

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

SPECIAL FOCUS ON INEQUALITIES



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**Progress on household drinking water, sanitation and hygiene 2000-2017:
Special focus on inequalities**

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1. Highlights

Leave no one behind

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

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



DRINKING WATER

2000-2017

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

In 2017

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

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

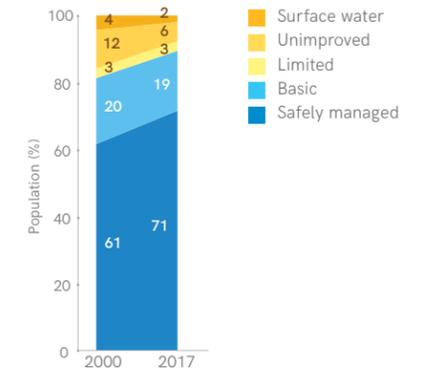


FIGURE 1 Global drinking water coverage, 2000-2017 (%)

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

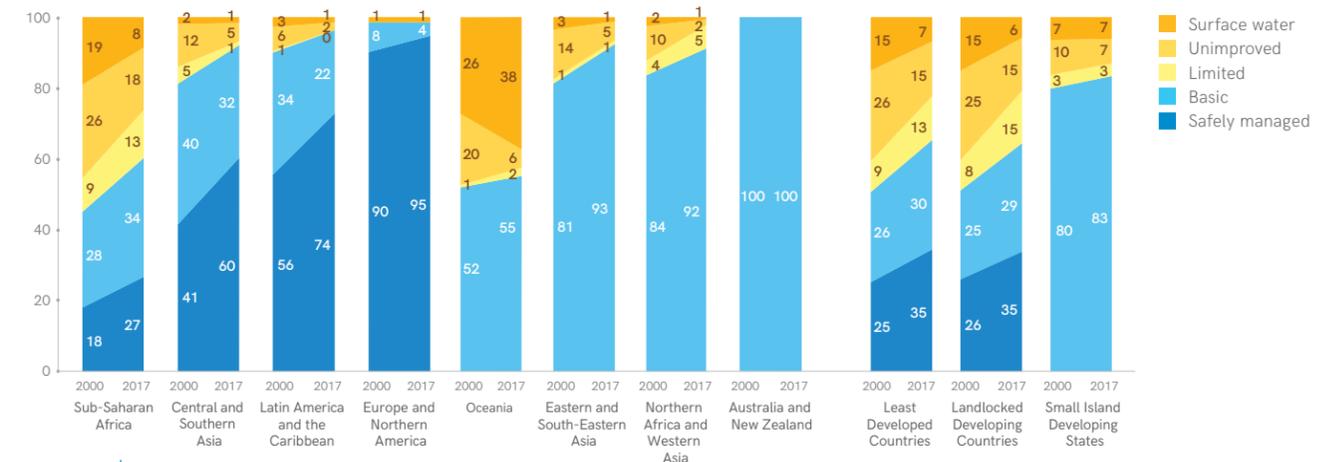


FIGURE 2 Regional drinking water coverage, 2000-2017 (%)

In 2017, 117 countries¹ had estimates for safely managed drinking water services

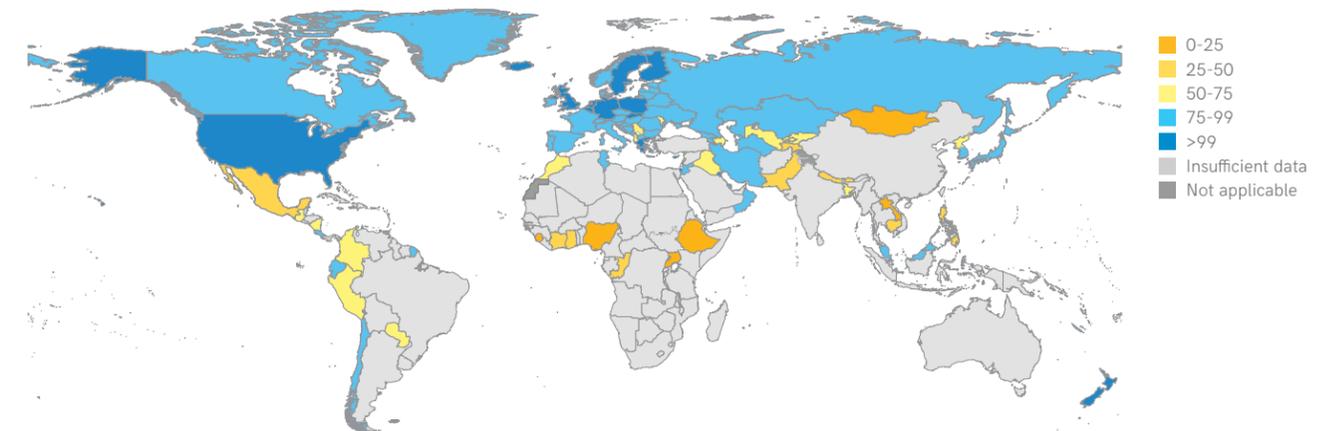


FIGURE 3 Proportion of population using safely managed drinking water services, 2017 (%)

¹ The JMP tracks progress for 232 countries, areas and territories, including all United Nations Member States. Statistics in this report refer to countries, areas or territories.

SANITATION

2000-2017

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

In 2017

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

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

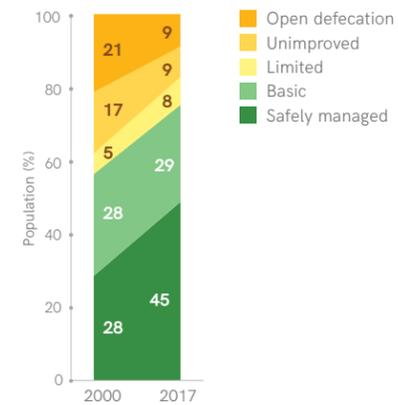


FIGURE 4 Global sanitation coverage, 2000-2017 (%)

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

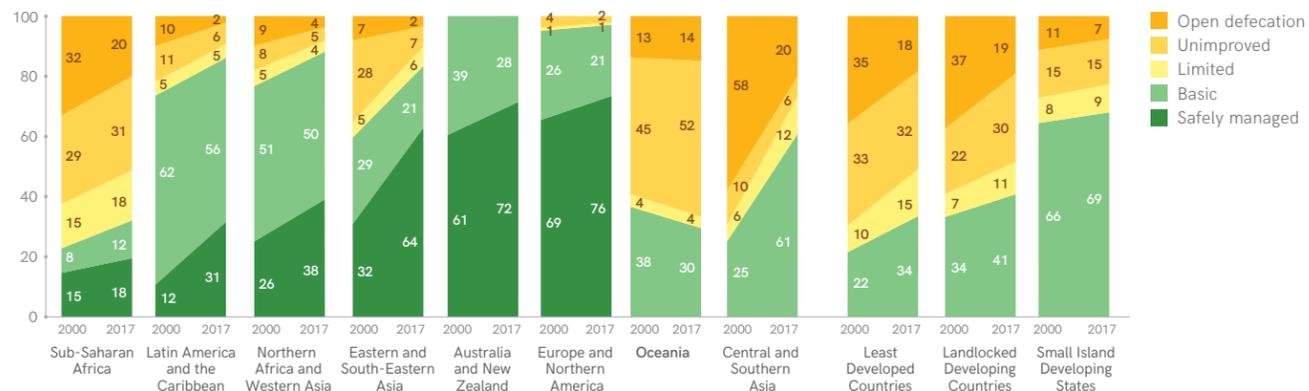


FIGURE 5 Regional sanitation coverage, 2000-2017 (%)

In 2017, 96 countries had estimates for safely managed sanitation

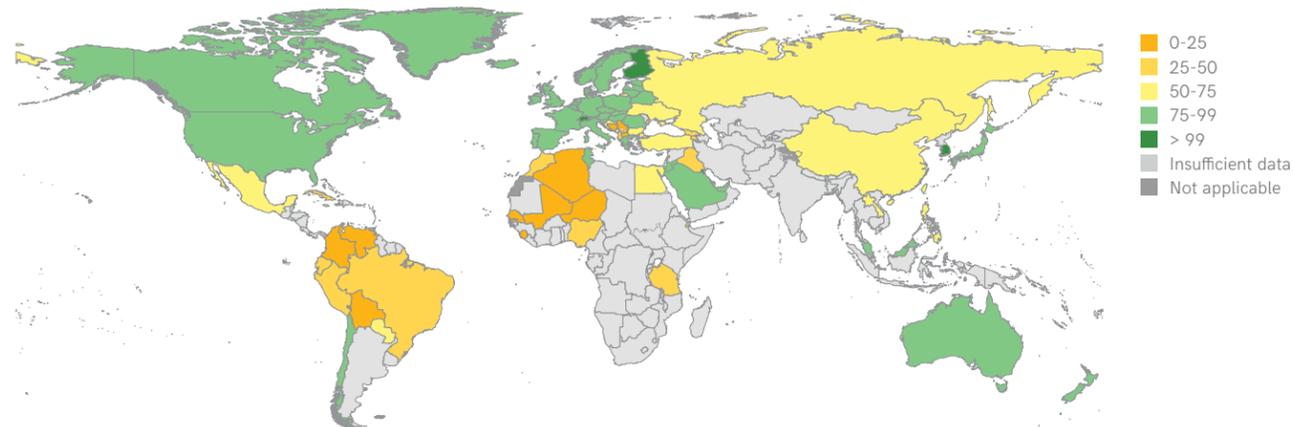


FIGURE 6 Proportion of population using safely managed sanitation services, 2017 (%)

HYGIENE

In 2017²

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

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

Three out of five people had basic handwashing facilities in 2017

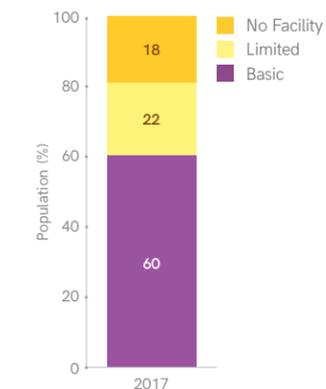


FIGURE 7 Global handwashing coverage, 2017 (%)

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

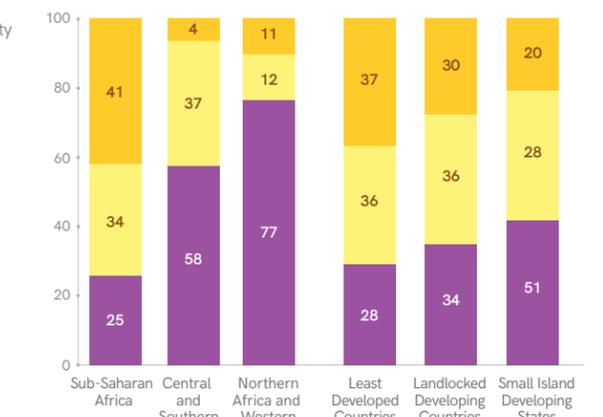


FIGURE 8 Regional handwashing coverage, 2017 (%)

In 2017, 78 countries had estimates for basic handwashing facilities

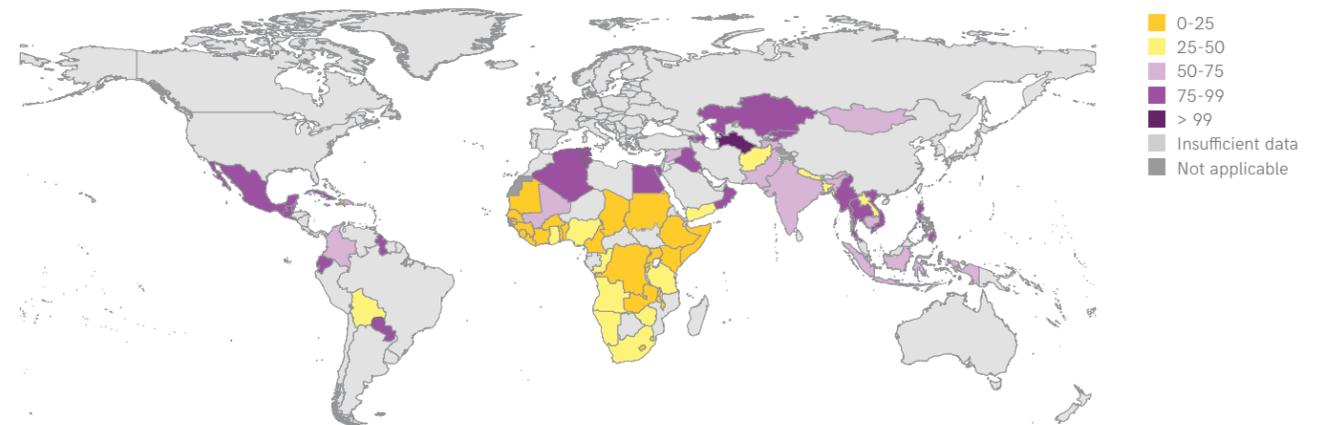


FIGURE 9 Proportion of population with basic handwashing facilities at home, 2017 (%)

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

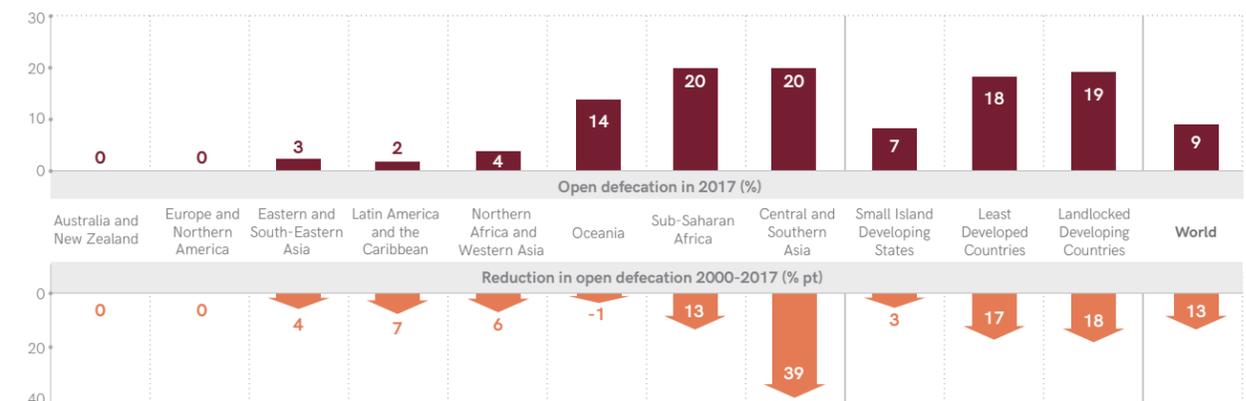


FIGURE 10 Proportion of population practising open defecation in 2017, and percentage point change, 2000-2017 (%)

2. Introduction

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

The 2030 agenda: Leave no one behind

Transforming our world: The 2030 Agenda for Sustainable Development³ is described as a plan of action for people, planet and prosperity. It comprises 17 Sustainable Development Goals and 169 global targets. These are

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

integrated and indivisible to balance the social, economic and environmental dimensions of sustainable development. The 2030 Agenda commits UN member states to take bold and transformative steps to 'shift the world onto a sustainable and resilient path', seeks to realize the human rights of all, to achieve gender equality and the empowerment of women and girls, and ensure 'no one will be left behind'. It is an ambitious universal agenda to be implemented by all countries and stakeholders in partnership.

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

	SDG global targets	SDG global indicators
	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services
	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using a) safely managed sanitation services and b) a hand-washing facility with soap and water
	1.4 By 2030, ensure all men and women, in particular the poor and vulnerable, have equal rights to economic resources as well as access to basic services...	1.4.1 Proportion of population living in households with access to basic services (including access to basic drinking water, basic sanitation and basic handwashing facilities)
	4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	4.a.1 Proportion of schools with access to... (e) basic drinking water, (f) single-sex basic sanitation facilities, and (g) basic handwashing facilities
	3.8 Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality and affordable essential medicines and vaccines for all	[Proportion of health care facilities with basic WASH services]

TABLE 1 SDG global targets and indicators related to WASH

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

The JMP has recently established global baseline estimates for WASH in schools and WASH in health care facilities (Box 1). This report provides an update on progress in reducing inequalities in WASH services at the household level between 2000 and 2017. It follows on and supersedes the 2017 report Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines⁴.

Localizing the SDGs: Setting national targets

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

⁴ Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines. Geneva: World Health Organization and United Nations Children's Fund, July 2017 <<https://washdata.org/report/jmp-2017-report-final>>
⁵ United Nations, Transforming Our World: The 2030 Agenda for Sustainable Development, UN General Assembly Resolution A/RES/70/1, 21 October 2015 (Paragraph 55), <<https://sustainabledevelopment.un.org/post2015/transformingourworld>>

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

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

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

Achieving universal targets requires faster progress among disadvantaged groups

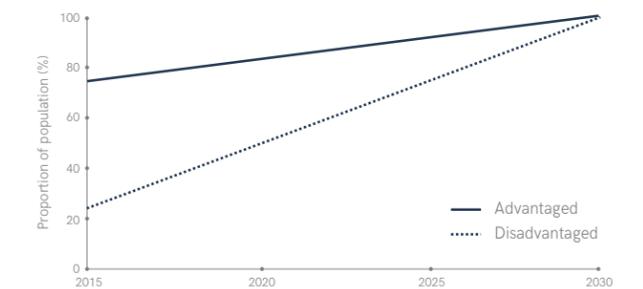


FIGURE 11 Illustration of progressive reduction of inequalities between advantaged and disadvantaged groups

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



In 2016

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



In 2016

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

Reducing inequalities: Metrics for assessing progress

The JMP has established several metrics for assessing progress in reducing inequalities in WASH, which are used throughout this report (Box 2). Since the 2017 progress update, the JMP global database on inequalities has been substantially expanded. It now includes service level and facility type estimates disaggregated by wealth quintile⁶ and sub-national region for nearly 100 countries, enabling further analysis of trends in inequalities within countries. Box 3 summarizes the main dimensions of inequality that should be considered in national or sub-national WASH monitoring systems.

The JMP is also responsible for assessing the achievement of international targets at national, regional and global levels.

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

Full realization of the SDG targets, which aim to 'end' open defecation and achieve 'universal access' to WASH 'for all', will be a challenge for all countries. While JMP estimates are based on the best available national data, there are inherent uncertainties in all national statistics.

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

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

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



CHART A

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



CHART B

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

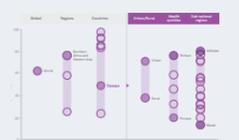


CHART C

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

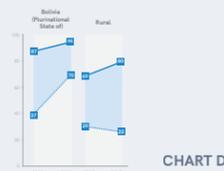


CHART D

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

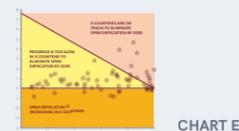


CHART E

Box 3: Dimensions of inequality in WASH services

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

Geographic location

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

Socio-economic groups

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

Individual characteristics

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



3. Eliminating open defecation

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

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

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

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



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

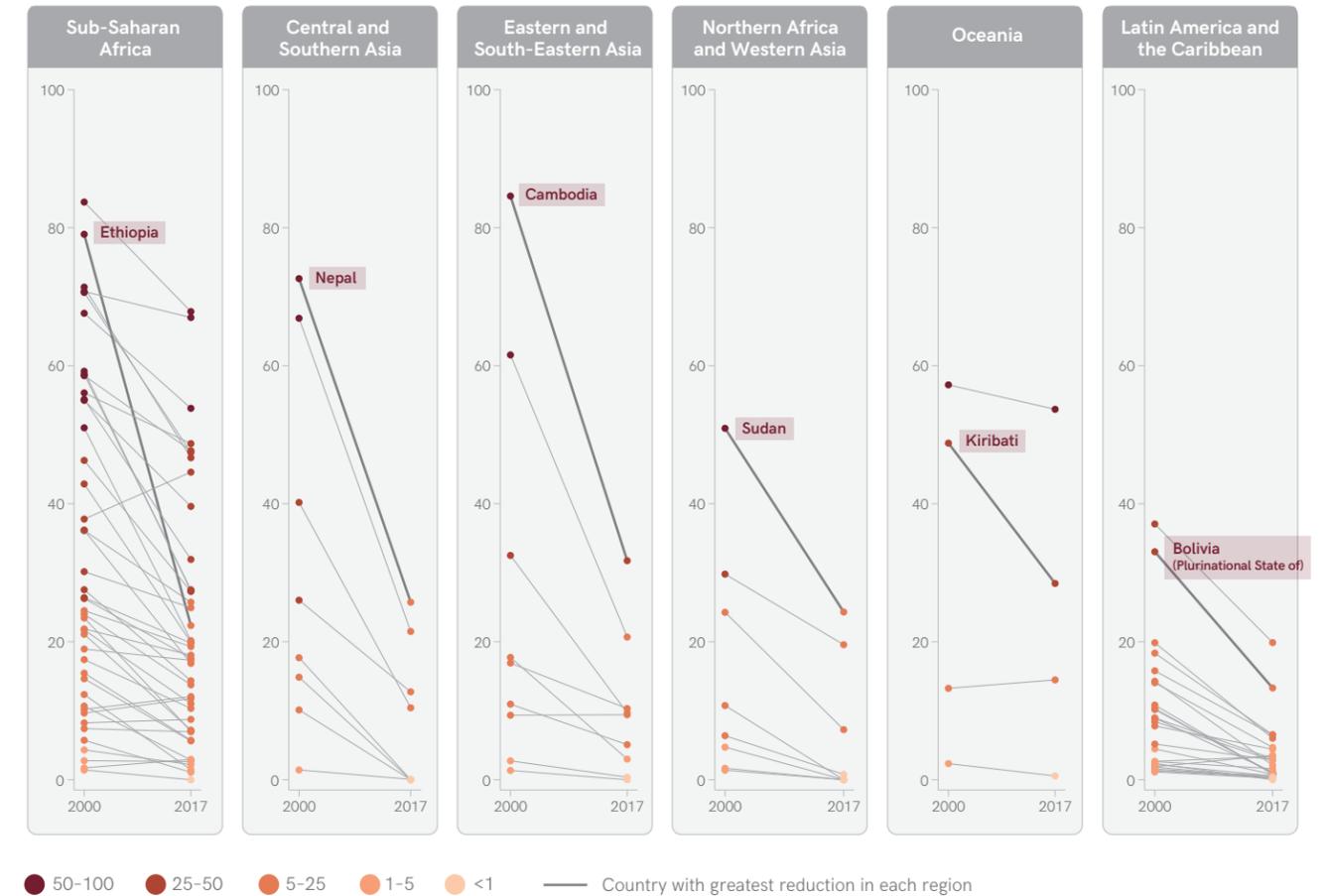


FIGURE 13 Proportion of population practising open defecation, by country and SDG region, 2000-2017 (%)

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

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

