	0.07	**96**	<1	2	2	0.25
	2022	51 874	82	**87**	<1	3	10		**>99**	<1	<1	<1		**98**	<1	<1	2	
Comoros	2015	730	28	**77**	12	11	<1	-	**88**	9	2	<1	-	**80**	11	8	<1	-
	2019	791	29	**77**	12	12	-		**88**	9	2	<1		**80**	11	9	-	
Congo	2015	5 064	66	**41**	11	29	19	-	**87**	10	3	<1	-	**71**	11	12	7	-
	2021	5 836	68	**46**	11	24	19		**87**	10	3	<1		**74**	10	9	6	
Cook Islands	2015	18	74	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.00
	2022	17	76	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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)	2015	-	57	-	-	30	43	-	95	81	-	88	10	-	83	-	-	70	21
	2022	-	63	-	-	21	60	-	96	80	-	86	14	-	87	-	-	67	27
Bonaire, Sint Eustatius and Saba	2015	-	-	-	-	-	-	-	-	-	-	-	-	**95**	95	-	>99	91	9
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
Bosnia and Herzegovina	2015	-	92	88	-	93	7	-	90	90	-	98	2	**89**	91	89	91	95	5
	2022	-	92	88	-	-	-	-	90	90	-	-	-	**87**	91	89	87	-	-
Botswana	2015	-	45	51	-	77	17	**76**	92	76	83	97	1	-	76	68	-	91	6
	2022	-	51	47	-	77	18	**73**	95	73	83	97	1	-	83	66	-	91	6
Brazil	2015	**63**	82	77	63	79	13	**85**	99	92	85	99	<1	**82**	97	90	82	96	2
	2022	**76**	98	82	76	90	8	**89**	>99	92	89	>99	<1	**87**	>99	91	87	99	<1
British Virgin Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-	96	4
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-	-	-
Brunei Darussalam	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	-	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	-	>99	<1
Bulgaria	2015	-	98	-	-	98	<1	-	>99	-	-	>99	<1	**97**	>99	97	97	>99	<1
	2022	-	97	-	-	97	<1	-	>99	-	-	>99	<1	**96**	>99	96	99	>99	<1
Burkina Faso	2015	-	2	43	-	9	60	-	49	59	-	78	15	-	15	48	-	28	47
	2022	-	3	56	-	10	61	-	59	56	-	78	17	-	21	56	-	32	47
Burundi	2015	-	3	42	-	25	51	-	55	58	-	88	9	-	9	44	-	33	46
	2022	-	3	43	-	30	49	-	58	53	-	91	8	-	11	45	-	39	43
Cabo Verde	2015	-	74	71	-	72	18	-	86	79	-	91	7	-	82	76	-	85	11
	2022	-	83	77	-	77	15	-	93	87	-	96	4	-	90	84	-	90	7
Cambodia	2015	**17**	41	65	17	13	60	**54**	71	81	54	66	28	**25**	48	68	25	25	53
	2022	**20**	41	76	20	20	66	**58**	68	87	58	77	23	**29**	48	79	29	34	55
Cameroon	2015	-	7	25	-	15	44	-	44	36	-	63	30	-	27	31	-	41	37
	2022	-	9	31	-	17	51	-	56	49	-	59	35	-	37	42	-	42	42
Canada	2015	-	98	-	-	99	<1	-	>99	-	-	>99	<1	**99**	99	-	>99	>99	<1
	2022	-	99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
Cayman Islands	2015	-	-	-	-	-	-	-	92	82	-	88	7	-	92	82	-	88	7
	2022	-	-	-	-	-	-	-	93	82	-	91	4	-	93	82	-	91	4
Central African Republic	2015	**3**	3	31	23	1	48	**13**	13	49	40	37	48	**7**	7	38	30	16	48
	2022	**2**	2	34	22	<1	47	**11**	11	42	40	31	52	**6**	6	37	29	14	49
Chad	2015	**3**	3	42	11	7	45	**17**	41	67	17	49	38	**6**	11	48	13	17	43
	2022	**3**	3	45	12	7	49	**18**	33	70	18	47	45	**6**	10	51	14	17	48
Channel Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	**92**	92	-	94	90	4
	2017	-	-	-	-	-	-	-	-	-	-	-	-	**92**	92	-	94	90	4
Chile	2015	-	90	-	-	94	4	**>99**	>99	>99	>99	>99	<1	**98**	99	99	98	99	<1
	2022	-	98	-	-	>99	<1	**>99**	>99	>99	>99	>99	<1	**99**	>99	>99	99	>99	<1
China	2015	-	80	81	-	57	30	**94**	97	96	94	92	7	-	90	90	-	76	17
	2022	-	96	93	-	72	25	**98**	98	98	99	94	5	-	97	96	-	86	12
China, Hong Kong SAR	2015	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
China, Macao SAR	2015	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1	**>99**	>99	>99	>99	>99	<1
	2022	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1	**>99**	>99	>99	>99	>99	<1
Colombia	2015	**38**	80	-	38	59	24	**81**	>99	81	91	95	4	**73**	95	76	80	88	8
	2022	**40**	85	-	40	60	27	**81**	>99	81	92	95	5	**74**	97	76	82	89	9
Comoros	2015	-	63	-	-	53	36	-	71	-	-	76	21	-	65	-	-	59	32
	2019	-	63	-	-	53	36	-	71	-	-	76	21	-	65	-	-	59	32
Congo	2015	**17**	17	-	19	10	42	**58**	65	-	58	77	20	**44**	49	-	45	54	27
	2021	**19**	19	-	21	11	46	**59**	69	-	59	76	21	**46**	53	-	47	55	29
Cook Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	87	-	-	85	15
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	87	-	-	89	11

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Costa Rica	2015	4 895	77	**98**	<1	<1	<1	0.54	**>99**	<1	<1	<1	0.03	**>99**	<1	<1	<1	0.24
	2022	5 181	82	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Côte d'Ivoire	2015	23 597	49	**57**	13	22	8	0.13	**88**	4	6	2	-0.21	**72**	8	14	5	0.10
	2022	28 161	53	**58**	13	21	8		**86**	4	6	4		**73**	8	13	6	
Croatia	2015	4 255	56	-	-	-	-	-	**>99**	<1	<1	<1	0.00	-	-	-	-	-
	2022	4 030	58	-	-	-	-		**>99**	<1	<1	<1		-	-	-	-	
Cuba	2015	11 340	77	**87**	6	6	1	0.65	**96**	2	2	<1	-0.04	**94**	3	3	<1	0.13
	2022	11 212	77	**92**	5	2	1		**95**	2	2	<1		**95**	3	2	<1	
Curaçao	2015	170	89	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	-
	2017	172	89	-	-	-	-		-	-	-	-		**>99**	<1	<1	<1	
Cyprus	2015	1 187	67	**>99**	<1	<1	<1	-0.00	**>99**	<1	<1	<1	-0.01	**>99**	<1	<1	<1	-0.01
	2022	1 251	67	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Czechia	2015	10 524	73	**>99**	<1	<1	<1	0.01	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	10 494	74	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Democratic People's Republic of Korea	2015	25 258	61	**92**	<1	7	<1	-0.49	**97**	<1	2	<1	-0.10	**95**	<1	4	<1	-0.25
	2022	26 069	63	**89**	<1	11	-		**97**	<1	2	<1		**94**	<1	5	-	
Democratic Republic of the Congo	2015	78 657	43	**16**	14	53	17	-0.26	**63**	23	12	2	-0.52	**36**	18	35	10	-0.11
	2022	99 010	47	**14**	18	54	14		**59**	30	9	<1		**35**	24	33	8	
Denmark	2015	5 678	88	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	5 882	88	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Djibouti	2015	1 006	77	**49**	12	30	8	-0.32	**84**	15	<1	<1	0.10	**76**	15	7	2	0.03
	2022	1 121	78	**47**	12	31	10		**84**	16	<1	<1		**76**	15	7	2	
Dominica	2015	70	70	-	-	-	-	-	-	-	-	-	-	**95**	<1	5	<1	-
	2017	70	70	-	-	-	-		-	-	-	-		**95**	<1	5	<1	
Dominican Republic	2015	10 406	79	**88**	3	2	6	0.47	**97**	1	1	<1	0.05	**95**	1	2	2	0.27
	2022	11 229	84	**91**	<1	<1	7		**98**	<1	1	<1		**97**	<1	1	2	
Ecuador	2015	16 196	63	**83**	<1	7	10	0.84	**>99**	<1	<1	<1	0.42	**93**	<1	3	4	0.61
	2022	18 001	65	**88**	<1	7	5		**>99**	<1	<1	<1		**96**	<1	3	2	
Egypt	2015	97 724	43	**98**	<1	1	<1	0.05	**>99**	<1	<1	<1	-0.01	**99**	<1	1	<1	0.02
	2022	110 990	43	**98**	<1	1	<1		**>99**	<1	<1	<1		**99**	<1	<1	<1	
El Salvador	2015	6 231	70	**87**	2	3	8	1.69	**99**	<1	<1	<1	0.30	**95**	<1	2	3	0.91
	2022	6 336	75	**94**	<1	<1	5		**>99**	<1	<1	<1		**99**	<1	<1	1	
Equatorial Guinea	2015	1 347	71	**31**	1	46	22	-	**78**	4	18	<1	-	**64**	3	26	7	-
	2017	1 451	72	**31**	1	46	22		**78**	4	18	<1		**65**	3	26	6	
Eritrea	2015	3 340	38	**28**	24	20	28	-	**90**	7	3	<1	-	**51**	18	14	17	-
	2016	3 365	39	**28**	24	20	28		**90**	7	3	<1		**52**	18	13	17	
Estonia	2015	1 315	68	**>99**	<1	<1	<1	0.32	**>99**	<1	<1	<1	0.03	**>99**	<1	<1	<1	0.12
	2022	1 326	70	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Eswatini	2015	1 134	23	**58**	11	12	19	1.00	**95**	<1	2	2	0.48	**67**	9	10	15	0.91
	2022	1 202	25	**65**	13	10	12		**98**	<1	<1	<1		**73**	10	7	9	
Ethiopia	2015	102 472	19	**32**	23	29	15	1.52	**81**	14	3	2	0.32	**42**	21	24	13	1.49
	2022	123 380	23	**42**	32	20	5		**83**	14	1	1		**52**	28	16	4	
Falkland Islands (Malvinas)	2015	3	76	**78**	<1	22	<1	-	**>99**	<1	<1	<1	0.00	**95**	<1	5	<1	-
	2022	4	79	-	-	-	-		**>99**	<1	<1	<1		-	-	-	-	
Faroe Islands	2015	49	42	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00
	2022	53	43	-	-	-	-		-	-	-	-		**>99**	<1	<1	<1	
Fiji	2015	917	55	**91**	1	3	4	-0.02	**99**	<1	<1	<1	0.01	**95**	<1	2	2	0.03
	2022	930	58	**91**	1	4	4		**99**	<1	<1	<1		**95**	<1	2	2	
Finland	2015	5 479	85	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	5 541	86	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
France	2015	63 810	80	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	64 627	82	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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	2015	**80**	97	80	83	96	2	**80**	>99	80	96	>99	<1	**80**	99	80	93	99	<1
	2022	**81**	99	81	84	>99	<1	**80**	>99	80	96	>99	<1	**81**	>99	81	94	>99	<1
Côte d'Ivoire	2015	**24**	24	36	27	27	43	**46**	73	46	64	67	24	**35**	49	41	46	47	34
	2022	**27**	28	62	27	29	42	**59**	73	59	64	66	24	**44**	52	60	47	49	32
Croatia	2015	-	-	-	-	-	-	**97**	97	-	97	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	**97**	97	-	97	-	-	-	-	-	-	-	-
Cuba	2015	-	79	85	-	55	38	-	92	89	-	85	13	-	89	88	-	78	18
	2022	-	92	89	-	57	40	-	93	89	-	87	11	-	93	89	-	80	18
Curaçao	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	-	99	<1
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	-	99	<1
Cyprus	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**99**	>99	-	99	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
Czechia	2015	**98**	98	-	99	>99	<1	**98**	98	>99	>99	>99	<1	**98**	98	-	>99	>99	<1
	2022	**98**	98	-	>99	>99	<1	**98**	98	>99	>99	>99	<1	**98**	98	-	>99	>99	<1
Democratic People's Republic of Korea	2015	**50**	72	91	50	57	35	**77**	77	97	89	78	20	**67**	76	95	74	70	26
	2022	**49**	70	88	49	50	39	**77**	77	97	88	74	24	**67**	74	93	74	65	30
Democratic Republic of the Congo	2015	**<1**	<1	26	22	7	23	**27**	27	58	58	65	21	**12**	12	40	37	32	22
	2022	**<1**	<1	28	23	8	24	**24**	24	60	60	67	22	**12**	12	43	41	36	23
Denmark	2015	-	-	-	-	>99	<1	-	-	-	-	>99	<1	**99**	>99	-	99	>99	<1
	2022	-	-	-	-	>99	<1	-	-	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
Djibouti	2015	-	5	-	-	27	35	-	58	-	-	97	2	-	46	-	-	81	9
	2022	-	5	-	-	26	33	-	58	-	-	>99	<1	-	47	-	-	83	8
Dominica	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	81	52	-	94	1
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	81	52	-	94	1
Dominican Republic	2015	**35**	78	70	35	64	27	**47**	94	85	47	84	14	**44**	91	82	44	80	17
	2022	**35**	85	85	35	66	27	**47**	98	91	47	83	15	**45**	96	90	45	80	17
Ecuador	2015	**50**	80	77	50	69	14	**74**	97	96	74	96	3	**65**	91	89	65	86	7
	2022	**53**	88	82	53	75	12	**75**	>99	97	75	>99	<1	**67**	96	92	67	91	4
Egypt	2015	-	96	77	-	96	3	-	98	84	-	99	<1	-	97	80	-	97	2
	2022	-	97	79	-	99	<1	-	98	87	-	99	<1	-	98	82	-	99	<1
El Salvador	2015	-	75	62	-	71	17	**81**	96	81	98	94	5	-	89	75	-	87	9
	2022	-	81	65	-	84	12	**79**	97	79	>99	96	4	-	93	75	-	93	6
Equatorial Guinea	2015	-	2	-	-	22	10	-	23	-	-	48	34	-	16	-	-	41	27
	2017	-	2	-	-	22	10	-	23	-	-	48	34	-	17	-	-	41	27
Eritrea	2015	-	8	-	-	41	11	-	74	-	-	69	27	-	34	-	-	52	18
	2016	-	8	-	-	41	11	-	74	-	-	69	27	-	34	-	-	52	18
Estonia	2015	-	93	-	-	89	11	-	99	-	-	>99	<1	**97**	97	>99	97	96	4
	2022	-	93	-	-	>99	<1	-	99	-	-	>99	<1	**97**	97	>99	98	>99	<1
Eswatini	2015	-	34	37	-	46	23	**79**	90	79	88	91	5	-	47	47	-	57	18
	2022	-	39	39	-	51	27	**78**	94	78	93	95	4	-	53	48	-	62	22
Ethiopia	2015	**3**	3	51	7	23	32	**38**	63	56	38	85	10	**10**	15	52	13	35	28
	2022	**6**	6	67	9	32	42	**39**	76	68	39	85	12	**13**	22	67	16	44	35
Falkland Islands (Malvinas)	2015	-	67	-	-	56	22	-	>99	-	-	>99	<1	-	92	-	-	90	5
	2022	-	-	-	-	-	-	-	>99	-	-	>99	<1	-	-	-	-	-	-
Faroe Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	-	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	-	>99	<1
Fiji	2015	**27**	88	52	27	74	18	**52**	98	52	86	98	1	**41**	94	52	59	87	9
	2022	**27**	88	52	27	77	16	**53**	98	53	86	98	<1	**42**	94	52	62	89	7
Finland	2015	-	98	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	98	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
France	2015	**98**	>99	-	98	>99	<1	**99**	>99	-	99	>99	<1	**99**	>99	-	99	>99	<1
	2022	**98**	>99	-	98	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
French Guiana	2015	257	84	-	-	-	-	-	-	-	-	-	-	94	<1	6	<1	-
	2022	305	86	-	-	-	-		-	-	-	-		94	<1	6	<1	
French Polynesia	2015	292	62	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.00
	2022	306	62	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Gabon	2015	2 029	88	49	11	15	24	0.65	89	7	2	1	-0.04	85	8	4	4	0.30
	2022	2 389	91	55	13	17	15		90	7	2	<1		87	8	3	2	
Gambia	2015	2 253	59	72	13	15	<1	0.62	88	4	8	<1	0.39	82	8	11	<1	0.62
	2022	2 706	64	76	13	11	<1		91	2	7	<1		86	6	8	<1	
Georgia	2015	3 771	57	86	7	7	<1	-0.06	99	<1	<1	<1	0.02	93	3	3	<1	0.02
	2022	3 744	60	89	6	5	<1		>99	<1	<1	<1		95	3	2	<1	
Germany	2015	82 073	77	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	-0.00
	2022	83 370	78	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Ghana	2015	28 871	54	68	11	6	15	0.92	92	5	2	1	0.86	81	8	4	8	1.05
	2022	33 476	59	74	12	4	10		98	2	<1	<1		88	6	2	4	
Gibraltar	2015	33	100	-	-	-	-	-	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	33	100	-	-	-	-		>99	<1	<1	<1		>99	<1	<1	<1	
Greece	2015	10 807	78	>99	<1	<1	<1	0.05	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.01
	2022	10 385	80	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Greenland	2015	56	86	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.00
	2022	56	88	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Grenada	2015	119	36	-	-	-	-	-	-	-	-	-	-	96	1	<1	3	-
	2017	121	36	-	-	-	-		-	-	-	-		96	1	<1	3	
Guadeloupe	2015	399	98	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	-
	2022	396	99	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Guam	2015	168	95	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.01
	2022	172	95	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Guatemala	2015	16 001	50	87	2	7	4	0.54	97	<1	2	<1	0.12	92	<1	5	2	0.37
	2022	17 844	53	91	2	4	3		98	<1	2	<1		95	1	3	2	
Guinea	2015	11 626	35	51	17	16	16	0.92	84	10	5	<1	0.77	63	15	12	11	0.97
	2022	13 859	38	59	16	13	13		92	6	2	<1		71	12	8	8	
Guinea-Bissau	2015	1 789	42	50	9	39	2	0.45	75	13	12	<1	-0.21	61	11	27	1	0.29
	2022	2 106	45	53	12	34	2		73	18	8	<1		62	15	22	<1	
Guyana	2015	755	26	93	2	3	3	0.44	96	3	<1	<1	0.07	94	2	2	2	0.33
	2022	809	27	96	2	1	1		96	4	<1	<1		96	2	<1	<1	
Haiti	2015	10 564	52	42	12	44	2	0.11	85	6	9	<1	-0.01	65	9	25	<1	0.51
	2022	11 585	59	43	13	44	<1		85	7	8	<1		67	10	23	<1	
Honduras	2015	9 295	55	86	1	11	1	0.64	98	<1	1	<1	0.15	93	<1	6	<1	0.48
	2022	10 433	60	91	1	8	<1		>99	<1	<1	<1		96	1	3	<1	
Hungary	2015	9 844	71	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	9 967	73	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Iceland	2015	331	94	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	373	94	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
India	2015	1 322 867	33	87	5	7	1	0.76	95	2	3	<1	0.18	89	4	6	<1	0.61
	2022	1 417 173	36	92	5	2	<1		96	3	1	<1		93	4	2	<1	
Indonesia	2015	259 092	53	81	<1	15	3	1.05	95	<1	4	<1	0.42	89	<1	9	2	0.86
	2022	275 501	58	88	1	9	2		98	<1	<1	<1		94	<1	4	<1	
Iran (Islamic Republic of)	2015	81 791	73	92	4	3	<1	0.33	98	1	<1	<1	0.03	97	2	1	<1	0.16
	2022	88 551	77	94	4	1	<1		99	1	<1	<1		98	2	<1	<1	
Iraq	2015	37 758	70	85	3	3	10	1.85	98	<1	1	<1	0.30	94	1	2	3	0.80
	2022	44 496	71	95	3	<1	3		>99	<1	<1	<1		98	<1	<1	<1	
Ireland	2015	4 666	63	97	<1	3	<1	-0.02	96	<1	4	<1	-0.07	96	<1	4	<1	-0.06
	2022	5 023	64	97	<1	3	<1		95	<1	5	<1		96	<1	4	<1	
Isle of Man	2015	84	52	-	-	-	-	-	-	-	-	-	-	99	<1	1	<1	-
	2022	85	53	-	-	-	-		-	-	-	-		>99	<1	<1	<1	

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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	2015	-	-	-	-	-	-	-	-	-	-	-	-	**91**	91	-	93	88	6
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**91**	91	-	94	89	6
French Polynesia	2015	-	-	-	-	-	-	-	-	-	-	-	-	**88**	98	-	88	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**82**	98	-	82	>99	<1
Gabon	2015	-	21	14	-	27	33	-	76	35	-	94	3	-	69	32	-	86	6
	2022	-	23	16	-	30	38	-	77	35	-	94	3	-	72	33	-	88	6
Gambia	2015	**9**	9	62	33	56	28	**65**	65	73	67	84	8	**42**	42	69	53	73	16
	2022	**12**	12	65	35	71	18	**68**	76	74	68	84	9	**48**	53	71	56	79	12
Georgia	2015	**40**	86	67	40	59	34	**88**	99	88	89	95	5	**67**	93	79	68	80	17
	2022	**41**	89	68	41	66	29	**88**	>99	88	89	97	2	**69**	95	80	70	85	13
Germany	2015	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	>99	>99	>99	<1
	2022	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	>99	>99	>99	<1
Ghana	2015	**11**	11	68	43	27	51	**52**	52	83	62	72	25	**33**	33	76	53	52	37
	2022	**19**	19	82	46	34	52	**63**	65	91	63	73	27	**44**	46	87	56	57	38
Gibraltar	2015	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
Greece	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**99**	>99	-	99	>99	<1
Greenland	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	90	-	-	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	90	-	-	>99	<1
Grenada	2015	-	-	-	-	-	-	-	-	-	-	-	-	**90**	90	92	91	92	4
	2017	-	-	-	-	-	-	-	-	-	-	-	-	**90**	90	92	93	92	4
Guadeloupe	2015	-	-	-	-	-	-	-	-	-	-	-	-	**98**	>99	-	98	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**96**	>99	-	96	>99	<1
Guam	2015	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	-	>99	-	-
Guatemala	2015	**44**	75	55	44	65	24	**64**	94	64	68	90	8	**54**	84	60	56	77	16
	2022	**46**	80	58	46	65	27	**66**	95	66	68	89	9	**56**	88	62	58	78	18
Guinea	2015	-	13	27	-	6	62	-	61	37	-	56	38	-	30	31	-	23	54
	2022	-	18	29	-	8	67	-	70	29	-	47	51	-	38	29	-	23	61
Guinea-Bissau	2015	**11**	11	56	33	22	37	**38**	38	59	57	58	30	**22**	22	57	43	37	34
	2022	**14**	14	61	36	32	32	**36**	36	61	59	67	25	**24**	24	61	46	48	29
Guyana	2015	-	86	85	-	64	31	-	84	87	-	83	16	-	85	85	-	69	27
	2022	-	90	88	-	65	33	-	84	87	-	84	16	-	89	88	-	70	28
Haiti	2015	-	8	44	-	25	29	-	14	78	-	26	65	-	11	61	-	26	48
	2022	-	7	45	-	24	32	-	8	78	-	15	77	-	8	64	-	19	58
Honduras	2015	**43**	78	71	43	79	8	**77**	96	78	77	95	4	**62**	88	75	62	88	6
	2022	**46**	80	78	46	86	6	**78**	97	94	78	96	4	**65**	90	87	65	92	5
Hungary	2015	**88**	>99	>99	88	99	<1	**93**	>99	>99	93	>99	<1	**92**	>99	>99	92	>99	<1
	2022	**>99**	>99	>99	>99	>99	<1	**>99**	>99	>99	>99	>99	<1	**>99**	>99	>99	>99	>99	<1
Iceland	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**98**	>99	-	98	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
India	2015	**53**	53	69	66	33	59	-	77	80	-	68	29	-	61	72	-	45	49
	2022	**66**	66	69	86	33	64	-	82	75	-	66	33	-	72	71	-	45	53
Indonesia	2015	**22**	58	74	22	11	71	**34**	74	88	34	31	65	**28**	67	81	28	22	68
	2022	**24**	64	81	24	14	76	**35**	74	91	35	30	69	**30**	70	86	30	23	72
Iran (Islamic Republic of)	2015	**86**	86	-	89	93	3	**96**	96	-	98	>99	<1	**93**	93	-	96	98	1
	2022	**88**	88	-	99	97	2	**96**	96	-	98	>99	<1	**94**	94	-	98	>99	<1
Iraq	2015	**43**	75	53	43	64	23	**64**	94	73	64	89	10	**57**	88	67	57	82	14
	2022	**48**	93	62	48	72	25	**65**	95	78	65	88	12	**60**	94	74	60	84	16
Ireland	2015	-	97	-	-	97	<1	-	96	-	-	96	<1	**95**	96	-	95	96	<1
	2022	-	97	-	-	97	<1	-	95	-	-	95	<1	**96**	96	-	96	96	<1
Isle of Man	2015	-	-	-	-	-	-	-	-	-	-	-	-	**97**	97	-	99	98	1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Israel	2015	8 008	92	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	9 038	93	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Italy	2015	60 233	70	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.02
	2022	59 037	72	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Jamaica	2015	2 794	55	85	8	3	4	-0.12	95	3	1	<1	-0.11	90	5	2	2	-0.09
	2022	2 827	57	85	8	3	4		95	3	1	<1		91	5	2	2	
Japan	2015	127 251	91	-	-	-	-	-	-	-	-	-	-	99	<1	1	<1	0.03
	2022	123 952	92	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Jordan	2015	9 494	90	97	<1	2	<1	0.01	>99	<1	<1	<1	0.00	99	<1	<1	<1	0.02
	2022	11 286	92	97	<1	2	<1		>99	<1	<1	<1		99	<1	<1	<1	
Kazakhstan	2015	17 836	57	91	2	7	<1	-	98	2	<1	<1	0.06	95	2	3	<1	-
	2022	19 398	58	-	-	-	-		98	2	<1	<1		-	-	-	-	
Kenya	2015	46 851	26	48	10	14	28	0.72	87	4	4	5	-0.06	58	8	12	22	0.70
	2022	54 027	29	53	11	12	24		86	4	4	6		63	9	9	19	
Kiribati	2015	117	52	56	2	42	<1	0.49	86	3	12	<1	0.50	71	2	26	<1	0.67
	2022	131	57	60	2	38	<1		88	6	6	<1		76	4	20	<1	
Kuwait	2015	3 909	100	-	-	-	-	-	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	4 269	100	-	-	-	-		>99	<1	<1	<1		>99	<1	<1	<1	
Kyrgyzstan	2015	5 915	36	82	3	3	11	0.61	98	<1	<1	1	0.21	88	2	2	8	0.48
	2022	6 631	37	86	4	3	7		>99	<1	<1	<1		91	3	2	4	
Lao People's Democratic Republic	2015	6 787	33	70	4	18	7	1.86	92	<1	6	<1	0.93	77	3	14	5	1.79
	2022	7 529	38	78	6	15	<1		97	<1	3	<1		85	3	10	<1	
Latvia	2015	1 992	68	98	<1	2	<1	0.14	99	<1	<1	<1	0.01	99	<1	<1	<1	0.05
	2022	1 851	69	99	<1	1	<1		99	<1	<1	<1		99	<1	<1	<1	
Lebanon	2015	6 399	88	-	-	-	-	-	-	-	-	-	-	91	7	2	<1	0.37
	2022	5 490	89	-	-	-	-		-	-	-	-		93	7	<1	<1	
Lesotho	2015	2 119	27	65	13	17	5	0.18	90	5	5	<1	0.55	71	11	14	4	0.38
	2022	2 306	30	66	14	13	7		93	3	4	<1		74	11	10	5	
Liberia	2015	4 612	50	61	5	10	24	0.74	83	9	6	<1	0.28	72	7	8	12	0.61
	2022	5 303	53	65	8	6	21		85	12	4	<1		76	10	5	10	
Libya	2015	6 192	79	-	-	-	-	-	-	-	-	-	-	97	<1	3	<1	0.71
	2022	6 812	81	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Liechtenstein	2015	37	14	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.00
	2022	39	15	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Lithuania	2015	2 964	67	91	<1	9	<1	0.84	>99	<1	<1	<1	0.15	97	<1	3	<1	0.38
	2022	2 750	68	94	<1	6	<1		>99	<1	<1	<1		98	<1	2	<1	
Luxembourg	2015	569	90	>99	<1	<1	<1	-0.06	>99	<1	<1	<1	0.00	>99	<1	<1	<1	-0.01
	2022	648	92	99	<1	1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Madagascar	2015	24 851	35	32	2	38	27	0.54	77	6	12	5	0.38	48	4	29	19	0.75
	2022	29 612	40	36	2	43	18		80	8	12	<1		53	5	31	11	
Malawi	2015	16 939	16	62	21	13	4	0.93	86	9	4	<1	0.01	66	19	11	4	0.82
	2022	20 405	18	69	23	6	2		86	10	4	<1		72	21	5	2	
Malaysia	2015	31 069	74	91	<1	9	-	-0.13	>99	<1	<1	<1	-0.01	97	<1	3	-	0.01
	2022	33 938	78	90	<1	9	-		>99	<1	<1	<1		97	<1	2	-	
Maldives	2015	436	39	99	<1	<1	<1	0.35	99	<1	1	<1	0.06	99	<1	1	<1	0.26
	2022	524	42	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Mali	2015	18 113	40	63	5	29	3	1.61	89	4	6	<1	0.79	73	5	20	2	1.54
	2022	22 594	45	74	4	20	1		95	5	<1	<1		84	5	11	<1	
Malta	2015	457	94	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	533	95	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Marshall Islands	2015	49	76	91	5	4	<1	-0.34	85	13	2	<1	-	87	11	2	<1	-
	2022	42	79	87	5	8	<1		84	13	3	<1		85	11	4	<1	

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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
Israel	2015	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
Italy	2015	-	-	-	-	-	-	-	-	-	-	-	-	**94**	98	-	94	98	1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**93**	98	-	93	-	-
Jamaica	2015	-	72	-	-	70	23	-	93	54	-	93	6	-	83	47	-	82	13
	2022	-	72	-	-	73	21	-	93	45	-	92	7	-	84	38	-	84	13
Japan	2015	-	-	-	-	-	-	-	-	-	-	-	-	**98**	98	-	99	98	1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**99**	99	-	>99	98	<1
Jordan	2015	-	97	77	-	81	17	-	99	75	-	89	10	**75**	98	75	98	88	11
	2022	-	97	87	-	80	18	-	99	86	-	87	13	**86**	98	86	98	86	13
Kazakhstan	2015	-	77	-	-	59	33	-	93	-	-	98	2	**86**	86	-	95	81	16
	2022	-	-	-	-	-	-	-	94	-	-	-	-	-	-	-	-	-	-
Kenya	2015	-	24	44	-	21	37	-	62	70	-	68	23	-	33	51	-	33	33
	2022	-	30	52	-	22	42	-	63	77	-	60	30	-	40	59	-	33	38
Kiribati	2015	**6**	38	47	6	16	42	**19**	73	46	19	55	33	**13**	56	47	13	36	38
	2022	**7**	33	50	7	15	47	**20**	68	49	20	61	33	**14**	53	49	14	41	39
Kuwait	2015	-	-	-	-	-	-	**>99**	>99	>99	>99	-	-	**>99**	>99	>99	>99	-	-
	2022	-	-	-	-	-	-	**>99**	>99	>99	>99	-	-	**>99**	>99	>99	>99	-	-
Kyrgyzstan	2015	**54**	54	73	76	77	9	**91**	93	91	95	97	1	**67**	68	80	83	84	6
	2022	**67**	67	77	81	90	<1	**92**	99	92	99	>99	<1	**76**	79	83	88	94	<1
Lao People's Democratic Republic	2015	**11**	54	71	11	13	61	**26**	90	91	26	59	34	**16**	66	78	16	28	52
	2022	**12**	77	80	12	14	70	**27**	97	95	27	62	35	**18**	84	86	18	32	57
Latvia	2015	-	88	-	-	79	19	-	98	-	-	97	3	**95**	95	-	99	91	8
	2022	-	93	-	-	88	11	-	99	-	-	98	1	**97**	97	-	>99	95	4
Lebanon	2015	-	-	-	-	-	-	-	-	-	-	-	-	**47**	88	88	47	87	11
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**48**	90	90	48	90	10
Lesotho	2015	**7**	7	50	47	61	17	**66**	68	66	85	88	6	**23**	24	55	57	68	14
	2022	**9**	9	55	48	64	15	**73**	78	73	86	91	5	**28**	30	60	59	72	12
Liberia	2015	-	6	41	-	<1	66	-	20	60	-	14	78	-	13	50	-	8	72
	2022	-	6	50	-	<1	74	-	28	68	-	10	86	-	18	60	-	5	80
Libya	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	87	93	-	75	22
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	90	96	-	78	22
Liechtenstein	2015	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1
Lithuania	2015	-	83	-	-	81	9	**99**	99	-	>99	99	<1	**92**	94	-	92	93	3
	2022	-	86	-	-	87	7	**>99**	>99	-	>99	>99	<1	**95**	95	-	98	96	2
Luxembourg	2015	**98**	98	-	>99	98	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	**97**	97	-	99	97	1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
Madagascar	2015	**9**	9	27	9	15	20	**34**	34	67	53	64	19	**17**	18	41	24	32	19
	2022	**10**	14	32	10	16	22	**41**	41	67	55	66	21	**22**	25	46	28	36	22
Malawi	2015	**7**	7	62	33	10	73	**47**	47	68	66	78	17	**14**	14	63	38	21	64
	2022	**10**	10	80	37	8	84	**52**	52	70	67	77	19	**18**	18	78	42	21	72
Malaysia	2015	-	83	-	-	83	8	-	97	-	-	99	<1	**94**	94	-	97	95	3
	2022	-	82	-	-	83	8	-	97	-	-	>99	<1	**94**	94	-	98	96	2
Maldives	2015	-	95	67	-	14	85	-	99	86	-	97	2	-	96	74	-	46	53
	2022	-	97	67	-	19	81	-	>99	87	-	>99	<1	-	98	75	-	52	47
Mali	2015	-	16	48	-	20	48	-	54	75	-	76	17	-	31	59	-	43	36
	2022	-	17	54	-	27	51	-	71	78	-	83	17	-	41	65	-	53	36
Malta	2015	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1	**>99**	>99	-	>99	>99	<1
Marshall Islands	2015	-	86	-	-	4	92	-	80	-	-	30	68	-	81	79	-	24	74
	2022	-	82	-	-	7	85	-	79	-	-	33	64	-	80	81	-	28	69

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Martinique	2015	384	89	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	-0.00
	2022	368	89	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Mauritania	2015	3 946	51	45	16	37	3	1.36	85	12	3	<1	1.23	66	14	19	1	1.64
	2022	4 736	57	56	14	30	<1		95	5	<1	<1		78	9	13	<1	
Mauritius	2015	1 293	41	>99	<1	<1	<1	0.05	>99	<1	<1	<1	0.01	>99	<1	<1	<1	0.03
	2022	1 299	41	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Mayotte	2015	250	47	-	-	-	-	-	-	-	-	-	-	97	<1	<1	3	-
	2022	326	45	-	-	-	-		-	-	-	-		96	<1	4	-	
Mexico	2015	120 150	79	92	<1	5	3	1.02	>99	<1	<1	<1	0.20	98	<1	2	<1	0.41
	2022	127 504	81	98	<1	2	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Micronesia (Federated States of)	2015	109	22	-	-	-	-	-	-	-	-	-	-	90	<1	10	-	-
	2020	112	23	-	-	-	-		-	-	-	-		90	<1	10	-	
Monaco	2015	37	100	-	-	-	-	-	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	36	100	-	-	-	-		>99	<1	<1	<1		>99	<1	<1	<1	
Mongolia	2015	2 965	68	50	10	16	24	1.43	92	5	2	<1	0.28	79	7	6	8	0.96
	2022	3 398	69	60	12	12	16		94	5	<1	<1		84	7	4	5	
Montenegro	2015	634	66	96	2	2	<1	-	98	2	<1	<1	-	97	2	<1	<1	-
	2022	627	68	98	<1	2	<1		>99	<1	<1	<1		99	<1	<1	<1	
Montserrat	2015	5	9	-	-	-	-	-	-	-	-	-	-	98	<1	2	<1	0.00
	2022	4	9	-	-	-	-		-	-	-	-		98	<1	2	<1	
Morocco	2015	34 680	61	55	7	36	1	1.50	96	2	2	<1	0.26	80	4	16	<1	1.01
	2022	37 458	65	66	6	29	<1		99	<1	1	<1		87	2	11	<1	
Mozambique	2015	26 843	34	34	12	37	18	1.88	79	6	12	3	1.19	49	10	29	13	1.84
	2022	32 970	38	48	12	24	15		87	5	5	2		63	10	17	10	
Myanmar	2015	51 484	30	65	8	11	16	1.70	87	4	4	5	1.09	72	7	9	12	1.58
	2022	54 179	32	77	1	8	14		94	<1	1	5		82	<1	6	11	
Namibia	2015	2 283	47	71	12	8	9	0.38	97	2	<1	<1	-0.08	83	7	5	5	0.45
	2022	2 567	54	74	12	7	7		96	3	<1	<1		86	7	4	3	
Nauru	2015	11	100	-	-	-	-	-	97	<1	3	<1	-	97	<1	3	<1	-
	2019	12	100	-	-	-	-		97	<1	3	<1		97	<1	3	<1	
Nepal	2015	27 610	19	88	3	7	2	0.63	91	3	6	1	-0.11	88	3	7	2	0.53
	2022	30 548	21	92	4	3	1		90	3	6	<1		91	4	3	1	
Netherlands (Kingdom of the)	2015	17 041	90	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	17 564	93	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
New Caledonia	2015	283	69	-	-	-	-	-	-	-	-	-	-	98	<1	2	<1	0.20
	2022	290	72	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
New Zealand	2015	4 591	86	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	5 185	87	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Nicaragua	2015	6 299	58	60	3	30	8	-	97	<1	2	<1	-	81	1	14	3	-
	2020	6 756	59	59	4	30	8		97	<1	2	<1		82	2	14	3	
Niger	2015	20 128	16	37	16	44	3	0.63	89	8	3	<1	-0.14	46	14	37	3	0.52
	2022	26 208	17	41	22	34	3		88	9	2	<1		49	20	29	3	
Nigeria	2015	183 996	48	53	7	24	17	1.45	85	7	6	3	1.15	68	7	15	10	1.60
	2022	218 541	54	63	6	21	9		94	3	3	<1		80	4	11	5	
Niue	2015	2	43	-	-	-	-	-	-	-	-	-	-	98	<1	2	<1	-0.10
	2022	2	48	-	-	-	-		-	-	-	-		97	<1	3	<1	
North Macedonia	2015	2 108	57	98	1	1	<1	-0.03	97	2	<1	<1	0.09	98	2	<1	<1	0.04
	2022	2 094	59	97	2	<1	<1		98	2	<1	<1		98	2	<1	<1	
Northern Mariana Islands	2015	52	91	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.14
	2022	50	92	-	-	-	-		-	-	-	-		>99	<1	<1	<1	
Norway	2015	5 190	81	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.00
	2022	5 434	84	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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
Martinique	2015	-	-	-	-	-	-	-	-	-	-	-	-	>99	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	99	>99	-	99	>99	<1
Mauritania	2015	-	29	30	-	34	26	-	60	48	-	65	32	-	45	39	-	50	29
	2022	-	40	34	-	43	27	-	84	49	-	75	24	-	65	43	-	61	25
Mauritius	2015	-	>99	92	-	>99	<1	-	>99	94	-	>99	<1	-	>99	93	-	>99	<1
	2022	-	>99	98	-	>99	<1	-	>99	95	-	>99	<1	-	>99	97	-	>99	<1
Mayotte	2015	-	-	-	-	-	-	-	-	-	-	-	-	91	91	-	95	94	2
	2022	-	-	-	-	-	-	-	-	-	-	-	-	92	96	-	92	93	4
Mexico	2015	-	79	58	-	83	9	-	96	72	-	97	2	42	92	69	42	94	4
	2022	-	88	55	-	92	6	-	98	70	-	>99	<1	43	96	67	43	98	2
Micronesia (Federated States of)	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	64	74	-	71	19
	2020	-	-	-	-	-	-	-	-	-	-	-	-	-	64	74	-	74	16
Monaco	2015	-	-	-	-	-	-	>99	>99	-	>99	>99	<1	>99	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	>99	>99	-	>99	>99	<1	>99	>99	-	>99	>99	<1
Mongolia	2015	8	8	59	47	6	54	45	45	88	91	47	51	33	33	79	77	34	52
	2022	13	13	70	56	8	64	51	51	90	92	50	49	39	39	84	81	37	54
Montenegro	2015	-	90	80	-	74	24	87	97	87	>99	97	3	85	95	85	92	89	10
	2022	-	98	80	-	75	23	87	98	87	>99	96	4	85	98	85	94	90	10
Montserrat	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-	98	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-	98	<1
Morocco	2015	36	36	45	52	43	19	89	90	92	89	94	4	68	69	74	75	74	10
	2022	47	54	47	59	53	19	90	99	91	90	94	5	75	83	75	79	79	10
Mozambique	2015	-	7	26	-	15	30	-	52	59	-	70	15	-	22	37	-	34	25
	2022	-	14	34	-	20	41	-	65	64	-	77	16	-	33	46	-	42	31
Myanmar	2015	41	41	62	47	14	59	70	77	84	70	55	36	50	52	68	54	27	52
	2022	50	52	66	50	18	60	72	88	87	72	67	26	57	64	73	57	34	49
Namibia	2015	-	44	53	-	64	19	-	76	82	-	97	1	-	59	67	-	80	11
	2022	-	50	55	-	68	18	-	75	82	-	97	2	-	63	70	-	84	9
Nauru	2015	-	-	-	-	-	-	-	96	-	-	2	95	-	96	-	-	2	95
	2019	-	-	-	-	-	-	-	96	-	-	2	95	-	96	-	-	2	95
Nepal	2015	24	60	78	24	47	44	33	75	78	33	56	38	25	62	78	25	49	43
	2022	14	69	79	14	50	46	23	75	78	23	52	41	16	71	79	16	50	45
Netherlands (Kingdom of the)	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	>99	>99	-	>99	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	>99	>99	-	>99	>99	<1
New Caledonia	2015	-	-	-	-	-	-	-	-	-	-	-	-	96	96	-	96	96	2
	2022	-	-	-	-	-	-	-	-	-	-	-	-	97	>99	-	97	>99	<1
New Zealand	2015	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1	94	>99	-	94	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	>99	-	>99	<1	>99	>99	-	>99	>99	<1
Nicaragua	2015	39	51	39	42	33	30	67	97	67	95	95	2	55	78	55	73	69	14
	2020	39	54	39	52	33	30	67	97	67	96	95	2	56	79	56	78	70	13
Niger	2015	-	6	26	-	23	30	-	59	65	-	89	7	-	15	32	-	34	26
	2022	-	7	28	-	31	32	-	67	42	-	93	4	-	17	30	-	41	27
Nigeria	2015	17	17	44	20	8	51	34	37	83	34	21	70	25	27	63	27	14	60
	2022	21	21	54	24	9	61	36	48	72	36	15	81	29	35	64	30	12	72
Niue	2015	-	-	-	-	-	-	-	-	-	-	-	-	95	95	98	97	95	3
	2022	-	-	-	-	-	-	-	-	-	-	-	-	94	94	97	96	97	<1
North Macedonia	2015	75	94	75	77	83	16	85	97	85	99	98	1	80	96	80	90	92	7
	2022	74	93	75	74	82	17	85	98	85	98	99	<1	80	96	81	89	92	7
Northern Mariana Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	89	95	89	96	91	9
	2022	-	-	-	-	-	-	-	-	-	-	-	-	91	94	91	95	90	10
Norway	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	>99	>99	-	>99	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	99	>99	-	99	>99	<1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Oman	2015	4 192	81	**74**	21	4	<1	0.27	**94**	5	<1	<1	0.13	**90**	8	1	<1	0.31
	2022	4 576	88	**76**	22	2	<1		**95**	5	<1	<1		**92**	7	<1	<1	
Pakistan	2015	210 969	36	**87**	4	5	4	0.29	**94**	3	2	<1	-0.17	**90**	4	4	2	0.15
	2022	235 825	38	**89**	4	5	2		**93**	5	2	<1		**91**	4	4	1	
Palau	2015	18	78	**>99**	<1	<1	<1	0.03	**>99**	<1	<1	<1	-0.00	**>99**	<1	<1	<1	0.01
	2022	18	82	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Panama	2015	3 957	67	**83**	2	8	6	0.40	**98**	2	<1	<1	0.07	**93**	2	3	2	0.23
	2022	4 409	69	**86**	3	7	4		**98**	2	<1	<1		**95**	2	2	1	
Papua New Guinea	2015	8 682	13	**37**	2	25	36	0.93	**85**	2	8	5	0.17	**43**	2	23	32	0.84
	2022	10 143	14	**44**	3	29	23		**87**	<1	6	7		**50**	2	26	21	
Paraguay	2015	6 178	61	**92**	<1	7	<1	2.03	**99**	<1	1	<1	0.27	**96**	<1	3	<1	1.06
	2022	6 781	63	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Peru	2015	30 712	77	**74**	1	13	12	1.57	**95**	<1	3	<1	0.29	**91**	<1	6	3	0.67
	2022	34 050	79	**85**	<1	8	6		**97**	<1	2	<1		**95**	<1	3	1	
Philippines	2015	103 031	46	**88**	4	7	<1	0.57	**96**	2	2	<1	0.20	**92**	3	5	<1	0.40
	2022	115 559	48	**92**	4	4	<1		**98**	2	<1	<1		**95**	3	2	<1	
Poland	2015	38 553	60	**90**	<1	10	<1	-	**98**	<1	2	<1	-0.18	**95**	<1	5	<1	-
	2022	39 857	60	**82**	<1	18	<1		**96**	<1	4	<1		**90**	<1	10	<1	
Portugal	2015	10 365	64	**98**	<1	2	<1	-0.07	**>99**	<1	<1	<1	0.04	**>99**	<1	<1	<1	0.00
	2022	10 271	67	**98**	<1	2	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Puerto Rico	2015	3 497	94	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.13
	2022	3 252	94	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Qatar	2015	2 415	99	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.00
	2022	2 695	99	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Republic of Korea	2015	50 994	82	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	-
	2022	51 816	81	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Republic of Moldova	2015	3 277	42	**83**	1	15	<1	0.66	**97**	2	2	<1	0.12	**89**	1	10	<1	0.41
	2022	3 273	43	**88**	2	11	<1		**98**	2	<1	<1		**92**	2	6	<1	
Réunion	2015	922	99	**-**	-	-	-	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.01
	2022	974	100	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Romania	2015	19 906	54	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	-0.00
	2022	19 659	54	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Russian Federation	2015	144 668	74	**90**	2	9	-	0.23	**99**	<1	<1	<1	0.01	**96**	<1	3	-	0.08
	2022	144 713	75	**92**	2	7	-		**99**	<1	<1	<1		**97**	<1	2	-	
Rwanda	2015	11 643	17	**54**	22	13	11	0.91	**82**	9	5	4	0.83	**58**	20	12	9	0.94
	2022	13 777	18	**60**	22	12	6		**88**	7	3	2		**65**	19	10	5	
Saint Barthélemy	2015	10	-	**-**	-	-	-	-	**>99**	<1	<1	<1	0.03	**>99**	<1	<1	<1	0.03
	2022	11	-	**-**	-	-	-		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Saint Helena	2015	5	40	**-**	-	-	-	-	**-**	-	-	-	-	**99**	<1	1	<1	-
	2022	5	40	**-**	-	-	-		**-**	-	-	-		**>99**	<1	<1	<1	
Saint Kitts and Nevis	2015	48	31	**-**	-	-	-	-	**-**	-	-	-	-	**99**	<1	1	<1	-
	2017	48	31	**-**	-	-	-		**-**	-	-	-		**99**	<1	1	<1	
Saint Lucia	2015	176	19	**95**	2	3	<1	0.36	**97**	2	1	<1	0.12	**96**	2	3	<1	0.30
	2022	180	19	**97**	2	1	<1		**97**	2	<1	<1		**97**	2	1	<1	
Saint Martin (French part)	2015	35	-	**-**	-	-	-	-	**>99**	<1	<1	<1	-0.00	**>99**	<1	<1	<1	-0.00
	2022	32	-	**-**	-	-	-		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Saint Pierre and Miquelon	2015	6	90	**-**	-	-	-	-	**-**	-	-	-	-	**91**	<1	9	<1	-
	2020	6	90	**-**	-	-	-		**-**	-	-	-		**91**	<1	9	<1	

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		Proportion of population using improved water supplies						Proportion of population using improved water supplies						Proportion of population using improved water supplies					
		Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped	Safely managed	Accessible on premises	Available when needed	Free from contamination	Piped	Non-piped
Oman	2015	-	72	-	-	78	18	-	92	>99	-	93	7	**89**	89	-	96	90	9
	2022	-	73	-	-	84	13	-	93	>99	-	97	3	**91**	91	-	>99	96	4
Pakistan	2015	**38**	74	80	38	18	73	**53**	78	83	53	49	48	**43**	76	81	43	29	64
	2022	**47**	70	82	47	17	77	**57**	66	83	57	39	58	**51**	69	82	51	25	70
Palau	2015	**57**	57	-	88	27	72	**89**	89	>99	>99	80	19	**82**	82	>99	97	69	31
	2022	**57**	57	-	88	29	70	**98**	98	>99	>99	98	1	**90**	90	>99	98	86	14
Panama	2015	-	80	71	-	79	6	-	97	89	-	98	1	-	92	83	-	92	3
	2022	-	83	72	-	81	8	-	98	90	-	99	1	-	93	85	-	93	3
Papua New Guinea	2015	-	21	23	-	11	27	-	65	46	-	61	26	-	27	26	-	18	27
	2022	-	28	28	-	10	37	-	87	46	-	53	34	-	36	30	-	16	37
Paraguay	2015	**47**	85	77	47	79	14	**71**	97	86	71	94	5	**62**	92	83	62	88	8
	2022	**51**	96	83	51	>99	<1	**72**	>99	83	72	>99	<1	**64**	98	83	64	>99	<1
Peru	2015	**20**	64	55	20	64	11	**59**	89	68	59	92	4	**50**	83	65	50	85	6
	2022	**23**	79	56	23	80	6	**60**	90	62	60	95	3	**52**	88	61	52	92	3
Philippines	2015	**33**	56	82	33	45	47	**61**	81	88	61	75	23	**46**	68	85	46	59	36
	2022	**35**	74	86	35	53	43	**62**	92	89	62	81	18	**48**	83	87	48	66	31
Poland	2015	-	85	-	-	81	9	-	96	-	-	96	1	**92**	92	-	95	90	4
	2022	-	80	-	-	82	<1	-	95	-	-	96	<1	**89**	89	-	90	90	<1
Portugal	2015	**90**	95	90	96	97	1	**97**	99	97	99	>99	<1	**95**	97	95	98	99	<1
	2022	**91**	93	91	96	96	2	**97**	>99	97	>99	>99	<1	**95**	97	95	98	98	<1
Puerto Rico	2015	-	-	-	-	-	-	-	-	-	-	-	-	**96**	99	96	>99	99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1
Qatar	2015	-	-	-	-	-	-	-	-	-	-	-	-	**97**	99	>99	97	98	2
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**97**	>99	>99	97	>99	<1
Republic of Korea	2015	-	-	-	-	-	-	-	-	-	-	-	-	**99**	99	>99	99	98	2
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1
Republic of Moldova	2015	-	62	82	-	43	42	-	88	93	-	90	8	**73**	73	87	77	63	27
	2022	-	65	87	-	63	26	-	89	94	-	94	5	**75**	75	90	78	77	17
Réunion	2015	-	-	-	-	-	-	-	-	-	-	-	-	**97**	>99	-	97	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**96**	>99	-	96	>99	<1
Romania	2015	**67**	67	-	95	35	65	**95**	95	-	>99	90	10	**82**	82	-	98	64	36
	2022	**67**	67	-	95	-	-	**95**	95	-	>99	-	-	**82**	82	-	98	-	-
Russian Federation	2015	-	55	-	-	74	17	-	83	-	-	96	4	**76**	76	-	94	90	7
	2022	-	56	-	-	85	8	-	83	-	-	97	2	**76**	76	-	94	94	3
Rwanda	2015	-	5	63	-	35	41	**45**	45	92	87	77	15	-	11	68	-	42	37
	2022	-	7	68	-	38	44	**55**	55	95	90	82	13	-	15	73	-	45	39
Saint Barthélemy	2015	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
Saint Helena	2015	-	-	-	-	-	-	-	-	-	-	-	-	**89**	98	-	89	98	1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**89**	99	-	89	98	<1
Saint Kitts and Nevis	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	98	87	-	98	<1
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	98	87	-	98	<1
Saint Lucia	2015	-	93	70	-	95	2	-	93	79	-	98	<1	-	93	72	-	95	2
	2022	-	94	71	-	96	2	-	94	79	-	98	<1	-	94	73	-	97	2
Saint Martin (French part)	2015	-	-	-	-	-	-	**97**	>99	-	97	>99	<1	**97**	>99	-	97	>99	<1
	2022	-	-	-	-	-	-	**97**	>99	-	97	>99	<1	**97**	>99	-	97	>99	<1
Saint Pierre and Miquelon	2015	-	-	-	-	-	-	-	-	-	-	-	-	**83**	83	91	91	91	<1
	2020	-	-	-	-	-	-	-	-	-	-	-	-	**83**	83	91	91	91	<1

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Saint Vincent and the Grenadines	2015	106	51	**97**	<1	2	<1	-	**98**	<1	1	<1	-	**98**	<1	2	<1	-
	2018	105	52	**97**	<1	3	-		**98**	<1	1	<1		**98**	<1	2	-	
Samoa	2015	204	19	**92**	5	2	<1	0.48	**92**	7	2	<1	0.78	**92**	6	2	<1	0.54
	2022	222	18	**99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
San Marino	2015	34	97	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00
	2022	34	98	-	-	-	-		-	-	-	-		**>99**	<1	<1	<1	
Sao Tome and Principe	2015	201	70	**69**	16	5	10	0.40	**79**	19	1	<1	0.22	**76**	18	2	4	0.39
	2022	227	76	**71**	19	2	8		**79**	21	<1	<1		**77**	20	<1	2	
Saudi Arabia	2015	32 750	83	**>99**	<1	<1	<1	0.00	**98**	<1	<1	<1	-	**99**	<1	<1	<1	-
	2022	36 409	85	**>99**	<1	<1	<1		**98**	<1	<1	<1		**99**	<1	<1	<1	
Senegal	2015	14 356	46	**65**	6	28	<1	1.66	**93**	1	5	<1	0.35	**78**	4	18	<1	1.20
	2022	17 316	49	**77**	5	18	<1		**96**	<1	3	<1		**86**	3	11	<1	
Serbia	2015	7 519	56	**95**	5	<1	<1	0.18	**92**	7	<1	<1	0.39	**93**	6	<1	<1	0.29
	2022	7 221	57	**96**	3	<1	<1		**95**	4	<1	<1		**96**	4	<1	<1	
Seychelles	2015	99	55	-	-	-	-	-	-	-	-	-	-	**96**	<1	<1	4	0.11
	2022	107	58	-	-	-	-		-	-	-	-		**96**	<1	4	-	
Sierra Leone	2015	7 315	41	**45**	5	22	29	1.25	**76**	11	9	4	0.57	**57**	7	17	19	1.10
	2022	8 606	44	**54**	5	24	17		**80**	11	8	2		**65**	7	17	11	
Singapore	2015	5 650	100	-	-	-	-	-	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	5 976	100	-	-	-	-		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Sint Maarten (Dutch part)	2015	40	100	-	-	-	-	-	**95**	<1	5	<1	-	**95**	<1	5	<1	-
	2017	42	100	-	-	-	-		**95**	<1	5	<1		**95**	<1	5	<1	
Slovakia	2015	5 424	54	**>99**	<1	<1	<1	0.15	**>99**	<1	<1	<1	0.03	**>99**	<1	<1	<1	0.08
	2022	5 643	54	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Slovenia	2015	2 081	54	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00
	2022	2 120	56	-	-	-	-		-	-	-	-		**>99**	<1	<1	<1	
Solomon Islands	2015	613	22	**63**	6	23	7	-0.78	**91**	4	4	1	-	**69**	6	19	6	-
	2022	724	26	**59**	7	34	-		-	-	-	-		-	-	-	-	
Somalia	2015	13 764	43	**29**	29	29	13	1.50	**74**	16	9	<1	0.92	**49**	23	20	8	1.57
	2022	17 598	47	**39**	38	20	3		**80**	17	2	<1		**58**	28	12	1	
South Africa	2015	55 877	65	**79**	7	5	9	0.82	**99**	<1	<1	<1	0.03	**92**	3	2	3	0.45
	2022	59 894	68	**85**	7	3	5		**>99**	<1	<1	<1		**94**	3	1	2	
South Sudan	2015	11 194	19	**37**	33	14	16	-	**61**	22	10	7	-	**41**	31	14	15	-
	2022	10 913	21	**34**	42	14	10		**70**	19	11	<1		**41**	37	14	8	
Spain	2015	46 431	80	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	-0.00	**>99**	<1	<1	<1	-0.00
	2022	47 559	81	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Sri Lanka	2015	21 337	18	**85**	2	10	3	0.32	**97**	<1	2	<1	0.17	**87**	2	8	3	0.29
	2022	21 832	19	**87**	2	8	3		**98**	<1	1	<1		**89**	2	7	2	
State of Palestine*	2015	4 485	75	**95**	<1	3	<1	0.59	**97**	<1	3	<1	0.27	**96**	<1	3	<1	0.35
	2022	5 250	77	**>99**	<1	<1	<1		**98**	2	<1	<1		**98**	1	<1	<1	
Sudan	2015	38 171	34	**51**	26	16	8	1.07	**70**	24	5	1	0.53	**57**	25	12	6	0.92
	2022	46 874	36	**60**	31	6	3		**74**	25	<1	<1		**65**	29	4	2	
Suriname	2015	575	66	**91**	1	1	7	1.10	**98**	<1	<1	<1	0.06	**96**	<1	1	2	0.41
	2022	618	66	**97**	2	<1	2		**99**	<1	<1	<1		**98**	1	<1	<1	
Sweden	2015	9 849	87	**>99**	<1	<1	<1	0.05	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.01
	2022	10 549	88	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Switzerland	2015	8 282	74	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00
	2022	8 740	74	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Syrian Arab Republic	2015	19 205	52	**91**	8	1	<1	0.22	**96**	4	<1	<1	0.00	**93**	6	<1	<1	0.11
	2022	22 125	57	**92**	8	<1	<1		**96**	4	<1	<1		**94**	6	<1	<1	

*WHO reports refer to 'occupied Palestinian territory (including east Jerusalem)'.

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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
Saint Vincent and the Grenadines	2015	-	93	70	-	89	8	-	98	74	-	98	<1	-	96	72	-	94	4
	2018	-	93	70	-	89	8	-	98	74	-	98	<1	-	96	72	-	94	4
Samoa	2015	**55**	91	72	55	86	12	**89**	91	89	90	92	6	**62**	91	75	62	87	11
	2022	**56**	97	73	56	87	12	**90**	>99	90	92	94	6	**62**	97	76	63	88	11
San Marino	2015	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	>99	>99	>99	>99	<1
Sao Tome and Principe	2015	**22**	22	63	53	80	5	**38**	38	76	86	96	2	**34**	34	72	76	91	3
	2022	**24**	24	67	56	87	4	**40**	40	78	88	>99	<1	**36**	36	75	80	97	<1
Saudi Arabia	2015	-	-	-	-	84	16	-	-	-	-	91	9	-	98	86	-	89	10
	2022	-	-	-	-	84	16	-	-	-	-	91	9	-	98	86	-	89	10
Senegal	2015	**11**	43	42	11	56	15	**41**	84	57	41	87	8	**25**	62	49	25	70	12
	2022	**13**	64	55	13	67	15	**41**	89	54	41	88	9	**27**	76	55	27	77	12
Serbia	2015	**67**	91	90	67	83	16	**82**	91	93	82	98	2	**75**	91	92	75	91	8
	2022	**67**	92	90	67	91	8	**82**	95	93	82	98	2	**75**	94	92	75	95	5
Seychelles	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	94	-	-	92	4
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	95	-	-	94	3
Sierra Leone	2015	**6**	6	30	8	12	37	**12**	25	57	12	38	49	**8**	14	41	9	23	42
	2022	**9**	9	51	9	13	46	**12**	22	66	12	31	60	**10**	15	58	11	21	52
Singapore	2015	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	-	-	-	-	-	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
Sint Maarten (Dutch part)	2015	-	-	-	-	-	-	-	93	-	-	91	5	-	93	-	-	91	5
	2017	-	-	-	-	-	-	-	93	-	-	91	5	-	93	-	-	91	5
Slovakia	2015	-	>99	-	-	>99	<1	-	>99	-	-	97	3	**99**	>99	-	99	98	2
	2022	-	>99	-	-	>99	<1	-	>99	-	-	-	-	**>99**	>99	-	>99	-	-
Slovenia	2015	-	-	-	-	-	-	-	-	-	-	-	-	**95**	98	-	95	-	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	**98**	98	-	>99	-	-
Solomon Islands	2015	-	44	56	-	42	28	-	83	-	-	71	24	-	53	38	-	48	27
	2022	-	41	53	-	38	28	-	-	-	-	-	-	-	-	-	-	-	-
Somalia	2015	-	6	33	-	17	41	-	58	75	-	63	27	-	28	51	-	37	35
	2022	-	9	44	-	23	54	-	69	81	-	79	19	-	38	62	-	49	37
South Africa	2015	-	44	54	-	70	15	**84**	91	84	98	98	1	-	75	74	-	88	6
	2022	-	54	52	-	74	18	**80**	91	80	>99	98	2	-	79	71	-	90	7
South Sudan	2015	-	2	-	-	5	65	-	5	-	-	11	72	-	2	-	-	6	66
	2022	-	3	-	-	3	73	-	4	-	-	10	78	-	3	-	-	4	74
Spain	2015	**99**	>99	-	99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	**99**	>99	-	99	>99	<1	**>99**	>99	-	>99	>99	<1	**>99**	>99	-	>99	>99	<1
Sri Lanka	2015	**38**	68	79	38	35	52	**90**	90	94	98	77	21	**47**	72	81	49	43	46
	2022	**39**	76	80	39	46	44	**83**	93	93	83	81	18	**47**	79	82	47	52	39
State of Palestine*	2015	**74**	92	84	74	83	13	**80**	88	87	80	56	41	**78**	89	86	78	62	34
	2022	**76**	>99	87	76	89	11	**81**	92	89	81	40	60	**80**	94	89	80	51	49
Sudan	2015	-	24	42	-	35	42	-	61	54	-	69	24	-	36	46	-	46	36
	2022	-	28	50	-	47	44	-	64	64	-	82	17	-	41	55	-	59	34
Suriname	2015	**38**	86	76	38	59	33	**63**	97	83	63	88	11	**55**	93	81	55	78	19
	2022	**41**	93	82	41	64	34	**63**	98	83	63	89	11	**56**	96	83	56	80	19
Sweden	2015	-	>99	-	-	76	23	-	>99	-	-	89	11	**>99**	>99	-	>99	87	12
	2022	-	>99	-	-	77	22	-	>99	-	-	89	10	**>99**	>99	-	>99	88	12
Switzerland	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**97**	>99	-	97	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**97**	>99	-	97	>99	<1
Syrian Arab Republic	2015	-	76	90	-	71	28	-	92	94	-	88	12	-	84	92	-	80	19
	2022	-	77	91	-	71	29	-	92	94	-	86	14	-	86	93	-	79	21

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
Tajikistan	2015	8 524	27	**70**	4	5	22	1.48	**95**	1	1	3	0.22	**76**	3	4	17	1.16
	2022	9 953	28	**77**	3	4	16		**96**	<1	2	2		**82**	3	3	12	
Thailand	2015	70 294	48	**98**	<1	<1	<1	0.35	**>99**	<1	<1	<1	0.09	**99**	<1	<1	<1	0.27
	2022	71 697	53	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Timor-Leste	2015	1 206	29	**68**	4	22	6	-	**90**	2	7	<1	-	**74**	3	18	5	-
	2022	1 341	32	**82**	2	12	5		**98**	2	<1	<1		**87**	2	8	3	
Togo	2015	7 473	40	**49**	7	22	22	1.41	**85**	3	11	<1	0.22	**63**	6	18	13	1.16
	2022	8 849	44	**58**	9	15	17		**87**	3	10	<1		**71**	6	13	10	
Tokelau	2015	1	0	**>99**	<1	<1	<1	0.05	**-**	-	-	-	-	**>99**	<1	<1	<1	0.05
	2022	2	0	**>99**	<1	<1	<1		**-**	-	-	-		**>99**	<1	<1	<1	
Tonga	2015	106	23	**98**	1	<1	<1	0.02	**99**	<1	<1	<1	0.07	**99**	<1	<1	<1	0.03
	2022	107	23	**99**	1	<1	<1		**>99**	<1	<1	<1		**99**	<1	<1	<1	
Trinidad and Tobago	2015	1 460	53	**-**	-	-	-	-	**-**	-	-	-	-	**98**	1	<1	<1	0.30
	2022	1 531	53	**-**	-	-	-		**-**	-	-	-		**99**	1	<1	<1	
Tunisia	2015	11 558	68	**84**	8	8	<1	0.95	**99**	<1	<1	<1	0.01	**94**	3	3	<1	0.37
	2022	12 356	70	**93**	3	3	<1		**99**	<1	<1	<1		**97**	2	1	<1	
Türkiye	2015	79 646	74	**94**	3	3	<1	0.31	**97**	2	1	<1	0.06	**96**	2	2	<1	0.16
	2022	85 341	77	**96**	3	<1	<1		**97**	2	<1	<1		**97**	2	<1	<1	
Turkmenistan	2015	5 766	50	**96**	1	<1	2	0.94	**>99**	<1	<1	<1	0.16	**98**	<1	<1	1	0.58
	2022	6 431	53	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Turks and Caicos Islands	2015	37	92	**-**	-	-	-	-	**>99**	<1	<1	<1	0.00	**-**	-	-	-	-
	2022	46	94	**92**	5	3	<1		**>99**	<1	<1	<1		**99**	<1	<1	<1	
Tuvalu	2015	11	60	**>99**	<1	<1	<1	0.03	**99**	<1	<1	<1	0.02	**>99**	<1	<1	<1	0.02
	2022	11	66	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Uganda	2015	37 477	22	**40**	33	18	9	1.50	**77**	16	6	1	0.48	**48**	29	15	7	1.49
	2022	47 250	26	**52**	29	13	6		**80**	13	6	<1		**59**	25	11	5	
Ukraine	2015	44 983	69	**99**	<1	1	<1	0.23	**91**	8	<1	<1	-0.40	**93**	6	<1	<1	-0.21
	2022	39 702	70	**>99**	<1	<1	<1		**91**	8	<1	<1		**94**	6	<1	<1	
United Arab Emirates	2015	8 917	86	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.02	**>99**	<1	<1	<1	0.02
	2022	9 441	88	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
United Kingdom	2015	65 224	83	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	0.00	**>99**	<1	<1	<1	-0.00
	2022	67 509	84	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
United Republic of Tanzania	2015	52 543	32	**38**	14	29	19	1.45	**78**	12	8	3	0.56	**51**	13	22	14	1.46
	2022	65 498	37	**49**	16	17	18		**81**	16	<1	2		**61**	16	11	12	
United States Virgin Islands	2015	103	95	**-**	-	-	-	-	**-**	-	-	-	-	**99**	<1	1	<1	-
	2020	100	96	**-**	-	-	-		**-**	-	-	-		**99**	<1	1	<1	
United States of America	2015	324 608	82	**98**	<1	2	<1	-	**>99**	<1	<1	<1	0.01	**>99**	<1	<1	<1	-
	2022	338 290	83	**>99**	<1	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Uruguay	2015	3 403	95	**91**	5	4	<1	0.93	**>99**	<1	<1	<1	0.04	**>99**	<1	<1	<1	0.11
	2022	3 423	96	**95**	5	<1	<1		**>99**	<1	<1	<1		**>99**	<1	<1	<1	
Uzbekistan	2015	30 949	51	**90**	5	<1	4	0.71	**97**	1	<1	<1	0.07	**94**	3	<1	2	0.42
	2022	34 628	50	**95**	2	<1	3		**98**	2	<1	<1		**97**	2	<1	1	
Vanuatu	2015	276	25	**85**	<1	6	8	0.40	**98**	<1	1	<1	0.12	**88**	<1	5	6	0.36
	2022	327	26	**89**	<1	3	8		**>99**	<1	<1	<1		**91**	<1	2	6	
Venezuela (Bolivarian Republic of)	2015	30 530	88	**-**	-	-	-	-	**-**	-	-	-	-	**95**	<1	4	1	-0.18
	2022	28 302	88	**-**	-	-	-		**-**	-	-	-		**93**	<1	6	-	
Viet Nam	2015	92 191	34	**90**	<1	7	2	0.97	**97**	<1	2	<1	0.19	**93**	<1	5	2	0.79
	2022	98 187	39	**97**	<1	3	<1		**>99**	<1	<1	<1		**98**	<1	2	<1	
Wallis and Futuna Islands	2015	12	0	**>99**	<1	<1	<1	-0.02	**-**	-	-	-	-	**>99**	<1	<1	<1	-0.02
	2022	12	0	**>99**	<1	<1	<1		**-**	-	-	-		**>99**	<1	<1	<1	
Yemen	2015	28 517	35	**45**	29	21	5	1.03	**76**	21	3	<1	0.17	**56**	26	15	3	0.95
	2022	33 697	39	**52**	34	10	4		**77**	22	1	<1		**62**	29	6	2	
Zambia	2015	16 248	42	**45**	8	31	16	1.05	**87**	4	8	<1	0.27	**63**	6	22	10	0.97
	2022	20 018	46	**51**	9	28	12		**89**	4	7	<1		**68**	6	19	7	
Zimbabwe	2015	14 155	32	**51**	16	23	10	-0.55	**94**	4	2	<1	-0.12	**65**	12	16	7	-0.44
	2022	16 321	32	**48**	19	23	10		**93**	5	2	<1		**62**	15	16	7	

COUNTRY, AREA OR TERRITORY	Year	RURAL						URBAN						TOTAL					
		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
Tajikistan	2015	-	42	48	-	51	22	-	88	62	-	90	6	**52**	54	52	69	61	18
	2022	-	49	52	-	56	24	-	90	64	-	90	7	**55**	60	55	74	65	19
Thailand	2015	-	97	98	-	57	41	-	>99	>99	-	86	14	-	98	99	-	71	28
	2022	-	>99	>99	-	79	21	-	>99	>99	-	93	7	-	>99	>99	-	86	14
Timor-Leste	2015	-	50	-	-	53	18	-	83	52	-	71	22	-	60	-	-	58	19
	2022	-	66	-	-	66	18	-	94	56	-	84	16	-	75	-	-	72	17
Togo	2015	**7**	7	30	17	18	38	**31**	31	51	52	52	37	**17**	17	39	31	31	38
	2022	**8**	8	67	21	21	47	**34**	34	75	53	43	47	**19**	19	71	35	30	47
Tokelau	2015	-	92	-	-	95	4	-	-	-	-	-	-	-	92	-	-	95	4
	2022	-	97	-	-	95	4	-	-	-	-	-	-	-	97	-	-	95	4
Tonga	2015	**23**	98	90	23	98	1	**50**	99	94	50	98	2	**29**	98	91	29	98	1
	2022	**23**	98	90	23	98	1	**51**	>99	94	51	>99	<1	**30**	98	91	30	99	1
Trinidad and Tobago	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	98	81	-	91	8
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	99	82	-	93	7
Tunisia	2015	**61**	78	61	65	73	19	**84**	96	85	84	97	2	**76**	90	77	78	89	8
	2022	**67**	78	67	68	80	17	**77**	94	77	84	99	<1	**74**	89	74	79	93	6
Türkiye	2015	-	88	-	-	86	10	-	94	-	-	98	<1	-	92	-	-	95	3
	2022	-	89	-	-	86	13	-	94	-	-	98	<1	-	93	-	-	95	4
Turkmenistan	2015	**85**	90	97	85	25	72	**96**	96	>99	97	85	15	**91**	93	98	91	55	44
	2022	**92**	>99	>99	92	22	78	**97**	>99	>99	97	84	16	**95**	>99	>99	95	55	45
Turks and Caicos Islands	2015	-	-	-	-	-	-	**47**	47	98	88	-	-	-	-	-	-	-	-
	2022	**56**	56	94	65	40	57	**47**	47	98	88	45	55	**47**	47	98	87	45	55
Tuvalu	2015	**5**	98	85	5	98	1	**10**	86	69	10	98	2	**8**	91	76	8	98	1
	2022	**5**	98	86	5	>99	<1	**10**	86	69	10	>99	<1	**9**	91	75	9	>99	<1
Uganda	2015	**6**	6	58	34	10	63	**36**	36	76	91	55	37	**12**	12	62	47	20	57
	2022	**9**	9	70	56	13	68	**45**	45	78	93	52	41	**19**	19	72	66	23	61
Ukraine	2015	**90**	99	-	90	35	64	**88**	88	-	95	83	17	**89**	92	-	94	68	31
	2022	**86**	>99	-	86	31	69	**88**	88	-	93	76	23	**88**	92	-	91	63	37
United Arab Emirates	2015	-	98	-	-	>99	<1	-	99	-	-	>99	<1	-	99	>99	-	>99	<1
	2022	-	98	-	-	>99	<1	-	99	-	-	>99	<1	-	99	>99	-	>99	<1
United Kingdom	2015	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
	2022	-	>99	-	-	>99	<1	-	>99	-	-	>99	<1	**>99**	>99	-	>99	>99	<1
United Republic of Tanzania	2015	**3**	13	29	3	26	26	**24**	44	63	24	65	25	**9**	23	39	9	39	26
	2022	**3**	27	35	3	28	37	**25**	67	69	25	63	33	**11**	42	48	11	41	36
United States Virgin Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	**98**	98	-	99	47	52
	2020	-	-	-	-	-	-	-	-	-	-	-	-	**98**	98	-	99	47	52
United States of America	2015	-	97	94	-	95	3	**97**	>99	97	>99	>99	<1	**96**	>99	96	>99	99	<1
	2022	-	>99	97	-	-	-	**98**	>99	98	>99	>99	<1	**97**	>99	97	>99	-	-
Uruguay	2015	-	91	-	-	91	5	**94**	99	>99	94	>99	<1	-	98	>99	-	>99	<1
	2022	-	95	-	-	>99	<1	**95**	99	>99	95	>99	<1	-	99	>99	-	>99	<1
Uzbekistan	2015	**57**	57	83	88	58	37	**88**	88	88	93	88	11	**72**	72	85	90	73	24
	2022	**71**	71	85	89	60	37	**89**	89	89	93	85	14	**80**	80	87	91	73	25
Vanuatu	2015	-	59	-	-	39	47	**56**	81	-	56	79	20	-	64	-	-	49	40
	2022	-	76	-	-	40	50	**56**	92	-	56	78	21	-	80	-	-	50	42
Venezuela (Bolivarian Republic of)	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	86	49	-	81	14
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	85	17	-	78	15
Viet Nam	2015	**43**	87	87	43	21	70	**75**	97	98	75	75	24	**54**	91	91	54	39	54
	2022	**46**	97	94	46	31	66	**76**	>99	98	76	86	13	**58**	98	95	58	52	46
Wallis and Futuna Islands	2015	**69**	99	-	69	>99	<1	-	-	-	-	-	-	**69**	99	-	69	>99	<1
	2022	**69**	98	-	69	99	<1	-	-	-	-	-	-	**69**	98	-	69	99	<1
Yemen	2015	-	29	47	-	39	35	-	73	60	-	74	23	-	44	52	-	51	31
	2022	-	34	55	-	44	42	-	74	61	-	77	22	-	50	58	-	57	34
Zambia	2015	-	8	33	-	6	47	**49**	54	49	90	72	19	-	27	40	-	33	35
	2022	-	9	38	-	5	54	**45**	58	45	92	69	23	-	32	41	-	34	40
Zimbabwe	2015	**14**	14	53	28	10	58	**55**	75	55	68	74	23	**27**	34	54	41	31	47
	2022	**13**	13	60	28	9	58	**55**	66	55	69	65	33	**27**	30	58	41	27	50

ANNEX 4

Sanitation estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Afghanistan	2015	33 753	25	**40**	6	35	19	1.48	-0.88	**57**	21	22	<1	1.80	-0.29	**44**	10	32	14	1.59	-0.78
	2022	41 129	27	**51**	8	29	12			**70**	23	7	<1			**56**	12	23	9		
Albania	2015	2 882	57	**96**	1	2	<1	0.69	-0.06	**99**	<1	<1	<1	0.11	-0.02	**98**	1	1	<1	0.45	-0.04
	2022	2 842	64	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Algeria	2015	39 543	71	**78**	11	7	4	0.28	-0.66	**90**	8	1	<1	-0.17	-0.03	**87**	9	3	1	0.06	-0.28
	2022	44 903	75	**80**	12	8	<1			**88**	10	2	<1			**86**	11	3	<1		
American Samoa	2015	51	87	-	-	-	-	-	-	-	-	-	-	-	-	**56**	42	<1	<1	-0.48	-
	2022	44	87	-	-	-	-			-	-	-	-			**54**	44	2	-		
Andorra	2015	72	88	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00
	2022	80	88	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Angola	2015	28 128	63	**21**	5	17	56	0.76	-0.57	**62**	27	7	3	0.81	-0.87	**47**	19	11	23	1.12	-1.16
	2022	35 589	68	**24**	6	15	54			**65**	28	6	<1			**52**	21	9	17		
Anguilla	2015	15	100	-	-	-	-	-	-	**97**	2	<1	<1	-	-	**97**	2	<1	<1	-	-
	2017	15	100	-	-	-	-			**97**	2	<1	<1			**97**	2	<1	<1		
Antigua and Barbuda	2015	90	25	**98**	<1	1	<1	-	-	**95**	<1	4	<1	-	-	**97**	<1	2	<1	-	-
	2022	94	24	**98**	<1	1	<1			**95**	<1	4	<1			**97**	<1	2	<1		
Argentina	2015	43 257	92	**77**	4	20	-	-	-	**96**	2	<1	<1	0.39	-0.07	**94**	2	3	-	-	-
	2022	45 510	92	-	-	-	-			**98**	2	<1	<1			-	-	-	-		
Armenia	2015	2 879	63	**82**	2	16	<1	0.29	-0.00	**>99**	<1	<1	<1	0.35	-0.00	**93**	<1	6	<1	0.32	-0.00
	2022	2 780	64	**83**	1	15	<1			**>99**	<1	<1	<1			**94**	<1	6	<1		
Aruba	2015	104	43	-	-	-	-	-	-	-	-	-	-	-	-	**99**	<1	<1	<1	0.04	-0.02
	2022	106	44	-	-	-	-			-	-	-	-			**99**	<1	<1	<1		
Australia	2015	23 820	86	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00
	2022	26 177	86	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Austria	2015	8 642	58	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	-0.00	0.00	**>99**	<1	<1	<1	-0.00	0.00
	2022	8 940	59	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Azerbaijan	2015	9 863	55	**96**	2	2	<1	-	-	**96**	4	<1	<1	1.07	-0.00	**96**	3	1	<1	-	-
	2022	10 358	57	-	-	-	-			**96**	4	<1	<1			-	-	-	-		
Bahamas	2015	393	83	-	-	-	-	-	-	-	-	-	-	-	-	**95**	3	2	<1	-	-
	2019	405	83	-	-	-	-			-	-	-	-			**95**	3	2	<1		
Bahrain	2015	1 362	89	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00
	2022	1 472	90	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Bangladesh	2015	157 830	34	**47**	18	31	4	1.97	-0.94	**52**	30	17	<1	0.53	-0.21	**49**	22	26	3	1.58	-0.77
	2022	171 186	40	**62**	20	18	<1			**55**	35	10	<1			**59**	26	15	<1		
Barbados	2015	278	31	-	-	-	-	-	-	-	-	-	-	-	-	**96**	2	<1	<1	0.42	-
	2022	282	31	-	-	-	-			-	-	-	-			**98**	2	<1	-		
Belarus	2015	9 701	77	**97**	1	2	<1	0.13	0.00	**97**	2	<1	<1	0.42	0.00	**97**	2	<1	<1	0.34	0.00
	2022	9 535	80	**98**	<1	2	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Belgium	2015	11 248	98	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00
	2022	11 656	98	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Belize	2015	360	45	**83**	11	4	2	0.17	-0.30	**92**	6	1	<1	0.37	-0.02	**87**	9	3	1	0.26	-0.18
	2022	405	46	**84**	12	4	<1			**94**	6	<1	<1			**88**	9	2	<1		
Benin	2015	10 933	46	**7**	10	10	73	0.34	-1.03	**27**	30	11	33	0.48	-0.23	**16**	19	10	54	0.49	-0.90
	2022	13 353	50	**10**	11	14	65			**30**	29	10	31			**19**	20	12	49		
Bermuda	2015	63	100	-	-	-	-	-	-	**>99**	<1	<1	<1	-0.00	0.00	**>99**	<1	<1	<1	-0.00	0.00
	2022	64	100	-	-	-	-			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Bhutan	2015	743	39	**67**	6	25	3	1.82	-0.54	**75**	15	9	<1	0.24	-0.20	**70**	9	19	2	1.41	-0.45
	2022	782	44	**79**	7	15	<1			**77**	14	9	<1			**78**	10	12	<1		

'-' = no estimate. For JMP estimate methods see Annex 1. For unrounded estimates see <www.washdata.org>.

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Afghanistan	2015	-	-	-	-	44	2	<1	-	-	-	-	42	27	9	-	-	-	-	43	8	3
	2022	-	-	-	-	56	2	1	-	-	-	-	55	29	9	-	-	-	-	55	9	3
Albania	2015	-	-	-	10	52	14	32	**34**	4	2	28	7	2	90	**42**	15	7	20	26	7	65
	2022	-	-	-	10	69	8	23	**50**	6	4	39	12	2	86	**56**	17	10	29	33	4	63
Algeria	2015	**54**	14	3	38	9	21	58	**66**	2	<1	64	1	3	94	**62**	5	1	56	4	8	84
	2022	**56**	12	2	41	9	18	65	**65**	<1	<1	64	<1	<1	97	**62**	3	<1	58	3	5	89
American Samoa	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**39**	8	7	24	6	44	48
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**37**	6	5	26	<1	43	55
Andorra	2015	**98**	<1	<1	98	<1	-	>99	**98**	<1	<1	98	<1	-	>99	**98**	<1	<1	98	<1	-	>99
	2022	**>99**	<1	<1	>99	<1	-	>99	**>99**	<1	<1	>99	<1	-	>99	**>99**	<1	<1	>99	<1	-	>99
Angola	2015	-	-	-	-	5	20	1	-	-	-	-	7	63	19	-	-	-	-	7	47	13
	2022	-	-	-	-	4	25	1	-	-	-	-	<1	75	19	-	-	-	-	1	59	13
Anguilla	2015	-	-	-	-	-	-	-	-	-	-	-	4	94	1	-	-	-	-	4	94	1
	2017	-	-	-	-	-	-	-	-	-	-	-	4	94	1	-	-	-	-	4	94	1
Antigua and Barbuda	2015	-	-	-	-	21	76	1	-	-	-	-	35	59	2	-	-	-	-	24	72	1
	2022	-	-	-	-	21	76	1	-	-	-	-	35	59	2	-	-	-	-	24	72	1
Argentina	2015	-	-	-	2	38	37	5	**46**	13	5	27	13	24	61	**46**	14	7	25	15	25	57
	2022	-	-	-	-	-	-	-	**46**	12	4	30	10	22	68	-	-	-	-	-	-	-
Armenia	2015	-	-	-	<1	58	5	21	**1**	1	<1	<1	2	<1	97	**12**	12	<1	<1	23	2	69
	2022	-	-	-	<1	56	6	22	**<1**	<1	<1	<1	<1	<1	>99	**11**	11	<1	<1	20	2	72
Aruba	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	3	91	5
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	3	91	5
Australia	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**95**	2	2	91	<1	7	93
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**96**	1	1	93	<1	6	94
Austria	2015	**>99**	14	<1	84	<1	15	84	**>99**	<1	<1	98	2	<1	98	**>99**	6	<1	92	1	7	92
	2022	**>99**	14	<1	84	<1	15	84	**>99**	<1	<1	98	2	<1	98	**>99**	6	<1	93	1	6	93
Azerbaijan	2015	-	-	-	7	78	5	14	**56**	8	7	41	15	5	81	**68**	22	20	26	43	5	51
	2022	-	-	-	-	-	-	-	**63**	4	4	54	7	5	88	-	-	-	-	-	-	-
Bahamas	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	77	21
	2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	77	21
Bahrain	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**90**	<1	9	81	<1	19	81
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**92**	<1	7	85	<1	14	86
Bangladesh	2015	**20**	20	<1	<1	51	13	<1	**27**	21	<1	6	34	29	19	**23**	21	<1	2	46	18	7
	2022	**32**	32	<1	<1	63	18	<1	**29**	20	<1	8	34	29	27	**31**	27	<1	3	51	23	11
Barbados	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88	7	3
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92	4	3
Belarus	2015	**55**	30	<1	26	46	22	30	**82**	5	5	72	8	5	87	**76**	10	4	61	17	9	74
	2022	**49**	27	<1	22	40	32	26	**81**	4	5	72	7	7	86	**75**	9	4	62	14	12	74
Belgium	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**86**	5	5	76	3	15	82
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**95**	5	5	84	6	9	84
Belize	2015	-	-	-	-	43	51	<1	-	-	-	-	9	69	20	-	-	-	-	28	59	9
	2022	-	-	-	-	39	56	<1	-	-	-	-	8	73	18	-	-	-	-	24	64	9
Benin	2015	**1**	1	<1	<1	17	<1	<1	**3**	3	<1	<1	46	9	2	**2**	2	<1	<1	30	4	<1
	2022	**2**	2	<1	<1	19	1	<1	**4**	3	<1	<1	47	9	2	**3**	2	<1	<1	33	5	1
Bermuda	2015	-	-	-	-	-	-	-	-	-	-	2	95	-	5	-	-	-	2	95	-	5
	2022	-	-	-	-	-	-	-	-	-	-	2	95	-	5	-	-	-	2	95	-	5
Bhutan	2015	**51**	50	<1	1	35	34	3	**43**	34	<1	10	11	55	23	**48**	44	<1	5	26	42	11
	2022	**58**	55	<1	3	36	44	6	**41**	24	<1	17	<1	52	39	**51**	42	<1	9	20	47	20

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Bolivia (Plurinational State of)	2015	11 090	68	**35**	6	19	40	1.51	-1.53	**67**	25	5	4	1.35	-0.67	**57**	19	9	15	1.53	-1.12
	2022	12 224	71	**47**	4	19	29			**77**	23	<1	<1			**69**	17	6	9		
Bonaire, Sint Eustatius and Saba	2015	23	75	-	-	-	-	-	-	-	-	-	-	-	-	**95**	5	<1	<1	0.06	0.00
	2022	27	75	-	-	-	-			-	-	-	-			**95**	5	<1	<1		
Bosnia and Herzegovina	2015	3 524	47	**92**	<1	7	<1	-	-	**99**	<1	<1	<1	0.02	-0.02	**95**	<1	4	<1	-	-
	2022	3 234	50	-	-	-	-			**99**	<1	<1	<1			-	-	-	-		
Botswana	2015	2 305	67	**49**	10	17	24	0.90	-1.33	**87**	3	7	2	1.03	-0.10	**75**	5	11	9	1.30	-0.80
	2022	2 630	72	**52**	11	21	16			**91**	4	4	1			**81**	5	9	5		
Brazil	2015	205 188	86	**56**	<1	33	10	1.26	-1.53	**91**	<1	8	<1	0.59	-0.14	**86**	<1	12	2	0.81	-0.40
	2022	215 313	88	**64**	<1	34	<1			**95**	<1	5	<1			**91**	<1	9	<1		
British Virgin Islands	2015	29	47	-	-	-	-	-	-	-	-	-	-	-	-	**97**	<1	3	<1	-	-
	2016	30	47	-	-	-	-			-	-	-	-			**97**	<1	3	<1		
Brunei Darussalam	2015	421	77	-	-	-	-	-	-	-	-	-	-	-	-	**91**	<1	7	2	1.22	-
	2022	449	79	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Bulgaria	2015	7 309	74	**84**	16	<1	<1	-0.00	0.00	**87**	13	<1	<1	0.00	0.00	**86**	14	<1	<1	0.01	0.00
	2022	6 782	76	**84**	16	<1	<1			**87**	13	<1	<1			**86**	14	<1	<1		
Burkina Faso	2015	18 718	28	**12**	18	10	60	0.66	-1.88	**44**	44	5	7	-0.26	-0.18	**21**	25	8	46	0.66	-1.84
	2022	22 674	32	**17**	26	11	47			**42**	49	3	6			**25**	33	8	34		
Burundi	2015	10 727	12	**46**	7	45	2	0.04	-0.06	**42**	41	17	<1	0.03	-0.09	**46**	11	42	2	0.02	-0.07
	2022	12 890	14	**46**	7	45	2			**41**	46	12	<1			**46**	13	40	1		
Cabo Verde	2015	552	64	**59**	3	6	33	2.63	-2.45	**77**	8	3	13	1.53	-1.33	**70**	6	4	20	2.10	-1.94
	2022	593	68	**77**	1	5	18			**86**	9	<1	4			**83**	7	2	9		
Cambodia	2015	15 418	22	**46**	7	4	43	3.24	-3.79	**81**	8	2	9	1.74	-1.58	**54**	7	3	35	3.02	-3.43
	2022	16 768	25	**71**	8	4	16			**93**	7	<1	<1			**77**	8	3	12		
Cameroon	2015	23 013	55	**23**	7	59	11	-0.13	-0.26	**57**	26	16	<1	0.16	-0.01	**41**	18	36	5	0.22	-0.19
	2022	27 915	59	**22**	6	63	9			**58**	25	16	<1			**43**	17	36	4		
Canada	2015	35 732	81	**99**	<1	1	<1	-0.03	0.00	**>99**	<1	<1	<1	-0.07	0.00	**>99**	<1	<1	<1	-0.06	0.00
	2022	38 454	82	**99**	<1	1	<1			**99**	<1	1	<1			**99**	<1	1	<1		
Cayman Islands	2015	61	100	-	-	-	-	-	-	**83**	11	5	<1	-	-	**83**	11	5	<1	-	-
	2022	69	100	-	-	-	-			**83**	10	6	<1			**83**	10	6	<1		
Central African Republic	2015	4 819	40	**7**	5	50	37	-0.16	0.23	**29**	26	39	6	-0.67	0.12	**16**	14	46	25	-0.31	0.11
	2022	5 579	43	**6**	7	49	39			**25**	29	40	7			**14**	16	45	25		
Chad	2015	14 140	23	**5**	1	13	80	-0.07	-0.38	**33**	18	32	16	0.76	-0.14	**11**	5	18	66	0.15	-0.40
	2022	17 723	24	**5**	2	16	78			**39**	17	28	15			**13**	5	19	63		
Channel Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**99**	<1	2	<1	-	-
	2017	-	-	-	-	-	-			-	-	-	-			**99**	<1	2	<1		
Chile	2015	17 870	87	**97**	<1	1	1	1.44	-0.15	**>99**	<1	<1	<1	0.18	-0.10	**>99**	<1	<1	<1	0.35	-0.10
	2022	19 604	88	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
China	2015	1 417 228	56	**77**	3	19	1	2.17	-0.18	**91**	3	5	<1	0.90	-0.00	**85**	3	12	<1	1.78	-0.11
	2022	1 449 781	64	**93**	2	5	<1			**98**	2	<1	<1			**96**	2	2	<1		
China, Hong Kong SAR	2015	7 400	100	-	-	-	-	-	-	**97**	<1	3	<1	-0.01	0.00	**97**	<1	3	<1	-0.01	0.00
	2022	7 489	100	-	-	-	-			**97**	<1	3	<1			**97**	<1	3	<1		
China, Macao SAR	2015	615	100	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00
	2022	695	100	-	-	-	-			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Colombia	2015	47 120	80	**77**	4	3	16	1.18	-0.76	**92**	7	<1	1	0.71	-0.05	**89**	6	1	4	0.88	-0.27
	2022	51 874	82	**86**	3	2	10			**97**	2	<1	<1			**95**	2	<1	2		
Comoros	2015	730	28	**32**	12	56	<1	-	-	**45**	17	37	<1	-	-	**36**	13	50	<1	-	-
	2019	791	29	**32**	12	56	-			**45**	17	38	-			**36**	13	51	-		

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Bolivia (Plurinational State of)	2015	-	-	-	-	29	7	5	-	-	-	-	12	14	64	-	-	-	-	18	12	46
	2022	-	-	-	-	36	9	7	-	-	-	-	13	16	71	-	-	-	-	20	14	52
Bonaire, Sint Eustatius and Saba	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	-	<1
Bosnia and Herzegovina	2015	-	-	-	8	<1	64	29	28	4	2	22	<1	16	84	44	26	3	15	<1	41	55
	2022	-	-	-	-	-	-	-	58	4	4	50	<1	16	84	-	-	-	-	-	-	-
Botswana	2015	-	-	-	<1	56	3	<1	-	-	-	<1	83	6	2	-	-	-	<1	74	5	1
	2022	-	-	-	<1	60	3	<1	-	-	-	<1	87	6	2	-	-	-	<1	80	5	1
Brazil	2015	-	-	-	4	24	26	7	46	7	3	36	7	13	72	44	8	4	32	9	15	62
	2022	-	-	-	5	27	29	9	51	5	3	44	4	11	80	50	7	4	39	7	13	71
British Virgin Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	73	22
	2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	73	22
Brunei Darussalam	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	91	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	99	-
Bulgaria	2015	56	10	10	36	<1	47	53	70	1	1	67	<1	6	94	66	3	3	59	<1	16	84
	2022	61	9	9	44	<1	42	58	77	<1	<1	75	<1	5	95	73	3	3	68	<1	13	87
Burkina Faso	2015	6	6	<1	<1	30	<1	<1	13	12	<1	<1	80	6	2	8	8	<1	<1	44	2	<1
	2022	9	9	<1	<1	43	<1	<1	12	12	<1	<1	84	6	1	10	10	<1	<1	56	2	<1
Burundi	2015	-	-	-	-	53	<1	<1	-	-	-	-	53	24	5	-	-	-	-	53	3	<1
	2022	-	-	-	-	54	<1	<1	-	-	-	-	57	28	2	-	-	-	-	54	4	<1
Cabo Verde	2015	-	-	-	-	<1	59	2	-	-	-	-	<1	49	35	-	-	-	-	<1	53	23
	2022	-	-	-	-	4	74	<1	-	-	-	-	20	48	28	-	-	-	-	15	56	19
Cambodia	2015	22	21	<1	2	<1	49	4	39	19	<1	20	<1	45	43	26	20	<1	6	<1	48	13
	2022	34	32	<1	2	<1	74	5	45	24	<1	21	<1	55	45	37	30	<1	7	<1	69	15
Cameroon	2015	-	-	-	-	29	<1	<1	-	-	-	-	62	20	2	-	-	-	-	47	11	<1
	2022	-	-	-	-	26	1	<1	-	-	-	-	59	22	2	-	-	-	-	46	13	1
Canada	2015	82	2	27	53	1	34	63	83	<1	8	74	4	6	89	83	<1	12	70	4	12	84
	2022	84	2	28	54	<1	35	63	84	<1	8	76	4	6	88	84	<1	12	72	3	11	84
Cayman Islands	2015	-	-	-	-	-	-	-	-	-	-	15	11	67	17	-	-	-	15	11	67	17
	2022	-	-	-	-	-	-	-	-	-	-	13	15	64	14	-	-	-	13	15	64	14
Central African Republic	2015	7	7	<1	<1	12	<1	<1	28	28	<1	<1	54	<1	<1	15	15	<1	<1	29	<1	<1
	2022	6	6	<1	<1	12	<1	<1	23	23	<1	<1	53	<1	<1	13	13	<1	<1	30	<1	<1
Chad	2015	5	5	<1	<1	6	<1	<1	27	26	<1	<1	47	3	2	10	10	<1	<1	15	<1	<1
	2022	4	4	<1	<1	6	<1	<1	32	31	<1	<1	52	3	2	11	11	<1	<1	17	<1	<1
Channel Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	7	1	82	<1	17	82
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	7	1	82	<1	17	82
Chile	2015	-	-	-	18	20	59	19	97	<1	<1	96	<1	2	97	93	4	4	86	3	9	87
	2022	-	-	-	20	14	66	20	>99	<1	<1	98	<1	2	98	95	3	3	89	2	9	89
China	2015	24	6	<1	18	39	17	23	70	2	3	65	5	8	81	49	4	2	44	21	12	55
	2022	37	7	<1	30	38	26	31	85	3	5	77	7	13	80	67	4	3	60	18	18	62
China, Hong Kong SAR	2015	-	-	-	-	-	-	-	80	2	1	77	3	-	93	80	2	1	77	3	-	93
	2022	-	-	-	-	-	-	-	97	2	2	93	3	-	93	97	2	2	93	3	-	93
China, Macao SAR	2015	-	-	-	-	-	-	-	61	<1	<1	61	<1	-	>99	61	<1	<1	61	<1	-	>99
	2022	-	-	-	-	-	-	-	68	<1	<1	68	<1	-	>99	68	<1	<1	68	<1	-	>99
Colombia	2015	-	-	-	2	10	57	14	16	2	<1	14	1	6	91	17	5	<1	11	3	16	76
	2022	-	-	-	2	9	66	13	17	2	<1	15	1	6	92	18	5	<1	12	3	17	78
Comoros	2015	-	-	-	-	36	4	4	-	-	-	-	44	10	8	-	-	-	-	38	5	5
	2019	-	-	-	-	36	4	4	-	-	-	-	44	10	8	-	-	-	-	38	5	5

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Congo	2015	5 064	66	**6**	9	63	22	-	-	**26**	45	28	2	-	-	**19**	33	40	9	-	-
	2021	5 836	68	**6**	9	62	23			**27**	46	25	2			**21**	34	37	8		
Cook Islands	2015	18	74	-	-	-	-	-	-	-	-	-	-	-	-	**85**	11	3	<1	0.17	-0.02
	2022	17	76	-	-	-	-			-	-	-	-			**85**	11	3	<1		
Costa Rica	2015	4 895	77	**94**	1	4	<1	0.37	-0.04	**98**	<1	<1	<1	0.09	-0.02	**97**	1	2	<1	0.21	-0.03
	2022	5 181	82	**97**	<1	2	<1			**99**	<1	<1	<1			**98**	<1	1	<1		
Côte d'Ivoire	2015	23 597	49	**17**	17	22	45	0.65	-1.02	**47**	32	15	6	0.56	0.02	**31**	25	18	26	0.74	-0.70
	2022	28 161	53	**22**	20	21	38			**51**	34	9	6			**37**	27	15	21		
Croatia	2015	4 255	56	**94**	4	2	<1	-	-	**98**	2	<1	<1	-	-	**96**	3	1	<1	-	-
	2021	4 060	58	**94**	4	2	<1			**98**	2	<1	<1			**96**	3	<1	<1		
Cuba	2015	11 340	77	**84**	8	6	2	0.82	-0.18	**90**	8	2	<1	0.31	-0.03	**89**	8	3	<1	0.44	-0.07
	2022	11 212	77	**91**	5	4	<1			**92**	6	2	<1			**92**	6	2	<1		
Curaçao	2015	170	89	-	-	-	-	-	-	-	-	-	-	-	-	**99**	<1	<1	<1	-	-
	2017	172	89	-	-	-	-			-	-	-	-			**99**	<1	<1	<1		
Cyprus	2015	1 187	67	**99**	<1	1	<1	-0.05	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	-0.02	0.00
	2022	1 251	67	**99**	<1	1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Czechia	2015	10 524	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
	2022	10 494	74	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Democratic People's Republic of Korea	2015	25 258	61	**71**	<1	28	<1	-	-	**88**	3	9	<1	-	-	**82**	2	16	<1	-	-
	2022	26 069	63	**73**	<1	27	<1			**92**	1	7	<1			**85**	<1	15	<1		
Democratic Republic of the Congo	2015	78 657	43	**14**	11	57	18	-0.57	0.19	**22**	30	44	4	-0.08	0.06	**18**	19	51	12	-0.34	0.06
	2022	99 010	47	**11**	9	61	19			**22**	27	47	4			**16**	18	54	12		
Denmark	2015	5 678	88	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	-0.00	0.00
	2022	5 882	88	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Djibouti	2015	1 006	77	**19**	2	14	65	0.47	-0.17	**74**	7	16	3	0.97	-0.08	**61**	6	15	17	0.90	-0.15
	2022	1 121	78	**22**	2	12	64			**79**	8	10	3			**67**	7	10	16		
Dominica	2015	70	70	-	-	-	-	-	-	-	-	-	-	-	-	**80**	3	11	6	-	-
	2017	70	70	-	-	-	-			-	-	-	-			**80**	3	11	6		
Dominican Republic	2015	10 406	79	**76**	13	4	7	0.45	-0.20	**88**	9	2	2	0.40	-0.06	**85**	10	2	3	0.53	-0.15
	2022	11 229	84	**79**	13	3	5			**91**	7	1	1			**89**	8	2	2		
Ecuador	2015	16 196	63	**79**	7	4	10	1.62	-1.14	**90**	9	<1	<1	0.58	-0.18	**86**	8	2	4	1.00	-0.57
	2022	18 001	65	**91**	8	<1	2			**93**	7	<1	<1			**92**	7	<1	<1		
Egypt	2015	97 724	43	**94**	4	2	<1	0.33	-0.11	**99**	1	<1	<1	0.22	-0.04	**96**	3	1	<1	0.29	-0.08
	2022	110 990	43	**96**	3	1	<1			**>99**	<1	<1	<1			**98**	2	<1	<1		
El Salvador	2015	6 231	70	**76**	16	2	7	0.31	-0.88	**90**	9	<1	<1	0.16	-0.12	**86**	11	<1	2	0.32	-0.43
	2022	6 336	75	**77**	21	2	<1			**91**	9	<1	<1			**88**	12	<1	<1		
Equatorial Guinea	2015	1 347	71	**57**	6	33	4	-	-	**70**	11	16	3	-	-	**66**	10	21	3	-	-
	2017	1 451	72	**57**	6	33	4			**70**	11	16	3			**66**	10	21	3		
Eritrea	2015	3 340	38	**6**	2	4	89	-	-	**22**	22	23	33	-	-	**12**	10	11	67	-	-
	2016	3 365	39	**6**	2	4	89			**22**	22	23	33			**12**	10	11	67		
Estonia	2015	1 315	68	**>99**	<1	<1	<1	0.01	0.00	**>99**	<1	<1	<1	-0.05	0.00	**>99**	<1	<1	<1	-0.03	0.00
	2022	1 326	70	**>99**	<1	<1	<1			**99**	<1	<1	<1			**>99**	<1	<1	<1		
Eswatini	2015	1 134	23	**63**	17	12	8	1.14	-1.32	**55**	38	6	1	-0.67	-0.05	**61**	22	11	6	0.71	-1.03
	2022	1 202	25	**69**	16	16	<1			**52**	41	7	<1			**64**	22	14	<1		
Ethiopia	2015	102 472	19	**4**	2	54	40	0.22	-2.86	**20**	28	43	9	0.33	-0.85	**7**	7	52	34	0.30	-2.63
	2022	123 380	23	**6**	3	70	22			**22**	29	46	3			**9**	8	65	18		
Falkland Islands (Malvinas)	2015	3	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
	2022	4	79	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Faroe Islands	2015	49	42	-	-	-	-	-	-	-	-	-	-	-	-	**91**	<1	9	<1	-	-
	2022	53	43	-	-	-	-			-	-	-	-			-	-	-	-		

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Congo	2015	-	-	-	-	14	<1	<1	-	-	-	-	50	19	2	-	-	-	-	37	13	1
	2021	-	-	-	-	14	<1	<1	-	-	-	-	50	22	2	-	-	-	-	39	15	1
Cook Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Costa Rica	2015	35	34	<1	<1	2	89	5	21	16	<1	5	<1	68	31	24	20	<1	4	<1	73	25
	2022	36	35	<1	<1	<1	93	5	23	18	<1	5	1	74	24	25	21	<1	4	<1	77	21
Côte d'Ivoire	2015	11	11	<1	<1	28	5	<1	19	15	<1	4	41	26	12	15	13	<1	2	34	15	6
	2022	14	14	<1	<1	34	6	1	20	17	<1	3	43	31	11	17	15	<1	2	39	19	6
Croatia	2015	-	-	-	28	8	61	29	88	6	6	77	3	17	79	78	11	11	55	5	36	57
	2021	-	-	-	28	8	61	29	88	6	6	77	3	17	79	78	11	11	56	5	36	58
Cuba	2015	55	50	<1	5	48	23	21	38	16	5	16	14	20	64	42	24	4	14	22	21	54
	2022	56	48	<1	8	45	22	29	37	14	4	19	14	12	72	41	22	3	16	21	15	63
Curaçao	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	<1	81	18
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	<1	81	18
Cyprus	2015	-	-	-	11	5	84	11	86	8	8	70	3	27	70	77	13	13	50	3	46	50
	2022	-	-	-	12	6	82	12	86	9	9	69	4	27	69	77	13	13	50	4	45	50
Czechia	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87	4	4	80	<1	16	84
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	3	3	84	<1	12	88
Democratic People's Republic of Korea	2015	9	<1	<1	9	42	12	17	-	1	-	-	18	6	68	-	<1	-	-	27	8	48
	2022	1	<1	<1	<1	55	17	2	-	1	-	-	19	7	67	-	<1	-	-	32	11	42
Democratic Republic of the Congo	2015	14	14	<1	<1	25	<1	<1	17	16	<1	<1	36	15	1	15	15	<1	<1	30	7	<1
	2022	11	11	<1	<1	20	<1	<1	15	15	<1	<1	28	20	<1	13	13	<1	<1	24	9	<1
Denmark	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97	6	1	90	<1	9	91
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99	6	<1	92	<1	7	92
Djibouti	2015	18	18	<1	<1	21	<1	<1	41	38	<1	3	60	15	7	36	34	<1	2	51	11	5
	2022	21	21	<1	<1	24	<1	<1	45	42	<1	3	67	15	7	40	37	<1	2	57	11	5
Dominica	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	61	13
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	61	13
Dominican Republic	2015	51	49	<1	2	38	45	6	45	32	<1	13	14	55	28	46	36	<1	11	19	53	24
	2022	48	46	<1	2	26	62	4	42	31	<1	11	7	67	24	43	34	<1	9	10	66	20
Ecuador	2015	55	49	<1	6	19	44	23	34	14	<1	20	2	17	80	42	27	<1	15	8	27	59
	2022	61	54	<1	7	12	58	29	31	8	<1	22	<1	11	89	42	24	<1	17	4	28	67
Egypt	2015	58	15	11	32	6	49	43	70	2	2	66	1	8	91	63	9	7	46	4	31	64
	2022	63	12	9	42	7	37	55	73	<1	<1	72	<1	<1	>99	67	7	5	55	4	21	74
El Salvador	2015	-	-	-	<1	71	19	1	18	15	<1	2	24	17	58	-	-	-	2	39	17	41
	2022	-	-	-	<1	71	26	<1	17	14	<1	2	21	22	58	-	-	-	2	34	23	43
Equatorial Guinea	2015	-	-	-	-	52	5	7	-	-	-	-	63	7	12	-	-	-	-	59	6	11
	2017	-	-	-	-	52	5	7	-	-	-	-	63	7	12	-	-	-	-	59	6	11
Eritrea	2015	-	-	-	-	7	1	<1	-	-	-	-	24	12	8	-	-	-	-	13	5	3
	2016	-	-	-	-	7	1	<1	-	-	-	-	24	12	8	-	-	-	-	13	5	3
Estonia	2015	-	-	-	44	12	43	45	96	1	1	94	<1	3	96	90	6	6	78	4	16	80
	2022	-	-	-	46	2	51	46	98	<1	<1	97	<1	1	98	90	4	4	82	<1	16	83
Eswatini	2015	-	-	-	1	74	3	3	-	-	-	11	46	16	30	-	-	-	4	68	6	9
	2022	-	-	-	2	78	3	3	-	-	-	14	42	21	30	-	-	-	5	69	7	10
Ethiopia	2015	3	3	<1	<1	6	<1	<1	16	15	<1	<1	38	7	3	6	6	<1	<1	12	2	<1
	2022	4	4	<1	<1	8	<1	<1	17	17	<1	<1	40	9	2	7	7	<1	<1	15	2	<1
Falkland Islands (Malvinas)	2015	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99
	2022	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99
Faroe Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	<1	91	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Fiji	2015	917	55	**91**	5	4	<1	0.55	-0.04	**94**	5	<1	<1	-0.08	-0.00	**93**	5	2	<1	0.25	-0.02
	2022	930	58	**93**	7	<1	<1			**93**	7	<1	<1			**93**	7	<1	<1		
Finland	2015	5 479	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
	2022	5 541	86	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
France	2015	63 810	80	**99**	1	<1	<1	0.00	0.00	**99**	1	<1	<1	0.00	0.00	**99**	1	<1	<1	-0.00	0.00
	2022	64 627	82	**99**	1	<1	<1			**99**	1	<1	<1			**99**	1	<1	<1		
French Guiana	2015	257	84	-	-	-	-	-	-	-	-	-	-	-	-	**93**	<1	7	<1	-	-
	2022	305	86	-	-	-	-			-	-	-	-			**94**	<1	6	<1		
French Polynesia	2015	292	62	-	-	-	-	-	-	-	-	-	-	-	-	**97**	<1	3	<1	-0.05	-0.07
	2022	306	62	-	-	-	-			-	-	-	-			**97**	<1	3	<1		
Gabon	2015	2 029	88	**40**	15	41	4	0.45	-0.03	**50**	30	19	2	0.72	0.01	**49**	28	21	2	0.72	-0.01
	2022	2 389	91	**40**	15	41	3			**51**	30	17	2			**50**	29	19	2		
Gambia	2015	2 253	59	**35**	12	50	3	-1.59	-0.44	**54**	26	19	<1	0.85	-0.04	**47**	20	32	1	-0.15	-0.24
	2022	2 706	64	**24**	8	68	<1			**61**	14	25	<1			**48**	12	41	<1		
Georgia	2015	3 771	57	**77**	<1	22	<1	-0.66	-0.09	**95**	2	3	<1	0.12	0.00	**87**	2	11	<1	-0.17	-0.04
	2022	3 744	60	**72**	<1	28	<1			**96**	1	3	<1			**86**	<1	13	<1		
Germany	2015	82 073	77	**99**	1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00
	2022	83 370	78	**99**	1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Ghana	2015	28 871	54	**14**	36	20	30	0.87	-0.06	**26**	58	8	8	1.01	0.02	**20**	48	13	18	1.02	-0.17
	2022	33 476	59	**21**	34	15	30			**34**	52	6	8			**29**	45	10	17		
Gibraltar	2015	33	100	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00
	2022	33	100	-	-	-	-			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Greece	2015	10 807	78	**98**	2	<1	<1	0.14	-0.08	**>99**	<1	<1	<1	0.03	-0.01	**99**	1	<1	<1	0.06	-0.03
	2022	10 385	80	**98**	2	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Greenland	2015	56	86	-	-	-	-	-	-	-	-	-	-	-	-	**63**	<1	38	<1	-	-
	2022	56	88	-	-	-	-			-	-	-	-			**63**	<1	38	<1		
Grenada	2015	119	36	-	-	-	-	-	-	-	-	-	-	-	-	**91**	2	3	4	-	-
	2017	121	36	-	-	-	-			-	-	-	-			**91**	2	3	4		
Guadeloupe	2015	399	98	-	-	-	-	-	-	-	-	-	-	-	-	**99**	<1	1	<1	-	-
	2022	396	99	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Guam	2015	168	95	-	-	-	-	-	-	-	-	-	-	-	-	**90**	9	<1	<1	0.06	-
	2022	172	95	-	-	-	-			-	-	-	-			**90**	9	<1	-		
Guatemala	2015	16 001	50	**54**	8	30	8	0.55	-0.91	**80**	10	8	2	0.00	-0.14	**67**	9	19	5	0.38	-0.56
	2022	17 844	53	**58**	11	29	2			**80**	11	8	<1			**70**	11	18	1		
Guinea	2015	11 626	35	**15**	14	50	20	0.82	-1.36	**38**	44	17	1	1.16	-0.04	**23**	25	38	14	1.00	-0.98
	2022	13 859	38	**22**	18	50	11			**47**	49	3	<1			**31**	29	32	7		
Guinea-Bissau	2015	1 789	42	**11**	5	58	26	0.73	-1.82	**32**	26	41	1	1.39	-0.16	**20**	14	51	16	1.08	-1.28
	2022	2 106	45	**16**	8	61	15			**42**	30	27	<1			**28**	18	46	8		
Guyana	2015	755	26	**85**	9	5	<1	0.67	-0.06	**90**	7	3	<1	0.38	-0.03	**87**	9	4	<1	0.58	-0.05
	2022	809	27	**90**	9	<1	<1			**93**	5	1	<1			**91**	8	<1	<1		
Haiti	2015	10 564	52	**22**	15	27	36	0.67	-0.93	**42**	37	13	9	0.82	-0.10	**33**	26	20	22	0.94	-0.88
	2022	11 585	59	**25**	17	26	31			**46**	37	9	8			**37**	29	16	18		
Honduras	2015	9 295	55	**72**	7	6	16	1.15	-1.02	**84**	10	4	2	0.52	-0.11	**79**	8	5	8	0.92	-0.66
	2022	10 433	60	**79**	9	3	8			**88**	9	2	1			**84**	9	3	4		
Hungary	2015	9 844	71	**99**	1	<1	<1	0.00	0.00	**98**	2	<1	<1	0.00	0.00	**98**	2	<1	<1	-0.00	0.00
	2022	9 967	73	**99**	1	<1	<1			**98**	2	<1	<1			**98**	2	<1	<1		
Iceland	2015	331	94	**>99**	<1	<1	<1	0.00	0.00	**99**	1	<1	<1	0.00	0.00	**99**	1	<1	<1	-0.00	0.00
	2022	373	94	**>99**	<1	<1	<1			**99**	1	<1	<1			**99**	1	<1	<1		
India	2015	1 322 867	33	**51**	7	<1	41	3.35	-3.39	**72**	17	2	9	1.68	-1.15	**58**	11	1	30	2.92	-2.83
	2022	1 417 173	36	**75**	8	<1	17			**85**	15	<1	<1			**78**	11	<1	11		
Indonesia	2015	259 092	53	**63**	10	8	19	2.68	-1.79	**82**	10	2	6	1.36	-0.52	**73**	10	5	12	2.18	-1.29
	2022	275 501	58	**84**	8	2	7			**91**	6	<1	2			**88**	7	1	4		
Iran (Islamic Republic of)	2015	81 791	73	**77**	17	5	1	0.95	-	**92**	7	<1	<1	0.23	-0.00	**88**	10	2	<1	0.55	-
	2022	88 551	77	**82**	18	<1	-			**93**	7	<1	<1			**90**	10	<1	-		

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Fiji	2015	**54**	53	<1	2	24	69	3	**43**	26	<1	17	5	59	35	**48**	38	<1	10	13	63	21
	2022	**57**	56	<1	1	28	69	3	**43**	26	<1	16	6	59	35	**49**	39	<1	10	15	63	22
Finland	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**89**	<1	5	84	<1	16	84
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**90**	<1	5	85	<1	14	86
France	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**89**	10	<1	79	<1	18	82
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**90**	11	<1	79	<1	18	82
French Guiana	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**73**	15	15	44	10	39	44
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**75**	13	13	48	8	37	48
French Polynesia	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	<1	79	19
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	<1	78	19
Gabon	2015	-	-	-	-	46	-	9	-	-	-	-	43	-	37	-	-	-	-	43	-	33
	2022	-	-	-	-	46	-	9	-	-	-	-	45	-	37	-	-	-	-	45	-	34
Gambia	2015	**34**	34	<1	<1	45	2	<1	**31**	30	<1	1	45	31	4	**32**	31	<1	<1	45	19	2
	2022	**23**	23	<1	<1	30	2	<1	**31**	30	<1	<1	35	38	2	**28**	28	<1	<1	33	25	1
Georgia	2015	**45**	43	<1	1	62	6	9	**19**	5	<1	13	9	2	86	**30**	21	<1	8	32	4	53
	2022	**39**	38	<1	2	52	9	11	**14**	<1	<1	14	<1	<1	97	**24**	15	<1	9	21	4	62
Germany	2015	**91**	3	6	82	3	14	83	**98**	<1	<1	98	<1	<1	>99	**97**	<1	1	94	<1	3	96
	2022	**91**	3	6	82	3	14	83	**98**	<1	<1	98	<1	<1	>99	**97**	<1	1	95	<1	3	96
Ghana	2015	**12**	12	<1	<1	47	3	<1	**12**	11	<1	<1	52	26	6	**12**	11	<1	<1	49	15	3
	2022	**18**	18	<1	<1	50	5	<1	**14**	13	<1	<1	47	35	4	**16**	15	<1	<1	48	22	2
Gibraltar	2015	-	-	-	-	-	-	-	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99
	2022	-	-	-	-	-	-	-	-	-	-	-	<1	-	>99	-	-	-	-	<1	-	>99
Greece	2015	-	-	-	34	<1	65	35	**94**	3	3	88	<1	11	89	**88**	6	6	76	<1	23	77
	2022	-	-	-	44	<1	55	45	**97**	<1	<1	95	<1	4	96	**92**	3	3	85	<1	14	86
Greenland	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**<1**	<1	<1	<1	25	38	<1
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**<1**	<1	<1	<1	25	38	<1
Grenada	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	59	7
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	59	7
Guadeloupe	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	40	39
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	35	39
Guam	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	30	69
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	31	68
Guatemala	2015	-	-	-	-	37	11	14	-	-	-	-	14	7	70	-	-	-	-	25	9	42
	2022	-	-	-	-	38	13	17	-	-	-	-	12	8	71	-	-	-	-	25	10	46
Guinea	2015	-	-	-	-	28	2	<1	-	-	-	-	58	20	4	-	-	-	-	38	8	1
	2022	-	-	-	-	37	3	<1	-	-	-	-	65	28	3	-	-	-	-	47	12	1
Guinea-Bissau	2015	**7**	7	<1	<1	14	2	<1	**16**	15	<1	1	30	24	4	**11**	10	<1	<1	21	11	2
	2022	**11**	11	<1	<1	21	2	<1	**21**	21	<1	<1	41	29	2	**15**	15	<1	<1	30	14	1
Guyana	2015	**52**	51	<1	<1	34	59	1	**37**	33	<1	4	16	73	8	**48**	46	<1	2	29	63	3
	2022	**48**	47	<1	<1	23	75	1	**34**	31	<1	3	10	82	7	**44**	43	<1	1	20	77	3
Haiti	2015	-	-	-	-	35	2	<1	-	-	-	-	56	21	1	-	-	-	-	46	12	<1
	2022	-	-	-	-	40	3	<1	-	-	-	-	55	27	<1	-	-	-	-	49	17	<1
Honduras	2015	**64**	62	<1	2	43	30	5	**40**	18	<1	22	11	18	64	**51**	38	<1	13	25	24	38
	2022	**71**	69	<1	2	48	34	5	**40**	17	<1	23	9	21	67	**53**	38	<1	15	25	26	42
Hungary	2015	**75**	11	11	53	3	42	56	**86**	3	3	80	1	11	88	**83**	6	5	72	2	20	78
	2022	**81**	9	9	63	<1	36	64	**91**	2	2	86	<1	8	92	**88**	4	4	80	<1	16	84
Iceland	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	7	93
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	6	94
India	2015	**38**	38	<1	<1	35	22	1	**35**	24	2	9	14	46	29	**37**	33	<1	3	28	30	10
	2022	**57**	57	<1	<1	53	28	1	**43**	28	2	13	14	54	32	**52**	47	<1	5	39	38	12
Indonesia	2015	-	-	-	-	15	57	<1	-	-	-	-	12	79	1	-	-	-	-	13	69	<1
	2022	-	-	-	-	14	77	<1	-	-	-	-	8	88	1	-	-	-	-	11	83	<1
Iran (Islamic Republic of)	2015	-	-	-	<1	91	1	2	**79**	28	28	23	60	1	38	-	-	-	17	68	1	28
	2022	-	-	-	<1	99	1	<1	**76**	23	23	31	48	1	51	-	-	-	24	60	1	39

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Iraq	2015	37 758	70	**86**	3	10	1	1.95	-0.67	**94**	4	2	<1	0.96	-0.01	**92**	3	4	<1	1.27	-0.21
	2022	44 496	71	**98**	<1	2	<1			**99**	<1	1	<1			**98**	<1	1	<1		
Ireland	2015	4 666	63	**93**	5	2	<1	0.03	0.00	**87**	8	5	<1	-0.09	0.00	**90**	7	4	<1	-0.06	0.00
	2022	5 023	64	**94**	5	2	<1			**87**	8	5	<1			**89**	7	4	<1		
Isle of Man	2015	84	52	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00
	2022	85	53	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Israel	2015	8 008	92	**>99**	<1	<1	<1	-0.05	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	-0.00	0.00
	2022	9 038	93	**99**	<1	1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Italy	2015	60 233	70	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	-0.00	0.00
	2022	59 037	72	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Jamaica	2015	2 794	55	**89**	10	<1	<1	0.42	-0.03	**83**	15	<1	<1	-0.02	0.02	**86**	13	<1	<1	0.17	-0.00
	2022	2 827	57	**91**	8	<1	<1			**83**	15	<1	<1			**87**	12	<1	<1		
Japan	2015	127 251	91	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	-0.00	0.00
	2022	123 952	92	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Jordan	2015	9 494	90	**96**	2	1	<1	-0.14	-0.03	**98**	1	<1	<1	-0.07	0.00	**98**	2	<1	<1	-0.07	-0.01
	2022	11 286	92	**95**	3	2	<1			**97**	2	1	<1			**97**	2	1	<1		
Kazakhstan	2015	17 836	57	**99**	<1	<1	<1	0.09	-0.00	**97**	3	<1	<1	0.02	0.00	**98**	2	<1	<1	0.05	-0.00
	2022	19 398	58	**>99**	<1	<1	<1			**97**	3	<1	<1			**98**	2	<1	<1		
Kenya	2015	46 851	26	**33**	15	39	13	0.35	-0.61	**36**	44	18	2	0.45	-0.10	**34**	23	34	10	0.39	-0.54
	2022	54 027	29	**35**	16	40	9			**40**	45	14	<1			**37**	24	33	6		
Kiribati	2015	117	52	**35**	5	10	50	0.92	-0.32	**50**	19	8	23	-0.02	-0.25	**43**	12	9	36	0.56	-0.45
	2022	131	57	**41**	7	4	47			**48**	25	6	22			**45**	17	5	33		
Kuwait	2015	3 909	100	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00
	2022	4 269	100	-	-	-	-			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Kyrgyzstan	2015	5 915	36	**99**	<1	<1	<1	0.32	-0.00	**94**	5	<1	<1	0.14	-0.01	**97**	3	<1	<1	0.25	-0.00
	2022	6 631	37	**>99**	<1	<1	<1			**95**	5	<1	<1			**98**	2	<1	<1		
Lao People's Democratic Republic	2015	6 787	33	**58**	2	4	36	2.33	-2.14	**92**	3	1	4	1.39	-0.97	**69**	3	3	25	2.33	-2.06
	2022	7 529	38	**69**	3	2	26			**98**	2	<1	<1			**80**	3	1	16		
Latvia	2015	1 992	68	**83**	1	16	<1	-	-	**96**	3	2	<1	-	-	**92**	2	6	<1	-	-
	2021	1 874	68	**84**	1	15	<1			**96**	3	1	<1			**92**	2	5	<1		
Lebanon	2015	6 399	88	-	-	-	-	-	-	-	-	-	-	-	-	**94**	<1	5	<1	1.01	-0.00
	2022	5 490	89	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Lesotho	2015	2 119	27	**40**	8	20	32	2.12	-1.68	**41**	39	14	5	1.18	-0.23	**41**	16	19	25	1.92	-1.48
	2022	2 306	30	**52**	11	18	20			**47**	46	3	4			**50**	21	13	15		
Liberia	2015	4 612	50	**7**	16	14	63	0.27	-0.84	**30**	33	17	20	0.51	-0.58	**19**	25	15	42	0.48	-0.89
	2022	5 303	53	**9**	16	18	57			**34**	36	14	16			**23**	26	16	35		
Libya	2015	6 192	79	-	-	-	-	-	-	-	-	-	-	-	-	**92**	7	<1	<1	0.08	-
	2022	6 812	81	-	-	-	-			-	-	-	-			**92**	7	<1	<1		
Liechtenstein	2015	37	14	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00
	2022	39	15	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
Lithuania	2015	2 964	67	**82**	2	16	<1	1.10	0.00	**96**	2	2	<1	0.17	0.00	**92**	2	7	<1	0.48	0.00
	2022	2 750	68	**91**	1	8	<1			**98**	1	1	<1			**95**	1	3	<1		
Luxembourg	2015	569	90	**99**	1	<1	<1	-0.00	0.00	**97**	2	<1	<1	-0.00	0.00	**98**	2	<1	<1	-0.01	0.00
	2022	648	92	**99**	1	<1	<1			**97**	2	<1	<1			**98**	2	<1	<1		
Madagascar	2015	24 851	35	**8**	11	35	46	0.38	-0.23	**18**	26	38	18	0.57	-0.13	**11**	16	36	36	0.50	-0.37
	2022	29 612	40	**10**	15	30	45			**22**	32	29	17			**15**	22	30	34		
Malawi	2015	16 939	16	**33**	16	44	7	1.94	-0.64	**39**	31	29	2	1.08	-0.06	**34**	18	41	6	1.81	-0.56
	2022	20 405	18	**50**	24	24	3			**48**	39	12	1			**49**	27	22	3		
Malaysia	2015	31 069	74	**94**	4	<1	1	0.23	-	**96**	4	<1	<1	0.07	-0.02	**95**	4	<1	<1	0.13	-
	2022	33 938	78	**96**	4	<1	-			**96**	4	<1	<1			**96**	4	<1	-		
Maldives	2015	436	39	**91**	<1	8	<1	1.44	-0.93	**99**	1	<1	<1	0.33	-0.00	**94**	<1	5	<1	1.13	-0.68
	2022	524	42	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Mali	2015	18 113	40	**29**	9	49	13	1.54	-0.85	**51**	31	16	2	1.19	-0.10	**38**	18	36	9	1.58	-0.69
	2022	22 594	45	**42**	7	43	7			**60**	28	10	1			**50**	17	28	5		

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Iraq	2015	**38**	34	<1	4	16	67	6	**43**	17	<1	27	10	50	37	**42**	22	<1	20	12	55	28
	2022	**48**	41	<1	7	8	82	8	**55**	20	<1	35	6	53	39	**53**	26	<1	27	7	62	30
Ireland	2015	**71**	51	<1	20	10	67	22	**82**	<1	<1	80	<1	2	92	**78**	20	<1	57	4	26	66
	2022	**71**	50	<1	21	11	65	22	**85**	<1	<1	83	<1	2	92	**80**	18	<1	61	5	25	67
Isle of Man	2015	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**85**	3	3	80	<1	10	90
	2022	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**85**	3	3	80	<1	10	90
Israel	2015	**89**	1	1	87	<1	5	95	**91**	<1	<1	91	<1	<1	>99	**91**	<1	<1	91	<1	<1	>99
	2022	**94**	<1	<1	92	<1	4	95	**96**	<1	<1	96	<1	<1	>99	**96**	<1	<1	96	<1	<1	>99
Italy	2015	**78**	2	2	75	<1	6	94	**79**	<1	<1	78	<1	2	98	**79**	<1	<1	77	<1	3	97
	2022	**78**	2	2	75	<1	6	94	**79**	<1	<1	78	<1	2	98	**79**	<1	<1	77	<1	3	97
Jamaica	2015	**-**	-	-	2	74	19	6	**-**	-	-	12	34	29	35	**-**	-	-	7	52	25	22
	2022	**-**	-	-	2	74	19	6	**-**	-	-	12	34	29	36	**-**	-	-	8	51	25	23
Japan	2015	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**99**	<1	25	73	6	21	73
	2022	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**>99**	<1	19	80	2	18	80
Jordan	2015	**-**	-	-	14	2	82	14	**84**	7	7	69	1	28	71	**81**	9	9	64	1	33	65
	2022	**-**	-	-	20	3	74	20	**84**	7	7	70	2	26	71	**82**	8	8	66	2	30	67
Kazakhstan	2015	**-**	-	-	3	89	7	3	**85**	15	14	56	27	8	64	**-**	-	-	33	54	8	38
	2022	**-**	-	-	2	90	7	2	**84**	15	14	55	27	10	63	**-**	-	-	33	54	9	38
Kenya	2015	**31**	30	<1	<1	46	1	<1	**26**	20	<1	6	43	13	25	**29**	28	<1	2	45	4	7
	2022	**33**	33	<1	<1	49	2	<1	**28**	23	<1	5	46	17	21	**31**	30	<1	1	48	6	6
Kiribati	2015	**22**	21	<1	<1	15	23	2	**25**	20	<1	5	10	44	14	**23**	20	<1	3	13	34	8
	2022	**25**	25	<1	<1	16	32	<1	**25**	21	<1	3	14	49	10	**25**	23	<1	2	15	42	5
Kuwait	2015	**-**	-	-	-	-	-	-	**>99**	<1	<1	>99	<1	-	>99	**>99**	<1	<1	>99	<1	-	>99
	2022	**-**	-	-	-	-	-	-	**>99**	<1	<1	>99	<1	-	>99	**>99**	<1	<1	>99	<1	-	>99
Kyrgyzstan	2015	**96**	95	<1	1	98	<1	1	**84**	45	<1	39	55	2	43	**91**	77	<1	15	83	<1	16
	2022	**96**	96	<1	<1	>99	<1	<1	**86**	46	<1	40	57	1	42	**93**	78	<1	15	83	<1	16
Lao People's Democratic Republic	2015	**51**	50	<1	<1	51	9	<1	**60**	59	<1	1	59	34	2	**54**	53	<1	<1	53	17	1
	2022	**60**	59	<1	<1	60	11	<1	**63**	62	<1	<1	60	38	2	**61**	61	<1	<1	60	21	1
Latvia	2015	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**79**	5	5	68	<1	21	73
	2021	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**85**	4	4	78	<1	15	80
Lebanon	2015	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**24**	7	2	16	8	13	74
	2022	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**26**	7	2	17	8	13	79
Lesotho	2015	**40**	40	<1	<1	48	<1	<1	**34**	33	<1	<1	73	3	4	**38**	38	<1	<1	55	1	1
	2022	**51**	51	<1	<1	62	<1	<1	**39**	39	<1	<1	87	3	4	**48**	47	<1	<1	69	1	1
Liberia	2015	**-**	-	-	-	19	3	<1	**-**	-	-	-	26	35	2	**-**	-	-	-	23	19	1
	2022	**-**	-	-	-	19	6	<1	**-**	-	-	-	21	49	<1	**-**	-	-	-	20	29	<1
Libya	2015	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**24**	12	2	10	22	8	69
	2022	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**24**	12	2	10	22	8	69
Liechtenstein	2015	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**96**	<1	<1	96	<1	1	99
	2022	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**96**	<1	<1	96	<1	1	99
Lithuania	2015	**81**	2	2	77	4	-	81	**94**	<1	<1	94	<1	-	98	**90**	<1	<1	89	1	-	92
	2022	**91**	6	6	79	11	-	81	**98**	<1	<1	98	<1	-	99	**95**	2	2	92	4	-	93
Luxembourg	2015	**87**	5	5	77	<1	19	81	**94**	<1	<1	94	<1	<1	>99	**94**	<1	<1	93	<1	2	98
	2022	**88**	5	5	79	<1	19	81	**96**	<1	<1	96	<1	<1	>99	**96**	<1	<1	95	<1	2	98
Madagascar	2015	**7**	7	<1	<1	17	1	<1	**13**	13	<1	<1	29	13	2	**9**	9	<1	<1	21	5	<1
	2022	**10**	10	<1	<1	23	1	<1	**16**	16	<1	<1	35	17	2	**12**	12	<1	<1	28	8	1
Malawi	2015	**31**	31	<1	<1	47	<1	<1	**32**	31	<1	2	51	13	6	**32**	31	<1	<1	48	3	2
	2022	**47**	47	<1	<1	72	<1	<1	**41**	40	<1	2	68	13	6	**46**	46	<1	<1	72	3	2
Malaysia	2015	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**81**	11	1	69	<1	23	75
	2022	**-**	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**86**	8	<1	77	<1	18	82
Maldives	2015	**-**	-	-	-	4	55	33	**-**	-	-	-	<1	<1	>99	**-**	-	-	-	3	34	59
	2022	**-**	-	-	-	<1	55	44	**-**	-	-	-	<1	<1	>99	**-**	-	-	-	<1	32	67
Mali	2015	**16**	16	<1	<1	37	<1	<1	**7**	5	<1	2	68	9	5	**12**	12	<1	<1	49	4	2
	2022	**23**	23	<1	<1	48	<1	<1	**8**	6	<1	1	70	14	4	**16**	15	<1	<1	58	7	2

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Malta	2015	457	94	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	-0.00	0.00
	2022	533	95	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Marshall Islands	2015	49	76	62	5	6	27	-	-	90	4	2	4	-	-	83	4	3	10	-	-
	2022	42	79	62	9	8	21			87	6	2	5			81	7	3	9		
Martinique	2015	384	89	-	-	-	-	-	-	-	-	-	-	-	-	99	<1	1	<1	-	-
	2022	368	89	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Mauritania	2015	3 946	51	19	7	12	62	0.86	-0.90	63	14	13	10	1.90	-0.70	42	11	12	35	1.72	-1.25
	2022	4 736	57	25	9	10	56			79	10	6	5			56	10	8	27		
Mauritius	2015	1 293	41	95	4	<1	<1	-	-	96	4	<1	<1	0.16	0.01	95	4	<1	<1	-	-
	2022	1 299	41	-	-	-	-			96	4	<1	<1			-	-	-	-		
Mayotte	2015	250	47	-	-	-	-	-	-	-	-	-	-	-	-	89	<1	11	<1	-	-
	2022	326	45	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Mexico	2015	120 150	79	78	8	7	8	1.48	-1.15	91	7	1	1	0.37	-0.17	88	7	2	2	0.67	-0.42
	2022	127 504	81	88	10	2	<1			94	6	<1	<1			93	7	<1	<1		
Micronesia (Federated States of)	2015	109	22	-	-	-	-	-	-	-	-	-	-	-	-	86	<1	14	-	-	-
	2020	112	23	-	-	-	-			-	-	-	-			90	<1	10	-		
Monaco	2015	37	100	-	-	-	-	-	-	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2022	36	100	-	-	-	-			>99	<1	<1	<1			>99	<1	<1	<1		
Mongolia	2015	2 965	68	45	23	7	25	1.54	-1.33	71	26	2	<1	0.72	-0.05	63	25	4	8	1.17	-0.68
	2022	3 398	69	57	22	6	15			76	22	2	<1			70	22	3	5		
Montenegro	2015	634	66	92	<1	7	<1	-	-	98	1	1	<1	-	-	96	1	3	<1	-	-
	2022	627	68	94	<1	6	<1			>99	<1	<1	<1			98	<1	2	<1		
Montserrat	2015	5	9	-	-	-	-	-	-	-	-	-	-	-	-	87	10	1	1	0.34	-0.16
	2022	4	9	-	-	-	-			-	-	-	-			89	11	<1	<1		
Morocco	2015	34 680	61	66	2	19	12	1.03	-2.14	93	5	2	<1	0.55	-0.08	83	4	9	5	0.90	-1.04
	2022	37 458	65	71	<1	28	<1			96	2	2	<1			88	2	11	<1		
Mozambique	2015	26 843	34	15	2	40	43	0.95	-2.01	52	9	28	11	1.38	-0.87	28	4	36	32	1.23	-1.77
	2022	32 970	38	23	2	47	28			61	11	23	5			37	5	38	20		
Myanmar	2015	51 484	30	68	10	12	11	0.64	-0.17	80	13	6	<1	0.01	-0.03	71	11	10	8	0.49	-0.15
	2022	54 179	32	72	10	8	10			79	15	5	<1			74	12	7	7		
Namibia	2015	2 283	47	18	4	15	63	0.30	-1.04	52	21	8	19	-0.44	0.23	34	12	12	43	0.35	-0.99
	2022	2 567	54	20	4	20	57			50	21	9	20			36	13	14	37		
Nauru	2015	11	100	-	-	-	-	-	-	66	31	<1	2	-	-	66	31	<1	2	-	-
	2021	13	100	-	-	-	-			66	31	<1	3			66	31	<1	3		
Nepal	2015	27 610	19	57	11	4	28	3.16	-3.13	64	26	2	8	2.14	-0.74	59	14	4	24	3.02	-2.83
	2022	30 548	21	81	8	3	8			79	17	<1	3			80	10	2	7		
Netherlands (Kingdom of the)	2015	17 041	90	>99	<1	<1	<1	-0.00	0.00	98	3	<1	<1	0.00	0.00	98	2	<1	<1	-0.02	0.00
	2022	17 564	93	>99	<1	<1	<1			98	3	<1	<1			98	2	<1	<1		
New Caledonia	2015	283	69	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.00	0.00
	2022	290	72	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
New Zealand	2015	4 591	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
	2022	5 185	87	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Nicaragua	2015	6 299	58	60	5	19	16	-	-	81	8	10	2	-	-	72	7	14	7	-	-
	2020	6 756	59	61	6	19	15			81	8	9	1			73	7	13	7		
Niger	2015	20 128	16	7	4	7	82	0.32	-0.84	43	27	17	14	1.30	-0.57	13	8	8	71	0.50	-0.82
	2022	26 208	17	9	6	9	76			53	29	9	10			16	10	9	65		
Nigeria	2015	183 996	48	32	10	27	31	0.27	0.04	47	31	12	9	1.33	-0.26	39	20	20	21	0.84	-0.27
	2022	218 541	54	34	7	28	31			58	24	11	7			47	16	19	18		
Niue	2015	2	43	-	-	-	-	-	-	-	-	-	-	-	-	98	<1	1	<1	-0.12	0.02
	2022	2	48	-	-	-	-			-	-	-	-			97	<1	2	<1		
North Macedonia	2015	2 108	57	92	3	5	<1	0.73	-0.03	98	2	<1	<1	0.29	0.00	95	2	2	<1	0.47	-0.01
	2022	2 094	59	98	<1	1	<1			>99	<1	<1	<1			99	<1	<1	<1		
Northern Mariana Islands	2015	52	91	-	-	-	-	-	-	-	-	-	-	-	-	79	19	2	<1	0.21	-0.00
	2022	50	92	-	-	-	-			-	-	-	-			80	19	<1	<1		
Norway	2015	5 190	81	98	2	<1	<1	0.00	0.00	98	2	<1	<1	0.00	0.00	98	2	<1	<1	-0.00	0.00
	2022	5 434	84	98	2	<1	<1			98	2	<1	<1			98	2	<1	<1		

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Malta	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**89**	<1	1	88	1	-	99
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**88**	<1	<1	87	<1	-	>99
Marshall Islands	2015	-	-	-	-	14	51	2	-	-	-	-	4	28	62	-	-	-	-	6	34	48
	2022	-	-	-	-	<1	67	4	-	-	-	-	<1	27	66	-	-	-	-	<1	35	53
Martinique	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	2	51	45
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	1	52	46
Mauritania	2015	-	-	-	-	18	7	<1	-	-	-	-	48	23	7	-	-	-	-	33	15	4
	2022	-	-	-	-	22	11	1	-	-	-	-	60	20	9	-	-	-	-	44	16	6
Mauritius	2015	-	-	-	4	85	9	5	-	-	-	35	47	4	49	-	-	-	16	69	7	23
	2022	-	-	-	-	-	-	-	-	-	-	34	47	4	49	-	-	-	-	-	-	-
Mayotte	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	35	35
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	35	58
Mexico	2015	-	-	-	16	11	41	34	**47**	2	1	44	<1	9	88	**45**	5	3	38	3	15	77
	2022	-	-	-	25	10	49	40	**65**	2	1	62	<1	8	92	**63**	5	3	55	2	16	82
Micronesia (Federated States of)	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	50	29
	2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	52	30
Monaco	2015	-	-	-	-	-	-	-	**>99**	<1	<1	>99	<1	-	>99	**>99**	<1	<1	>99	<1	-	>99
	2022	-	-	-	-	-	-	-	**>99**	<1	<1	>99	<1	-	>99	**>99**	<1	<1	>99	<1	-	>99
Mongolia	2015	**45**	42	<1	2	64	<1	3	**66**	41	<1	25	59	<1	37	**59**	41	<1	18	61	<1	26
	2022	**56**	53	<1	3	74	<1	5	**70**	43	<1	27	59	1	38	**66**	46	<1	20	64	<1	27
Montenegro	2015	**39**	29	<1	10	5	68	20	**46**	14	2	30	1	36	62	**44**	19	2	23	2	47	48
	2022	**43**	30	<1	13	2	75	17	**64**	15	4	45	<1	42	58	**57**	20	3	35	<1	52	45
Montserrat	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	78	19
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	80	20
Morocco	2015	-	-	-	<1	29	35	5	**34**	2	<1	31	1	6	90	**58**	10	9	19	12	18	57
	2022	-	-	-	<1	28	39	6	**34**	1	<1	33	<1	5	93	**61**	9	8	21	10	17	62
Mozambique	2015	**14**	14	<1	<1	16	<1	<1	-	-	-	-	38	19	4	-	-	-	-	24	7	1
	2022	**21**	21	<1	<1	23	1	<1	-	-	-	-	44	25	3	-	-	-	-	31	10	1
Myanmar	2015	**63**	62	<1	<1	69	8	<1	**57**	56	<1	1	56	34	3	**61**	60	<1	<1	65	16	1
	2022	**64**	64	<1	<1	68	13	<1	**53**	52	<1	<1	48	44	2	**61**	60	<1	<1	62	23	<1
Namibia	2015	-	-	-	-	13	2	7	-	-	-	-	7	2	63	-	-	-	-	10	2	33
	2022	-	-	-	-	15	3	6	-	-	-	-	7	2	62	-	-	-	-	11	2	36
Nauru	2015	-	-	-	-	-	-	-	-	-	-	-	44	29	23	-	-	-	-	44	29	23
	2021	-	-	-	-	-	-	-	-	-	-	-	45	29	23	-	-	-	-	45	29	23
Nepal	2015	**38**	37	<1	<1	25	42	2	**35**	29	<1	7	17	54	19	**37**	35	<1	2	23	44	5
	2022	**52**	51	<1	<1	31	57	2	**45**	38	<1	6	21	59	16	**51**	48	<1	2	29	57	5
Netherlands (Kingdom of the)	2015	**97**	1	1	95	<1	5	95	**97**	<1	<1	97	<1	<1	>99	**97**	<1	<1	97	<1	<1	>99
	2022	**97**	1	1	95	<1	5	95	**98**	<1	<1	98	<1	<1	>99	**97**	<1	<1	97	<1	<1	>99
New Caledonia	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Zealand	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**88**	5	5	77	5	12	83
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**89**	4	4	81	<1	16	84
Nicaragua	2015	-	-	-	<1	61	3	<1	-	-	-	32	34	15	41	-	-	-	19	45	10	24
	2020	-	-	-	<1	62	4	<1	-	-	-	33	33	15	41	-	-	-	19	45	10	25
Niger	2015	**4**	4	<1	<1	8	1	1	**17**	16	<1	1	53	13	4	**7**	6	<1	<1	16	3	2
	2022	**6**	5	<1	<1	11	2	2	**21**	19	<1	1	58	20	4	**8**	7	<1	<1	19	5	2
Nigeria	2015	**25**	24	<1	1	33	5	3	**30**	26	<1	4	40	27	12	**27**	25	<1	2	36	16	8
	2022	**27**	25	<1	2	28	8	4	**37**	33	<1	4	34	36	11	**32**	29	<1	3	32	23	8
Niue	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	96	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	96	-
North Macedonia	2015	**18**	13	1	4	15	35	45	**9**	<1	<1	8	<1	2	97	**12**	6	<1	6	7	16	75
	2022	**18**	12	1	5	18	25	56	**8**	<1	<1	8	<1	<1	>99	**12**	5	<1	7	7	10	82
Northern Mariana Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	48	50
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	46	54
Norway	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**78**	7	9	62	2	15	83
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**78**	6	8	64	2	13	85

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Oman	2015	4 192	81	>99	<1	<1	<1	0.96	-	>99	<1	<1	<1	0.26	-0.02	>99	<1	<1	<1	0.46	-
	2022	4 576	88	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Pakistan	2015	210 969	36	48	9	19	24	2.22	-1.91	77	8	14	2	0.82	-0.20	58	9	17	16	1.80	-1.37
	2022	235 825	38	63	13	13	11			82	8	9	<1			71	11	12	7		
Palau	2015	18	78	93	<1	7	<1	0.74	0.00	98	<1	2	<1	0.12	0.00	97	<1	3	<1	0.31	0.00
	2022	18	82	98	<1	2	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Panama	2015	3 957	67	60	4	22	14	0.99	-0.25	88	5	7	<1	0.97	-0.06	79	4	12	5	1.07	-0.17
	2022	4 409	69	66	4	18	12			95	1	3	<1			86	2	8	4		
Papua New Guinea	2015	8 682	13	14	3	66	17	0.11	0.18	52	9	36	4	-0.39	0.01	19	4	62	15	0.05	0.15
	2022	10 143	14	15	4	64	18			49	9	38	4			19	4	60	16		
Paraguay	2015	6 178	61	80	2	18	1	1.86	-0.02	93	4	3	<1	0.47	-0.02	88	3	9	<1	1.10	-0.03
	2022	6 781	63	93	2	4	<1			96	4	<1	<1			95	4	2	<1		
Peru	2015	30 712	77	51	4	22	22	1.32	-1.82	81	10	5	3	0.32	-0.28	74	9	9	7	0.65	-0.72
	2022	34 050	79	60	6	24	10			83	11	5	1			78	10	9	3		
Philippines	2015	103 031	46	74	13	5	8	1.37	-0.53	80	15	2	3	0.43	-0.17	77	14	4	6	0.93	-0.36
	2022	115 559	48	86	7	3	4			84	13	2	2			85	10	2	3		
Poland	2015	38 553	60	97	<1	2	<1	1.00	0.00	98	1	<1	<1	0.22	0.00	98	1	1	<1	0.52	0.00
	2022	39 857	60	>99	<1	<1	<1			99	1	<1	<1			99	1	<1	<1		
Portugal	2015	10 365	64	>99	<1	<1	<1	0.16	0.00	>99	<1	<1	<1	0.05	0.00	>99	<1	<1	<1	0.10	0.00
	2022	10 271	67	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Puerto Rico	2015	3 497	94	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.11	0.00
	2022	3 252	94	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Qatar	2015	2 415	99	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	-0.00	0.00
	2022	2 695	99	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Republic of Korea	2015	50 994	82	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	-0.01	0.00
	2022	51 816	81	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Republic of Moldova	2015	3 277	42	74	4	22	<1	0.97	0.01	89	8	2	<1	0.16	0.00	80	6	14	<1	0.61	0.01
	2022	3 273	43	81	2	17	<1			90	8	1	<1			85	5	10	<1		
Réunion	2015	922	99	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	-	-
	2022	974	100	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Romania	2015	19 906	54	69	<1	31	<1	-	-	96	<1	4	<1	-	-	83	<1	17	<1	-	-
	2022	19 659	54	77	<1	22	<1			97	<1	3	<1			88	<1	11	<1		
Russian Federation	2015	144 668	74	68	<1	32	<1	0.52	0.00	95	<1	5	<1	0.08	0.00	88	<1	12	<1	0.22	0.00
	2022	144 713	75	71	<1	29	<1			95	<1	5	<1			89	<1	11	<1		
Rwanda	2015	11 643	17	68	8	22	3	1.65	-0.12	56	33	10	1	-0.38	-0.02	66	12	20	3	1.31	-0.11
	2022	13 777	18	78	9	11	2			54	38	7	1			74	14	10	2		
Saint Barthélemy	2015	10	-	-	-	-	-	-	-	>99	<1	<1	<1	0.04	0.00	>99	<1	<1	<1	0.04	0.00
	2022	11	-	-	-	-	-			>99	<1	<1	<1			>99	<1	<1	<1		
Saint Helena	2015	5	40	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	-	-
	2022	5	40	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Saint Kitts and Nevis	2015	48	31	-	-	-	-	-	-	-	-	-	-	-	-	95	1	2	1	-	-
	2017	48	31	-	-	-	-			-	-	-	-			95	1	2	1		
Saint Lucia	2015	176	19	84	9	<1	7	-0.06	0.02	77	18	1	4	-0.19	-0.33	83	10	<1	6	-0.07	-0.06
	2022	180	19	84	9	<1	7			79	18	<1	2			83	10	<1	6		
Saint Martin (French part)	2015	35	-	-	-	-	-	-	-	>99	<1	<1	<1	0.04	0.00	>99	<1	<1	<1	0.04	0.00
	2022	32	-	-	-	-	-			>99	<1	<1	<1			>99	<1	<1	<1		
Saint Pierre and Miquelon	2015	6	90	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	-0.00	0.00
	2022	6	90	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Saint Vincent and the Grenadines	2015	106	51	86	2	8	4	-	-	93	2	4	1	-	-	90	2	6	3	-	-
	2018	105	52	86	2	8	4			93	2	4	1			90	2	6	3		
Samoa	2015	204	19	95	3	2	<1	0.31	0.00	96	4	<1	<1	0.23	0.00	95	3	1	<1	0.29	0.00
	2022	222	18	98	<1	<1	<1			98	2	<1	<1			98	1	<1	<1		

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Oman	2015	-	-	-	2	6	92	2	-	-	-	24	2	74	24	-	-	-	20	2	77	20
	2022	-	-	-	2	6	92	2	-	-	-	24	2	74	24	-	-	-	22	2	76	22
Pakistan	2015	**28**	26	<1	3	17	33	6	-	11	-	-	5	20	59	-	20	-	-	13	29	25
	2022	**40**	37	<1	4	30	37	8	-	14	-	-	8	20	62	-	28	-	-	22	31	29
Palau	2015	-	-	-	-	35	-	59	-	-	-	-	13	-	86	-	-	-	-	17	-	80
	2022	-	-	-	-	25	-	73	-	-	-	-	9	-	90	-	-	-	-	12	-	87
Panama	2015	-	-	-	<1	26	35	4	**29**	12	3	13	7	38	48	-	-	-	9	13	37	33
	2022	-	-	-	2	22	44	4	**50**	13	8	29	4	44	48	-	-	-	21	10	44	35
Papua New Guinea	2015	-	-	-	<1	12	3	2	**29**	10	5	14	14	17	29	-	-	-	3	13	5	5
	2022	-	-	-	1	11	4	3	**28**	7	4	17	13	10	35	-	-	-	3	12	5	7
Paraguay	2015	**51**	50	<1	<1	52	29	<1	**52**	45	<1	7	30	52	15	**52**	47	<1	4	38	43	9
	2022	**59**	59	<1	<1	60	35	<1	**53**	47	<1	6	29	59	12	**55**	51	<1	4	41	50	8
Peru	2015	-	-	-	8	19	21	16	**44**	2	1	40	4	3	85	**41**	5	3	33	7	7	69
	2022	-	-	-	14	24	21	21	**62**	2	2	58	5	<1	89	**58**	5	4	48	9	5	74
Philippines	2015	**59**	57	<1	2	19	63	4	**52**	49	<1	4	5	81	9	**56**	53	<1	3	13	72	6
	2022	**69**	67	<1	2	23	65	5	**56**	52	<1	4	12	74	10	**63**	59	<1	3	18	69	7
Poland	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**96**	<1	27	69	28	-	71
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**98**	<1	21	77	21	-	79
Portugal	2015	**75**	18	2	55	2	37	60	**87**	4	<1	82	<1	9	90	**83**	9	1	72	1	19	79
	2022	**86**	12	<1	74	<1	25	75	**96**	3	<1	93	<1	7	93	**93**	6	<1	86	<1	13	87
Puerto Rico	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**33**	<1	<1	33	<1	-	>99
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**33**	<1	<1	33	<1	-	>99
Qatar	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**94**	3	3	88	<1	12	88
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	>99	<1	<1	>99
Republic of Korea	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**97**	1	3	92	2	5	93
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	>99	<1	<1	>99
Republic of Moldova	2015	-	-	-	3	64	10	3	**80**	9	8	63	15	8	75	-	-	-	29	43	9	34
	2022	-	-	-	3	69	10	3	**85**	9	8	68	15	8	76	-	-	-	31	46	9	35
Réunion	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**75**	14	14	47	4	48	48
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**77**	13	12	52	3	44	52
Romania	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**71**	17	14	40	32	2	49
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**88**	16	16	56	31	2	56
Russian Federation	2015	-	-	-	22	30	5	33	**63**	2	2	59	4	2	89	**60**	6	4	50	10	3	74
	2022	-	-	-	23	32	5	35	**64**	2	1	61	2	2	91	**61**	6	4	52	10	3	77
Rwanda	2015	**50**	50	<1	<1	75	<1	<1	-	-	-	-	80	3	6	-	-	-	-	76	<1	1
	2022	**58**	58	<1	<1	86	<1	<1	-	-	-	-	83	2	7	-	-	-	-	86	<1	1
Saint Barthélemy	2015	-	-	-	-	-	-	-	-	-	-	-	12	84	4	-	-	-	-	12	84	4
	2022	-	-	-	-	-	-	-	-	-	-	-	5	88	7	-	-	-	-	5	88	7
Saint Helena	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	48	52
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	48	52
Saint Kitts and Nevis	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	87	7
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	87	7
Saint Lucia	2015	-	-	-	-	8	82	4	-	-	-	-	2	82	11	-	-	-	-	7	82	5
	2022	-	-	-	-	8	82	4	-	-	-	-	5	82	11	-	-	-	-	7	82	5
Saint Martin (French part)	2015	-	-	-	-	-	-	-	-	-	-	-	<1	40	59	-	-	-	-	<1	40	59
	2022	-	-	-	-	-	-	-	-	-	-	-	<1	40	60	-	-	-	-	<1	40	60
Saint Pierre and Miquelon	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saint Vincent and the Grenadines	2015	-	-	-	-	20	65	3	-	-	-	-	10	72	12	-	-	-	-	15	69	7
	2018	-	-	-	-	20	65	3	-	-	-	-	10	72	12	-	-	-	-	15	69	8
Samoa	2015	**48**	48	<1	<1	10	85	3	**40**	40	<1	<1	4	92	4	**47**	47	<1	<1	9	86	3
	2022	**44**	44	<1	<1	4	86	9	**37**	37	<1	<1	<1	89	10	**43**	43	<1	<1	3	87	9

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
San Marino	2015	34	97	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.00	0.00
	2022	34	98	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Sao Tome and Principe	2015	201	70	31	5	3	61	1.19	-1.15	44	6	5	46	1.06	-1.12	40	6	4	50	1.24	-1.29
	2022	227	76	39	4	3	54			51	6	5	39			48	6	4	42		
Saudi Arabia	2015	32 750	83	92	7	<1	<1	0.00	0.00	96	4	<1	<1	0.00	0.00	95	4	<1	<1	0.01	0.00
	2022	36 409	85	92	7	<1	<1			96	4	<1	<1			95	4	<1	<1		
Senegal	2015	14 356	46	41	9	29	22	1.35	-1.13	67	23	8	2	0.43	-0.11	53	15	19	13	1.06	-0.77
	2022	17 316	49	51	10	26	14			70	25	4	1			60	17	15	8		
Serbia	2015	7 519	56	95	<1	4	<1	0.06	-0.00	99	<1	<1	<1	0.14	-0.00	97	<1	2	<1	0.11	-0.00
	2022	7 221	57	96	<1	4	<1			>99	<1	<1	<1			98	<1	2	<1		
Seychelles	2015	99	55	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.21	-0.05
	2022	107	58	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Sierra Leone	2015	7 315	41	9	22	39	29	0.49	-0.44	27	48	20	5	0.85	-0.12	17	33	32	19	0.69	-0.41
	2022	8 606	44	14	24	36	26			35	47	14	4			23	34	26	16		
Singapore	2015	5 650	100	-	-	-	-	-	-	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.00	0.00
	2022	5 976	100	-	-	-	-			>99	<1	<1	<1			>99	<1	<1	<1		
Sint Maarten (Dutch part)	2015	40	100	-	-	-	-	-	-	99	<1	1	<1	-	-	99	<1	1	<1	-	-
	2017	42	100	-	-	-	-			99	<1	1	<1			99	<1	1	<1		
Slovakia	2015	5 424	54	96	4	<1	<1	-0.16	0.00	99	1	<1	<1	-0.05	0.00	98	2	<1	<1	-0.10	0.00
	2022	5 643	54	96	4	<1	<1			99	1	<1	<1			98	2	<1	<1		
Slovenia	2015	2 081	54	-	-	-	-	-	-	-	-	-	-	-	-	99	<1	<1	<1	-0.04	0.00
	2022	2 120	56	-	-	-	-			-	-	-	-			98	<1	<1	<1		
Solomon Islands	2015	613	22	19	2	19	60	0.36	-	77	17	<1	5	-	-	32	5	15	48	-	-
	2022	724	26	21	2	77	-			-	-	-	-			-	-	-	-		
Somalia	2015	13 764	43	19	10	19	52	0.85	-1.89	54	26	16	4	0.48	-0.54	34	17	18	31	0.93	-1.70
	2022	17 598	47	26	9	25	40			57	26	17	<1			41	17	21	21		
South Africa	2015	55 877	65	66	6	21	6	1.52	-1.12	75	19	5	1	0.29	-0.12	72	14	10	3	0.82	-0.55
	2022	59 894	68	78	4	18	<1			77	18	4	<1			78	14	8	<1		
South Sudan	2015	11 194	19	7	5	12	76	-	-	29	17	29	24	-	-	11	8	16	66	-	-
	2022	10 913	21	9	6	11	73			42	19	31	8			16	9	15	60		
Spain	2015	46 431	80	>99	<1	<1	<1	0.00	0.00	>99	<1	<1	<1	0.01	0.00	>99	<1	<1	<1	0.00	0.00
	2022	47 559	81	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Sri Lanka	2015	21 337	18	89	6	3	2	0.81	-0.27	89	8	3	<1	0.92	-0.13	89	7	3	1	0.83	-0.24
	2022	21 832	19	95	4	<1	<1			96	2	2	<1			95	4	1	<1		
State of Palestine*	2015	4 485	75	95	4	<1	<1	0.54	-0.05	97	3	<1	<1	0.36	-0.02	96	3	<1	<1	0.41	-0.03
	2022	5 250	77	99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Sudan	2015	38 171	34	23	6	34	37	-	-	58	12	20	10	-	-	35	8	29	28	-	-
	2020	44 440	35	24	6	46	24			60	12	22	6			37	8	37	17		
Suriname	2015	575	66	76	10	5	9	1.10	-1.01	92	6	1	<1	0.26	0.00	86	8	3	3	0.54	-0.34
	2022	618	66	82	9	6	3			94	5	1	<1			90	6	3	1		
Sweden	2015	9 849	87	>99	<1	<1	<1	0.01	0.00	99	<1	<1	<1	-0.02	0.00	99	<1	<1	<1	-0.02	0.00
	2022	10 549	88	>99	<1	<1	<1			99	<1	<1	<1			99	<1	<1	<1		
Switzerland	2015	8 282	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
	2022	8 740	74	>99	<1	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Syrian Arab Republic	2015	19 205	52	90	7	1	1	0.42	-	95	5	<1	<1	0.17	0.00	93	6	<1	<1	0.30	-
	2022	22 125	57	94	6	<1	-			96	4	<1	<1			95	5	<1	-		
Tajikistan	2015	8 524	27	96	2	1	<1	0.41	-0.04	94	5	1	<1	0.05	-0.04	95	3	1	<1	0.31	-0.04
	2022	9 953	28	98	2	<1	<1			94	5	1	<1			97	3	<1	<1		
Thailand	2015	70 294	48	97	2	<1	<1	0.22	-0.08	97	3	<1	<1	0.44	-0.01	97	3	<1	<1	0.30	-0.06
	2022	71 697	53	98	2	<1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
Timor-Leste	2015	1 206	29	43	10	19	28	-	-	69	17	9	5	-	-	51	12	16	21	-	-
	2022	1 341	32	52	12	21	15			72	22	6	<1			58	15	16	10		

*WHO reports refer to 'occupied Palestinian territory (including east Jerusalem)'.

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
San Marino	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	4	4	83	<1	15	85
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	4	4	83	<1	15	85
Sao Tome and Principe	2015	24	21	<1	3	22	6	8	30	24	<1	5	23	14	12	28	23	<1	5	23	12	11
	2022	31	27	<1	4	28	6	10	35	27	<1	7	28	13	17	34	27	<1	7	28	11	15
Saudi Arabia	2015	-	-	-	41	4	50	46	82	6	5	71	<1	22	77	80	7	7	66	1	26	72
	2022	-	-	-	41	4	50	46	82	6	5	71	<1	22	77	80	7	7	67	1	26	72
Senegal	2015	17	17	<1	<1	28	21	<1	17	11	<1	6	25	48	18	17	14	<1	3	27	33	8
	2022	14	14	<1	<1	33	27	<1	14	8	<1	6	26	52	17	14	11	<1	3	29	40	8
Serbia	2015	30	27	<1	3	8	70	18	25	5	5	15	1	13	85	27	15	3	10	4	38	56
	2022	29	26	<1	3	<1	76	20	22	4	4	14	3	11	86	25	14	2	9	1	39	58
Seychelles	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	82	17
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	82	17
Sierra Leone	2015	7	7	<1	<1	31	<1	<1	17	16	<1	<1	62	11	2	11	11	<1	<1	44	5	<1
	2022	10	10	<1	<1	37	1	<1	23	22	<1	<1	66	14	2	15	15	<1	<1	49	7	<1
Singapore	2015	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	-	>99	>99	<1	<1	>99	<1	-	>99
	2022	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	-	>99	>99	<1	<1	>99	<1	-	>99
Sint Maarten (Dutch part)	2015	-	-	-	-	-	-	-	-	-	-	-	47	43	9	-	-	-	-	47	43	9
	2017	-	-	-	-	-	-	-	-	-	-	-	47	43	9	-	-	-	-	47	43	9
Slovakia	2015	76	12	12	52	6	39	55	89	5	5	78	3	16	82	83	8	8	66	4	27	69
	2022	75	12	12	52	6	39	55	88	5	5	78	3	16	82	82	8	8	66	4	27	69
Slovenia	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79	9	8	62	<1	33	66
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84	9	8	67	<1	31	68
Solomon Islands	2015	-	-	-	-	14	4	2	-	-	-	-	28	43	23	-	-	-	-	17	13	7
	2022	-	-	-	-	16	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Somalia	2015	16	16	<1	<1	26	1	2	41	36	<1	5	61	5	14	27	25	<1	2	41	3	7
	2022	22	21	<1	1	30	2	3	45	41	<1	3	67	7	9	33	31	<1	2	47	5	6
South Africa	2015	-	-	-	5	63	5	5	71	3	3	65	8	2	84	67	11	10	44	27	3	56
	2022	-	-	-	4	71	7	5	73	2	2	68	7	1	88	72	11	10	48	27	3	61
South Sudan	2015	-	-	-	-	12	<1	<1	-	-	-	-	44	1	1	-	-	-	-	18	<1	<1
	2022	-	-	-	-	15	<1	<1	-	-	-	-	57	2	2	-	-	-	-	24	<1	<1
Spain	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	<1	3	87	2	1	97
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	<1	4	86	4	<1	96
Sri Lanka	2015	-	-	-	-	88	5	2	-	-	-	-	71	13	13	-	-	-	-	85	7	4
	2022	-	-	-	-	93	7	<1	-	-	-	-	73	18	7	-	-	-	-	89	9	1
State of Palestine*	2015	37	31	<1	6	38	49	11	66	13	7	46	15	21	64	59	18	5	36	21	28	51
	2022	55	48	<1	6	65	22	12	75	20	7	48	26	9	64	70	27	5	38	35	12	52
Sudan	2015	-	-	-	-	28	<1	<1	-	-	-	-	53	15	3	-	-	-	-	37	6	<1
	2020	-	-	-	-	30	<1	<1	-	-	-	-	53	16	3	-	-	-	-	38	6	1
Suriname	2015	36	36	<1	<1	18	66	1	22	21	<1	<1	4	93	2	27	26	<1	<1	9	84	2
	2022	34	33	<1	<1	8	81	2	21	19	<1	1	<1	96	3	25	24	<1	1	3	91	2
Sweden	2015	92	1	16	74	<1	25	74	96	<1	6	89	<1	10	90	95	<1	8	87	<1	12	88
	2022	92	1	16	75	<1	24	75	96	<1	6	90	<1	9	90	96	<1	7	88	<1	11	89
Switzerland	2015	97	1	1	95	<1	5	95	>99	<1	<1	>99	<1	<1	>99	>99	<1	<1	98	<1	1	99
	2022	>99	<1	<1	98	1	<1	98	>99	<1	<1	>99	<1	<1	>99	>99	<1	<1	>99	<1	<1	>99
Syrian Arab Republic	2015	-	-	-	-	17	16	65	-	-	-	-	1	<1	97	-	-	-	-	9	8	82
	2022	-	-	-	-	3	19	77	-	-	-	-	<1	<1	99	-	-	-	-	2	9	89
Tajikistan	2015	58	58	<1	<1	94	3	<1	-	-	-	-	43	<1	55	-	-	-	-	80	2	15
	2022	59	59	<1	<1	95	4	<1	-	-	-	-	40	<1	58	-	-	-	-	80	3	17
Thailand	2015	21	18	<1	3	4	89	7	28	21	<1	7	1	84	14	24	19	<1	5	3	87	10
	2022	22	18	<1	4	5	87	8	30	20	<1	10	2	78	20	26	19	<1	7	3	82	14
Timor-Leste	2015	-	-	-	-	27	18	8	-	-	-	-	30	38	18	-	-	-	-	28	24	11
	2022	-	-	-	-	32	24	8	-	-	-	-	37	39	18	-	-	-	-	33	29	11

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
Togo	2015	7 473	40	**7**	10	16	68	0.29	-0.87	**30**	48	7	15	0.39	-0.52	**16**	25	12	47	0.44	-1.01
	2022	8 849	44	**9**	10	19	61			**32**	50	7	11			**19**	28	14	39		
Tokelau	2015	1	0	**94**	4	2	<1	0.91	-	-	-	-	-	-	-	**94**	4	2	<1	0.91	-
	2022	2	0	**97**	3	<1	-			-	-	-	-			**97**	3	<1	-		
Tonga	2015	106	23	**92**	2	5	<1	0.41	-0.01	**97**	2	<1	<1	-0.04	0.00	**93**	2	4	<1	0.31	-0.00
	2022	107	23	**95**	5	<1	<1			**96**	3	<1	<1			**95**	4	<1	<1		
Trinidad and Tobago	2015	1 460	53	-	-	-	-	-	-	-	-	-	-	-	-	**94**	6	<1	<1	0.18	-0.01
	2022	1 531	53	-	-	-	-			-	-	-	-			**94**	6	<1	<1		
Tunisia	2015	11 558	68	**83**	8	5	4	2.25	-1.16	**96**	2	2	<1	0.20	-0.01	**92**	4	3	2	0.95	-0.43
	2022	12 356	70	**97**	2	<1	<1			**98**	1	1	<1			**97**	2	<1	<1		
Türkiye	2015	79 646	74	**90**	2	8	<1	1.27	-0.03	**99**	<1	<1	<1	0.18	-0.01	**96**	<1	3	<1	0.58	-0.02
	2022	85 341	77	**97**	1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Turkmenistan	2015	5 766	50	**99**	<1	<1	<1	0.19	-0.04	**96**	4	<1	<1	0.46	-0.01	**97**	2	<1	<1	0.31	-0.03
	2022	6 431	53	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Turks and Caicos Islands	2016	38	93	**92**	6	2	<1	-	-	**93**	6	1	<1	-	-	**93**	6	1	<1	-	-
	2022	46	94	**92**	6	2	<1			**93**	6	1	<1			**93**	6	1	<1		
Tuvalu	2015	11	60	**83**	7	3	7	0.32	-0.37	**83**	12	2	3	-0.01	-0.14	**83**	10	2	5	0.15	-0.27
	2022	11	66	**85**	9	2	4			**83**	14	1	2			**84**	12	2	3		
Uganda	2015	37 477	22	**17**	9	66	8	0.16	-0.54	**29**	40	29	2	0.10	-0.01	**20**	16	58	7	0.21	-0.47
	2022	47 250	26	**18**	10	68	5			**30**	37	31	2			**21**	17	58	4		
Ukraine	2015	44 983	69	**96**	3	1	<1	0.39	-0.01	**98**	2	<1	<1	0.04	0.00	**97**	2	<1	<1	0.16	-0.00
	2022	39 702	70	**97**	3	<1	<1			**98**	2	<1	<1			**98**	2	<1	<1		
United Arab Emirates	2015	8 917	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
	2022	9 441	88	**>99**	<1	<1	<1			**99**	<1	<1	<1			**>99**	<1	<1	<1		
United Kingdom	2015	65 224	83	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	-0.00	0.00
	2022	67 509	84	**>99**	<1	<1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
United Republic of Tanzania	2015	52 543	32	**17**	4	67	11	0.75	-0.22	**39**	33	27	1	1.57	-0.10	**24**	13	54	8	1.10	-0.25
	2022	65 498	37	**21**	6	63	10			**47**	43	10	<1			**31**	19	44	6		
United States Virgin Islands	2015	103	95	-	-	-	-	-	-	-	-	-	-	-	-	**>99**	<1	<1	<1	0.00	0.00
	2022	99	96	-	-	-	-			-	-	-	-			**>99**	<1	<1	<1		
United States of America	2015	324 608	82	**>99**	<1	<1	<1	-0.07	0.00	**>99**	<1	<1	<1	0.00	0.00	**>99**	<1	<1	<1	-0.01	0.00
	2022	338 290	83	**99**	<1	1	<1			**>99**	<1	<1	<1			**>99**	<1	<1	<1		
Uruguay	2015	3 403	95	**95**	1	3	1	0.64	-0.21	**97**	2	<1	<1	0.19	-0.05	**97**	2	<1	<1	0.22	-0.06
	2022	3 423	96	**>99**	<1	<1	<1			**98**	1	<1	<1			**98**	1	<1	<1		
Uzbekistan	2015	30 949	51	**95**	1	3	<1	0.29	0.00	**96**	3	2	<1	-0.04	0.00	**95**	2	2	<1	0.13	-0.00
	2022	34 628	50	**97**	1	1	<1			**95**	3	2	<1			**96**	2	2	<1		
Vanuatu	2015	276	25	**48**	18	34	<1	-0.27	-0.13	**58**	35	6	<1	-0.91	-0.01	**50**	22	27	<1	-0.40	-0.10
	2022	327	26	**45**	22	33	<1			**51**	44	6	<1			**47**	27	26	<1		
Venezuela (Bolivarian Republic of)	2015	30 530	88	-	-	-	-	-	-	-	-	-	-	-	-	**95**	<1	2	4	0.55	-
	2022	28 302	88	-	-	-	-			-	-	-	-			**98**	<1	2	-		
Viet Nam	2015	92 191	34	**73**	3	18	6	2.19	-0.93	**92**	3	4	1	0.83	-0.25	**79**	3	13	5	1.92	-0.77
	2022	98 187	39	**88**	3	9	<1			**98**	2	<1	<1			**92**	2	6	<1		
Wallis and Futuna Islands	2015	12	0	**95**	<1	<1	5	-0.06	0.06	-	-	-	-	-	-	**95**	<1	<1	5	-0.06	0.06
	2022	12	0	**94**	<1	<1	6			-	-	-	-			**94**	<1	<1	6		
Yemen	2015	28 517	35	**36**	5	37	23	0.46	-1.30	**81**	5	13	2	-0.48	-0.15	**52**	5	28	15	0.44	-1.07
	2022	33 697	39	**40**	5	42	14			**78**	5	16	<1			**55**	5	32	9		
Zambia	2015	16 248	42	**25**	8	48	19	1.15	-1.45	**43**	32	23	1	-0.17	-0.13	**32**	18	38	12	0.74	-1.04
	2022	20 018	46	**32**	9	48	11			**42**	36	21	<1			**36**	22	36	6		
Zimbabwe	2015	14 155	32	**33**	17	18	32	-0.15	-0.92	**49**	48	3	<1	-1.03	-0.16	**38**	27	13	22	-0.45	-0.64
	2022	16 321	32	**32**	18	24	26			**40**	57	3	<1			**35**	31	17	17		

COUNTRY, AREA OR TERRITORY	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
Togo	2015	**4**	4	<1	<1	14	2	<1	**7**	7	<1	<1	40	37	<1	**5**	5	<1	<1	25	16	<1
	2022	**5**	5	<1	<1	15	4	<1	**7**	7	<1	<1	36	46	<1	**6**	6	<1	<1	24	22	<1
Tokelau	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tonga	2015	**37**	37	<1	<1	12	81	2	**26**	25	<1	<1	5	93	1	**35**	34	<1	<1	10	84	2
	2022	**35**	33	<1	2	5	91	3	**22**	21	<1	1	<1	97	3	**32**	31	<1	1	4	93	3
Trinidad and Tobago	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	6	73	20
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	6	73	20
Tunisia	2015	**52**	44	<1	8	43	38	9	**84**	7	1	76	7	12	80	**74**	19	<1	54	18	20	57
	2022	**63**	53	<1	10	51	38	10	**89**	8	1	80	9	8	82	**81**	21	<1	59	22	17	60
Türkiye	2015	**67**	21	16	31	42	-	50	**64**	1	1	61	3	-	96	**65**	6	5	53	13	-	84
	2022	**81**	19	16	46	38	-	61	**78**	1	<1	76	2	-	98	**79**	5	4	69	11	-	89
Turkmenistan	2015	-	-	-	-	98	<1	<1	-	-	-	-	45	2	52	-	-	-	-	71	2	26
	2022	-	-	-	-	98	1	<1	-	-	-	-	43	3	54	-	-	-	-	69	2	29
Turks and Caicos Islands	2016	**44**	44	<1	<1	13	85	<1	**33**	33	<1	<1	8	91	<1	**34**	34	<1	<1	8	91	<1
	2022	**44**	44	<1	<1	13	85	<1	**33**	33	<1	<1	8	91	<1	**34**	34	<1	<1	8	91	<1
Tuvalu	2015	**47**	47	<1	<1	14	76	<1	**36**	36	<1	<1	7	88	<1	**41**	41	<1	<1	10	83	<1
	2022	**42**	42	<1	<1	1	93	<1	**35**	35	<1	<1	3	93	<1	**37**	37	<1	<1	3	93	<1
Uganda	2015	**15**	15	<1	<1	25	<1	<1	**22**	21	<1	<1	59	7	2	**17**	17	<1	<1	33	2	<1
	2022	**16**	16	<1	<1	27	<1	<1	**22**	22	<1	<1	58	7	2	**18**	18	<1	<1	35	2	<1
Ukraine	2015	-	-	-	1	93	3	3	**61**	13	7	40	27	<1	73	**65**	24	13	28	48	<1	51
	2022	-	-	-	2	95	3	3	**69**	13	9	47	27	<1	73	**72**	23	15	33	48	<1	52
United Arab Emirates	2015	**99**	6	6	86	11	3	86	**98**	2	2	94	4	1	94	**98**	3	3	92	5	1	93
	2022	**99**	6	6	86	11	3	86	**98**	2	2	94	4	1	94	**98**	3	3	93	5	1	93
United Kingdom	2015	**94**	3	3	88	<1	12	88	**99**	<1	<1	99	<1	<1	>99	**98**	<1	<1	97	<1	2	98
	2022	**94**	3	3	88	<1	12	88	**99**	<1	<1	99	<1	<1	>99	**98**	<1	<1	97	<1	2	98
United Republic of Tanzania	2015	**17**	16	<1	<1	20	2	<1	**30**	29	<1	1	55	14	3	**21**	20	<1	<1	31	6	1
	2022	**20**	20	<1	<1	24	3	<1	**34**	34	<1	<1	67	21	1	**25**	25	<1	<1	40	10	<1
United States Virgin Islands	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	55	44
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	60	39
United States of America	2015	-	-	-	31	<1	67	32	**97**	3	3	91	<1	6	94	**97**	9	8	80	<1	17	82
	2022	-	-	-	40	<1	58	41	**97**	2	2	93	<1	4	95	**97**	7	7	84	<1	14	86
Uruguay	2015	-	-	-	-	7	87	2	-	-	-	-	2	34	63	-	-	-	-	3	36	60
	2022	-	-	-	-	13	85	2	-	-	-	-	4	30	64	-	-	-	-	5	33	62
Uzbekistan	2015	**84**	84	<1	<1	95	<1	1	**64**	45	<1	19	59	<1	39	**74**	64	<1	10	77	<1	20
	2022	**86**	85	<1	<1	96	<1	2	**63**	43	<1	20	56	<1	42	**75**	64	<1	11	76	<1	22
Vanuatu	2015	-	-	-	<1	59	6	<1	**35**	10	25	<1	22	71	<1	-	-	-	<1	50	22	<1
	2022	-	-	-	<1	59	8	<1	**30**	8	21	<1	22	72	<1	-	-	-	<1	49	25	<1
Venezuela (Bolivarian Republic of)	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**26**	3	<1	22	<1	10	83
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**27**	2	<1	24	2	4	92
Viet Nam	2015	**40**	40	<1	<1	20	54	2	**40**	38	<1	2	7	83	4	**40**	39	<1	1	16	64	3
	2022	**45**	44	<1	1	12	77	2	**41**	38	<1	3	<1	94	5	**44**	42	<1	2	7	84	3
Wallis and Futuna Islands	2015	-	-	-	-	17	78	-	-	-	-	-	-	-	-	-	-	-	-	17	78	-
	2022	-	-	-	-	16	78	-	-	-	-	-	-	-	-	-	-	-	-	16	78	-
Yemen	2015	-	-	-	<1	4	30	7	**61**	4	3	54	<1	16	69	**17**	7	2	19	2	25	29
	2022	-	-	-	<1	8	30	7	**60**	3	3	54	<1	14	69	**19**	8	2	22	5	24	31
Zambia	2015	**24**	24	<1	<1	31	1	<1	-	-	-	-	40	13	22	-	-	-	-	35	6	10
	2022	**31**	30	<1	<1	39	1	<1	-	-	-	-	43	17	18	-	-	-	-	41	9	8
Zimbabwe	2015	**32**	31	<1	<1	46	2	2	**33**	6	<1	27	8	9	79	**32**	23	<1	9	34	5	27
	2022	**30**	30	<1	<1	46	3	<1	**35**	5	<1	29	6	13	78	**32**	22	<1	10	33	6	26

ANNEX 5

Hygiene estimates

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL				URBAN				TOTAL			
				Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic
Afghanistan	2015	33 753	25	**35**	38	27	1.34	**63**	25	11	-0.69	**42**	35	23	0.87
	2022	41 129	27	**44**	49	6		**59**	37	4		**48**	46	6	
Algeria	2015	39 543	71	**74**	14	12	0.21	**88**	6	5	-0.02	**84**	9	7	0.12
	2022	44 903	75	**75**	17	8		**88**	9	3		**85**	11	4	
American Samoa	2015	51	87	-	-	-	-	-	-	-	-	-	-	8	-
	2021	45	87	-	-	-		-	-	-		-	-	6	
Angola	2015	28 128	63	**13**	14	73	-	**34**	16	50	-	**26**	15	59	-
	2020	33 428	67	**13**	14	73		**34**	16	50		**27**	15	58	
Armenia	2015	2 879	63	**87**	4	10	0.49	**96**	2	2	0.09	**93**	2	5	0.24
	2022	2 780	64	**90**	<1	10		**97**	1	2		**94**	<1	5	
Aruba	2015	104	43	-	-	-	-	-	-	-	-	**>99**	-	-	0.00
	2022	106	44	-	-	-		-	-	-		**>99**	-	-	
Azerbaijan	2015	9 863	55	**87**	11	2	-	**91**	8	1	-	**89**	9	2	-
	2017	10 072	55	**87**	11	2		**91**	8	1		**89**	9	2	
Bahrain	2015	1 362	89	-	-	-	-	-	-	-	-	**>99**	<1	<1	0.00
	2022	1 472	90	-	-	-		-	-	-		**>99**	<1	<1	
Bangladesh	2015	157 830	34	**35**	54	12	3.30	**55**	38	6	1.77	**42**	48	10	2.85
	2022	171 186	40	**58**	36	7		**68**	29	3		**62**	33	5	
Barbados	2015	278	31	-	-	-	-	-	-	-	-	**88**	2	9	-
	2016	279	31	-	-	-		-	-	-		**88**	2	9	
Belize	2015	360	45	**88**	7	5	0.14	**88**	7	5	0.64	**88**	7	5	0.37
	2022	405	46	**89**	11	<1		**92**	8	<1		**90**	10	<1	
Benin	2015	10 933	46	**6**	50	44	0.31	**13**	43	43	0.44	**9**	47	44	0.42
	2022	13 353	50	**8**	48	44		**17**	40	43		**12**	44	44	
Bhutan	2015	743	39	**85**	14	2	1.63	**88**	12	<1	0.21	**86**	13	1	1.04
	2022	782	44	**96**	4	<1		**90**	10	<1		**93**	7	<1	
Bolivia (Plurinational State of)	2015	11 090	68	**22**	26	52	0.00	**29**	8	63	0.00	**27**	13	60	0.03
	2022	12 224	71	**22**	26	52		**29**	8	63		**27**	13	60	
Bosnia and Herzegovina	2015	3 524	47	**96**	2	2	-	**99**	<1	<1	-	**97**	2	1	-
	2016	3 481	48	**96**	2	2		**99**	<1	<1		**97**	2	1	
Burkina Faso	2015	18 718	28	**5**	47	48	0.09	**19**	42	38	-0.31	**9**	46	46	0.05
	2022	22 674	32	**5**	27	68		**17**	29	54		**9**	27	64	
Burundi	2015	10 727	12	**4**	93	3	0.00	**21**	77	2	-0.26	**6**	91	3	0.02
	2022	12 890	14	**4**	96	<1		**19**	81	<1		**6**	94	<1	
Cambodia	2015	15 418	22	**62**	14	24	2.79	**88**	6	7	0.05	**68**	12	20	2.21
	2022	16 768	25	**82**	7	11		**88**	5	7		**83**	7	10	
Cameroon	2015	23 013	55	**22**	74	4	0.00	**47**	49	4	0.00	**36**	60	4	0.15
	2022	27 915	59	**22**	74	4		**47**	49	4		**37**	59	4	
Central African Republic	2015	4 819	40	**13**	10	78	-0.07	**28**	11	61	1.02	**19**	10	71	0.46
	2022	5 579	43	**12**	16	71		**35**	17	48		**22**	16	61	
Chad	2015	14 140	23	**16**	27	56	1.06	**37**	23	40	-0.40	**21**	26	53	0.76
	2022	17 723	24	**24**	32	45		**34**	30	36		**26**	31	43	
China	2015	1 417 228	56	-	-	<1	-	-	-	<1	-	-	-	<1	-
	2022	1 449 781	64	**95**	5	<1		**98**	2	<1		**97**	3	<1	
Colombia	2015	47 120	80	**33**	5	62	0.00	**78**	4	18	0.00	**69**	4	27	0.15
	2022	51 874	82	**33**	5	62		**78**	4	18		**70**	4	26	
Comoros	2015	730	28	**15**	33	52	-	**18**	42	40	-	**16**	35	49	-
	2016	746	29	**15**	33	52		**18**	42	40		**16**	35	49	
Congo	2015	5 064	66	**32**	43	25	-	**56**	29	14	-	**48**	34	18	-
	2019	5 571	67	**32**	43	25		**56**	29	14		**48**	34	18	
Costa Rica	2015	4 895	77	**83**	12	5	0.03	**85**	9	6	0.19	**85**	10	5	0.17
	2022	5 181	82	**83**	12	5		**87**	9	5		**86**	9	5	
Côte d'Ivoire	2015	23 597	49	**9**	41	50	0.30	**28**	32	40	0.52	**18**	37	45	0.50
	2022	28 161	53	**11**	50	39		**31**	25	44		**22**	37	41	

'-' = no estimate. For JMP estimate methods see Annex 1. For unrounded estimates see <www.washdata.org>.

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL				URBAN				TOTAL			
				Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic
Cuba	2015	11 340	77	**78**	12	10	1.47	**89**	9	2	0.86	**86**	10	4	1.00
	2022	11 212	77	**88**	12	<1		**95**	5	<1		**93**	6	<1	
Democratic People's Republic of Korea	2015	25 258	61	-	-	<1	-	-	-	<1	-	-	-	<1	-
	2022	26 069	63	-	-	<1		-	-	<1		-	-	<1	
Democratic Republic of the Congo	2015	78 657	43	**12**	39	49	0.00	**27**	38	35	0.00	**19**	38	43	0.09
	2022	99 010	47	**12**	39	49		**27**	38	35		**19**	38	42	
Dominican Republic	2015	10 406	79	**39**	15	46	-0.75	**55**	15	30	-0.59	**52**	15	33	-0.49
	2022	11 229	84	**33**	15	51		**51**	14	35		**48**	14	38	
Ecuador	2015	16 196	63	**79**	16	5	0.00	**92**	6	2	0.00	**87**	10	3	0.02
	2022	18 001	65	**79**	16	5		**92**	6	2		**87**	9	3	
Egypt	2015	97 724	43	**85**	14	<1	-	**92**	6	2	-	**88**	11	<1	-
	2022	110 990	43	-	-	<1		-	-	-		-	-	-	
El Salvador	2015	6 231	70	**86**	10	4	-	**92**	5	2	-	**91**	7	3	-
	2018	6 276	72	**86**	10	4		**92**	5	2		**91**	7	3	
Equatorial Guinea	2015	1 347	71	**20**	25	56	-	**26**	21	53	-	**24**	22	53	-
	2022	-	-	-	-	-		-	-	-		-	-	-	
Eswatini	2015	1 134	23	**17**	33	50	-	**48**	26	26	-	**24**	31	45	-
	2020	1 181	24	**17**	33	50		**48**	26	26		**24**	31	44	
Ethiopia	2015	102 472	19	**5**	52	43	0.00	**20**	60	20	0.00	**8**	54	39	0.07
	2022	123 380	23	**5**	52	43		**20**	60	20		**8**	54	38	
Fiji	2017	919	56	**80**	16	4	-	**91**	7	2	-	**86**	11	2	-
	2022	930	58	**80**	16	4		**91**	7	2		**87**	11	2	
Gambia	2015	2 253	59	**12**	80	8	0.00	**14**	77	9	0.00	**13**	79	9	0.01
	2022	2 706	64	**12**	80	8		**14**	77	9		**13**	78	9	
Georgia	2015	3 771	57	**87**	11	2	0.00	**95**	4	1	0.00	**92**	7	1	0.03
	2022	3 744	60	**87**	11	2		**95**	4	1		**92**	7	1	
Ghana	2015	28 871	54	**35**	40	25	0.00	**47**	34	19	0.00	**41**	37	22	0.08
	2022	33 476	59	**35**	40	25		**47**	34	19		**42**	36	22	
Guatemala	2015	16 001	50	**70**	27	3	-	**83**	14	2	-	**77**	21	3	-
	2019	17 106	51	**70**	27	3		**83**	14	2		**77**	21	3	
Guinea	2015	11 626	35	**13**	57	30	0.00	**33**	42	25	0.00	**20**	51	28	0.07
	2022	13 859	38	**13**	57	30		**33**	42	25		**21**	51	28	
Guinea-Bissau	2015	1 789	42	**8**	7	85	1.12	**14**	9	77	1.50	**10**	8	82	1.31
	2022	2 106	45	**16**	13	71		**25**	15	60		**20**	14	66	
Guyana	2015	755	26	**79**	11	10	0.91	**76**	10	15	0.35	**78**	11	11	0.76
	2022	809	27	**85**	8	6		**78**	15	7		**83**	10	6	
Haiti	2015	10 564	52	**17**	56	27	-0.15	**30**	51	19	-0.30	**23**	54	23	-0.12
	2022	11 585	59	**15**	71	14		**28**	68	5		**23**	69	9	
Honduras	2015	9 295	55	**82**	15	3	0.38	**87**	9	4	-0.17	**84**	12	4	0.08
	2022	10 433	60	**84**	15	1		**85**	15	<1		**85**	15	<1	
India	2015	1 322 867	33	**53**	44	3	2.40	**80**	19	1	1.12	**62**	36	3	2.06
	2022	1 417 173	36	**70**	26	4		**88**	10	3		**76**	20	3	
Indonesia	2015	259 092	53	**70**	15	15	0.86	**84**	10	6	-0.40	**77**	13	10	0.22
	2022	275 501	58	**76**	24	<1		**81**	19	<1		**79**	21	<1	
Iraq	2015	37 758	70	**88**	6	6	1.26	**96**	2	1	0.17	**94**	3	3	0.50
	2022	44 496	71	**97**	3	<1		**98**	2	<1		**97**	2	<1	
Jamaica	2015	2 794	55	**63**	18	18	-	**69**	14	16	-	**67**	16	17	-
	2022	-	-	-	-	-		-	-	-		-	-	-	
Kazakhstan	2015	17 836	57	**99**	<1	<1	-	**>99**	<1	<1	-	**>99**	<1	<1	-
	2022	19 398	58	-	-	<1		-	-	<1		-	-	<1	
Kenya	2015	46 851	26	**35**	27	38	0.00	**45**	31	24	0.00	**37**	28	34	0.05
	2022	54 027	29	**35**	27	38		**45**	31	24		**38**	29	34	
Kiribati	2015	117	52	**51**	32	17	0.00	**59**	30	12	0.00	**55**	31	14	0.06
	2022	131	57	**51**	32	17		**59**	30	12		**56**	31	14	
Kyrgyzstan	2015	5 915	36	**90**	9	1	1.42	**95**	4	<1	0.66	**92**	7	1	1.15
	2022	6 631	37	**>99**	<1	<1		**>99**	<1	<1		**>99**	<1	<1	

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL				URBAN				TOTAL			
				Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic
Lao People's Democratic Republic	2015	6 787	33	**46**	43	11	-	**73**	19	8	-	**55**	35	10	-
	2021	7 425	37	**46**	43	11		**73**	19	8		**56**	34	10	
Lesotho	2015	2 119	27	**4**	44	53	0.00	**10**	42	48	0.00	**5**	43	51	0.03
	2022	2 306	30	**4**	44	53		**10**	42	48		**6**	43	51	
Liberia	2015	4 612	50	**<1**	5	95	0.04	**3**	8	89	0.43	**2**	6	92	0.26
	2022	5 303	53	**<1**	16	83		**6**	30	64		**3**	24	73	
Madagascar	2015	24 851	35	**16**	55	29	-0.07	**38**	47	15	-0.36	**24**	52	24	-0.03
	2022	29 612	40	**15**	62	23		**36**	53	11		**23**	58	18	
Malawi	2015	16 939	16	**13**	67	21	0.00	**29**	61	9	-0.22	**15**	66	19	0.00
	2022	20 405	18	**13**	62	26		**28**	60	12		**15**	61	23	
Maldives	2015	436	39	**95**	1	4	-	**97**	2	<1	-	**96**	2	2	-
	2022	524	42	-	-	-		-	-	<1		-	-	-	
Mali	2015	18 113	40	**9**	61	29	0.00	**27**	42	31	0.00	**16**	54	30	0.14
	2022	22 594	45	**9**	61	29		**27**	42	31		**17**	53	30	
Marshall Islands	2015	49	76	**80**	15	4	-	**86**	12	2	-	**85**	13	2	-
	2021	42	78	**80**	15	4		**86**	12	2		**85**	13	2	
Mauritania	2015	3 946	51	**36**	31	33	-2.42	**66**	26	8	-1.11	**52**	28	20	-1.42
	2022	4 736	57	**19**	48	33		**59**	30	11		**42**	38	21	
Mexico	2015	120 150	79	**91**	3	5	0.37	**91**	6	2	0.37	**91**	6	3	0.37
	2022	127 504	81	**94**	-	-		**94**	-	-		**94**	-	-	
Mongolia	2015	2 965	68	**60**	17	22	2.95	**84**	9	7	0.72	**76**	12	12	1.44
	2022	3 398	69	**81**	19	<1		**89**	11	<1		**86**	14	<1	
Montenegro	2015	634	66	**>99**	<1	<1	0.00	**>99**	<1	<1	0.00	**>99**	<1	<1	-0.00
	2022	627	68	**>99**	<1	<1		**>99**	<1	<1		**>99**	<1	<1	
Mozambique	2015	26 843	34	**8**	37	55	-	**21**	24	55	-	**12**	32	55	-
	2022	-	-	-	-	-		-	-	-		-	-	-	
Myanmar	2015	51 484	30	**71**	23	6	0.00	**83**	14	3	0.00	**74**	20	5	0.03
	2022	54 179	32	**71**	23	6		**83**	14	3		**75**	20	5	
Namibia	2015	2 283	47	**27**	58	15	-	**62**	28	9	-	**44**	44	12	-
	2017	2 365	49	**27**	58	15		**62**	28	9		**45**	43	12	
Nepal	2015	27 610	19	**51**	48	1	1.36	**75**	24	<1	0.03	**55**	44	1	1.18
	2022	30 548	21	**60**	38	2		**75**	24	1		**64**	35	2	
Niger	2015	20 128	16	**15**	59	26	1.01	**35**	59	6	0.53	**18**	59	23	0.95
	2022	26 208	17	**22**	50	29		**39**	60	<1		**25**	51	24	
Nigeria	2015	183 996	48	**23**	35	42	0.00	**38**	27	35	0.00	**30**	31	39	0.12
	2022	218 541	54	**23**	35	42		**38**	27	35		**31**	31	38	
Niue	2015	2	43	-	-	-	-	-	-	-	-	-	-	19	-
	2022	2	48	-	-	-		-	-	-		-	-	21	
North Macedonia	2015	2 108	57	**>99**	<1	<1	0.00	**>99**	<1	<1	0.00	**>99**	<1	<1	-0.00
	2022	2 094	59	**>99**	<1	<1		**>99**	<1	<1		**>99**	<1	<1	
Oman	2015	4 192	81	-	-	-	-	-	-	-	-	**97**	-	-	-
	2021	4 520	87	-	-	-		-	-	-		**97**	-	-	
Pakistan	2015	210 969	36	**53**	39	8	3.95	**85**	11	4	1.02	**64**	29	7	2.92
	2022	235 825	38	**80**	19	1		**92**	7	<1		**85**	14	<1	
Papua New Guinea	2015	8 682	13	**25**	30	45	0.00	**62**	26	11	0.00	**30**	29	41	0.03
	2022	10 143	14	**25**	30	45		**62**	26	11		**30**	29	41	
Paraguay	2015	6 178	61	**72**	25	3	-	**85**	13	2	-	**80**	18	2	-
	2020	6 619	62	**72**	25	3		**85**	13	2		**80**	18	2	
Peru	2015	30 712	77	**51**	46	3	2.69	-	-	-	-	-	-	-	-
	2022	34 050	79	**70**	30	<1		-	-	-		-	-	-	
Philippines	2015	103 031	46	**79**	13	9	0.00	**85**	10	4	0.00	**82**	12	7	0.02
	2022	115 559	48	**79**	13	9		**85**	10	4		**82**	12	7	
Republic of Moldova	2015	3 277	42	**82**	10	8	-	**93**	2	4	-	**87**	7	6	-
	2016	3 225	43	**82**	10	8		**93**	2	4		**87**	7	6	
Rwanda	2015	11 643	17	**10**	29	60	0.79	**22**	25	53	1.07	**12**	29	59	0.86
	2022	13 777	18	**16**	44	40		**29**	38	33		**18**	43	39	
Saint Lucia	2015	176	19	**87**	7	5	-	**88**	7	5	-	**87**	7	5	-
	2016	176	19	**87**	7	5		**88**	7	5		**87**	7	5	
Samoa	2016	206	19	**69**	28	2	-	**84**	15	<1	-	**72**	26	2	-
	2022	222	18	**69**	28	2		**84**	15	<1		**72**	26	2	

COUNTRY, AREA OR TERRITORY	Year	Population (thousands)	% urban	RURAL				URBAN				TOTAL			
				Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic
Sao Tome and Principe	2015	201	70	**47**	17	36	-0.57	**43**	13	44	2.90	**44**	14	42	2.02
	2022	227	76	**43**	21	36		**63**	16	21		**58**	17	25	
Senegal	2015	14 356	46	**10**	20	69	0.00	**35**	22	43	0.00	**21**	21	57	0.11
	2022	17 316	49	**10**	20	69		**35**	22	43		**22**	21	56	
Sierra Leone	2015	7 315	41	**10**	30	60	0.72	**21**	27	52	0.06	**15**	29	57	0.48
	2022	8 606	44	**15**	12	73		**21**	13	66		**18**	12	70	
Solomon Islands	2015	613	22	**28**	40	31	0.00	**71**	12	17	-	**38**	34	28	-
	2022	724	26	**28**	-	-		**-**	-	-		**-**	-	-	
Somalia	2015	13 764	43	**19**	55	26	0.00	**32**	54	15	0.00	**25**	54	21	0.07
	2022	17 598	47	**19**	55	26		**32**	54	15		**25**	54	21	
South Africa	2015	55 877	65	**27**	55	18	-	**53**	38	10	-	**44**	44	12	-
	2020	58 802	67	**27**	55	18		**53**	38	10		**44**	43	12	
South Sudan	2015	11 194	19	**-**	-	-	-	**-**	-	-	-	**6**	-	-	0.00
	2022	10 913	21	**-**	-	-		**-**	-	-		**6**	-	-	
Sri Lanka	2015	21 337	18	**-**	-	13	-	**-**	-	5	-	**-**	-	11	-
	2022	21 832	19	**83**	4	13		**93**	2	5		**85**	3	11	
State of Palestine*	2015	4 485	75	**96**	3	1	0.00	**95**	5	<1	0.00	**95**	4	<1	-0.00
	2022	5 250	77	**96**	3	1		**95**	5	<1		**95**	5	<1	
Sudan	2015	38 171	34	**-**	-	-	-	**-**	-	-	-	**21**	21	58	-1.50
	2022	46 874	36	**-**	-	-		**-**	-	-		**11**	-	-	
Suriname	2015	575	66	**67**	25	8	0.00	**75**	13	12	0.00	**72**	17	11	0.00
	2022	618	66	**67**	25	8		**75**	13	12		**72**	17	11	
Syrian Arab Republic	2015	19 205	52	**81**	12	7	0.00	**87**	9	4	0.00	**84**	11	5	0.04
	2022	22 125	57	**81**	12	7		**87**	9	4		**84**	11	5	
Tajikistan	2015	8 524	27	**67**	26	7	0.07	**88**	11	2	-0.12	**73**	22	6	0.05
	2022	9 953	28	**68**	28	4		**87**	12	2		**73**	24	4	
Thailand	2015	70 294	48	**83**	11	6	0.00	**87**	7	6	0.00	**85**	9	6	0.03
	2022	71 697	53	**83**	11	6		**87**	7	6		**85**	9	6	
Timor-Leste	2015	1 206	29	**22**	69	9	-	**43**	54	4	-	**28**	65	7	-
	2020	1 300	31	**22**	69	9		**43**	54	4		**28**	64	7	
Togo	2015	7 473	40	**7**	10	83	0.41	**24**	13	63	0.48	**14**	11	75	0.53
	2022	8 849	44	**10**	7	83		**27**	11	62		**17**	9	74	
Tonga	2015	106	23	**66**	32	1	0.00	**80**	16	4	0.00	**70**	29	2	-0.00
	2022	107	23	**66**	32	1		**80**	16	4		**70**	29	2	
Trinidad and Tobago	2015	1 460	53	**-**	-	-	-	**-**	-	-	-	**90**	4	6	-
	2022	-	-	**-**	-	-		**-**	-	-		**-**	-	-	
Tunisia	2015	11 558	68	**67**	14	18	0.02	**94**	3	3	-0.39	**86**	6	8	-0.18
	2022	12 356	70	**67**	9	24		**91**	3	5		**84**	5	11	
Turkmenistan	2015	5 766	50	**97**	<1	3	0.48	**99**	<1	<1	0.20	**98**	<1	2	0.34
	2022	6 431	53	**>99**	<1	<1		**>99**	<1	<1		**>99**	<1	<1	
Turks and Caicos Islands	2015	37	92	**-**	-	-	-	**-**	-	<1	-	**-**	-	-	-
	2022	46	94	**89**	5	6		**95**	5	<1		**95**	5	<1	
Tuvalu	2016	11	61	**96**	3	<1	-	**93**	7	<1	-	**94**	5	<1	-
	2022	11	66	**96**	3	<1		**93**	7	<1		**94**	5	<1	
Uganda	2015	37 477	22	**17**	34	48	1.10	**34**	30	36	1.86	**21**	33	46	1.40
	2022	47 250	26	**25**	42	33		**47**	30	22		**31**	39	30	
United Republic of Tanzania	2015	52 543	32	**22**	68	10	0.00	**40**	54	6	0.00	**28**	63	9	0.13
	2022	65 498	37	**22**	68	10		**40**	54	6		**29**	63	8	
Uzbekistan	2018	32 450	50	**75**	<1	25	-	**88**	<1	12	-	**82**	<1	18	-
	2022	34 628	50	**75**	<1	25		**88**	<1	12		**82**	<1	18	
Vanuatu	2015	276	25	**39**	34	27	5.15	**65**	19	16	2.15	**45**	31	24	4.41
	2022	327	26	**75**	25	<1		**80**	12	9		**76**	22	2	
Viet Nam	2015	92 191	34	**83**	15	2	0.24	**93**	6	<1	0.26	**86**	12	2	0.32
	2022	98 187	39	**85**	13	2		**95**	4	<1		**89**	10	2	
Yemen	2015	28 517	35	**36**	31	33	-	**70**	21	9	-	**48**	27	24	-
	2017	30 034	36	**36**	31	33		**70**	21	9		**49**	27	24	
Zambia	2015	16 248	42	**9**	25	66	0.00	**29**	33	38	0.00	**17**	29	54	0.11
	2022	20 018	46	**9**	23	68		**29**	25	46		**18**	24	58	
Zimbabwe	2015	14 155	32	**36**	60	3	0.00	**56**	42	2	0.00	**42**	55	3	0.00
	2022	16 321	32	**36**	60	3		**56**	42	2		**42**	55	3	

*WHO reports refer to 'occupied Palestinian territory (including east Jerusalem)'.

ANNEX 6

Menstrual heath data

COUNTRY, AREA OR TERRITORY	Year	Survey name	Population of women and girls age 15-49 (thousands)	% urban (of total population)	RURAL						URBAN						TOTAL					
					Proportion of women and girls age 15-49 who have menstruated in the previous year						Proportion of women and girls age 15-49 who have menstruated in the previous year						Proportion of women and girls age 15-49 who have menstruated in the previous year					
					Awareness of menstruation before menarche	Private place to wash and change	Participation in activities during menstruation	Use of menstrual materials	Use of reusable materials	Use of single-use materials	Awareness of menstruation before menarche	Private place to wash and change	Participation in activities during menstruation	Use of menstrual materials	Use of reusable materials	Use of single-use materials	Awareness of menstruation before menarche	Private place to wash and change	Participation in activities during menstruation	Use of menstrual materials	Use of reusable materials	Use of single-use materials
Algeria	2019	MICS	10 770	73	-	88	77	94	7	87	-	91	75	95	3	91	-	90	76	95	5	90
Bangladesh	2018	NHS	46 075	37	33	84	44	-	-	-	31	82	59	-	-	-	32	83	45	-	-	-
Bangladesh	2019	MICS	46 743	37	-	97	-	98	71	25	-	97	-	98	51	47	-	97	-	98	66	30
Burkina Faso	2017	PMA	4 583	29	-	66	78	87	59	29	-	82	78	97	18	79	-	70	81	90	49	41
Burkina Faso	2019	PMA	4 877	30	-	72	82	85	63	22	-	79	82	92	16	76	-	74	84	87	50	37
Cambodia	2022	CDHS	4 331	25	-	96	-	-	-	-	-	96	-	-	-	-	-	96	-	-	-	-
Central African Republic	2019	MICS	1 111	42	-	92	67	96	77	19	-	92	72	94	39	55	-	92	69	95	62	33
Chad	2019	MICS	3 563	23	-	94	67	95	87	8	-	92	70	93	55	38	-	93	67	95	80	15
Costa Rica	2018	MICS	1 317	79	-	>99	92	99	2	96	-	99	94	99	2	96	-	99	93	99	2	96
Côte d'Ivoire	2018	PMA	6 153	51	-	80	68	>99	72	28	-	80	81	99	38	61	-	80	78	>99	50	49
Cuba	2019	MICS	2 604	77	-	97	68	98	4	94	-	94	75	97	2	95	-	95	72	98	3	95
Democratic People's Republic of Korea	2017	MICS	6 538	62	-	>99	>99	>99	74	25	-	99	98	99	43	55	-	99	98	99	55	43
Democratic Republic of the Congo	2018	MICS	19 350	44	-	89	85	93	78	15	-	92	86	96	35	61	-	90	86	95	56	39
Dominican Republic	2019	MICS	2 824	82	-	95	76	98	3	95	-	95	79	98	2	96	-	95	78	98	2	96
Egypt	2009	SYP	22 096	43	-	-	-	98	-	-	-	-	-	>99	-	-	-	-	-	99	-	-
Egypt	2014	SYP	24 358	43	63	-	-	98	-	-	72	-	-	>99	-	-	66	-	-	99	-	-
Ethiopia	2017	PMA	26 198	20	-	80	-	78	55	23	-	80	-	96	25	71	-	80	-	83	46	37
Fiji	2021	MICS	239	58	-	96	74	96	20	76	-	96	79	98	7	91	-	96	77	97	12	85
Gambia	2018	MICS	577	61	-	98	83	>99	79	21	-	95	79	98	50	47	-	96	80	98	58	40
Ghana	2016	PMA	7 382	55	-	80	-	98	21	77	-	86	-	99	5	93	-	83	-	98	13	86
Ghana	2018	MICS	7 747	56	-	93	80	98	18	80	-	95	82	98	7	91	-	94	81	98	13	85
Guinea-Bissau	2019	MICS	491	44	-	-	93	-	-	-	-	-	90	-	-	-	-	-	92	-	-	-
Guyana	2020	MICS	212	27	-	93	80	97	2	95	-	95	78	96	2	94	-	93	80	96	2	94
Honduras	2019	MICS	2 729	58	-	96	80	98	4	94	-	97	82	98	2	96	-	97	81	98	3	95
India	2016	NFHS	346 212	33	-	-	-	99	-	-	-	-	-	>99	-	-	-	-	-	99	-	-
India	2021	NFHS	368 337	35	-	-	94	>99	-	-	-	-	96	>99	-	-	-	-	95	>99	-	-
Indonesia	2016	PMA	69 131	54	-	90	-	97	17	79	-	96	-	>99	9	91	-	93	-	98	13	85
Iraq	2018	MICS	10 120	70	-	87	88	96	17	79	-	89	90	96	8	87	-	89	89	96	11	85
Kenya	2016	PMA	12 059	26	-	89	-	99	16	83	-	89	-	>99	6	94	-	89	-	>99	13	86
Kiribati	2019	MICS	32	55	-	91	85	98	24	74	-	94	83	98	11	87	-	93	84	98	16	82

'-' = no estimate. For JMP estimate methods see Annex 1. For unrounded estimates see <www.washdata.org>.

COUNTRY, AREA OR TERRITORY	Year	Survey name	Population of women and girls age 15-49 (thousands)	% urban (of total population)	RURAL						URBAN						TOTAL					
					Proportion of women and girls age 15-49 who have menstruated in the previous year						Proportion of women and girls age 15-49 who have menstruated in the previous year						Proportion of women and girls age 15-49 who have menstruated in the previous year					
					Awareness of menstruation before menarche	Private place to wash and change	Participation in activities during menstruation	Use of menstrual materials	Use of reusable materials	Use of single-use materials	Awareness of menstruation before menarche	Private place to wash and change	Participation in activities during menstruation	Use of menstrual materials	Use of reusable materials	Use of single-use materials	Awareness of menstruation before menarche	Private place to wash and change	Participation in activities during menstruation	Use of menstrual materials	Use of reusable materials	Use of single-use materials
Kyrgyzstan	2018	MICS	1 604	36	-	93	94	97	25	72	-	94	91	97	8	89	-	93	93	97	18	79
Lao People's Democratic Republic	2017	LSIS	1 866	34	-	74	88	75	3	72	-	93	88	94	2	92	-	81	88	82	3	79
Lesotho	2018	MICS	572	28	-	94	86	98	12	85	-	95	88	98	3	96	-	95	87	98	8	90
Madagascar	2018	MICS	6 561	37	-	91	92	93	79	14	-	90	90	97	58	39	-	91	92	94	73	21
Malawi	2020	MICS	4 863	17	-	92	87	97	72	25	-	96	90	98	53	45	-	93	87	97	68	29
Mongolia	2018	MICS	831	68	-	90	96	91	5	86	-	89	97	92	2	90	-	89	97	91	3	89
Montenegro	2018	MICS	148	67	-	98	94	97	4	93	-	97	93	97	4	93	-	97	93	97	4	93
Nepal	2014	MICS	7 538	18	-	-	30	-	-	-	-	-	36	-	-	-	-	-	31	-	-	-
Nepal	2019	MICS	8 306	20	-	82	<1	93	71	21	-	89	<1	94	54	41	-	87	<1	94	59	35
Niger	2016	PMA	4 335	16	-	47	-	83	73	10	-	61	-	94	35	58	-	52	-	85	63	22
Nigeria	2018	PMA	45 305	50	-	67	79	95	43	51	-	90	74	96	11	85	-	81	77	95	23	72
Nigeria	2021	MICS	49 296	53	-	93	83	97	58	39	-	93	84	97	23	74	-	93	83	97	41	56
North Macedonia	2019	MICS	515	58	-	97	92	98	<1	97	-	98	94	99	<1	98	-	98	93	99	<1	98
Pakistan	2020	MICSprov	55 856	37	-	88	80	89	63	25	-	89	78	90	36	53	-	88	79	89	53	35
Samoa	2020	MICS	49	18	-	83	91	91	16	75	-	91	91	93	24	69	-	85	91	92	18	74
Sao Tome and Principe	2019	MICS	51	74	-	93	87	>99	96	4	-	95	90	>99	97	2	-	94	89	>99	97	3
Serbia	2019	MICS	1 649	56	-	>99	89	98	<1	98	-	99	92	98	<1	98	-	99	91	98	<1	98
Sierra Leone	2017	MICS	1 853	42	-	90	80	97	88	9	-	96	80	97	48	50	-	93	80	97	68	29
State of Palestine*	2020	MICS	1 253	77	-	83	89	95	2	92	-	80	86	97	2	94	-	80	86	97	2	94
Suriname	2018	MICS	151	66	-	96	82	87	6	81	-	96	83	95	3	92	-	96	83	93	4	89
Togo	2017	MICS	1 887	41	-	90	87	96	76	20	-	93	88	97	39	58	-	92	88	96	57	39
Tonga	2019	MICS	26	23	-	94	84	95	<1	94	-	94	87	91	1	90	-	94	84	94	<1	93
Tunisia	2018	MICS	3 131	69	-	56	87	96	6	90	-	56	90	96	3	93	-	56	89	96	4	92
Turkmenistan	2019	MICS	1 595	52	-	>99	>99	>99	<1	99	-	99	>99	99	1	98	-	99	>99	>99	<1	98
Turks and Caicos Islands	2020	MICS	12	94	-	98	96	>99	2	98	-	96	87	>99	1	96	-	96	87	>99	1	96
Tuvalu	2020	MICS	3	64	-	96	81	92	27	64	-	94	86	96	13	83	-	94	84	95	18	77
Uganda	2017	PMA	9 389	23	-	85	-	98	46	52	-	92	-	98	24	74	-	87	-	98	41	57
Uzbekistan	2022	MICS	8 962	50	-	97	93	97	17	80	-	97	93	96	11	84	-	97	93	97	14	82
Viet Nam	2021	MICS	25 765	38	-	97	96	98	1	97	-	98	95	98	<1	97	-	97	96	98	1	97
Zimbabwe	2019	MICS	4 128	32	-	96	83	97	29	68	-	97	84	>99	11	88	-	97	84	98	22	76

*WHO reports refer to 'occupied Palestinian territory (including east Jerusalem)'.

ANNEX 7

Inequalities in basic services

COUNTRIES, AREAS AND TERRITORIES	Year	Survey name	INEQUALITIES BY WEALTH QUINTILE														
			Basic drinking water			Basic sanitation			Open defecation			Basic hygiene			Basic WASH*		
			Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest
Afghanistan	2015	DHS	45	92	2.1	10	57	5.8	27	2	16.1	8	61	8.0	<1	37	78.1
Albania	2018	DHS	93	98	1.1	94	99	1.1	<1	<1	-	-	-	-	-	-	-
Algeria	2019	MICS	89	96	1.1	72	95	1.3	3	<1	-	62	96	1.5	42	86	2.0
Angola	2016	IIMS	21	89	4.3	15	87	5.9	72	<1	1291.6	9	57	6.2	<1	42	71.9
Armenia	2016	DHS	>99	>99	1.0	86	96	1.1	<1	<1	-	85	>99	1.2	-	-	-
Bangladesh	2019	MICS	94	>99	1.1	48	82	1.7	5	<1	-	31	86	2.8	17	76	4.4
Barbados	2012	MICS	99	>99	1.0	93	98	1.1	2	<1	-	79	91	1.2	58	74	1.3
Belarus	2019	MICS	>99	>99	1.0	94	>99	1.1	-	-	-	-	-	-	-	-	-
Belize	2016	MICS	95	97	1.0	66	98	1.5	5	<1	-	83	94	1.1	47	73	1.6
Benin	2018	DHS	44	83	1.9	<1	43	50.9	85	14	6.1	4	22	5.6	<1	13	∞
Bhutan	2010	MICS	90	>99	1.1	38	92	2.4	7	<1	56.2	72	90	1.2	26	83	3.2
Bolivia (Plurinational State of)	2016	EDSA	77	>99	1.3	23	88	3.8	51	<1	119.0	7	41	5.7	-	-	-
Bosnia and Herzegovina	2012	MICS	98	>99	1.0	83	99	1.2	<1	<1	-	90	>99	1.1	74	97	1.3
Burkina Faso	2018	MIS	40	78	1.9	7	51	6.8	62	7	8.5	-	-	-	-	-	-
Burundi	2017	DHS	54	80	1.5	26	61	2.3	7	<1	171.3	2	17	9.8	<1	14	38.7
Cambodia	2014	DHS	61	95	1.6	14	91	6.6	80	2	32.2	49	90	1.9	-	-	-
Cameroon	2019	DHS	38	92	2.4	12	80	6.5	22	<1	778.3	8	65	8.3	<1	51	109.7
Central African Republic	2019	MICS	27	52	2.0	2	28	12.4	55	2	26.4	8	42	5.4	<1	8	165.9
Colombia	2015	ENDS	74	>99	1.3	62	99	1.6	26	<1	-	-	-	-	-	-	-
Comoros	2012	DHS	70	93	1.3	24	53	2.2	<1	<1	12.4	13	26	2.1	<1	16	16.6
Congo	2015	MICS	34	92	2.7	3	61	22.8	32	<1	57.1	36	73	2.0	<1	35	109.2
Costa Rica	2018	MICS	99	>99	1.0	91	98	1.1	<1	<1	5.5	73	97	1.3	59	76	1.3
Côte d'Ivoire	2016	MICS	51	98	1.9	8	77	10.0	49	<1	73.5	11	51	4.8	<1	44	68.5
Cuba	2019	MICS	96	98	1.0	83	92	1.1	<1	<1	1.9	86	95	1.1	70	88	1.3
Democratic Republic of the Congo	2018	MICS	18	93	5.1	7	29	4.2	24	2	12.9	7	37	5.0	<1	12	52.1
Dominican Republic	2018	ENH	93	99	1.1	61	98	1.6	7	<1	-	29	88	3.1	17	65	3.8
Egypt	2015	DHS	>99	>99	1.0	89	97	1.1	<1	<1	-	-	-	-	-	-	-
El Salvador	2014	MICS	85	>99	1.2	65	98	1.5	9	<1	698.4	82	94	1.1	43	78	1.8
Eswatini	2014	MICS	40	98	2.5	40	55	1.4	34	<1	59.4	3	48	17.5	<1	38	59.2
Ethiopia	2016	DHS	27	84	3.1	4	18	5.2	55	7	7.5	1	21	14.9	<1	7	∞

*Basic WASH refers to the proportion of the population that have at least basic drinking water, at least basic sanitation and basic hygiene services.
∞ The infinity symbol is used for the ratio of richest to poorest quintiles where the poorest quintile has 0% basic WASH.

COUNTRIES, AREAS AND TERRITORIES	Year	Survey name	INEQUALITIES BY SUBNATIONAL REGION														
			Basic drinking water			Basic sanitation			Open defecation			Basic hygiene			Basic WASH		
			Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest
Afghanistan	2015	DHS	12	97	8.0	2	70	32.7	<1	80	∞	<1	66	229.0	<1	36	∞
Albania	2018	DHS	87	>99	1.1	93	>99	1.1	<1	<1	-	-	-	-	-	-	-
Algeria	2019	MICS	91	99	1.1	83	91	1.1	<1	3	76.2	71	91	1.3	59	74	1.2
Angola	2016	IIMS	28	87	3.1	12	71	5.8	2	85	36.0	4	56	15.6	<1	29	35.9
Armenia	2016	DHS	99	>99	1.0	63	>99	1.6	<1	<1	-	85	>99	1.2	-	-	-
Bangladesh	2019	MICS	94	>99	1.1	57	72	1.3	<1	7	92.0	34	68	2.0	25	51	2.0
Barbados	2012	MICS	>99	>99	1.0	94	98	1.0	<1	<1	17.4	85	91	1.1	67	78	1.2
Belarus	2019	MICS	99	>99	1.0	92	>99	1.1	-	-	-	-	-	-	-	-	-
Belize	2016	MICS	95	>99	1.1	72	96	1.3	<1	8	64.9	82	94	1.1	56	73	1.3
Benin	2018	DHS	33	98	3.0	4	34	9.2	6	88	14.0	1	29	20.3	<1	15	69.3
Bhutan	2010	MICS	67	>99	1.5	31	80	2.6	<1	6	29.9	49	94	1.9	20	74	3.7
Bolivia (Plurinational State of)	2016	EDSA	78	99	1.3	36	61	1.7	3	47	14.3	13	39	3.0	-	-	-
Bosnia and Herzegovina	2012	MICS	88	>99	1.1	89	>99	1.1	<1	<1	-	90	98	1.1	71	94	1.3
Burkina Faso	2018	MIS	14	81	5.8	7	57	8.2	8	70	9.0	-	-	-	-	-	-
Burundi	2017	DHS	37	93	2.5	16	83	5.1	<1	10	36.5	1	23	18.0	<1	19	31.2
Cambodia	2014	DHS	53	96	1.8	25	87	3.5	4	69	16.3	30	98	3.3	-	-	-
Cameroon	2019	DHS	40	97	2.4	27	68	2.5	<1	16	∞	11	77	6.9	4	47	12.0
Central African Republic	2019	MICS	16	61	3.8	4	25	6.7	3	49	18.0	4	41	9.4	<1	8	14.0
Colombia	2015	ENDS	88	>99	1.1	80	93	1.2	<1	13	∞	-	-	-	-	-	-
Comoros	2012	DHSMICS	81	87	1.1	21	39	1.9	<1	3	11.0	6	24	4.4	3	12	4.4
Congo	2015	MICS	20	90	4.5	2	33	20.1	<1	38	47.8	18	66	3.6	<1	15	40.5
Costa Rica	2018	MICS	98	>99	1.0	92	98	1.1	<1	<1	-	83	91	1.1	66	79	1.2
Côte d'Ivoire	2016	MICS	49	99	2.0	12	60	5.1	1	50	38.4	6	40	6.3	3	32	11.6
Cuba	2019	MICS	93	>99	1.1	66	99	1.5	<1	3	43.1	75	>99	1.3	60	98	1.6
Democratic Republic of the Congo	2018	MICS	2	97	49.8	<1	36	817.1	<1	41	91.6	<1	56	116.8	<1	10	∞
Dominican Republic	2018	ENH	92	99	1.1	75	89	1.2	<1	10	21.6	33	63	1.9	29	55	1.9
Egypt	2015	DHS	>99	>99	1.0	90	>99	1.1	<1	<1	-	-	-	-	-	-	-
El Salvador	2014	MICS	91	>99	1.1	81	92	1.1	<1	5	37.9	87	91	1.0	63	71	1.1
Eswatini	2014	MICS	51	78	1.5	51	56	1.1	4	25	6.4	10	25	2.5	5	17	3.4
Ethiopia	2016	DHS	34	98	2.9	2	30	16.1	1	71	61.2	2	38	15.5	<1	19	76.2

COUNTRIES, AREAS AND TERRITORIES	Year	Survey name	INEQUALITIES BY WEALTH QUINTILE														
			Basic drinking water			Basic sanitation			Open defecation			Basic hygiene			Basic WASH		
			Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest
Gabon	2012	DHS	55	96	1.8	15	86	5.9	6	<1	115.1	-	-	-	-	-	-
Gambia	2020	DHS	82	98	1.2	21	87	4.2	3	<1	-	4	20	4.8	1	19	14.9
Georgia	2018	MICS	91	>99	1.1	80	>99	1.3	<1	<1	-	82	98	1.2	60	96	1.6
Ghana	2018	MICS	54	99	1.8	12	47	3.8	46	2	29.9	28	60	2.2	2	35	17.2
Guatemala	2015	DHS	84	>99	1.2	39	92	2.3	18	<1	235.5	51	92	1.8	-	-	-
Guinea	2018	DHS	43	92	2.1	7	57	7.8	32	<1	-	13	42	3.3	<1	25	26.1
Guinea-Bissau	2019	MICS	45	91	2.0	2	48	22.8	28	<1	1063.8	10	22	2.3	<1	12	38.4
Guyana	2020	MICS	86	96	1.1	80	96	1.2	2	<1	-	68	91	1.3	46	76	1.6
Haiti	2017	DHS	28	95	3.4	10	68	7.0	57	1	48.7	12	39	3.2	<1	29	69.0
Honduras	2019	EPHPM	88	>99	1.1	64	98	1.5	26	<1	379.3	78	90	1.2	49	75	1.5
India	2016	DHS	87	98	1.1	11	91	8.4	83	2	54.1	25	92	3.7	4	83	23.1
Indonesia	2017	DHS	74	99	1.3	44	97	2.2	26	<1	36.0	-	-	-	-	-	-
Iraq	2018	MICS	96	>99	1.0	91	99	1.1	<1	<1	-	88	>99	1.1	77	98	1.3
Jamaica	2011	MICS	88	98	1.1	76	99	1.3	<1	<1	-	53	82	1.6	30	61	2.0
Jordan	2018	DHS	>99	>99	1.0	96	>99	1.0	<1	<1	-	-	-	-	-	-	-
Kazakhstan	2015	MICS	98	>99	1.0	96	99	1.0	<1	<1	-	98	>99	1.0	90	95	1.1
Kenya	2020	MIS	33	97	2.9	20	76	3.7	25	<1	64.9	-	-	-	-	-	-
Kiribati	2019	MICS	56	99	1.7	25	78	3.1	64	1	50.9	44	71	1.6	6	56	9.5
Kyrgyzstan	2018	MICS	88	>99	1.1	98	99	1.0	-	-	-	91	>99	1.1	78	94	1.2
Lao People's Democratic Republic	2017	LSIS	61	>99	1.6	30	98	3.3	65	<1	824.9	21	85	4.0	6	83	13.2
Lesotho	2018	MICS	61	96	1.6	35	66	1.9	57	<1	103.5	3	24	7.4	<1	18	18.5
Liberia	2020	DHS	55	88	1.6	2	59	24.6	70	4	15.6	<1	10	17.6	<1	9	564.9
Madagascar	2018	MICS	17	84	4.9	<1	24	80.4	67	5	13.5	5	43	9.2	<1	14	964.9
Malawi	2016	DHS	55	82	1.5	16	40	2.4	13	<1	26.0	4	20	5.4	-	-	-
Maldives	2017	DHS	99	>99	1.0	97	99	1.0	<1	<1	-	86	97	1.1	83	96	1.1
Mali	2018	DHS	42	96	2.3	17	56	3.3	28	<1	78523.6	5	31	6.2	1	18	16.4
Mauritania	2015	MICS	33	95	2.8	4	87	19.6	85	<1	531.0	7	24	3.4	<1	21	73.2
Mexico	2015	MICS	94	>99	1.1	81	>99	1.2	4	<1	-	80	97	1.2	58	87	1.5
Mongolia	2018	MICS	42	99	2.4	33	97	2.9	38	<1	-	63	98	1.5	13	92	6.9
Montenegro	2018	MICS	99	99	1.0	87	>99	1.1	<1	<1	-	>99	>99	1.0	86	99	1.1
Mozambique	2018	MIS	35	95	2.7	15	79	5.2	49	<1	51.7	-	-	-	-	-	-
Myanmar	2016	DHS	67	95	1.4	22	83	3.7	30	<1	324.1	57	95	1.7	10	76	7.6
Namibia	2013	DHS	51	>99	1.9	4	87	24.6	92	<1	422.7	17	79	4.5	<1	69	85.1
Nepal	2019	MICS	88	97	1.1	80	77	1.0	9	<1	270.0	49	98	2.0	37	73	2.0
Nicaragua	2012	ENDESA	51	98	1.9	43	91	2.1	33	<1	90.3	-	-	-	-	-	-
Niger	2006	DHS	31	70	2.2	2	37	24.1	93	25	3.7	4	27	7.0	-	-	-
Nigeria	2018	DHS	43	95	2.2	12	65	5.3	42	3	12.3	8	60	7.3	<1	41	85.0

COUNTRIES, AREAS AND TERRITORIES	Year	Survey name	INEQUALITIES BY SUBNATIONAL REGION															
			Basic drinking water			Basic sanitation			Open defecation			Basic hygiene			Basic WASH		
			Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest
Gabon	2012	DHS	53	95	1.8	26	44	1.6	<1	12	403.7	-	-	-	-	-	-
Gambia	2020	DHS	79	>99	1.3	18	63	3.5	<1	10	∞	4	16	4.5	2	14	6.1
Georgia	2018	MICS	85	>99	1.2	76	97	1.3	<1	<1	-	84	97	1.2	62	91	1.5
Ghana	2018	MICS	50	98	1.9	8	25	3.0	7	67	9.9	19	55	2.8	2	18	10.4
Guatemala	2015	DHS	81	>99	1.2	51	78	1.5	<1	15	20.0	59	88	1.5	-	-	-
Guinea	2018	DHS	50	95	1.9	17	44	2.5	<1	40	∞	4	44	11.7	1	20	16.5
Guinea-Bissau	2019	MICS	38	97	2.6	5	40	7.7	<1	32	∞	<1	29	380.2	<1	11	∞
Guyana	2020	MICS	64	>99	1.5	69	95	1.4	<1	9	∞	58	86	1.5	41	70	1.7
Haiti	2017	DHS	42	92	2.2	21	49	2.4	7	48	6.6	13	31	2.3	4	19	5.3
Honduras	2019	EPHPM	74	>99	1.4	35	92	2.6	<1	42	56.5	62	93	1.5	18	80	4.4
India	2016	DHS	63	>99	1.6	25	>99	4.0	<1	70	∞	29	96	3.3	15	85	5.6
Indonesia	2017	DHS	70	>99	1.4	56	91	1.6	2	26	15.2	-	-	-	-	-	-
Iraq	2018	MICS	92	>99	1.1	87	>99	1.1	<1	<1	-	88	>99	1.1	76	98	1.3
Jamaica	2011	MICS	91	>99	1.1	84	88	1.0	<1	<1	2.8	63	74	1.2	44	46	1.0
Jordan	2018	DHS	98	>99	1.0	95	>99	1.1	<1	<1	-	-	-	-	-	-	-
Kazakhstan	2015	MICS	95	>99	1.1	88	>99	1.1	<1	<1	-	96	>99	1.0	83	99	1.2
Kenya	2020	MIS	22	>99	4.6	13	74	5.8	<1	29	464.9	-	-	-	-	-	-
Kiribati	2019	MICS	55	96	1.7	32	51	1.6	22	55	2.5	51	59	1.2	15	32	2.2
Kyrgyzstan	2018	MICS	72	>99	1.4	95	>99	1.0	-	-	-	84	>99	1.2	62	97	1.6
Lao People's Democratic Republic	2017	LSIS	63	>99	1.6	33	96	2.9	<1	65	94.7	17	87	5.1	9	85	9.2
Lesotho	2018	MICS	65	84	1.3	44	54	1.2	7	44	6.2	3	12	3.7	1	7	5.8
Liberia	2020	DHS	70	79	1.1	9	35	3.8	21	62	2.9	<1	6	11.3	<1	4	22.0
Madagascar	2018	MICS	11	74	6.9	<1	18	30.1	5	85	16.6	3	36	12.3	<1	10	58.8
Malawi	2016	DHS	61	66	1.1	18	31	1.8	4	6	1.4	8	13	1.6	-	-	-
Maldives	2017	DHS	99	>99	1.0	92	>99	1.1	<1	<1	-	85	97	1.1	83	96	1.2
Mali	2018	DHS	32	96	3.0	15	47	3.2	<1	61	1810.1	7	27	3.9	2	14	6.2
Mauritania	2015	MICS	41	>99	2.4	12	91	7.4	1	79	57.6	2	40	23.7	<1	34	57.2
Mexico	2015	MICS	96	>99	1.0	91	97	1.1	<1	1	3.1	86	92	1.1	68	87	1.3
Mongolia	2018	MICS	61	95	1.5	48	78	1.6	<1	23	1471.6	72	85	1.2	32	65	2.0
Montenegro	2018	MICS	98	>99	1.0	89	98	1.1	<1	<1	2.7	>99	>99	1.0	88	97	1.1
Mozambique	2018	MIS	34	>99	3.0	11	86	8.0	<1	52	235.6	-	-	-	-	-	-
Myanmar	2016	DHS	64	94	1.5	29	87	3.1	2	54	27.2	58	98	1.7	16	66	4.1
Namibia	2013	DHS	53	98	1.9	14	64	4.6	12	83	6.8	18	72	4.0	6	46	7.7
Nepal	2019	MICS	89	97	1.1	70	85	1.2	<1	16	20.3	50	85	1.7	41	70	1.7
Nicaragua	2012	ENDESA	57	93	1.6	-	-	-	-	-	-	-	-	-	-	-	-
Niger	2006	DHS	26	91	3.5	1	32	25.2	11	93	8.3	4	31	8.1	-	-	-
Nigeria	2018	DHS	57	87	1.5	24	48	2.0	9	51	5.5	8	53	7.0	4	31	8.2

COUNTRIES, AREAS AND TERRITORIES	Year	Survey name	INEQUALITIES BY WEALTH QUINTILE														
			Basic drinking water			Basic sanitation			Open defecation			Basic hygiene			Basic WASH		
			Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest	Poorest	Richest	Ratio: richest to poorest
North Macedonia	2019	MICS	98	>99	1.0	85	>99	1.2	<1	<1	-	99	>99	1.0	82	>99	1.2
Pakistan	2018	DHS	78	98	1.2	30	97	3.3	45	<1	-	17	94	5.5	7	84	12.8
Panama	2013	MICS	87	>99	1.2	53	>99	1.9	10	<1	-	-	-	-	-	-	-
Papua New Guinea	2018	DHS	22	89	4.0	10	63	6.4	22	5	4.4	7	69	10.4	<1	47	100.1
Paraguay	2016	MICS	80	98	1.2	47	98	2.1	3	<1	-	61	96	1.6	24	81	3.3
Peru	2016	ENDES	77	>99	1.3	49	98	2.0	23	<1	178.2	-	-	-	-	-	-
Republic of Moldova	2012	MICS	71	96	1.3	53	90	1.7	<1	<1	-	73	96	1.3	28	79	2.8
Rwanda	2020	DHS	40	83	2.1	43	72	1.7	8	<1	54.0	13	43	3.3	3	28	8.9
Saint Lucia	2012	MICS	97	>99	1.0	72	99	1.4	7	<1	-	70	96	1.4	49	88	1.8
Samoa	2020	MICS	97	>99	1.0	89	99	1.1	<1	<1	-	55	91	1.7	48	85	1.8
Sao Tome and Principe	2019	MICS	84	94	1.1	15	81	5.6	74	11	6.6	43	77	1.8	6	57	9.7
Senegal	2019	DHS	50	98	2.0	22	90	4.1	41	<1	3001.1	11	44	4.1	2	41	26.9
Serbia	2019	MICS	98	>99	1.0	95	>99	1.0	<1	<1	-	-	-	-	-	-	-
Sierra Leone	2019	DHS	38	74	2.0	4	45	10.3	40	2	21.8	14	27	2.0	<1	13	50.6
Somalia	2017	HFS	42	96	2.3	4	36	9.0	67	<1	2187.1	-	-	-	-	-	-
South Africa	2016	DHS	68	>99	1.5	53	97	1.8	8	<1	-	4	80	18.4	-	-	-
State of Palestine*	2020	MICS	98	>99	1.0	96	99	1.0	<1	<1	-	84	98	1.2	78	93	1.2
Sudan	2014	MICS	36	96	2.7	7	78	10.8	54	<1	124.6	16	49	3.0	2	39	25.3
Suriname	2018	MICS	94	>99	1.1	64	98	1.5	10	<1	-	53	90	1.7	30	66	2.2
Tajikistan	2017	DHS	72	98	1.4	98	95	1.0	<1	<1	-	46	87	1.9	33	84	2.5
Thailand	2019	MICS	99	>99	1.0	93	98	1.1	<1	<1	-	79	95	1.2	65	81	1.2
Timor-Leste	2016	DHS	61	96	1.6	24	86	3.6	55	<1	251.9	12	54	4.4	4	45	11.1
Togo	2017	MICS	40	95	2.3	3	55	17.6	79	4	18.1	7	36	5.1	<1	24	∞
Tonga	2019	MICS	>99	>99	1.0	82	98	1.2	<1	<1	-	43	90	2.1	36	86	2.4
Trinidad and Tobago	2011	MICS	98	>99	1.0	86	99	1.2	<1	<1	-	77	94	1.2	57	84	1.5
Tunisia	2018	MICS	88	98	1.1	91	>99	1.1	4	<1	-	79	>99	1.3	59	85	1.4
Türkiye	2013	DHS	96	>99	1.0	86	>99	1.2	<1	<1	-	-	-	-	-	-	-
Turkmenistan	2016	MICS	98	>99	1.0	99	98	1.0	<1	<1	-	98	>99	1.0	90	97	1.1
Turks and Caicos Islands	2020	MICS	98	99	1.0	75	99	1.3	<1	<1	-	89	98	1.1	59	92	1.6
Tuvalu	2020	MICS	>99	99	1.0	75	90	1.2	4	<1	-	92	96	1.0	69	84	1.2
Uganda	2016	DHS	43	82	1.9	5	46	9.1	21	<1	135.3	2	17	9.8	<1	11	556.9
Ukraine	2012	MICS	98	99	1.0	96	>99	1.0	<1	<1	-	-	-	-	-	-	-
United Republic of Tanzania	2016	DHS	25	87	3.5	2	57	33.5	27	<1	997.4	<1	17	18.6	<1	14	∞
Uruguay	2013	MICS	99	>99	1.0	87	97	1.1	2	<1	-	-	-	-	-	-	-
Viet Nam	2014	MICS	80	>99	1.2	37	98	2.7	23	<1	-	62	98	1.6	23	95	4.2

*WHO reports refer to 'occupied Palestinian territory (including east Jerusalem)'.

COUNTRIES, AREAS AND TERRITORIES	Year	Survey name	INEQUALITIES BY SUBNATIONAL REGION														
			Basic drinking water			Basic sanitation			Open defecation			Basic hygiene			Basic WASH		
			Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest	Lowest	Highest	Ratio: highest to lowest
North Macedonia	2019	MICS	98	>99	1.0	87	99	1.1	<1	<1	-	98	>99	1.0	85	99	1.2
Pakistan	2018	DHS	62	97	1.6	47	95	2.0	<1	21	134.8	31	78	2.5	<1	61	∞
Panama	2013	MICS	47	>99	2.1	<1	90	164.5	<1	56	∞	-	-	-	-	-	-
Papua New Guinea	2018	DHS	36	62	1.7	22	29	1.3	5	44	8.4	19	41	2.2	8	16	2.0
Paraguay	2016	MICS	80	>99	1.2	61	93	1.5	<1	4	115.4	70	88	1.3	46	78	1.7
Peru	2016	ENDES	66	99	1.5	54	90	1.7	<1	25	33.7	-	-	-	-	-	-
Republic of Moldova	2012	MICS	77	98	1.3	63	86	1.4	<1	<1	-	83	95	1.1	43	75	1.8
Rwanda	2020	DHS	43	82	1.9	51	67	1.3	<1	3	4.9	13	36	2.8	7	18	2.8
Saint Lucia	2012	MICS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Samoa	2020	MICS	98	>99	1.0	94	98	1.0	<1	<1	-	65	84	1.3	61	80	1.3
Sao Tome and Principe	2019	MICS	76	95	1.2	34	56	1.6	30	58	2.0	39	62	1.6	12	33	2.7
Senegal	2019	DHS	20	>99	5.1	26	76	2.9	<1	33	443.6	1	58	45.7	<1	27	46.5
Serbia	2019	MICS	97	>99	1.0	97	>99	1.0	<1	<1	-	-	-	-	-	-	-
Sierra Leone	2019	DHS	41	72	1.7	12	37	3.2	3	41	14.4	5	31	6.6	1	7	5.8
Somalia	2017	HFS	36	98	2.7	3	44	15.6	<1	71	∞	-	-	-	-	-	-
South Africa	2016	DHS	71	>99	1.4	60	82	1.4	<1	5	11.9	11	74	6.6	-	-	-
State of Palestine*	2020	MICS	98	>99	1.0	90	>99	1.1	<1	2	∞	89	97	1.1	76	96	1.3
Sudan	2014	MICS	33	95	2.9	10	79	8.2	2	45	25.9	2	49	32.1	<1	30	39.6
Suriname	2018	MICS	84	>99	1.2	42	97	2.3	<1	31	∞	53	85	1.6	17	68	3.9
Tajikistan	2017	DHS	69	>99	1.4	92	98	1.1	<1	<1	-	30	91	3.0	24	89	3.7
Thailand	2019	MICS	97	>99	1.0	96	99	1.0	<1	<1	-	84	90	1.1	58	82	1.4
Timor-Leste	2016	DHS	65	95	1.5	31	73	2.4	4	49	13.1	9	39	4.4	4	33	7.5
Togo	2017	MICS	44	96	2.2	10	46	4.8	3	73	22.3	8	29	3.8	<1	20	39.6
Tonga	2019	MICS	97	>99	1.0	81	93	1.1	<1	<1	-	47	74	1.6	42	67	1.6
Trinidad and Tobago	2011	MICS	98	>99	1.0	92	97	1.1	<1	<1	-	77	96	1.2	54	87	1.6
Tunisia	2018	MICS	88	99	1.1	93	99	1.1	<1	3	∞	85	98	1.2	57	82	1.4
Türkiye	2013	DHS	97	99	1.0	91	98	1.1	<1	<1	-	-	-	-	-	-	-
Turkmenistan	2016	MICS	98	>99	1.0	98	>99	1.0	<1	<1	-	98	>99	1.0	91	>99	1.1
Turks and Caicos Islands	2020	MICS	79	>99	1.3	82	>99	1.2	<1	<1	-	85	96	1.1	45	85	1.9
Tuvalu	2020	MICS	>99	>99	1.0	64	97	1.5	<1	4	8.7	89	>99	1.1	61	95	1.6
Uganda	2016	DHS	37	98	2.6	2	38	19.1	<1	67	498.1	2	16	8.4	<1	13	112.9
Ukraine	2012	MICS	98	>99	1.0	94	99	1.1	<1	<1	-	-	-	-	-	-	-
United Republic of Tanzania	2016	DHS	26	97	3.7	7	75	10.8	<1	45	1847.8	<1	32	112.6	<1	22	∞
Uruguay	2013	MICS	97	>99	1.0	94	95	1.0	<1	<1	26.0	-	-	-	-	-	-
Viet Nam	2014	MICS	84	>99	1.2	54	94	1.7	<1	22	284.1	71	95	1.3	46	89	1.9

ANNEX 8

Regional and global drinking water estimates

REGION	Year	Population (thousands)	% urban	RURAL					URBAN					TOTAL				
				At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic	At least basic	Limited (more than 30 mins)	Unimproved	Surface water	Annual rate of change in at least basic
SDG REGIONS																		
Australia and New Zealand	2015	28 411	86	>99	<1	<1	<1	0.04	>99	<1	<1	<1	0.00	>99	<1	<1	<1	0.01
	2022	31 363	87	>99	<1	<1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
Central and Southern Asia	2015	1 926 327	35	87	4	7	2	0.65	95	2	2	<1	0.12	90	4	5	1	0.51
	2022	2 084 590	38	92	4	3	1		96	2	1	<1		93	4	2	<1	
Eastern and South-Eastern Asia	2015	2 268 355	56	85	2	10	2	1.10	98	<1	1	<1	0.10	92	1	5	1	0.75
	2022	2 344 325	62	94	1	4	1		98	<1	1	<1		97	<1	2	<1	
Europe and Northern America	2015	1 100 651	76	97	<1	3	<1	0.05	>99	<1	<1	<1	-0.01	99	<1	<1	<1	0.01
	2022	1 118 593	78	97	<1	2	<1		>99	<1	<1	<1		99	<1	<1	<1	
Latin America and the Caribbean	2015	623 076	80	85	2	7	6	0.90	98	<1	<1	<1	0.10	96	<1	2	1	0.31
	2022	660 269	82	92	1	3	4		>99	<1	<1	<1		98	<1	<1	1	
Northern Africa and Western Asia	2015	493 116	61	81	9	8	2	0.56	96	3	1	<1	0.12	90	5	4	<1	0.38
	2022	553 690	63	84	10	4	1		96	3	<1	<1		92	6	2	<1	
Oceania	2015	11 992	22	45	2	22	30	0.52	92	1	4	2	0.06	56	2	18	24	0.36
	2022	13 676	23	51	3	26	21		93	<1	4	3		60	2	21	17	
Sub-Saharan Africa	2015	972 748	39	44	15	26	15	0.89	83	9	6	2	0.33	59	12	19	10	0.89
	2022	1 166 766	43	50	17	22	10		85	9	5	<1		65	14	15	6	
OTHER REGIONAL GROUPINGS																		
Landlocked Developing Countries	2015	478 578	30	53	16	21	10	0.92	89	6	4	1	0.17	64	13	16	7	0.78
	2022	563 805	32	59	19	16	5		91	6	2	<1		69	15	12	4	
Least Developed Countries	2015	951 928	32	53	14	22	11	0.72	82	10	7	2	0.28	62	13	17	8	0.73
	2022	1 125 179	36	58	16	18	8		83	11	5	<1		67	14	13	5	
Small Island Developing States	2015	67 455	60	63	5	20	12	0.18	95	2	3	<1	-0.03	82	3	9	5	0.12
	2022	71 976	62	65	6	20	9		95	3	3	<1		83	4	9	4	
Fragile contexts	2015	1 650 219	40	59	11	19	11	0.66	88	6	5	1	0.17	71	9	13	7	0.60
	2022	1 914 974	44	64	13	16	8		89	7	3	<1		75	10	10	5	
INCOME GROUPINGS																		
Low income	2015	610 047	32	42	18	28	12	0.91	79	13	7	1	0.16	53	16	21	9	0.81
	2022	737 605	35	48	22	23	7		80	14	5	<1		60	19	16	5	
Lower middle income	2015	3 134 755	40	82	5	9	4	0.72	93	3	3	<1	0.19	86	4	7	3	0.58
	2022	3 432 097	43	86	5	6	3		95	3	2	<1		90	4	4	2	
Upper middle income	2015	2 458 300	63	87	2	9	2	1.10	98	<1	<1	<1	0.06	94	<1	4	<1	0.62
	2022	2 549 815	69	95	1	3	<1		99	<1	<1	<1		98	<1	1	<1	
High income	2015	1 189 999	80	98	<1	2	<1	0.06	>99	<1	<1	<1	0.01	>99	<1	<1	<1	0.06
	2022	1 224 062	82	98	<1	1	<1		>99	<1	<1	<1		>99	<1	<1	<1	
WORLD	2015	7 426 435	54	79	5	11	4	0.67	96	2	2	<1	0.06	88	3	6	2	0.45
	2022	7 974 931	57	84	6	7	3		97	2	1	<1		91	4	4	1	

REGION	Year	RURAL						URBAN						TOTAL					
		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	2015	-	>99	-	-	89	11	**>99**	>99	-	>99	>99	<1	-	>99	96	-	98	2
	2022	-	>99	-	-	-	-	**>99**	>99	-	>99	-	-	-	>99	96	-	-	-
Central and Southern Asia	2015	**57**	57	72	62	30	61	**65**	80	83	65	67	31	**60**	65	76	63	43	50
	2022	**68**	68	73	77	31	65	**67**	82	79	67	63	35	**68**	73	75	73	43	54
Eastern and South-Eastern Asia	2015	**61**	75	81	61	47	40	**84**	94	95	84	84	14	**74**	86	89	74	68	26
	2022	**65**	88	90	65	58	37	**87**	95	97	87	86	13	**79**	92	94	79	75	22
Europe and Northern America	2015	**89**	89	91	94	86	11	**97**	97	97	98	98	2	**95**	95	95	97	95	4
	2022	**85**	90	92	85	91	6	**97**	97	97	98	98	1	**94**	95	96	95	97	2
Latin America and the Caribbean	2015	**49**	76	66	49	71	16	**82**	96	82	83	95	4	**75**	92	79	76	90	6
	2022	**53**	85	68	53	78	14	**80**	97	80	84	96	3	**75**	95	78	78	92	6
Northern Africa and Western Asia	2015	-	69	65	-	70	19	**80**	91	81	80	91	8	**75**	83	75	77	83	12
	2022	-	73	68	-	74	20	**81**	92	82	81	91	9	**77**	85	77	79	85	13
Oceania	2015	-	31	30	-	21	26	**57**	82	57	81	78	16	-	42	36	-	34	24
	2022	-	35	33	-	19	35	**55**	91	55	79	72	21	-	48	38	-	30	33
Sub-Saharan Africa	2015	**12**	12	42	19	19	40	**51**	51	67	53	60	32	**27**	27	52	32	35	37
	2022	**15**	15	51	23	21	46	**53**	57	66	53	58	36	**31**	33	58	36	37	42
OTHER REGIONAL GROUPINGS																			
Landlocked Developing Countries	2015	**20**	20	55	27	25	44	**66**	70	74	66	77	18	**34**	35	61	39	41	36
	2022	**23**	23	64	31	29	49	**66**	74	75	66	76	21	**37**	40	68	42	44	40
Least Developed Countries	2015	**25**	25	53	28	17	49	**52**	56	68	52	58	33	**33**	35	58	36	30	44
	2022	**28**	28	60	31	21	53	**54**	62	70	54	61	33	**37**	40	63	39	35	46
Small Island Developing States	2015	-	47	54	-	42	27	**69**	82	83	69	80	17	**56**	68	71	56	65	21
	2022	-	48	56	-	40	31	**67**	81	84	67	77	21	**56**	68	73	56	62	25
Fragile contexts	2015	**31**	34	55	31	20	50	**58**	65	73	58	61	33	**42**	47	62	42	36	43
	2022	**35**	36	61	35	22	54	**59**	67	72	59	58	38	**46**	50	66	46	38	47
INCOME GROUPINGS																			
Low income	2015	**11**	11	45	23	20	40	**52**	52	66	59	68	24	**24**	24	52	34	35	35
	2022	**14**	14	54	28	24	46	**56**	56	69	60	70	25	**29**	29	59	39	40	39
Lower middle income	2015	**52**	54	69	52	30	56	**61**	76	82	61	63	34	**56**	63	74	56	43	47
	2022	**63**	63	71	63	32	60	**62**	79	79	62	60	38	**62**	70	75	62	44	50
Upper middle income	2015	-	79	79	-	61	27	**88**	96	91	88	94	5	**83**	90	87	83	82	13
	2022	-	92	88	-	75	22	**91**	97	92	91	95	4	**86**	95	91	86	89	10
High income	2015	**91**	95	91	94	93	5	**96**	>99	96	98	99	<1	**95**	98	95	97	98	2
	2022	**84**	96	92	84	97	2	**97**	>99	97	98	99	<1	**94**	99	96	95	99	<1
WORLD	2015	**56**	58	70	56	41	43	**80**	88	88	80	84	14	**69**	74	80	69	64	28
	2022	**62**	65	74	62	45	45	**81**	89	87	81	83	16	**73**	79	81	73	66	28

ANNEX 9

Regional and global sanitation estimates

REGION	Year	Population (thousands)	% urban	RURAL						URBAN						TOTAL					
				At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation	At least basic	Limited (shared)	Unimproved	Open defecation	Annual rate of change in at least basic	Annual rate of change in open defecation
SDG REGIONS																					
Australia and New Zealand	2015	28 411	86	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	<1	0.00	0.00
	2022	31 363	87	-	-	-	-			-	-	-	-			>99	<1	<1	<1		
Central and Southern Asia	2015	1 926 327	35	53	9	6	33	2.89	-2.75	74	16	5	6	1.24	-0.79	60	11	6	23	2.44	-2.21
	2022	2 084 590	38	73	10	3	14			83	15	2	<1			77	11	3	9		
Eastern and South-Eastern Asia	2015	2 268 355	56	75	4	15	5	1.95	-0.39	91	4	4	<1	0.72	-0.08	84	4	9	3	1.52	-0.28
	2022	2 344 325	62	90	4	5	2			96	3	<1	<1			94	3	2	1		
Europe and Northern America	2015	1 100 651	76	93	<1	7	<1	0.17	-0.00	99	<1	<1	<1	0.03	-0.00	97	<1	2	<1	0.08	-0.00
	2022	1 118 593	78	94	<1	6	<1			99	<1	<1	<1			98	<1	2	<1		
Latin America and the Caribbean	2015	623 076	80	67	5	16	12	1.16	-1.08	90	4	4	1	0.47	-0.15	86	5	6	3	0.68	-0.40
	2022	660 269	82	75	6	14	5			93	4	3	<1			90	4	5	1		
Northern Africa and Western Asia	2015	493 116	61	75	5	12	9	1.03	-0.77	94	3	2	<1	0.32	-0.06	87	4	6	4	0.67	-0.38
	2022	553 690	63	86	3	8	2			96	2	1	<1			93	3	4	<1		
Oceania	2015	11 992	22	24	3	56	17	-0.05	0.02	73	9	16	3	-0.31	0.03	35	5	47	14	-0.15	0.05
	2022	13 676	23	23	4	57	16			69	9	18	3			33	5	48	13		
Sub-Saharan Africa	2015	972 748	39	22	9	38	31	0.38	-0.77	44	30	19	6	0.58	-0.21	30	17	31	21	0.56	-0.70
	2022	1 166 766	43	24	9	41	25			49	29	17	5			35	18	31	17		
OTHER REGIONAL GROUPINGS																					
Landlocked Developing Countries	2015	478 578	30	33	6	32	29	0.63	-1.24	61	21	15	4	0.09	-0.21	41	10	27	21	0.54	-1.00
	2022	563 805	32	37	7	35	21			62	22	14	2			45	12	28	15		
Least Developed Countries	2015	951 928	32	28	9	36	27	0.95	-1.12	46	26	22	5	0.56	-0.32	34	15	32	20	0.92	-1.00
	2022	1 125 179	36	36	10	35	19			51	28	18	3			41	16	29	13		
Small Island Developing States	2015	67 455	60	47	8	30	16	0.07	-0.30	82	11	5	2	0.09	-0.01	68	10	15	8	0.14	-0.16
	2022	71 976	62	45	8	33	15			83	11	4	2			68	10	15	7		
Fragile contexts	2015	1 650 219	40	34	9	32	25	0.88	-0.93	61	20	15	4	0.41	-0.19	45	14	25	17	0.82	-0.73
	2022	1 914 974	44	41	10	31	18			64	21	12	3			51	15	22	12		
INCOME GROUPINGS																					
Low income	2015	610 047	32	21	7	40	32	0.62	-1.20	45	24	26	6	0.29	-0.25	28	12	36	24	0.62	-1.00
	2022	737 605	35	28	8	42	23			49	24	23	3			35	13	35	16		
Lower middle income	2015	3 134 755	40	53	9	10	28	2.31	-2.09	73	16	5	5	0.93	-0.53	61	12	8	19	1.89	-1.61
	2022	3 432 097	43	69	9	8	14			80	15	3	2			74	12	6	9		
Upper middle income	2015	2 458 300	63	77	3	18	2	1.80	-0.26	92	4	4	<1	0.61	-0.04	86	3	9	1	1.26	-0.16
	2022	2 549 815	69	90	3	7	<1			96	2	1	<1			94	3	3	<1		
High income	2015	1 189 999	80	97	<1	2	<1	0.07	-0.00	>99	<1	<1	<1	0.01	-0.00	99	<1	<1	<1	0.03	-0.00
	2022	1 224 062	82	98	<1	1	<1			>99	<1	<1	<1			>99	<1	<1	<1		
WORLD	2015	7 426 435	54	59	6	15	20	1.60	-1.13	85	8	5	2	0.44	-0.18	73	7	10	10	1.15	-0.74
	2022	7 974 931	57	70	7	12	11			89	7	3	<1			81	7	7	5		

REGION	Year	RURAL							URBAN							TOTAL						
		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 in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections	Safely managed	Disposed in situ	Emptied and treated	Wastewater treated	Latrines and other	Septic tanks	Sewer connections
SDG REGIONS																						
Australia and New Zealand	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95	2	2	91	<1	8	91
	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96	1	1	93	<1	8	92
Central and Southern Asia	2015	37	36	<1	<1	38	21	2	40	23	4	13	21	35	33	38	32	1	5	32	26	13
	2022	54	53	<1	<1	54	27	2	46	26	4	16	20	41	37	51	43	1	7	41	32	15
Eastern and South-Eastern Asia	2015	32	18	<1	14	33	30	17	67	11	4	52	7	25	63	52	14	3	35	18	27	44
	2022	43	23	<1	20	31	41	21	77	12	5	60	7	29	63	64	16	3	45	16	33	48
Europe and Northern America	2015	70	10	17	43	16	28	49	87	2	2	82	2	4	93	83	4	6	73	6	10	82
	2022	72	9	16	47	16	25	53	88	2	2	84	2	3	94	84	3	5	76	5	8	85
Latin America and the Caribbean	2015	-	-	-	7	25	31	17	43	7	2	34	7	14	74	42	11	3	28	10	17	63
	2022	-	-	-	10	24	37	20	50	6	2	42	5	13	79	49	10	3	36	8	16	70
Northern Africa and Western Asia	2015	47	18	8	20	19	30	30	63	5	2	55	6	12	80	56	10	5	42	11	19	61
	2022	57	18	8	31	14	33	43	69	4	1	63	2	10	86	64	9	4	51	6	18	71
Oceania	2015	-	-	-	1	14	10	3	35	16	4	14	11	39	32	-	-	-	4	14	16	9
	2022	-	-	-	1	13	10	3	33	14	3	16	9	33	36	-	-	-	5	13	15	10
Sub-Saharan Africa	2015	18	17	<1	<1	27	2	1	28	19	<1	9	39	19	17	22	18	<1	4	32	9	7
	2022	20	19	<1	<1	29	3	1	30	22	<1	8	38	25	15	24	20	<1	4	33	12	7
OTHER REGIONAL GROUPINGS																						
Landlocked Developing Countries	2015	25	24	<1	<1	34	4	1	39	23	2	14	43	11	28	29	24	<1	5	36	6	9
	2022	29	28	<1	<1	38	5	1	40	24	2	14	45	13	26	32	27	<1	5	40	8	9
Least Developed Countries	2015	19	19	<1	<1	29	7	<1	27	22	<1	4	40	22	11	22	20	<1	2	33	12	4
	2022	25	23	<1	2	33	10	3	30	22	<1	7	38	25	15	27	23	<1	4	35	15	8
Small Island Developing States	2015	-	-	-	2	30	19	6	48	20	2	25	18	28	48	41	24	1	16	23	24	31
	2022	-	-	-	3	27	19	7	47	20	2	25	18	30	46	40	23	1	16	21	26	31
Fragile contexts	2015	23	21	<1	1	30	10	3	36	20	3	13	34	19	28	28	21	2	6	31	14	13
	2022	28	25	<1	3	33	13	5	39	21	2	16	32	23	30	33	23	1	8	32	17	16
INCOME GROUPINGS																						
Low income	2015	15	13	<1	1	23	3	2	30	16	2	12	39	12	17	19	14	1	5	28	6	7
	2022	20	16	<1	3	26	5	5	33	16	<1	16	37	14	21	24	16	<1	8	30	8	11
Lower middle income	2015	37	35	<1	2	34	25	3	41	25	2	13	21	38	30	39	31	1	6	29	30	14
	2022	50	47	<1	2	44	31	4	45	27	2	15	20	43	32	48	38	1	8	33	36	16
Upper middle income	2015	30	14	<1	16	36	22	21	60	5	3	52	6	12	77	49	8	2	39	17	15	57
	2022	41	16	<1	24	35	29	28	71	5	4	62	6	14	78	62	8	3	50	15	18	64
High income	2015	81	8	18	54	7	32	59	92	2	5	85	2	7	91	90	3	8	79	3	13	84
	2022	82	8	16	58	7	28	63	93	2	4	88	<1	6	93	91	3	6	83	2	10	87
WORLD	2015	36	25	2	9	31	22	12	60	11	3	46	11	19	63	49	17	3	29	20	20	39
	2022	46	33	2	11	37	26	14	65	12	3	50	11	22	63	57	21	2	33	22	24	42

ANNEX 10

Regional and global hygiene estimates

REGION	Year	Population (thousands)	% urban	RURAL				URBAN				TOTAL			
				Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic	Basic	Limited (without water or soap)	No facility	Annual rate of change in basic
SDG REGIONS															
Australia and New Zealand	2015	28 411	86	-	-	-	-	-	-	-	-	-	-	-	-
	2022	31 363	87	-	-	-		-	-	-		-	-	-	
Central and Southern Asia	2015	1 926 327	35	**52**	43	5	2.54	**79**	19	2	1.01	**61**	35	4	2.07
	2022	2 084 590	38	**70**	26	4		**86**	11	3		**76**	20	4	
Eastern and South-Eastern Asia	2015	2 268 355	56	-	-	3	-	-	-	1	-	-	-	2	-
	2022	2 344 325	62	**89**	9	2		**95**	5	<1		**93**	6	<1	
Europe and Northern America	2015	1 100 651	76	-	-	-	-	-	-	-	-	-	-	-	-
	2022	1 118 593	78	-	-	-		-	-	-		-	-	-	
Latin America and the Caribbean	2015	623 076	80	**62**	18	20	0.57	-	-	-	-	-	-	-	-
	2022	660 269	82	**66**	-	-		-	-	-		-	-	-	
Northern Africa and Western Asia	2015	493 116	61	**67**	16	17	-	**87**	-	-	-	**79**	11	10	-
	2022	553 690	63	-	-	3		-	-	-		-	-	-	
Oceania	2015	11 992	22	**28**	31	42	0.38	**66**	23	11	0.66	**36**	29	35	0.45
	2022	13 676	23	**30**	29	41		**71**	21	8		**39**	27	33	
Sub-Saharan Africa	2015	972 748	39	**16**	45	39	0.04	**36**	36	29	-0.51	**24**	41	35	-0.09
	2022	1 166 766	43	**17**	46	38		**32**	38	30		**23**	42	34	
OTHER REGIONAL GROUPINGS															
Landlocked Developing Countries	2015	478 578	30	**26**	43	31	0.25	**55**	27	18	-0.52	**35**	38	27	0.09
	2022	563 805	32	**28**	43	29		**52**	29	19		**36**	38	26	
Least Developed Countries	2015	951 928	32	**23**	45	32	0.88	**40**	35	25	0.37	**29**	42	30	0.79
	2022	1 125 179	36	**29**	45	26		**43**	39	19		**34**	43	23	
Small Island Developing States	2015	67 455	60	**37**	31	33	0.01	**65**	19	15	-0.25	**54**	24	22	-0.09
	2022	71 976	62	**37**	35	29		**63**	23	13		**53**	28	19	
Fragile contexts	2015	1 650 219	40	**31**	41	28	1.19	**56**	26	18	0.21	**41**	35	24	0.88
	2022	1 914 974	44	**39**	38	23		**57**	27	16		**47**	33	20	
INCOME GROUPINGS															
Low income	2015	610 047	32	**16**	43	41	0.63	**38**	34	28	0.24	**23**	40	37	0.58
	2022	737 605	35	**21**	47	33		**39**	39	22		**27**	44	29	
Lower middle income	2015	3 134 755	40	**53**	37	10	1.48	**75**	18	8	0.26	**62**	29	9	1.05
	2022	3 432 097	43	**63**	28	8		**76**	17	7		**69**	23	8	
Upper middle income	2015	2 458 300	63	-	-	4	-	-	-	5	-	-	-	5	-
	2022	2 549 815	69	**89**	7	4		**90**	4	5		**90**	5	5	
High income	2015	1 189 999	80	-	-	-	-	-	-	-	-	-	-	-	-
	2022	1 224 062	82	-	-	-		-	-	-		-	-	-	
WORLD	2015	7 426 435	54	**53**	35	12	1.71	-	-	7	-	**67**	24	9	1.22
	2022	7 974 931	57	**65**	25	10		**83**	10	6		**75**	17	8	

UN WATER

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

PERIODIC REPORTS:

Blueprint for Acceleration: Sustainable Development Goal 6 Synthesis Report on Water and Sanitation 2023
The report, written by the UN-Water family of Members and Partners, is a concise guide to delivering concrete results. It offers actionable policy recommendations directed towards senior decision-makers in Member States, other stakeholders and the United Nations System to get the world on track to achieve SDG 6 by 2030. It is released ahead of the discussions of Member States and relevant stakeholders at the 2023 High-level Political Forum on Sustainable Development (HLPF), which includes a Special Event focused on SDG 6 and the Water Action Agenda.

SDG 6 Progress Updates – by SDG 6 global indicator
This series of reports provides an in-depth update and analysis of progress towards the different SDG 6 targets and identifies priority areas for acceleration. They are: Progress on household drinking water, sanitation and hygiene (WHO and UNICEF, as part of the JMP reports); Progress on wastewater treatment (WHO and UN-Habitat); Progress on ambient water quality (UNEP); Progress on water-use efficiency (FAO); Progress on level of water stress (FAO); Progress on integrated water resources management (UNEP); Progress on transboundary water cooperation (UNECE and UNESCO); Progress on water-related ecosystems (UNEP); and Progress on international cooperation and local participation (WHO, as part of the GLAAS reports). The reports, produced by the responsible custodian agencies, present the latest available country, region and global data on the SDG 6 global indicators, and are published every two to three years.

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The GLAAS report is produced by 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 water and sanitation. It is a substantive input into the activities of Sanitation and Water for All (SWA) as well as the progress reporting on SDG 6 (see above).

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UN-WATER PLANNED PUBLICATIONS

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- UN-Water Policy Brief on Transboundary Waters Cooperation – Update
- Progress on wastewater treatment, ambient water quality, water-use efficiency, level of water stress, integrated water resources management, transboundary water cooperation and water-related ecosystems – 2024 update (release August 2024)

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KEY MESSAGES

DRINKING WATER

- In 2022, 73% of the global population used safely managed drinking water services, 62% rural and 81% urban.
- 2.2 billion people lacked safely managed drinking water, including 1.5 billion with basic services, 292 million with limited services, 296 million with unimproved and 115 million drinking surface water.
- Estimates for safely managed services were available for 142 countries and six out of eight SDG regions, representing 51% of the global population.
- Achieving universal access to safely managed services by 2030 will require a sixfold increase in current rates of progress (20-fold in least developed countries, 19-fold in fragile contexts).

SANITATION

- In 2022, 57% of the global population used safely managed sanitation services, 46% rural and 65% urban.
- 3.5 billion people lacked safely managed sanitation, including 1.9 billion with basic services, 570 million with limited services, 545 million with unimproved services and 419 million practising open defecation.
- Estimates for safely managed services were available for 135 countries and seven out of eight SDG regions, representing 86% of the global population.
- Achieving universal access to safely managed services by 2030 will require a fivefold increase in current rates of progress (16-fold in least developed countries, 15-fold in fragile contexts).

HYGIENE

- In 2022, 75% of the global population used basic hygiene services, 65% rural and 83% urban.
- 2 billion people lacked basic hygiene services, including 1.3 billion with limited services and 653 million with no facility.
- Estimates for basic services were available for 84 countries and four out of eight SDG regions, representing 69% of the global population.
- Achieving universal access to basic hygiene services by 2030 will require a threefold increase in current rates of progress (12-fold in least developed countries and eightfold in fragile contexts).

MENSTRUAL HEALTH

- 53 countries had data for at least one menstrual health indicator in 2022, and three quarters were low-income or lower-middle-income.
- Adolescent girls and women living in rural areas were more likely to use reusable menstrual materials or no materials at all.
- Adolescent girls and women in the poorest wealth quintile and those with functional difficulties were more likely to lack a private place to wash and change their menstrual materials at home.
- Many adolescent girls and women did not participate in school, work or social activities during menstruation but there was significant variation between and within countries.

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World Health Organization