

Progress on drinking water, sanitation and hygiene in schools

2000-2021 DATA UPDATE



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



Progress on drinking water, sanitation and hygiene in schools: 2000-2021 data update

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SECTION 1

Introduction



Global progress on WASH in schools

The World Health Organization (WHO) and the United Nations Children's Fund (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 releases updated estimates for WASH in households in odd years and updated estimates for WASH in schools and health care facilities in even years. This data update presents national, regional and global estimates for WASH in schools up to the year 2021, and includes additional analysis on efforts to prepare schools for future pandemics and provide disability-inclusive WASH services in schools.

The 2030 Agenda for Sustainable Development includes global goals and targets for water and sanitation and for education. Goal 4 aims to 'ensure inclusive and quality education for all and promote lifelong learning' and includes targets to build and upgrade education facilities that are child, disability and gender-sensitive and provide safe and effective learning environments for all (4.a). This includes providing all schools with access to electricity, computers, the internet, adapted infrastructure and materials for students with disabilities, and basic WASH services (4.a.1). 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) for all.

The JMP uses service ladders to benchmark and compare progress across countries on WASH in schools (Figure 1). These service ladders are

designed to track progress towards a basic level of service, which is the indicator used for global monitoring of SDG targets for WASH in schools. While the basic service indicators are universally relevant, they do not capture all aspects of WASH services that are important for a safe and inclusive learning environment. The JMP aims to highlight examples of other relevant indicators included in national monitoring systems and will consider reporting on additional service levels in future. This report examines emerging national data related to pandemic preparedness and disability-inclusive WASH services in schools, which are not part of the existing JMP service ladders.

For the purposes of SDG monitoring: a basic drinking water service means schools have access to an improved water source¹ and water is

¹ Improved sources include piped water, boreholes or tubewells, protected dug wells, protected springs, and packaged or delivered water. Unimproved sources include unprotected wells, unprotected springs and surface water.

available, a basic sanitation service means schools have improved sanitation facilities² that are single-sex and usable³, and a basic hygiene service means schools have a handwashing facility with soap and water⁴ available at the time of the survey. The ladders also distinguish between schools providing limited levels of service that do not fully meet the criteria for basic services, and schools that provide no service at all.

² Improved facilities include flush/pour-flush toilets, ventilated improved pit latrines, composting toilets and pit latrines with a slab or platform. Unimproved facilities include pit latrines without a slab or platform, hanging latrines and bucket latrines.

³ Pre-primary schools must have improved sanitation facilities that are usable, but they do not need to be single-sex. Facilities are considered usable if they are available to students (doors are unlocked or a key is available at all times), functional (the toilet is not broken, the toilet hole is not blocked and water is available for flush/pour-flush toilets) and private (there are closeable doors that lock from the inside and no large gaps in the structure).

⁴ Handwashing facilities may be fixed or mobile, and include sinks 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.

JMP service ladders for WASH in schools

SERVICE LEVEL	DRINKING WATER	SANITATION	HYGIENE
BASIC SERVICE	Drinking water from an improved source and water is available at the school at the time of the survey	Improved sanitation facilities at the school that are single-sex and usable (available, functional and private) at the time of the survey	Handwashing facilities with water and soap available at the school at the time of the survey
LIMITED SERVICE	Drinking water from an improved source but water is unavailable at the school at the time of the survey	Improved sanitation facilities at the school that are either not single-sex or not usable at the time of the survey	Handwashing facilities with water but no soap available at the school at the time of the survey
NO SERVICE	Drinking water from an unimproved source or no water source at the school	Unimproved sanitation facilities or no sanitation facilities at the school	No handwashing facilities or no water available at the school

FIGURE 1 JMP service ladders for global monitoring of WASH in schools



This data update assesses the status of WASH in schools in 2021 and progress made since 2015, and analyses the acceleration required to meet the SDG targets. Six years into the SDG period, the world is not on track to achieve universal access (>99%) to basic WASH in schools by 2030 (Figure 2). Achieving universal coverage requires a 14x increase in current rates of progress on basic drinking water, a 3x increase in progress on basic sanitation, and a 5x increase in progress on basic hygiene services. If current progress continues, one in four schools will still lack basic drinking water, one in five will lack basic sanitation, and one in three will lack a basic hygiene service in 2030. While there has been a steady reduction in schools with no services at all, further acceleration is required to ensure that all schools have at least limited drinking water and hygiene services by 2030. At current rates of progress, one in seven schools will still have no hygiene service and one in nine will have no drinking water service in 2030.

The JMP produces regional and global estimates if data on WASH in schools are available for at least 30% of the relevant school-age population (see Annex 1: Methods). Figure 3 shows that the latest aggregate estimates for SDG regions often mask significant inequalities in national coverage of basic WASH services in schools. For example, in Northern Africa and Western Asia, basic sanitation coverage in schools ranges from universal access (>99%) in eight countries to 49% in the Syrian Arab Republic. However, inequalities are even greater for basic drinking water and basic hygiene, ranging from universal access to just 17% basic drinking water in Libya and 8% basic hygiene in Sudan. Sub-Saharan Africa has the most significant gap in national coverage of basic hygiene services, ranging from universal access in the Seychelles to just 5% in Eritrea.

Achieving global SDG targets by 2030 requires an acceleration in current rates of progress



FIGURE 2 Global coverage of WASH in schools 2015–2021 and acceleration required to meet targets by 2030 (%)

Significant inequalities persist between countries and SDG regions

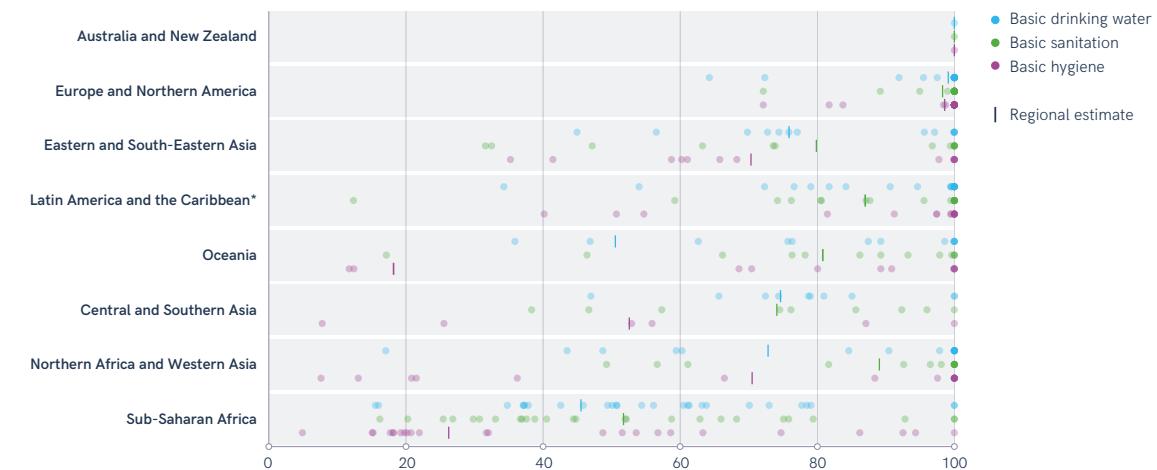


FIGURE 3 Proportion of schools with basic drinking water, sanitation and hygiene, by SDG region and country in 2021 (%)

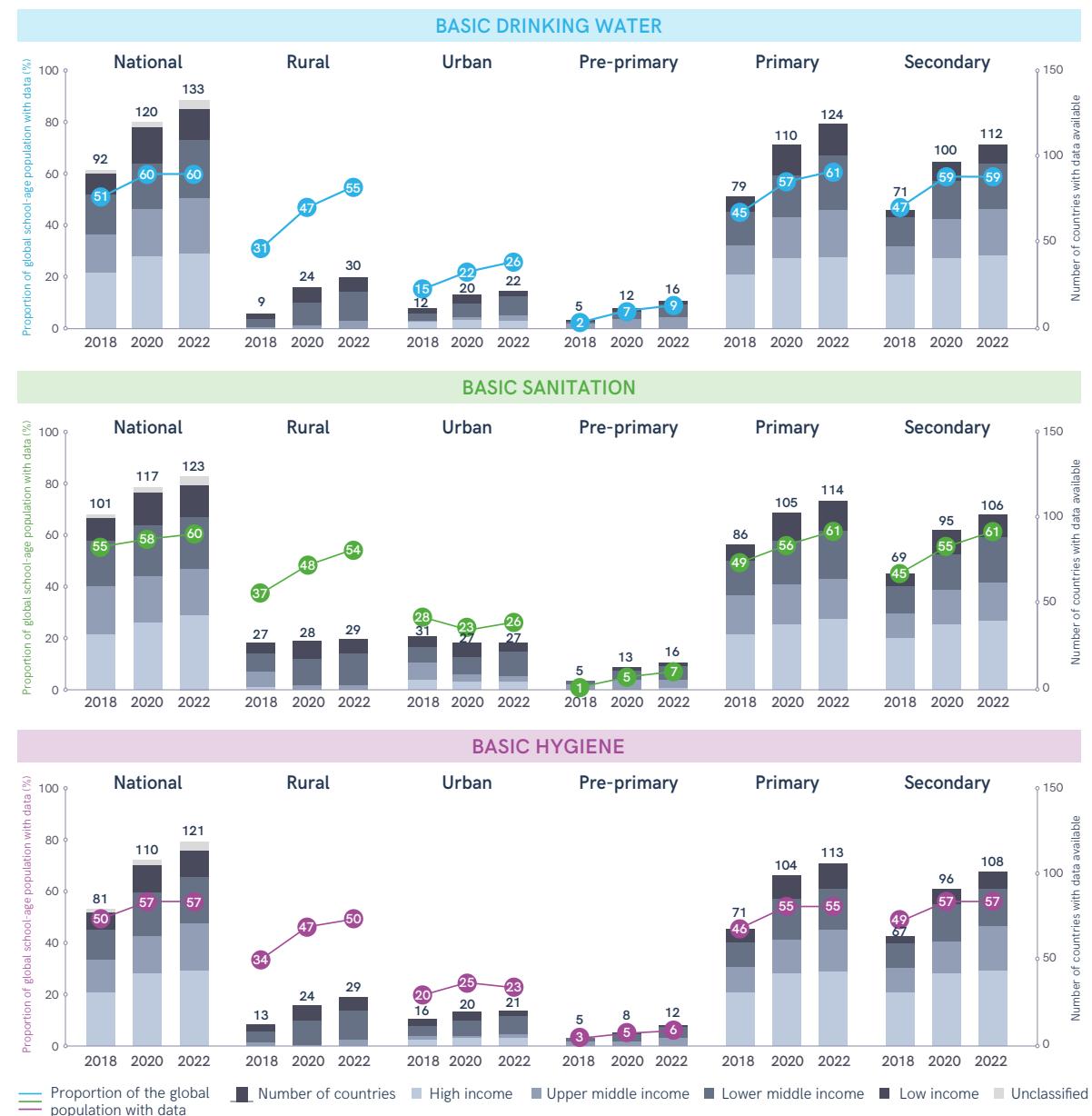
Note: Regional estimates are weighted by school-age population. There were insufficient data to produce regional estimates for basic drinking water and hygiene in Latin America and the Caribbean in 2021.

Since the 2018 JMP global baseline report, there has been a significant improvement in the availability of national data for monitoring the SDG global indicators on WASH in schools. Both the total number of countries⁵ with estimates and the proportion of the global school-age population for which estimates are available have increased with each JMP update (Figure 4). The number of countries with national estimates available for basic drinking water in schools has increased from 92 to 133, resulting in a growth in population coverage from 51% to 60%. The total number of countries with estimates for primary schools has increased by more than half (from 79 to 124). Relatively few countries have disaggregated data for basic drinking water in rural and urban schools, but the number of rural estimates has tripled (from 9 to 30) and the number of urban estimates has nearly doubled (from 12 to 22).

Data availability for basic sanitation has also increased, from 101 to 123 countries, representing 60% of the global school-age population. There has been little change in the number of countries with rural and urban estimates, but as the mix of countries with recent data has changed over time, population coverage in rural has increased (from 37% to 54%), and urban coverage has decreased. Between 2018 and 2022, the number of countries with pre-primary estimates for basic sanitation has tripled (from 5 to 16), but these still only represent 7% of the relevant school-age population.

Between 2018 and 2022, the number of countries with estimates for basic hygiene increased from 81 to 121, representing a modest increase in population coverage (from 50% to 57%). The number of

National data availability is improving, but disaggregation remains a challenge



⁵ The JMP tracks progress in 234 countries, areas and territories, including all United Nations Member States. Statistics in this report refer to countries, areas and territories. For further details see <https://washdata.org>.

FIGURE 4 Proportion of school-age population and number of countries with estimates available in JMP progress updates 2018–2022



countries with estimates has increased faster in rural (from 13 to 29) than urban (from 16 to 21) areas.

While the number of countries with basic hygiene estimates for secondary schools has increased by more than half (from 67 to 108), population coverage has not changed since the 2020 update.

Figure 5 compares data availability for basic WASH services in the JMP 2021 update for WASH in households and the JMP 2022 updates for WASH in schools and WASH in health care facilities (forthcoming). Population coverage for each setting varies by income group. Still, it is generally higher for households than for schools and health care facilities, except in upper-middle and high-income countries, which have far fewer data on hygiene in households. Data coverage is also higher for schools than for health care facilities, apart from upper-middle income countries where the reverse is true. In all other income groups, data for basic drinking water, sanitation and hygiene in schools are now available for more than 50% of the school-age population.

Data availability is generally better for households than for schools and health care facilities



FIGURE 5 Proportion of population with estimates available in JMP progress updates for basic WASH in households (2020), schools (2021) and health care facilities (2021), by income group (%)



Progress on drinking water in schools

In 2021,

- 133 countries and 7 out of 8 SDG regions had national estimates for basic drinking water services in schools, representing 60% of the global school-age population.
- 71% of schools had a basic drinking water service (improved source with water available at the time of the survey), 14% had a limited service (improved source with water unavailable), and 15% had no service (unimproved source or no source at all).
- 546 million children lacked a basic drinking water service at their school, including 258 million whose school had an improved source with no water available, and 288 million whose school still had no water service.
- Coverage of basic drinking water services ranged from 46% in low income countries to 100% in high income countries.
- Sub-Saharan Africa was the only SDG region where coverage of basic drinking water services remained below 50%.
- 2 out of 3 primary schools (67%) and 3 out of 4 secondary schools (76%) had a basic drinking water service. There were insufficient data to generate global estimates for pre-primary schools.
- One third of children without a basic drinking water service at their school lived in Least Developed Countries (LDCs), and more than half lived in fragile contexts⁶.
- Achieving universal access to basic drinking water services in schools by 2030 would require a 14x increase in the current rate of progress (14x increase in LDCs and a reversal of the negative trend in fragile contexts).
- Only two SDG regions are on track to achieve universal access by 2030. At current rates of progress, the world will only reach 73% coverage by 2030, leaving approximately 470 million children⁷ without a basic drinking water service at their school.
- A growing number of countries monitor the provision of disability-inclusive WASH services in schools, but national definitions and indicators vary widely, making cross-country comparison difficult.

⁶ The OECD States of Fragility series identifies 57 'fragile contexts' including 13 that are classified as 'extremely fragile' (as of June 2022). Source: <<https://www.oecd.org/dac/states-of-fragility-fa5a6770-en.htm>>.

⁷ UNICEF projections based on UNESCO UIS country estimates for the school-age population 2000–2021.

Between 2015 and 2021, global coverage of basic drinking water in schools increased from 70% to 71% (Figure 6). While the proportion of schools with no service decreased from 18% to 15%, the proportion with a limited service increased from 12% to 14%. It is estimated that the SDG regions of Australia and New Zealand and Europe and Northern America have already achieved >99% coverage, although estimates are not available for all countries. Over the same period, coverage remained largely unchanged in Eastern and South-Eastern Asia, Northern Africa and Western Asia, and Oceania, while sub-Saharan Africa and Central and Southern Asia both increased coverage by three percentage points (% pts). While

there were insufficient national data to calculate recent trends in Latin America and the Caribbean, the proportion of schools with no service decreased from 17% to 15%. In LDCs, coverage of basic services increased from 53% to 56%, but in fragile contexts coverage has stagnated at just 52% (Figure 7).

In 2021, 133 countries, areas and territories had national estimates available for basic drinking water services in schools. While coverage exceeded 75% in two out of three countries with estimates, 18 countries had still not exceeded 50% coverage. A third of the 61 countries with universal access (>99%) to basic drinking water were in Australia and New Zealand and

7 out of 10 schools had a basic water service in 2021

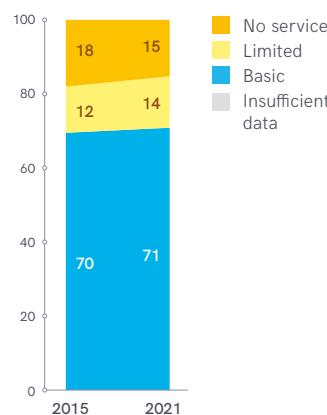


FIGURE 6 Global coverage of drinking water services in schools 2015–2021 (%)

7 out of 8 SDG regions had estimates for basic drinking water services in 2021

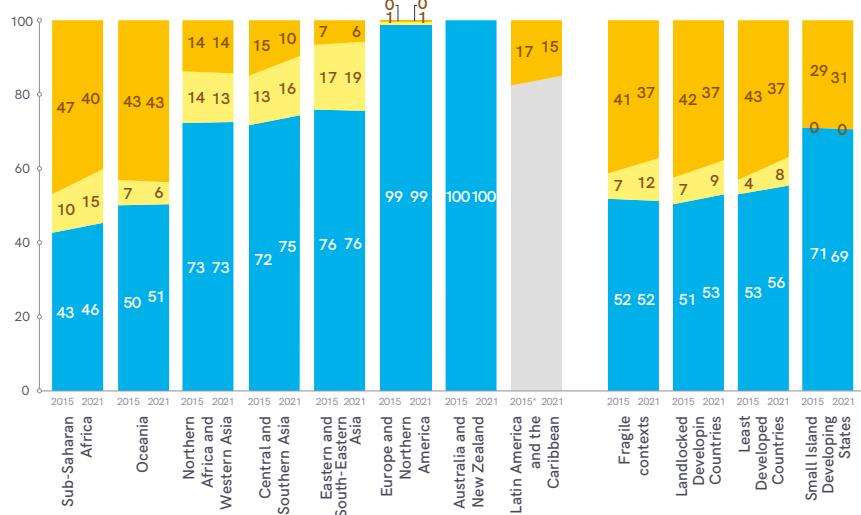


FIGURE 7 Regional coverage of drinking water services in schools 2015–2021 (%)

Note: The 2015 values for Latin America and the Caribbean were 69% basic, 14% limited and 17% no service

Europe and Northern America. All other SDG regions had at least one country where basic service coverage did not exceed 50%, but more than half of these countries were in sub-Saharan Africa (Figure 8).

School drinking water service levels also varied widely between countries. 19 countries had data on the proportion of schools with no drinking water service but lacked sufficient data to determine how many of the remaining schools met the criteria for limited or basic services (shown in grey in Figure 9). More than a quarter of schools had a limited service in eight countries, and in 23 countries more than a third of schools had no service at all. In Ethiopia, Central African Republic and Niger, more than three quarters of schools still had no service in 2021.

89 out of 133 countries with estimates had >75% coverage of basic drinking water services in schools in 2021

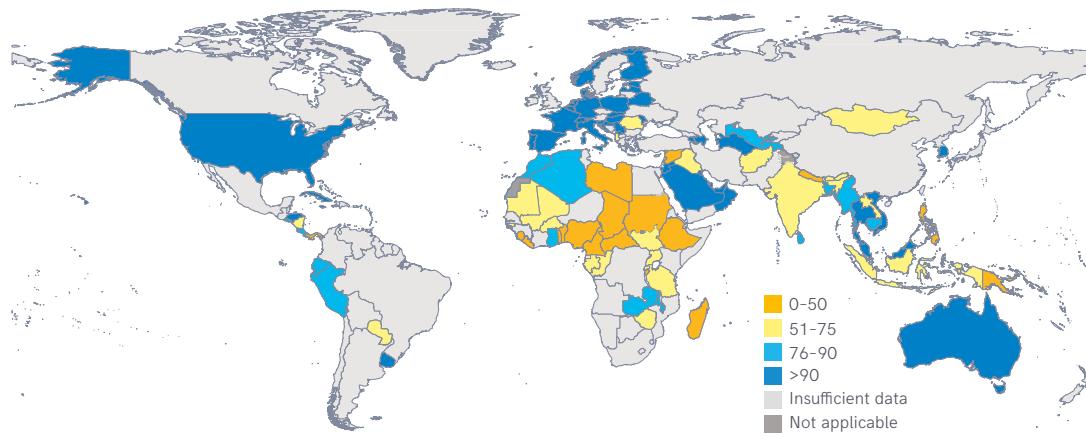


FIGURE 8 Proportion of schools with a basic drinking water service in 2021 (%)

Drinking water service levels in schools varied widely between countries in 2021

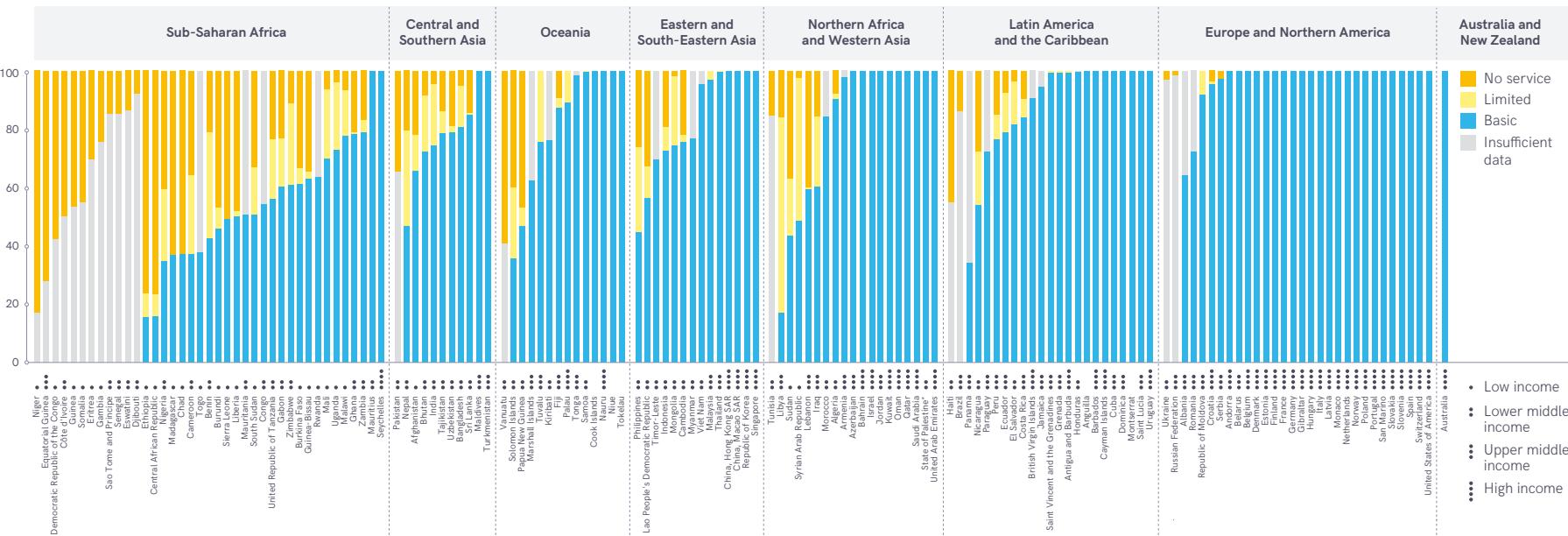


FIGURE 9 National coverage of drinking water services in schools, by country, SDG region and income group in 2021 (%)

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

Some countries now have sufficient data to assess trends in basic drinking water coverage since 2015. Figure 10 shows current coverage and annual rates of change between 2015 and 2021 among 24 countries that have not yet achieved universal access (>99%). It shows that most countries with trend data available are currently progressing too slowly to achieve universal coverage by 2030, and in some countries coverage is decreasing. Serbia has increased coverage by over 5 % pts per year, from 66% in 2015 to 98% in 2021, and is one of only two upper-middle income countries that are on track. Mauritania has also increased coverage by 5 % pts per year, but it had only reached 51% by 2021 so this rate of change is still not sufficient. Conversely, in Bhutan, more than seven out of ten schools already have a basic service, but annual rates of change are less than 2 % pts. Coverage is

lower among low income countries but annual rates of change vary. Since 2015, basic drinking water coverage in Chad has doubled, from 19% to 37%, while coverage in Sierra Leone has decreased from 62% to 49%.

Figure 11 extrapolates estimates based on existing trend data to illustrate current trajectories and the acceleration required to achieve universal coverage in each SDG region. At current rates of progress, the world will only reach 73% coverage by 2030, leaving approximately 470 million school-age children without basic drinking water at their school. No SDG region that has not already reached universal coverage by 2021 is on track to do so by 2030. In Oceania, Northern Africa and Western Asia, and Eastern and South-Eastern Asia progress has stagnated. Central and Southern Asia has achieved the fastest rate of

progress (0.43 % pts/yr) but will still only reach 79% coverage by 2030. If current rates of progress continue, fewer than half the schools in sub-Saharan Africa will have a basic water service in 2030.

Between 2015 and 2021, the number of children without basic drinking water at their school decreased from 551 million to 546 million. One third lived in LDCs and more than half lived in fragile contexts. Figure 12 shows that sub-Saharan Africa and Central and Southern Asia together account for over two thirds of the affected population. Since 2015, the number of children without a basic drinking water service at their school has decreased in Oceania and in Central and Southern Asia, but has increased in Northern Africa and Western Asia, in Eastern and South-Eastern Asia, and by 24 million in sub-Saharan Africa.

Only 2 out of 24 countries with trend data that have yet to achieve universal access (>99%) are on track to do so by 2030

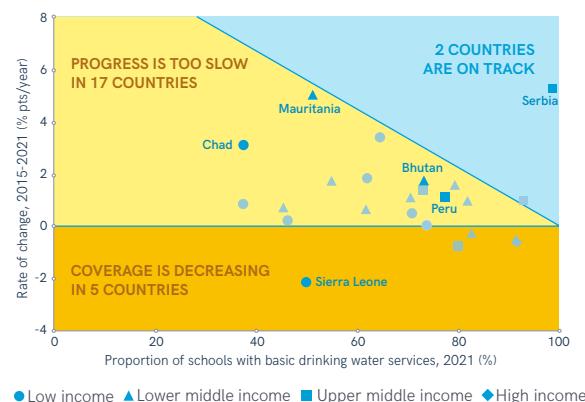


FIGURE 10 Progress towards universal access to basic drinking water in schools 2015–2021, among countries with <99% coverage in 2021

Note: Does not include 61 countries with >99% coverage in 2021, or 7 countries with no estimates for rates of change

Only 2 out of 8 SDG regions are on track to achieve universal access (>99%) to basic drinking water in schools by 2030

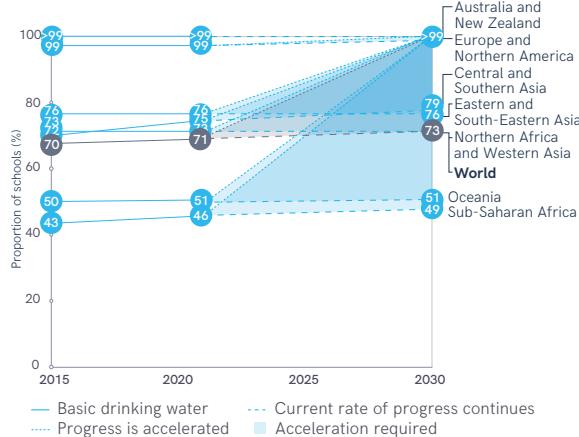


FIGURE 11 Progress on basic drinking water in schools, 2015–2021, and acceleration required to reach universal coverage by 2030

546 million children still lacked a basic drinking water service at their school in 2021

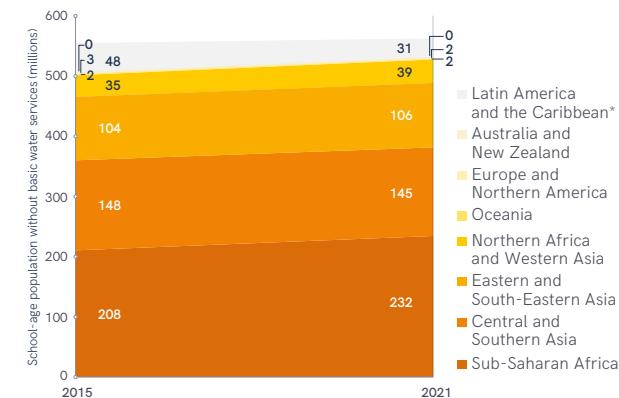


FIGURE 12 School-age population lacking a basic water service at school 2015–2021, by SDG region (millions)

* Data coverage for Latin America and the Caribbean is less than 30%.

In 2021, 15% of schools worldwide still had no drinking water service at all. Since 2015, many countries have successfully reduced the proportion of schools with no service, but rates of progress have been mixed. The largest reductions have generally been achieved in countries where more than a third of schools still had no service in 2015, but countries with similar starting points have progressed at different rates, and in a few countries, the share of schools with no service has increased. Senegal and the Philippines both achieved reductions of around 20 % pts (from 34% to 15% and from 46% to 26%), while Ecuador and Bangladesh have halved the proportion of schools with no service to 7% and 5% respectively. In 2015, 2% of schools in Oman still had no service but by 2021 there were none (<1% no service).

Disaggregated data also reveal inequalities within countries. In countries where it is possible to disaggregate estimates by school level there are often large gaps in basic drinking water coverage between pre-primary, primary and secondary schools (Figure 14). Coverage is generally higher in secondary than in primary schools but there is no obvious pattern for pre-primary. In 19 countries, secondary coverage was at least 10 % pts higher than primary, with the biggest gap found in Nepal (37 % pts). Burkina Faso and the Marshall Islands were the only countries where primary coverage was at least 10 % pts higher than secondary. In Gabon, Lebanon, Ghana, Mongolia, Peru and Fiji there was very little difference between the three school levels, but in the Solomon Islands coverage ranged from just 26% in pre-primary to 43% in primary and 59% in secondary schools.

Rates of reduction in schools with no water service have varied widely between countries in SDG regions

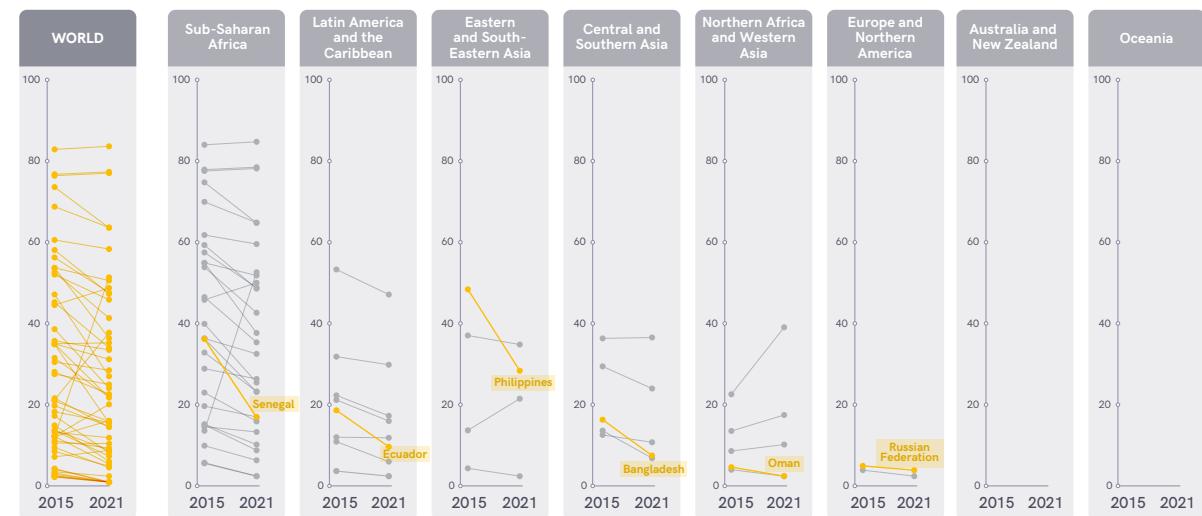


FIGURE 13 Proportion of schools with no water service, by country and SDG region, 2015–2021 (%)

In many countries, large gaps in basic drinking water coverage remain between school levels

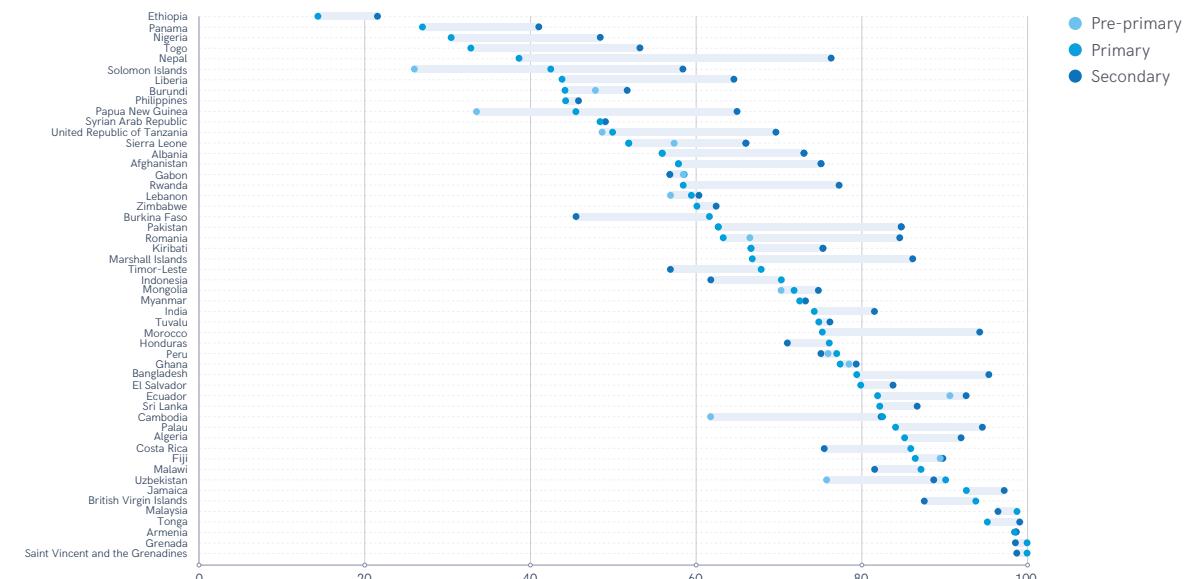


FIGURE 14 Proportion of pre-primary, primary and secondary schools with a basic water service, by country in 2021 (%)

Note: Includes 55 countries with <99% coverage for either primary or secondary. Only 15 of these countries have data for pre-primary.

Progress on sanitation in schools

In 2021,

- 123 countries and all 8 SDG regions had national estimates for basic sanitation services in schools, representing 60% of the global school-age population.
- 72% of schools had a basic sanitation service (improved single-sex facilities that were usable at the time of the survey), 16% had a limited service (improved facilities that were not single-sex or not usable), and 13% had no service (unimproved source or none at all).
- 539 million children lacked a basic sanitation service at their school, including 299 million whose school had improved facilities that were not single-sex or not usable, and 240 million whose school still had no sanitation service.
- Coverage of basic sanitation services ranged from 47% in low income countries to 100% in high income countries.
- In sub-Saharan Africa and Oceania, fewer than half of schools had a basic sanitation service.
- 2 out of 3 primary schools (68%) and 3 out of 4 secondary schools (75%) had a basic sanitation service but there were insufficient data to generate global estimates for pre-primary schools.
- One third of children without basic sanitation services at their school lived in LDCs, and 3 out of 5 lived in fragile contexts.
- Achieving universal access (>99%) to basic sanitation services in schools by 2030 would require a 3x increase in the current rate of progress (over 100x increase in LDCs and 50x increase in fragile contexts).
- Only three SDG regions are on track to achieve universal access (>99%) by 2030. At current rates of progress, the world will only reach 82% coverage by 2030, leaving approximately 310 million children without a basic drinking water service at their school.
- While national definitions and indicators vary, in all countries with data available significantly fewer schools had toilets that were considered accessible for children with disabilities.

Since 2015, global coverage of basic sanitation in schools has increased by 1.14 % pts per year from 65% to 72% (Figure 15). The proportion of schools with a limited service has increased from 13% to 16% and the share with no service has been reduced by over a third, from 22% to 13%. It is estimated that the SDG regions of Australia and New Zealand and Europe and Northern America have already achieved >99% coverage but progress in other SDG regions has been mixed. Coverage has increased in Northern Africa and Western Asia and Eastern and South-Eastern Asia, and by 20 % pts in Central and Southern Asia. But it has remained largely unchanged in Oceania and sub-Saharan Africa. In Latin America and the Caribbean basic sanitation

coverage in schools has decreased by 4 % pts. Coverage remains below 50% in LDCs and in fragile contexts, and has decreased among Landlocked Developing Countries (Figure 16).

In 2021, 123 countries had national estimates for basic sanitation services in schools. Basic sanitation coverage exceeded 75% in 83 of these countries, but had still not exceeded 50% in 23 countries. 23 out of 55 countries with universal access (>99%) to basic sanitation were in Australia and New Zealand and Europe and Northern America, and in all other regions at least one country had reached >99%. Each of the other regions also had at least one country where basic service coverage was below 50%, but

7 out of 10 schools had a basic sanitation service in 2021

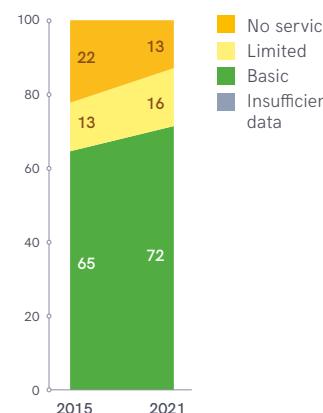


FIGURE 15 Global coverage of sanitation services in schools 2015–2021 (%)

All 8 SDG regions had estimates for basic sanitation services in schools in 2021

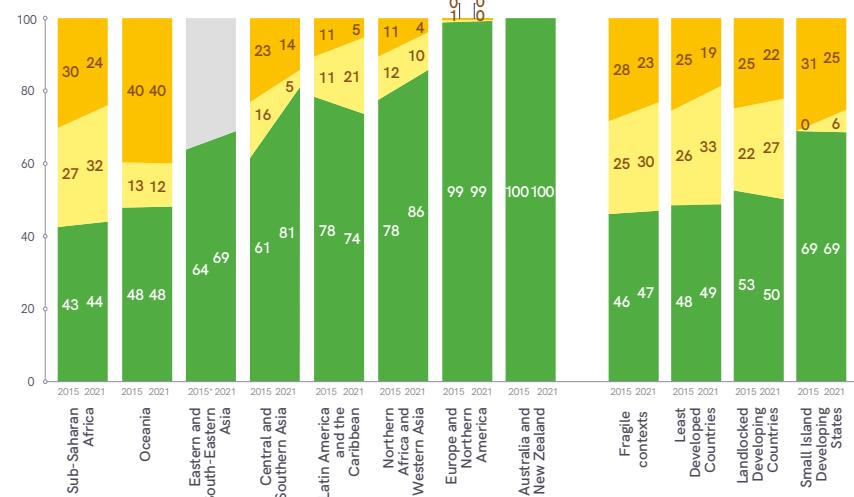


FIGURE 16 Regional coverage of sanitation services in schools 2015–2021 (%)

these were mostly concentrated in Eastern and South-Eastern Asia and in sub-Saharan Africa (Figure 17).

Sanitation service levels in schools also varied widely between countries. 14 countries only had estimates for no service and lacked sufficient data to produce estimates for limited or basic sanitation services (shown in grey in Figure 18). In 21 countries, more than a quarter of schools had a limited sanitation service, including Mali, Nicaragua, Senegal and the United Republic of Tanzania where more than half of schools had improved facilities that were either not usable or not single-sex. And in 14 countries, more than a third of schools had no service at all. In Mauritania, Niger and the Solomon Islands more than half of schools had no service at all in 2021.

82 out of 123 countries with estimates had >75% coverage of basic sanitation services in schools in 2021

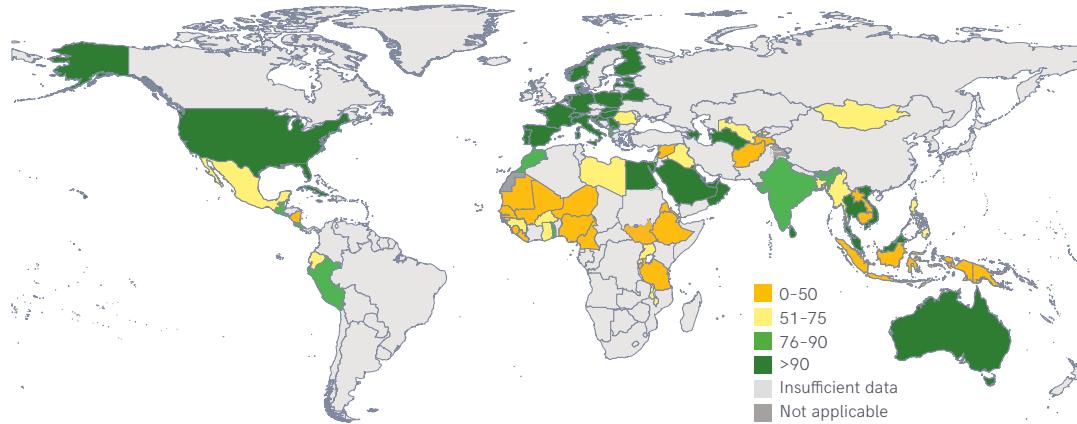


FIGURE 17 Proportion of schools with a basic sanitation service in 2021 (%)

Sanitation service levels in schools varied widely between countries in 2021

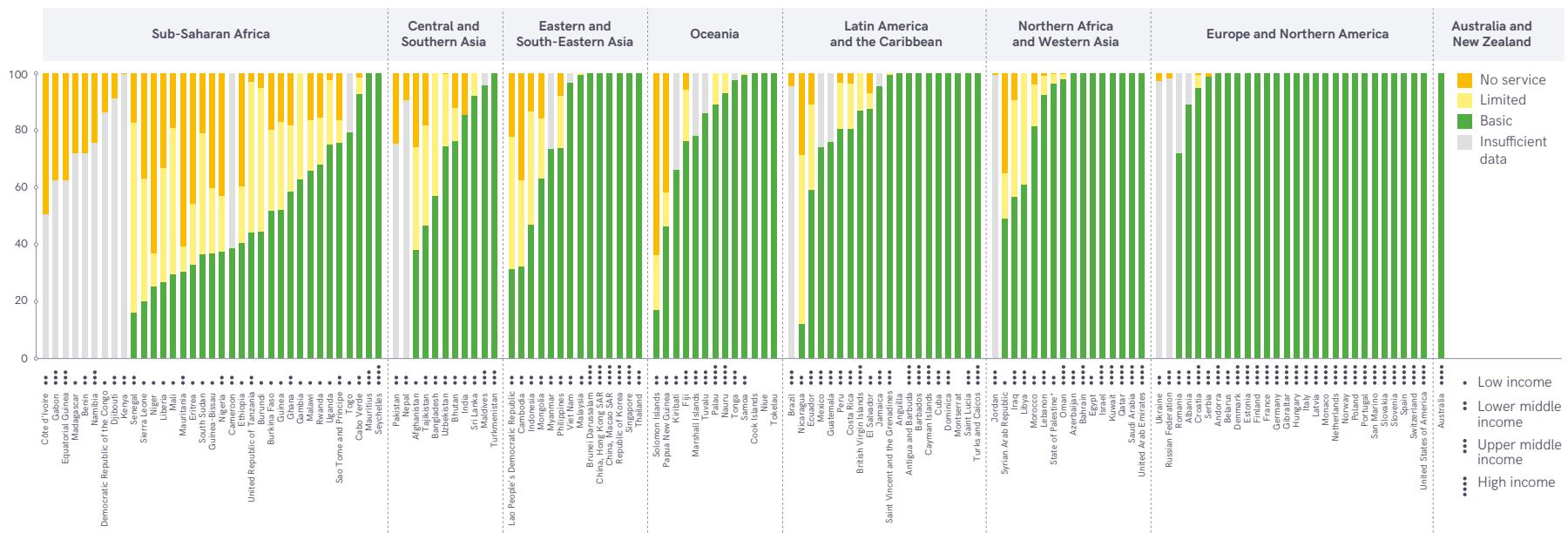


FIGURE 18 National coverage of sanitation services in schools, by SDG region and income group in 2021 (%)

A growing number of countries have sufficient data to assess trends in basic sanitation services between 2015 and 2021. Figure 19 combines information on current coverage and annual rates of change among countries that have not yet achieved universal access ($>99\%$). While some countries have progressed rapidly and are on track to achieve universal coverage by 2030, others are progressing too slowly, and in some countries coverage has decreased. Between 2015 and 2021, basic service coverage in Togo doubled from 36% to 79%, which means it is catching up with lower-middle income and upper-middle income countries such as India and Peru that are also on track. By contrast, Nigeria increased coverage by 2.2 % pts per year, from 25% to 38%, which is not sufficient. Malawi and Burkina Faso both achieved higher coverage, despite being low income

countries, but in Malawi coverage is only increasing by 0.4 % pts per year and in Burkina Faso it has decreased by 3.6 % pts per year, from 74% to 52%.

Despite recent progress on basic sanitation services in schools, at current rates of change, the world will only reach 82% coverage by 2030, leaving approximately 310 million children without basic sanitation services at their school (Figure 20). Australia and New Zealand, Europe and Northern America, and Central and Southern Asia are the only SDG regions on track to achieve universal coverage by 2030. Since 2015, Central and Southern Asia has progressed rapidly at 3.3 % pts per year. If Northern Africa and Western Asia continues at 1.4 % pts per year it will reach 98% coverage by 2030, but the rate of change in Eastern and South-Eastern Asia

is slower (0.8 % pts per year) so unless progress accelerates, a quarter of schools will still lack basic sanitation in 2030. Coverage in Oceania and sub-Saharan Africa has remained largely unchanged since 2015, which means that at current rates of progress more than half of schools in both regions will still lack basic sanitation in 2030.

Since 2015, the total number of children without a basic sanitation service at their school has decreased from 642 million to 539 million. One in three now live in LDCs and three out of five live in fragile contexts. Two out of five live in sub-Saharan Africa where the number of children affected has increased by 26 million. By contrast, in Central and Southern Asia, there were 92 million fewer children without a basic sanitation service at their school in 2021 than in 2015.

Only 7 out of 21 countries with data on trends on basic sanitation in schools are on track to achieve universal access ($>99\%$) by 2030

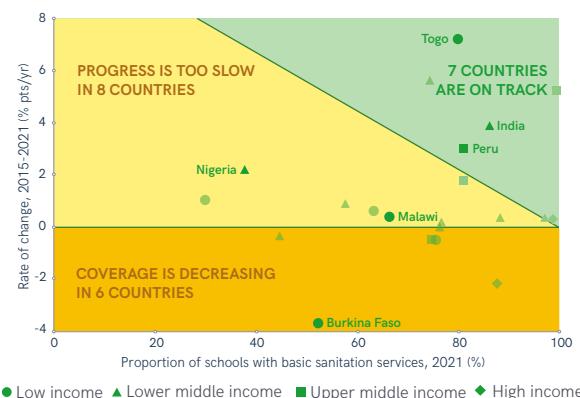


FIGURE 19 Progress towards universal access to basic sanitation services in schools 2015–2021, among countries with <99% coverage in 2021

Note: Does not include 55 countries with >99% coverage in 2021, or 6 countries with no estimates for rates of change.

Only 3 SDG regions are on track to achieve universal access ($>99\%$) to basic sanitation in schools by 2030

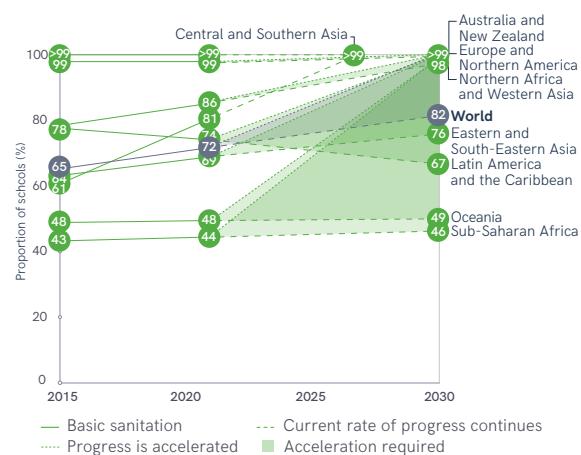


FIGURE 20 Progress on basic sanitation in schools, 2015–2021, and acceleration required to reach universal coverage by 2030

539 million children still lacked a basic sanitation service at their school in 2021

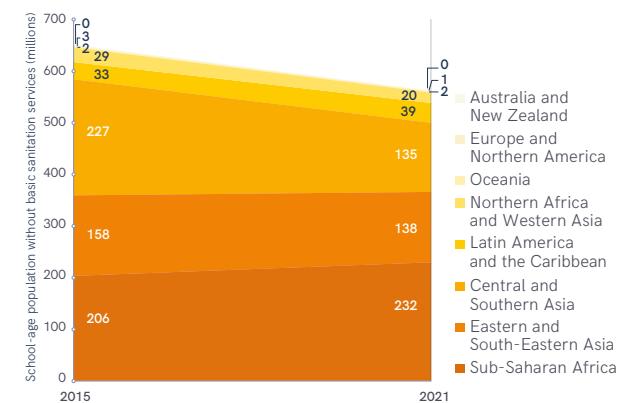


FIGURE 21 School-age population lacking a basic sanitation service at school 2015–2021, by SDG region (millions)

In 2021, 13% of schools around the world (representing 240 million children) still had no sanitation service. Since 2015, many countries have successfully reduced the proportion of schools with no service but rates of progress have been mixed, as shown in Figure 22. Countries with data on trends in no service were available for all SDG regions except for Australia and New Zealand and Oceania. Between 2015 and 2021, South Sudan recorded a reduction of 20 % pts, from 41% to 21%. India and Ecuador both achieved a reduction of 11 % pts, from 25% to 14% and from 22% to 11%. Over the same period, Morocco more than halved the proportion of schools with no service (from 9% to 4%), and the Russian Federation reduced no service from 3% to 2%.

Not all countries have disaggregated data for schools in urban and rural areas. In 2021, only 27 countries had basic sanitation estimates for urban schools and 29 countries had estimates for rural schools. In almost all countries with disaggregated data available coverage was higher in urban schools than in rural schools. In Mali and the State of Palestine, rural coverage was higher than urban coverage (42% vs 25% and 84% vs 79% respectively). But in 13 countries, urban coverage was at least 10 % pts higher than rural, with the biggest gaps found in Pakistan (32 % pts) and in South Sudan (27 % pts). In Niger and India the urban-rural gap was less than 5 % pts and in Bangladesh basic sanitation coverage was 50% in both urban and rural schools.

Progress in reducing the number of schools with no sanitation service has varied widely between countries in SDG regions

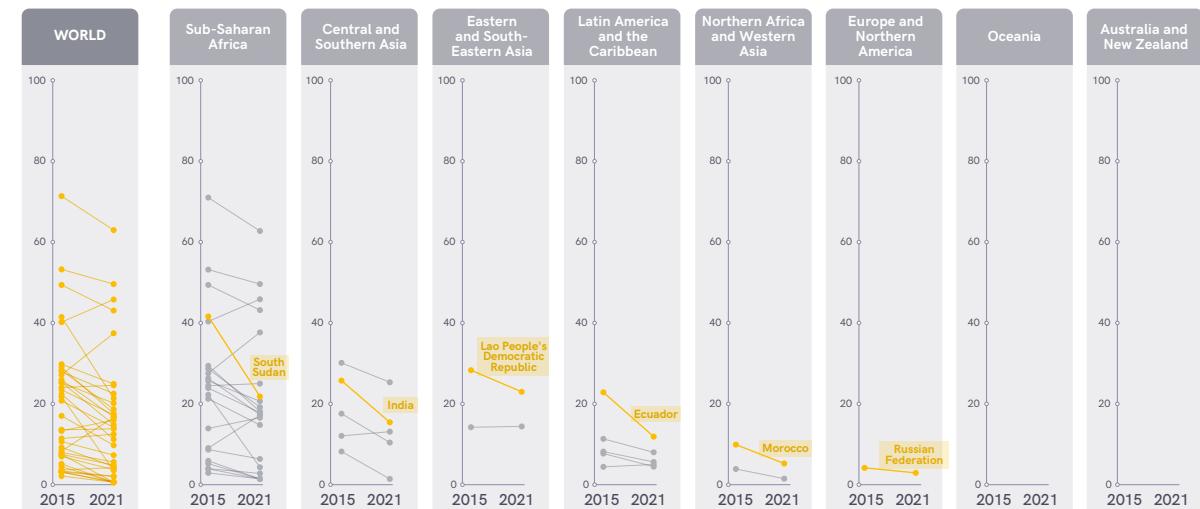


FIGURE 22 Proportion of schools with no sanitation service, by country and SDG region, 2015–2021 (%)

In some countries, large disparities in basic sanitation coverage remain between urban and rural schools

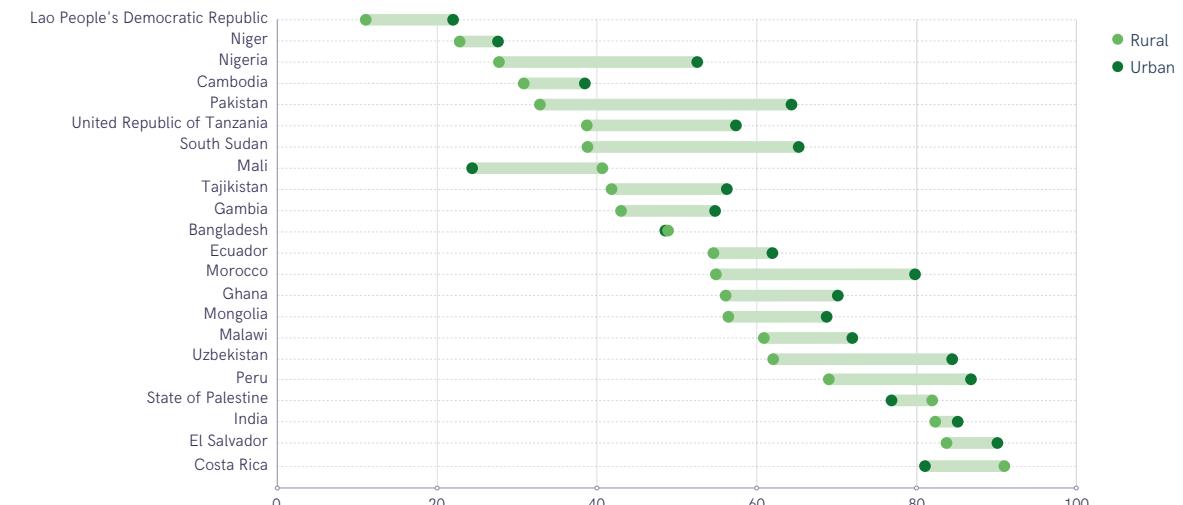


FIGURE 23 Proportion of rural and urban schools with a basic sanitation service in 2021 (%)

Progress on hygiene in schools

In 2021,

- 121 countries and 7 out of 8 SDG regions had national estimates for basic hygiene services in schools, representing 57% of the global school-age population.
- 58% of schools had a basic hygiene service (handwashing facilities with soap and water available at the time of the survey), 17% had a limited service (handwashing facilities with water but no soap available), and 25% had no service (no facilities or no water at the school).
- 802 million children lacked a basic hygiene service at their school, including 322 million whose school had facilities with water but no soap, and 480 million whose school still had no hygiene service.
- Coverage of basic hygiene services ranged from 23% in low income countries to >99% in high income countries.
- In Oceania and sub-Saharan Africa, fewer than a third of schools had a basic hygiene service.
- Nearly two thirds of schools (63%) in sub-Saharan Africa had no hygiene service at all.
- 58% of primary schools and 60% of secondary schools had a basic hygiene service but there were insufficient data to generate global estimates for pre-primary schools.
- One third of children without a basic hygiene service lived in LDCs, and more than half lived in fragile contexts.
- Achieving universal access (>99%) to basic hygiene services in schools by 2030 would require a 5x increase in the current rate of progress (6x increase in LDCs and 8x increase in fragile contexts).
- Only two SDG regions are on track to achieve universal access (>99%) by 2030. At current rates of progress, the world will only reach 66% coverage by 2030, leaving approximately 590 million children without a basic hygiene service at their school.
- Improving pandemic preparedness and response will require more frequent monitoring of WASH and other elements of infection prevention and control (IPC) in schools, including hygiene promotion, cleaning, disinfection and solid waste management.

Between 2015 and 2021, global coverage of basic hygiene in schools increased by 1% pt per year, from 52% to 58% (Figure 24). While there was little change in the proportion of schools with a limited service, the proportion with no service at all decreased from 33% to 25%. It is estimated that Australia and New Zealand has already achieved >99% coverage, and that Europe and Northern America is approaching universal coverage, although estimates are not available for all countries in these regions. Basic hygiene coverage remained unchanged in Oceania and in Northern Africa and Western Asia, but increased steadily in sub-Saharan Africa and Central and Southern Asia, and most rapidly in Eastern and

South-Eastern Asia, by 2.1 % pts per year. There were insufficient data available to generate estimates for Latin America and the Caribbean in 2021. While coverage has increased in LDCs and in fragile contexts, fewer than a third of schools in these regions had a basic hygiene service in 2021 (Figure 25).

In 2021, 121 countries had national estimates available for basic drinking water services in schools and in nearly two thirds of these coverage exceeded 75%. 58 countries had already achieved universal access (>99%) to basic hygiene services, of which 26 were in Australia and New Zealand or Europe and Northern America. But in another 26 countries,

6 out of 10 schools had a basic hygiene service in 2021

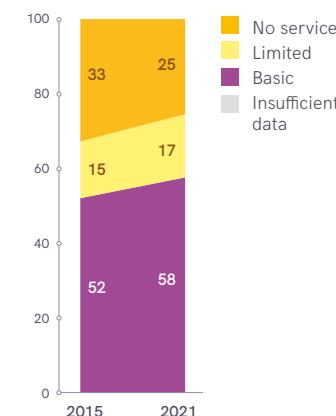


FIGURE 24 Global coverage of hygiene in schools 2015–2021 (%)

7 out of 8 SDG regions had estimates for basic hygiene services in schools in 2021

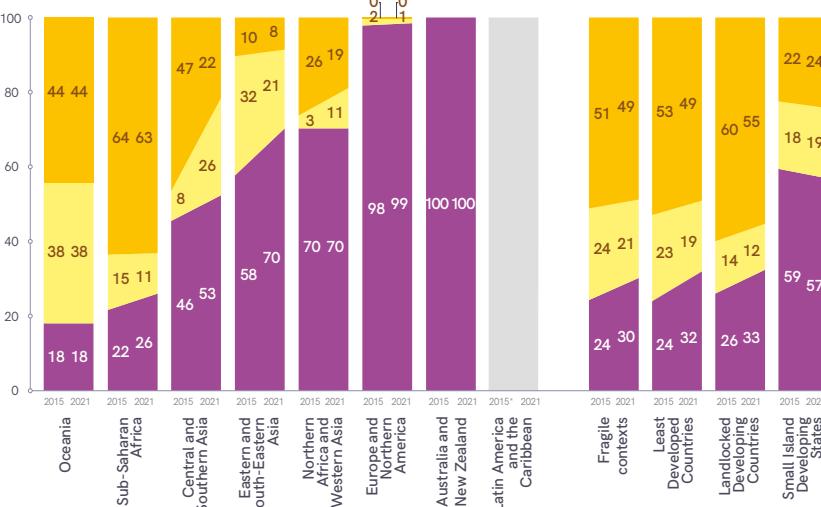


FIGURE 25 Regional coverage of hygiene services in schools 2015–2021 (%)

Note: The 2015 values for Latin America and the Caribbean were 58% basic, 25% limited and 17% no service.

coverage remained below 50%, more than half of which were in sub-Saharan Africa (Figure 26).

Hygiene service levels in schools varied widely between countries in many SDG regions. Eight countries (shown in grey in Figure 27) had data on the proportion of schools with no handwashing facility but lacked sufficient data to determine how many of the remaining schools met the criteria for limited or basic services. In six countries, more than a third of schools had a limited hygiene service, including Lebanon, the State of Palestine and Libya where more than half of schools had handwashing facilities with water but no soap. In 13 countries, more than half of schools had no handwashing facility or no water available. In Ethiopia, Malawi and South Sudan more than three quarters of schools still had no hygiene service in 2021.

76 out of 121 countries with estimates had >75% coverage of basic hygiene services in schools in 2021

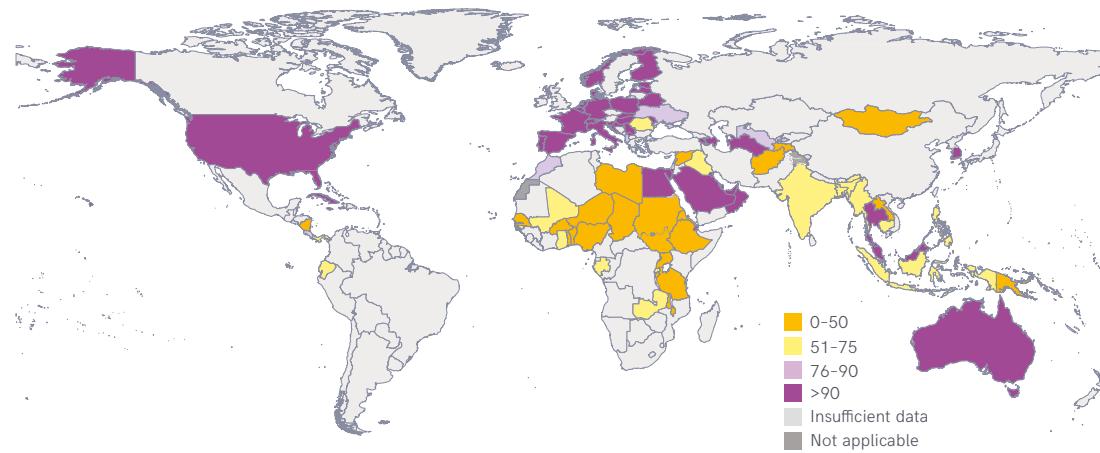


FIGURE 26 Proportion of schools with a basic hygiene service in 2021 (%)

Hygiene service levels in schools varied widely between countries in 2021

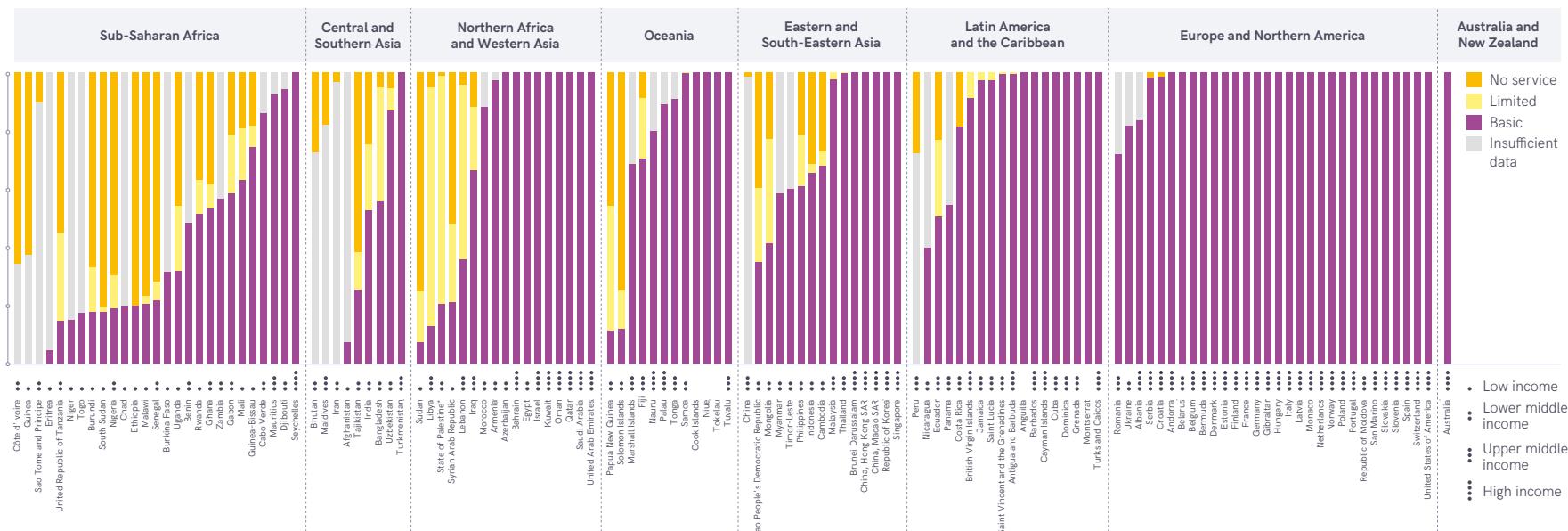


FIGURE 27 National coverage of hygiene services in schools in 2021 (%)

As data availability improves, it is increasingly possible to assess trends in basic hygiene coverage in schools between 2015 and 2021, and to compare rates of progress towards universal access (>99%) by 2030. Figure 28 shows current coverage and annual rates of change in the 14 countries with trend data where at least 1% of schools lacked a basic hygiene service in 2021. It shows that while annual rates of change vary, most countries are progressing too slowly to achieve universal access by 2030. Cambodia has rapidly increased coverage by over 6 % pts per year, from 30% in 2015 to 68% in 2021, and is therefore on track. In Indonesia, coverage has increased by 3.5 % pts per year and two thirds of schools (66%) had a basic service in 2021, but this is still not sufficient. While Costa Rica has achieved higher coverage (81%), the annual rate of change is much lower (1.5 % pts per year). Only one in five schools in Ethiopia (20%) and one in three schools in Uganda (32%) had a basic

hygiene service in 2021, but coverage in the former is increasing nearly three times faster. Four countries have negative trends, including the United Republic of Tanzania where basic hygiene coverage decreased from 21% in 2015 to 15% in 2021.

Figure 29 extrapolates estimates based on existing trend data to illustrate current trajectories and the acceleration required to achieve universal coverage in each SDG region. At current rates of progress, the world will only reach 66% coverage by 2030, leaving approximately 590 million school-age children without a basic hygiene service at their school. Apart from Australia and New Zealand and Europe and Northern America, no SDG region is on track to achieve universal coverage by 2030. In Oceania and Northern Africa and Western Asia coverage has stagnated. Eastern and South-Eastern Asia has achieved the fastest rate of progress but will still

only reach 89% coverage by 2030. If current rates of progress continue, one third of schools in Central and Southern Asia, two thirds of schools in sub-Saharan Africa, and four out of five schools in Oceania will still lack a basic hygiene service in 2030 (Figure 29).

Between 2015 and 2021, the total number of children without a basic hygiene service at their school decreased from 872 million to 802 million. One third of children without a basic hygiene service now live in LDCs, more than half live in fragile contexts, and more than two thirds (566 million) live in Central and Southern Asia and sub-Saharan Africa. Since 2015, the number of children without a basic service in Central and Southern Asia has decreased by 37 million, but in sub-Saharan Africa it has increased by 25 million. Eastern and South-Eastern Asia has recorded the biggest reduction (69 million), while the population affected in other SDG regions has remained largely unchanged.

Only 2 out of 14 countries with data on trends in basic hygiene services are on track to achieve universal access (>99%) by 2030

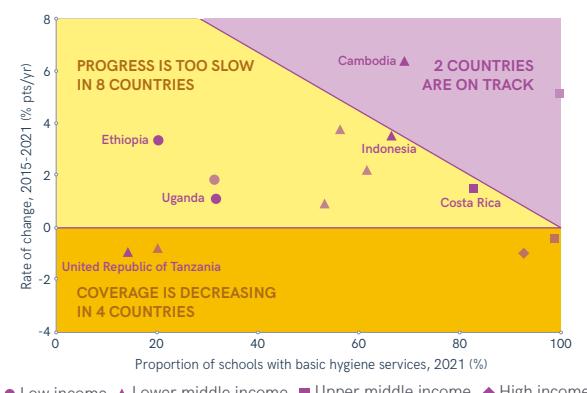


FIGURE 28 Progress towards universal access to basic hygiene in schools 2015–2021, among countries with <99% coverage in 2021

Note: Does not include 58 countries with >99% coverage in 2021, or 10 countries with no estimates for rates of change.

Only 2 SDG regions are on track to achieve universal access (>99%) to basic hygiene services in schools by 2030

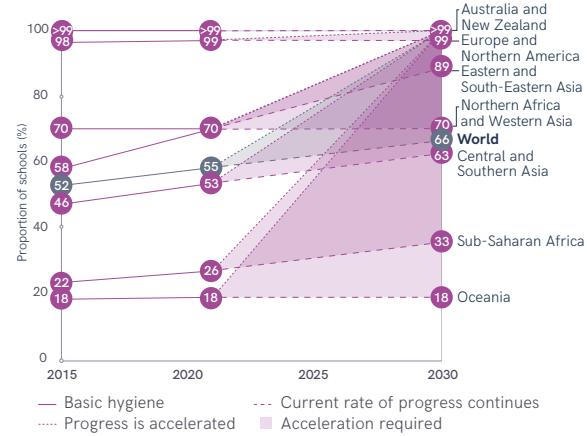


FIGURE 29 Progress on basic hygiene in schools, 2015–2021, and acceleration required to reach universal coverage by 2030

802 million children still lacked a basic hygiene service at their school in 2021

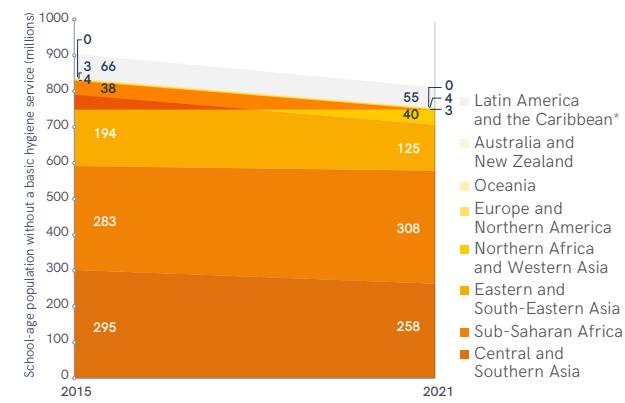


FIGURE 30 School-age population lacking a basic hygiene service at school 2015–2021, by SDG region (millions)

*Data coverage for Latin America and the Caribbean is less than 30%.



In 2021, a quarter of the world's schools still had no hygiene service, compared with a third of schools in 2015. Figure 31 shows that the majority of countries with trend data available for this period have reduced the proportion of schools with no service, and highlights examples from each SDG region. By 2021, the proportion of schools with no hygiene service in Côte d'Ivoire had decreased from 77% to 65%. Over the same period, Cambodia and India both recorded large reductions, from 68% to 27% and from 53% to 25% respectively. Costa Rica has reduced the proportion of schools with no hygiene service by a third (from 28% to 19%) and in the State of Palestine and the Republic of Moldova almost all schools had at least a limited hygiene service by 2021.

In countries where it is possible to disaggregate estimates by both rural/urban and school level it is possible to further analyse sub-national inequalities in basic hygiene coverage (Figure 32). In 7 out of 10 countries coverage was higher in urban schools than in rural schools, but in India, Cambodia and Uzbekistan the coverage gap was less than 10 % pts and in the United Republic of Tanzania, Ecuador and Bangladesh coverage was slightly higher in rural. Only 5 countries had estimates for rural, urban and all three school levels in 2021. In the United Republic of Tanzania and Ghana, the differences in pre-primary, primary and secondary coverage were less than 5 % pts. In Cambodia primary school coverage (73%) was 6 % pts higher than secondary (67%) and 12 % pts higher than pre-primary (61%). By contrast, in Gabon pre-primary coverage (83%) was higher than secondary (69%) and primary (57%). In Ecuador there was no difference between primary and pre-primary (50%), but only one third (33%) of secondary schools had a basic hygiene service. While there were insufficient data to estimate pre-primary coverage in Bangladesh, there was a 57 % pt gap in basic hygiene coverage between primary (85%) and secondary schools (28%).

Since 2015, some countries have achieved rapid reductions in the number of schools with no hygiene service

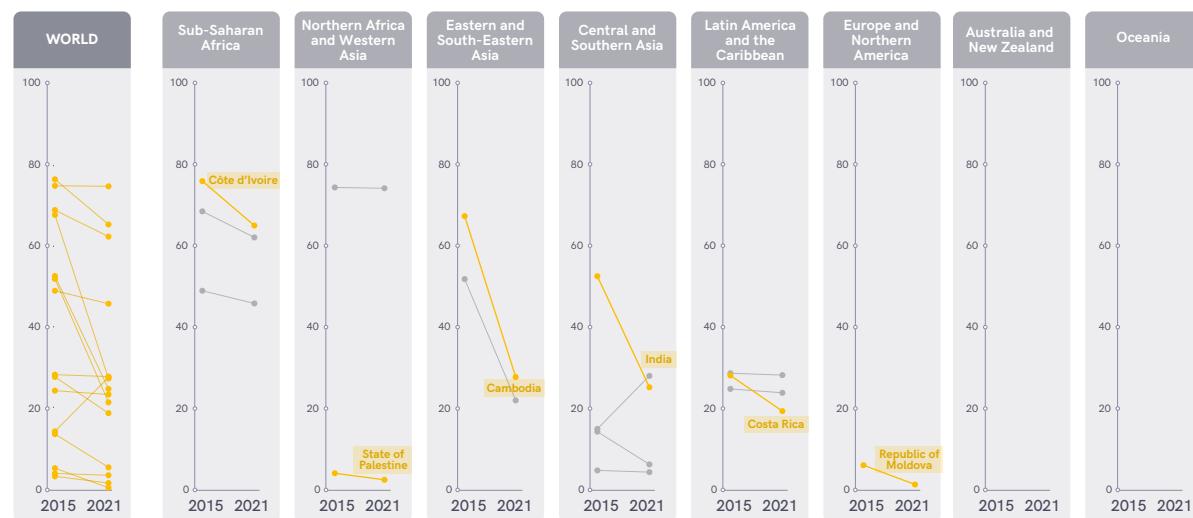


FIGURE 31 Proportion of schools with no hygiene service, by country and SDG region, 2015–2021 (%)

Disaggregated data reveal disparities in basic hygiene services between urban and rural and school levels



FIGURE 32 Proportion of schools with a basic hygiene service, by rural/urban and by school level in 2021 (%)

Note: Data shown from ten countries with data on rural, urban, primary and secondary schools. Data on pre-primary schools are available for five of these countries.



SECTION 2

Preparing schools for future pandemics



Building back better

The coronavirus disease 2019 (COVID-19) pandemic triggered an unprecedented global health and economic crisis, upending the lives of billions of people all around the globe and exacerbating inequalities. Global efforts to control the virus have sought to balance the risks to public health with the social and economic impacts of lockdown measures, and to mitigate the impacts of school closures on children's education, nutrition and well-being. Evidence suggests that learning losses have disproportionately affected the poorest and most disadvantaged children, including those living with disabilities⁸. With subsequent increases in vaccination coverage and the gradual lifting of restrictions, the UN Secretary General has called on Member States to seize the opportunity to 'build back better' and ensure the world is better prepared for future pandemics⁹.

The Sanitation and Water for All (SWA) global partnership has called for a transformative approach focused on strengthening key building blocks of the enabling environment: sector policy and planning; sector budget and financing; planning, monitoring and review; institutional arrangements; and sector capacity development¹⁰. The WASH in Schools Network¹¹ is documenting country-level examples of good practices designed to improve pandemic preparedness and response by strengthening the enabling environment for WASH in schools.

⁸ Learners with Disabilities and COVID-19 School Closures: Findings from a global survey conducted by the World Bank's Inclusive Education Initiative. World Bank, 2021 <<https://openknowledge.worldbank.org/handle/10986/36326>>.

⁹ The Sustainable Development Goals Report 2021. UN, 2021 <<https://unstats.un.org/sdgs/report/2021/>>.

¹⁰ Building blocks. In: Sanitation and Water for All [website]. <<https://www.sanitationandwaterforall.org/about/our-work/priority-areas/building-blocks>>.

¹¹ WASH in Schools Network [website]. <<https://www.winsnetwork.org>>.

Disaggregated data show that few schools meet the criteria for all three basic WASH services



FIGURE 33 Proportion of schools with basic drinking water, sanitation and hygiene services, selected countries (%)

The JMP 2020 progress update on WASH in schools¹² had a special focus on COVID-19 and noted that infection prevention and control (IPC) needs to extend beyond the provision of basic WASH services and include additional measures related to hygiene, cleaning, disinfection and waste management. This thematic pullout section highlights examples of emerging national data which go beyond the basic service indicators used for global monitoring and provide additional insights into specific challenges related to improving pandemic preparedness and response in schools.

The COVID-19 pandemic has caused significant disruption to education monitoring systems around the world. Some countries have conducted rapid assessments of WASH in schools, but it remains to be seen whether new questions and indicators will be integrated into routine monitoring. While global data availability is improving, many countries still have

data gaps which makes it difficult to assess progress towards 'safe and effective learning environments for all' (SDG 4.a).

Furthermore, currently available data suggest that while many schools already meet some of the criteria for basic WASH services, far fewer schools meet all of them. Figure 33¹³ shows that among countries with school-level information on basic drinking water, sanitation and hygiene, the proportion of schools with access to all three services is often significantly lower. In Guinea Bissau, while three quarters of schools had basic hygiene services, two thirds had basic drinking water and more than a third had basic sanitation, only a quarter of schools had access to all three (WASH) in 2021. In Nigeria, while a third of schools had basic water and basic sanitation and a tenth had basic hygiene, none of the schools surveyed had all three basic services in 2020.

¹² Progress on Drinking Water, Sanitation and Hygiene in Schools: Special focus on COVID-19. New York: UNICEF and WHO, 2020. <<https://data.unicef.org/resources/progress-on-drinking-water-sanitation-and-hygiene-in-schools-special-focus-on-covid-19/>>.

¹³ Unless otherwise indicated, figures in this section are based on individual data sources. Short survey codes are provided for reference. For further information please refer to the relevant JMP country files for WASH in schools: <<https://washdata.org/data/downloads>>.



In Cambodia, availability of group handwashing facilities has increased in all 25 provinces since 2020

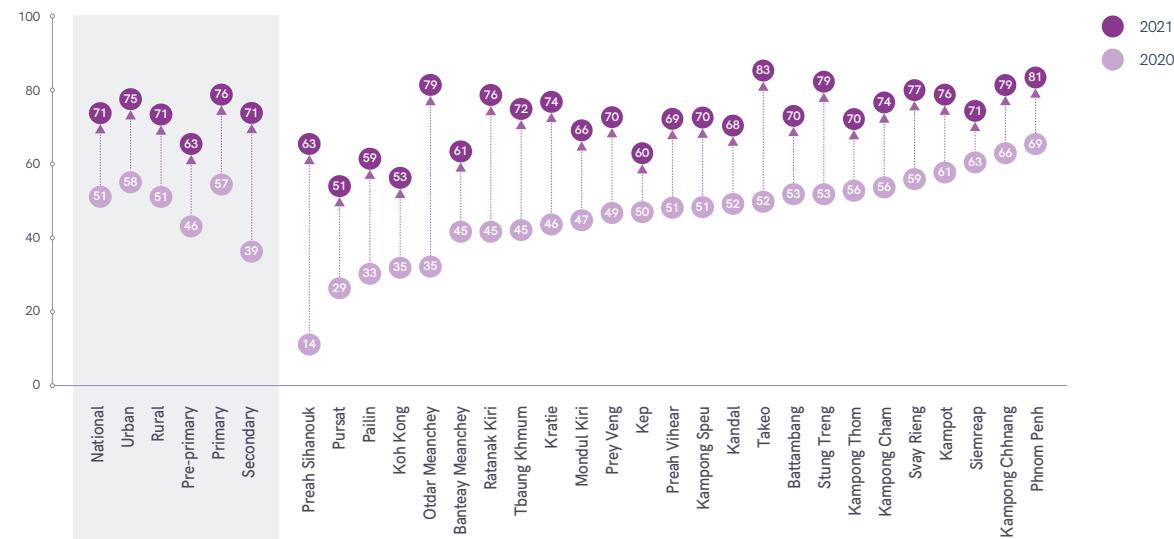


FIGURE 34 Proportion of schools with group handwashing facilities, by province in Cambodia 2020–2021 (%)

In the Philippines, availability of handwashing facilities in toilets and canteens has increased rapidly in both primary and secondary schools

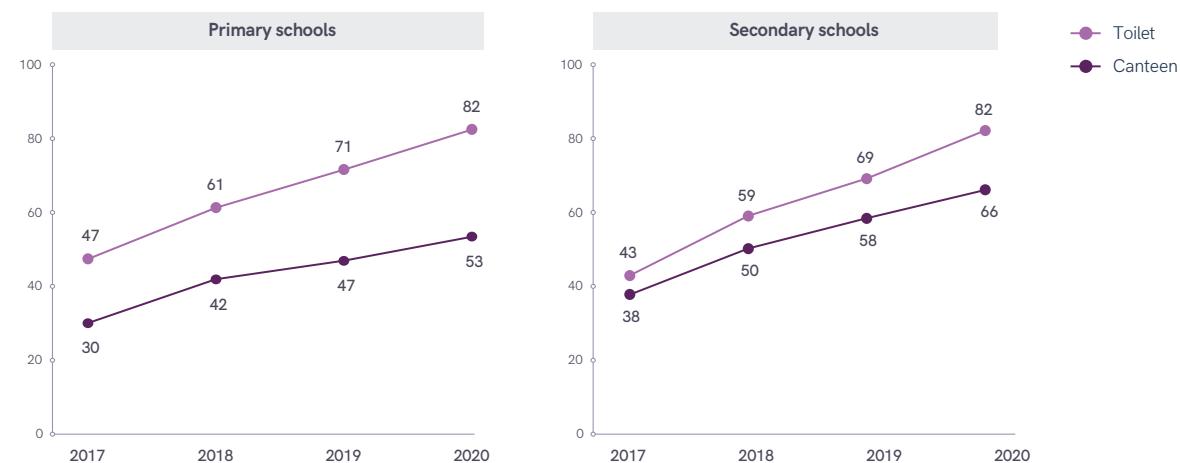


FIGURE 35 Proportion of schools with handwashing facilities with soap in toilets and the canteen, by school level in the Philippines 2017–2020 (%)

Hygiene promotion

To monitor pandemic preparedness and response, countries also need to be able to track progress over time. For example, Cambodia has integrated WASH questions into the Education Management Information System (EMIS) which is updated every 12 months. Improving hand hygiene in schools has been a key focus of the government's pandemic response and EMIS data show a rapid increase in the availability of group handwashing facilities (Figure 34). Between 2020 and 2021, coverage of group handwashing facilities increased by 20 % pts with similar increases in both urban and rural and pre-primary and primary schools and an even bigger increase of 32 % pts in secondary schools. Availability of group handwashing facilities has improved in all 25 provinces despite wide variations in coverage at the start of the pandemic. By 2021, Kampong Chhnang, Stung Treng and Otdar Meanchey had all achieved 79% coverage, but from respective baselines of 66%, 53% and 35% in 2020. Preah Sihanouk increased coverage by nearly 50 % pts.

The Philippines uses a Three Star Approach¹⁴ for routine monitoring of WASH in schools which not only provides data on the availability of handwashing facilities but also whether they are present in key locations for promoting hand hygiene within the school. Between 2017 and 2020, the availability of handwashing facilities increased rapidly in both primary and secondary schools (Figure 35), but the availability of handwashing facilities in the toilets has increased more quickly than in the canteens. Progress on both indicators has been faster in secondary schools (9,201) than in primary schools (39,018). By 2020, four out of five primary and secondary schools had handwashing facilities in the toilets, but only half of primary schools had handwashing facilities in the canteen, compared with two thirds of secondary schools.

¹⁴ Republic of the Philippines Department of Education WASH in Schools Programme [website]. <https://wins.deped.gov.ph>.



In addition to monitoring the availability and location of handwashing facilities, some countries also collect information on student handwashing behaviour at critical times. For example, a nationwide survey of hygienic behaviours of Iranian children and adolescents asked teachers to record how frequently students wash their hands after using the bathroom and before eating. Teachers reported that while 86% of students always washed their hands after using the bathroom, only 57% always washed their hands before eating. Nearly a third 'sometimes' washed their hands before eating, and students were three times as likely to 'never' wash their hands before eating than after using the bathroom (Figure 36).

Pandemic preparedness and response planning has led to a renewed focus on the role of hygiene promotion in preventing the spread of infectious diseases. Schools have an important role to play in promoting the formation of healthy habits and behaviours among children and hygiene behaviour change programmes often employ a range of different approaches. For example, the 2021 National Assessment of Water, Sanitation and Hygiene Facilities in Schools in Sudan found that while almost all schools routinely included hygiene messages in morning assemblies, only half included hygiene in the core curriculum and fewer than a fifth had dedicated hygiene lessons or participated in special events linked to hygiene (Figure 37).



In Iran, children were found to be more likely to wash their hands after using the bathroom than before eating

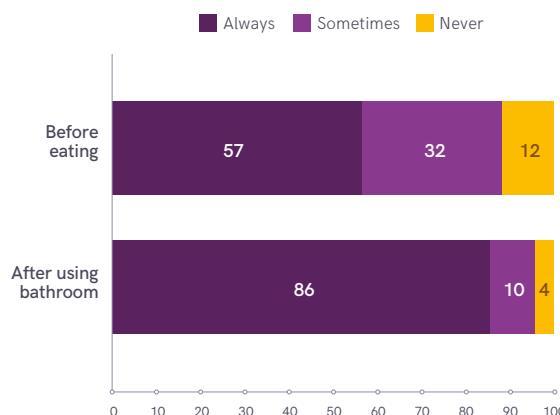


FIGURE 36 Proportion of schools by reported frequency of student handwashing behaviour after using the bathroom and before eating, in Iran in 2016 (%)

In Sudan, only half of schools include hygiene within the core curriculum but 9 out of 10 schools include health messages in morning assemblies

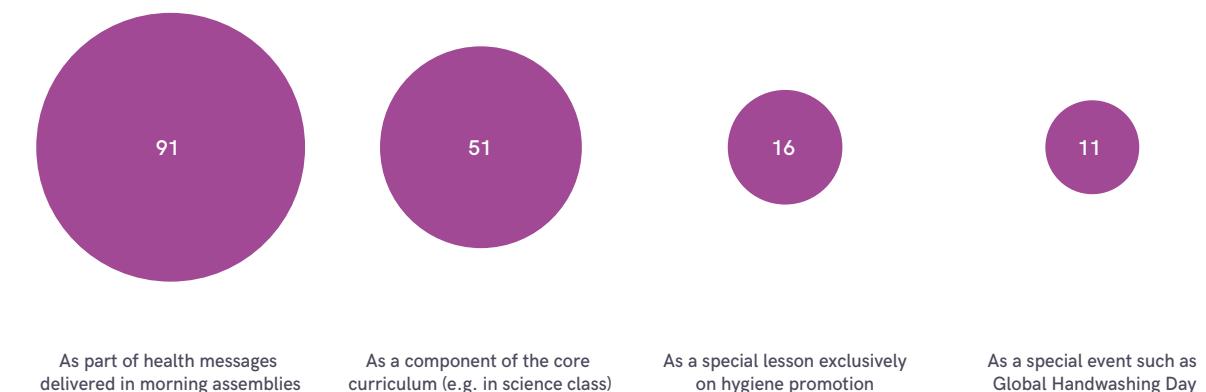


FIGURE 37 Proportion of schools in which hygiene sessions are introduced in Sudan, 2020 (%)



In 2020, in response to COVID-19, Ecuador conducted a rapid nationwide assessment of the status of WASH in schools which enabled detailed analysis of the distribution of schools that did not meet national WASH standards and required additional support to reopen. Figure 38 shows that while 79% of schools had a basic drinking water service and 59% had a basic sanitation service, just 51% had a basic hygiene service. Within Latin America and the Caribbean, Nicaragua was the only country with lower coverage of basic sanitation (12%) and hygiene (40%) in schools.

The Ecuador assessment enabled further analysis of sub-national inequalities in hygiene. While there was little difference in coverage of basic hygiene services in rural (52%) and urban (49%) schools, there were very large differences between sub-national provinces, ranging from 70% in Carchi to just 24% in Pastaza. Further analysis of school-level data shows that coverage of group handwashing facilities was higher than coverage of individual handwashing facilities, but in both cases significantly fewer schools had facilities that were in good condition with water and soap available.

In 2020, 92% of secondary schools, 90% of pre-primary and 83% of primary schools had a group handwashing facility but only 56%, 52% and 45% respectively were found to be in good condition. While most of those in good condition had water available, fewer than a third of pre-primary and primary schools and a quarter of secondary schools had both water and soap at group handwashing facilities. While a larger proportion of individual handwashing facilities were found to be in good condition, only a quarter of pre-primary and a fifth of secondary schools had individual handwashing facilities meeting all criteria.

In Ecuador, disaggregated data highlight sub-national inequalities in coverage of basic hygiene services, and in the condition and availability of water and soap at group and individual handwashing facilities

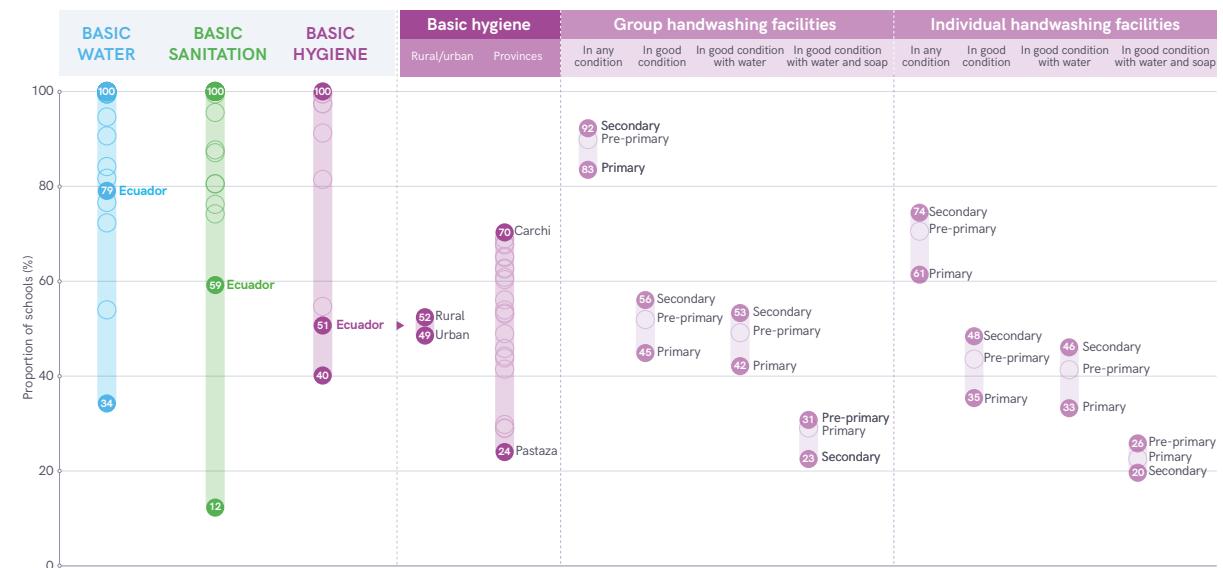


FIGURE 38 Sub-national inequalities in coverage of basic hygiene services and condition of handwashing facilities in Ecuador, 2020 (%)







In many countries with data available, more than a quarter of toilets were not clean, and the reported frequency of cleaning varied widely

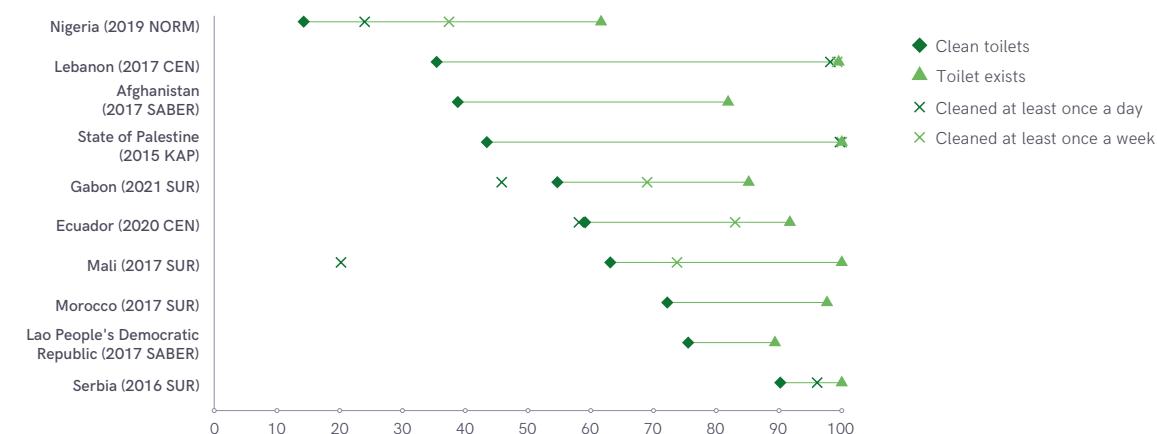


FIGURE 39 Proportion of schools with any toilet by frequency of cleaning and cleanliness, selected countries with recent data available (%)

In Gabon, half of schools lacked liquid disinfectants and other basic cleaning materials in 2021

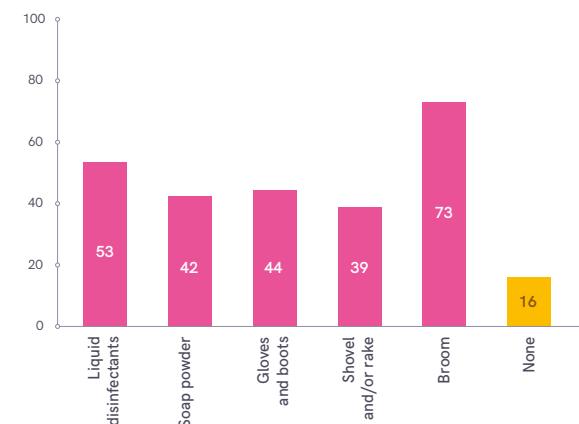


FIGURE 40 Proportion of schools with environmental cleaning materials in Gabon, 2021 (%)

Cleaning and waste management

A growing number of countries also collect information on cleaning and waste management in schools. While indicator definitions vary and are not always directly comparable, they nevertheless provide interesting insights. For example, many countries collect information on the cleanliness of toilets, classifying facilities as 'extremely clean', 'clean', 'somewhat clean' and 'not clean' based on observations by teachers. Some countries also collect information on the frequency at which toilets are cleaned. Categories include 'more than once per day', 'once per day', 'two to four times per week', 'once per week' and 'not cleaned' and the results are reported by school managers. Among countries with data available it is possible to compare the proportion of schools with any toilet and 'clean' toilets and to calculate the proportion of schools in

which toilets are cleaned 'at least once per day' and 'at least once per week'.

In many countries, a significant proportion of school toilets were classified as 'not clean' (Figure 39). A 2016 survey in Serbia found that all schools had toilets, 96% were cleaned at least once per day, and 90% were 'clean' at the time of the survey. By contrast, a 2015 Knowledge, Attitudes and Practices (KAP) survey in the State of Palestine showed that while almost all schools had toilets that were cleaned at least once per day, just 42% were found to be 'clean'. 2017 SABER surveys found that the 'cleanliness gap' between any toilet and clean toilets was much bigger in Afghanistan (44 % pts) than in the Lao People's Democratic Republic (14 % pts). The 2019 WASH NORM survey found an even bigger gap in Nigeria (48 % pts), and showed that a third (36%) of school toilets were cleaned once per

week and only a fifth (22%) were cleaned once per day, with just one in ten school toilets (12%) clean at the time of the survey.

Environmental cleaning is a major focus of IPC strategies in schools and requires that school managers have basic materials available for regular cleaning and disinfection of the school environment, including classrooms, canteens and playgrounds. Relatively few countries have national data on environmental cleaning but a 2021 school survey in Gabon included questions on the availability of basic cleaning materials. While three quarters of schools had brooms, only half had liquid detergents and even fewer schools had soap powder, gloves and boots and a shovel and/or rake. More than one in six schools reported that they had none of these materials available at the time of the survey (Figure 40).



Improving solid waste management has also been identified as a priority for pandemic preparedness and response. But in countries where school surveys and censuses have included questions, many schools lacked proper systems for safe management of solid waste (Figure 41). The 2020 school census in Uzbekistan showed that 92% of schools had solid waste collection services and 4% buried waste on premises, while 4% used unsafe disposal methods such as burning or openly dumping waste on the school premises. However, just 34% of schools in Gabon and 16% of schools in Sudan had solid waste collection services. The vast majority of schools in Guinea Bissau (90%) reported burning waste on the premises and just 2% had solid waste collection services. In Mali, more than a quarter of schools reported dumping waste on the premises (27%) and nearly one in ten (8%) had no system at all for managing solid waste.

In countries with data on solid waste management, many schools burn waste on the premises

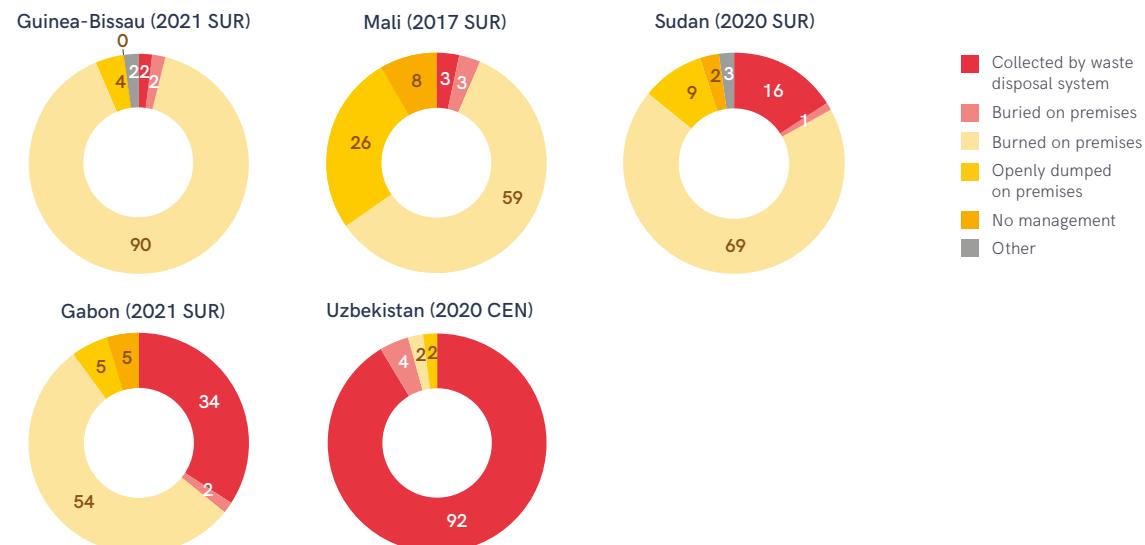


FIGURE 41 Proportion of schools using different methods of solid waste management, selected countries with recent data available (%)





SECTION 3

Providing disability-inclusive WASH services in schools



Developing definitions and indicators

Education is widely recognized as a fundamental human right. Children with disabilities have historically been excluded from educational opportunities but under international law they have a right to education without discrimination and on the basis of equal opportunities. Article 24 of the 2006 Convention on the Rights of Persons with Disabilities (CRPD)¹⁵ explicitly calls for children with disabilities to have access to 'an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live. This includes the provision of reasonable accommodations to children's needs along with adequate support to maximize economic and social development.'

¹⁵ Convention on the Rights of Persons with Disabilities. UN, 2006 <www.un.org/disabilities/documents/convention/convoptprot-e.pdf>.

'Disability-inclusive education' has since become a major focus of the 2030 Sustainable Development Agenda commitment to ensure 'inclusive and equitable quality education and to promote lifelong learning opportunities for all' (SDG 4). The Inclusive Education Initiative¹⁶ advocates a twin-track approach focused on ensuring that mainstream education programmes are designed for all learners, and developing targeted support to address the specific needs of children with disabilities. Volume 3 of the Education Sector Analysis Methodological Guidelines¹⁷ includes a chapter on monitoring inclusive education for children with disabilities, which covers a range of issues related to system capacity

¹⁶ Inclusive Education Initiative: Transforming education for children with disabilities. In: World Bank [website]. <www.worldbank.org/inclusive-education-initiative>.

¹⁷ Education Sector Analysis: Methodological guidelines volume III. UNESCO, UNICEF, GPE and UK FCDO, 2021 <www.iiep.unesco.org/fr/publication/education-sector-analysis-methodological-guidelines-vol-3-thematic-analyses>.

and development, participation of children with disabilities, and demand-side and supply-side issues related to the learning environment and its quality.

The guidelines note that 'an essential pre-requisite for disability-inclusive education is that schools are capable of receiving children with disabilities and that three supply-side characteristics are particularly important: teachers need to be trained to instruct classes in which children may have physical impairments or learning difficulties and need additional expert support; school infrastructure (buildings, classrooms, toilets, school grounds, transportation) must be accessible; and schools should also be able to provide textbooks and other learning materials for children with a variety of disabilities.'

BOX 1 Defining disability¹⁸

Disability is a complex and evolving concept which, as stated in the CRPD, stems from the interaction between certain conditions or impairments and an unaccommodating environment that hinders an individual's full and effective participation in society on an equal basis with others.

The framework of the International Classification of Functioning, Disability and Health (ICF)¹⁹ relies on a three-level model to describe the concept of disability. According to the ICF, disability can occur as:

- An impairment in body function or structure (e.g. a cataract or opacity of the natural lens of the eye, which prevents the passage of rays of light and impairs or destroys sight).
- A limitation in activity (e.g. low vision or inability to see, read or engage in other activities).

- A restriction in participation (e.g. exclusion from school or participation in other social, recreational or other events or roles).

The ICF framework defines disability within a biopsychosocial model, integrating both factors pertaining to the individual and his or her environment. In contrast, the medical model defines disability as a problem resulting from a medical condition. Awareness of the important role of the social context in defining disability led to the development of the social model of disability, which defines disability not merely as a medical condition or diagnosis but rather as a failure of the policy, cultural and physical environments to accommodate differences in function.

¹⁸ Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities. UNICEF, 2001 <<https://data.unicef.org/resources/children-with-disabilities-report-2021>>.

¹⁹ International Classification of Functioning, Disability and Health (ICF). In: World Health Organization [website]. <www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health>.







Monitoring progress on disability-inclusive education remains challenging. In recent years, there has been a renewed effort to collect more comprehensive data on children with disabilities, including through Child Functioning Modules in censuses and household surveys. Questions on children with disabilities have also been progressively included in school surveys and in EMIS²⁰. At the same time there has been an increased effort in the WASH sector to monitor disability-inclusive drinking water, sanitation and hygiene services²¹. This thematic pull out highlights emerging national data on the provision of disability-inclusive WASH services in schools, which is widely recognized as a critical component of a safe and inclusive learning environment for all.

While a growing number of countries monitor coverage of disability-inclusive WASH services in schools, national definitions and indicators vary widely, which makes cross-country comparison difficult. Education programmes are increasingly moving towards a 'universal design' approach which aims to maximize usability for all students regardless of physical, intellectual or perceptual abilities, and to reduce the stigma associated with 'accessible designs' that involve modifying existing designs to make them more accessible for students with disabilities²². However, this shift is not yet reflected in national monitoring systems which mostly focus on disability-accessible designs and rarely collect information from students on their usability. Furthermore, the questions used for data collection are often outdated and stigmatizing (Table 1).

²⁰ Guide for Including Disability in Education Management Information Systems. UNICEF, 2016 <www.openemis.org/wp-content/uploads/2018/04/UNICEF_Guide_for_Including_Disability_in_Education_Management_Information_Systems_2016_en.pdf>.

²¹ Make it Count: Disability Inclusive WASH Programme. Guidance note on disability inclusive WASH programme data collection, monitoring and reporting. In: UNICEF [website]. <www.unicef.org/documents/make-it-count-disability-inclusive-wash-programme>.

²² Accessibility Toolkit. In: UNICEF [website]. <<https://accessibilitytoolkit.unicef.org>>.



For example, school surveys in Mali, the United Republic of Tanzania and Nigeria recorded whether drinking water sources are accessible to those with limited mobility or vision, whereas schools in the Solomon Islands are asked whether sources are accessible to all students, including small children and those with limited mobility. The annual census in Peru focuses on specific criteria related to disability-accessible sanitation, such as the presence of a support railing and having an obstacle-free space where a wheelchair can turn. By contrast, a recent survey in Tajikistan asked whether students with disabilities or other special needs are able to access facilities without

assistance and provided detailed guidance on the classification of facilities as 'accessible'. While many countries rely on information submitted by school managers, a growing number of school surveys include direct observation of WASH facilities by independent enumerators (e.g. Nigeria's WASH NORM survey) in an effort to ensure more consistent classification. The Fiji EMIS guidelines on disability disaggregation²³ recommend that school managers conduct a full disability audit in partnership with local organizations of persons with disabilities.

²³ Fiji Education Management Information System (FEMIS): Disability disaggregation package. Guidelines and forms. In: Planipolis [website]. <<https://planipolis.iep.unesco.org/en/2017/fiji-education-management-information-system-femis-disability-disaggregation-package-guidelines>>.



National definitions and indicators of disability-inclusive WASH in schools vary

Country	Source	Year	DRINKING WATER	SANITATION	HYGIENE
Question*					
Peru	Encuesta Nacional a Instituciones Educativas, INEI/ENEDU	2013-present (annual)		<p>Los servicios higiénicos, ¿Cuentan por lo menos con uno que disponga de barandas de apoyo?</p> <p>Los servicios higiénicos ¿Cuentan por lo menos con uno que tenga un espacio libre de obstáculos donde pueda girar una silla de ruedas?</p> <p><i>Is there at least one toilet with support railing?</i></p> <p><i>Is there at least one toilet with obstacle-free space where a wheelchair can turn?</i></p>	
Mali	Enquête de base WASH dans les écoles	2017	<p>Le point de puisage est-il accessible pour les personnes à mobilité ou vision réduite?</p> <p><i>Is the point of use accessible for people with reduced mobility or vision?</i></p>	<p>Y a-t-il au moins une cabine accessible pour les personnes à mobilité ou vision réduite?</p> <p><i>Is there at least one cabin accessible for people with reduced mobility or vision?</i></p>	<p>Sont-ils accessibles pour les personnes à mobilité ou vision réduite?</p> <p><i>Are [the handwashing facilities] accessible for people with reduced mobility or vision?</i></p>
Tajikistan	Poverty Diagnostic of Water Supply, Sanitation and Hygiene Sector in Tajikistan, World Bank	2017	<p>Can students with disabilities or other special needs access drinking water facilities without assistance?</p> <ul style="list-style-type: none"> • Without any difficulty • With some difficulty • With a lot of difficulty • Not at all 	<p>Can students with disabilities or other special needs access the toilet facility without assistance? Ask even if there are no students with disabilities at school.</p> <ul style="list-style-type: none"> • Without any difficulty • With some difficulty • With a lot of difficulty • Not at all 	<p>Can students with disabilities or other special needs access the handwashing facilities without assistance?</p> <ul style="list-style-type: none"> • Without any difficulty • With some difficulty • With a lot of difficulty • Not at all
Solomon Islands	National WinS Baseline Survey	2018	<p>Is the primary water source accessible to all students, including small children and those with limited mobility? (multiple response)</p> <ul style="list-style-type: none"> • Yes-small children • Yes-those with limited mobility • There are no children with disability • N/A 	<p>Are the toilets accessible by all students including small children and children with limited mobility? (multiple response)</p> <ul style="list-style-type: none"> • Yes-small children • Yes-children with limited mobility • None of the above 	<p>Are the handwashing facilities accessible to all students including small children and those with limited mobility? (multiple response)</p> <ul style="list-style-type: none"> • Yes-small children • Yes-those with limited mobility • None of the above • There are no children with limited mobility • N/A
United Republic of Tanzania	School Water, Sanitation and Hygiene Assessment	2018	Is drinking water accessible to those with limited mobility or vision?	Is there at least one usable toilet/latrine that is accessible to those with physical disability or impaired vision?	Are the handwashing facilities accessible to those with physical disability or impaired vision?
Nigeria	National Outcome Routine Mapping of Water, Sanitation and Hygiene Service Levels	2019	Is the drinking water source accessible to those with limited mobility or vision?	Is there at least one usable toilet/latrine that is accessible to those with limited mobility or vision? (Q AND RECORD)	Are the handwashing facilities accessible to those with limited mobility or vision?
Fiji	Education Management Information System (FEMIS)	2018-present (annual)	Is drinking water accessible to boys and girls with disabilities?	Are toilets accessible to boys and girls with physical disabilities? (ramp access, hand rails)	Are the handwashing facilities accessible for boys and girls with physical disabilities? (taps and soap within reach)
Gabon	Enquête de base sur la situation EHA dans les écoles du Gabon - Rapport final	2021	<p>Le point de puisage est-il accessible aux personnes en situation de handicap?</p> <p><i>Is the point of use accessible to people with disabilities?</i></p>	<p>Y a-t-il au moins une cabine accessible aux personnes en situation de handicap?</p> <p><i>Is there at least one cabin accessible to people with disabilities?</i></p>	<p>Sont-ils accessibles pour les personnes en situation de handicap?</p> <p><i>Are [the handwashing facilities] accessible for people with disabilities?</i></p>

* Response options are yes or no unless otherwise noted.

† Question includes a note: 'To be considered accessible, water can be accessed (directly from the source or from a storage container) via a clear path without stairs or steps that is free of obstructions and has age-appropriate handrails; the tap can be reached from a seated position, and the water source/dispenser can be opened/closed with minimal effort with one closed fist or feet.'

TABLE 1 Definitions of disability-inclusive drinking water, sanitation and hygiene facilities in schools, selected national data sources 2017-2021



Coverage of disability-accessible toilets depends on the criteria used for classification

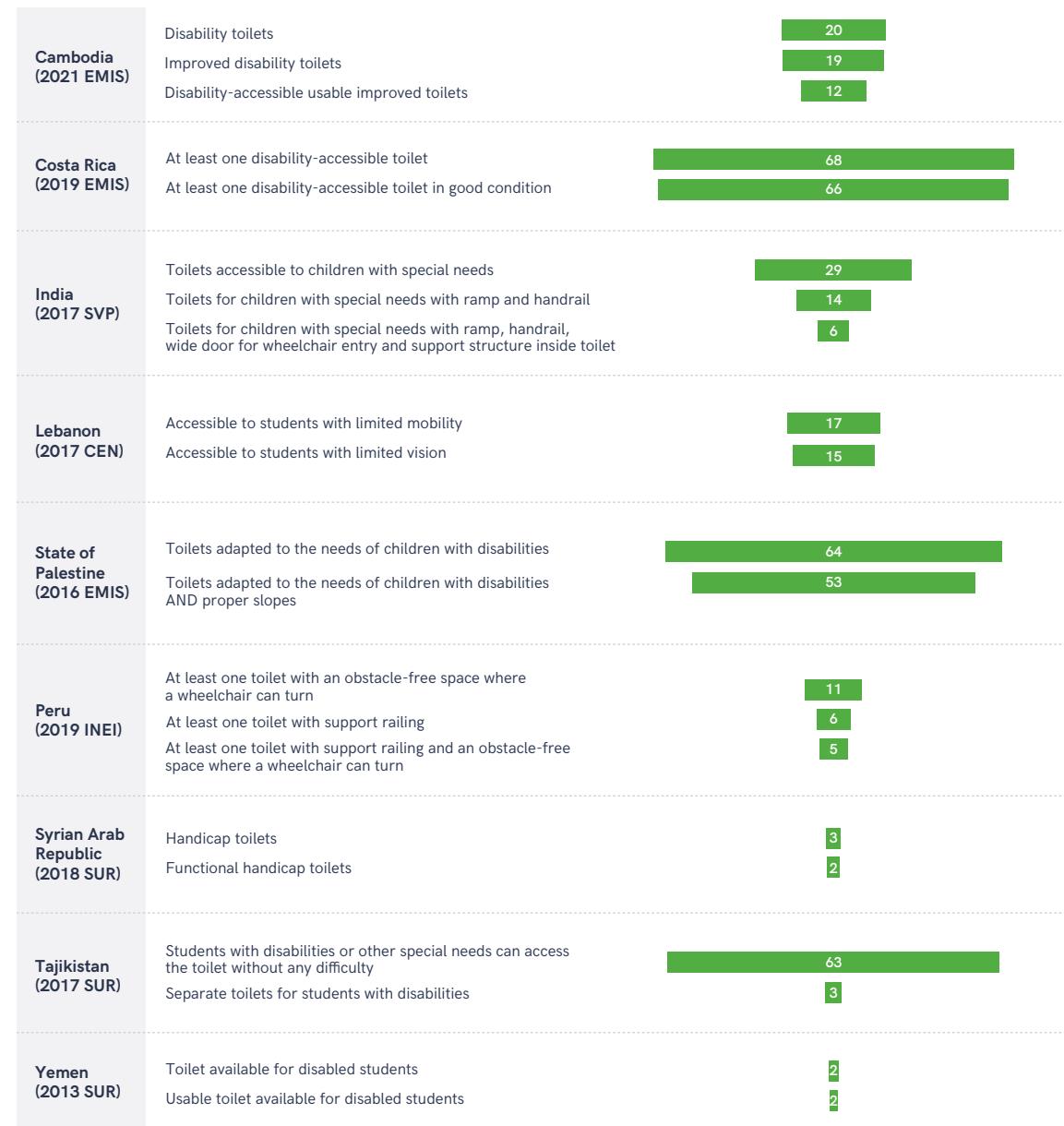


FIGURE 42

Proportion of schools meeting different criteria for accessible toilets, selected countries with national data available (%)

Assessing current status

Figure 42²⁴ shows the proportion of schools meeting different criteria for disability-accessible toilets in countries with disaggregated data available. It highlights that some criteria are more stringent than others and that the definitions of indicators selected for national monitoring can make a big difference to coverage figures. For example, in India 29% of schools had toilets accessible to students with special needs but only 14% had a ramp and a handrail, and just 6% had a ramp, a handrail and a wide door for a wheelchair. In Lebanon 17% of schools had toilets accessible for students with limited mobility and 15% had toilets accessible for students with limited vision. In Tajikistan teachers reported that students with disabilities or other special needs were able to access toilet facilities without difficulty in 63% of schools, but only 3% of schools had separate toilets for students with disabilities.

While many countries collect information on disability-accessible toilets, relatively few collect information on accessibility of drinking water and handwashing facilities. In all countries with data on two or more WASH services, schools were more likely to have accessible drinking water than accessible sanitation or hygiene (Figure 43). In the United Republic of Tanzania, coverage of accessible drinking water was nearly five times higher than accessible sanitation. Coverage also varied between school levels. In Nigeria, Gabon and the United Republic of Tanzania, coverage was higher in secondary schools than in primary schools, whereas in Fiji and Syria coverage was higher in primary schools. Coverage in pre-primary schools also varied widely. In the Solomon Islands pre-primary schools were less likely to have disability-accessible drinking water and sanitation, but more likely to have disability-accessible hygiene services.

²⁴ Unless otherwise indicated, figures in this section are based on individual data sources. Short survey codes are provided for reference. For further information please refer to the relevant JMP country files for WASH in schools: <<https://washdata.org/data/downloads>>.



Coverage of disability-accessible drinking water, sanitation and hygiene often varies between school levels

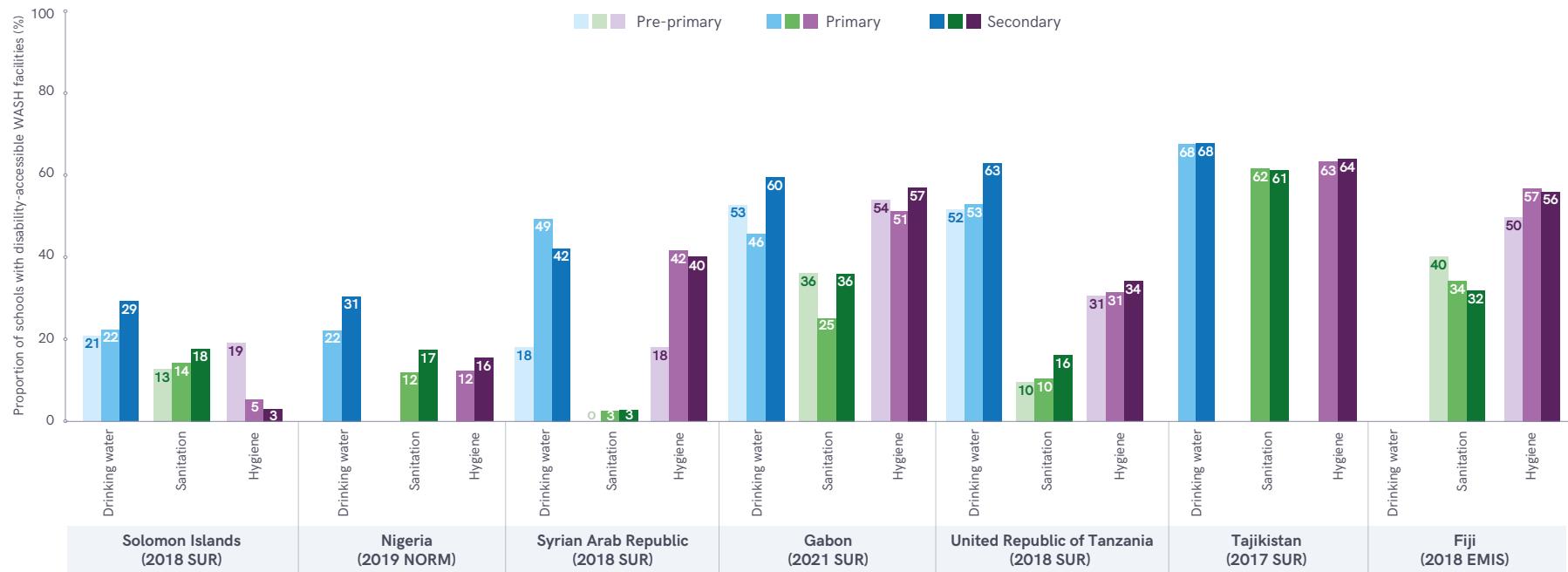


FIGURE 43 Proportion of schools with disability-accessible drinking water, sanitation and hygiene, by school level in selected countries 2017–2021 (%)



In many countries with disaggregated data available, most schools have some kind of WASH facility, but far fewer schools have disability-accessible WASH services (Figure 44). In over half the countries, the gap between any sanitation facility and a disability-accessible toilet exceeded 50 % pts. In Yemen, 8 out of 10 schools had toilets, but only 1 in 50 schools had disability-accessible toilets. While schools in Costa Rica and Peru universally (>99%) had some kind of sanitation facility, 2 out of 3 schools in Costa Rica and 1 in 20 schools in Peru had disability-accessible toilets. By contrast, only half the schools in the Solomon Islands had any kind of toilet, but nearly a third of these had disability-accessible toilets.

In some countries large gaps are also observed for drinking water. In Syria and Mali all schools had some kind of water source but only half had disability-accessible sources. In Sudan 8 out of 10 schools had any water source, but only 1 out of 4 had disability accessible sources. In most countries the accessibility gap for hygiene services was less than 30% pts, except for Gabon and Ecuador which had gaps of 32 and 66 % pts respectively. Mali reported the smallest gap: 83% of schools had a handwashing facility and 81% considered the handwashing facilities to be accessible for those with limited vision or mobility.

Far fewer schools have drinking water, sanitation and hygiene facilities that are disability accessible

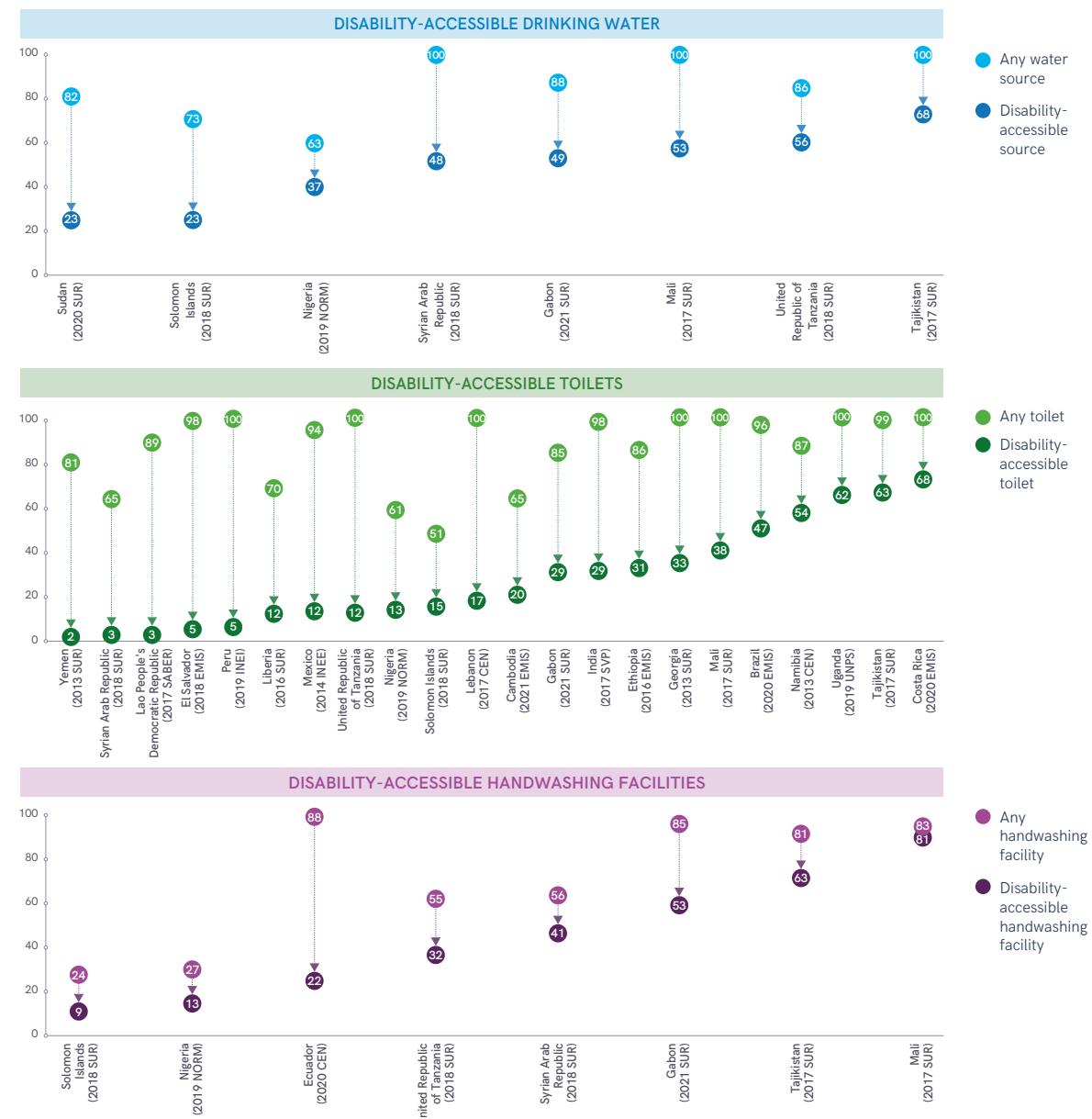


FIGURE 44

Proportion of schools with any facility and with accessible water, sanitation and hygiene facilities, selected countries with national data available 2013–2021 (%)



Analysing inequalities

Costa Rica is one of the few countries with sufficient data to assess trends in coverage of disability-inclusive WASH services in schools. The Ministerio de Educación Pública Infraestructura has time series data from 2014 to 2020 which show that there has been a steady increase in the number of pre-primary, primary and secondary schools with toilets in good condition that comply with Law 7600 to 'incorporate an inclusive approach and take into account the special needs of different types of people so that they are not excluded due to their disability'²⁵ (Figure 45). By 2020, coverage was higher in pre-primary schools and secondary schools than in primary schools, but since 2014 primary school coverage has nearly doubled from 32% to 61%.

In addition to monitoring the provision of infrastructure meeting disability-accessible criteria, it is important to assess the extent to which students with disabilities are able to access and use school facilities without additional assistance. The Tajikistan 2017 WASH Poverty Diagnostic survey asked teachers to assess the degree to which students with disabilities have difficulties accessing WASH services. In three out of five rural schools teachers reported that students with disabilities could access handwashing facilities without any difficulty. Further observations revealed that while more than half had a clear path with no obstructions, only around one in ten could be reached from a seated position and operated by feet and/or one closed fist with minimal effort (Figure 46).

²⁵ Translated from Spanish. Ley de Igualdad de Oportunidades Para las Personas con Discapacidad. Ley N° 7600. Tribunal Supremo de Elecciones. p13. tse.go.cr/pdf/normativa/leyigualdaddeoportunidades.pdf.

In Costa Rica, disability-accessible toilet coverage has increased at all school levels since 2014

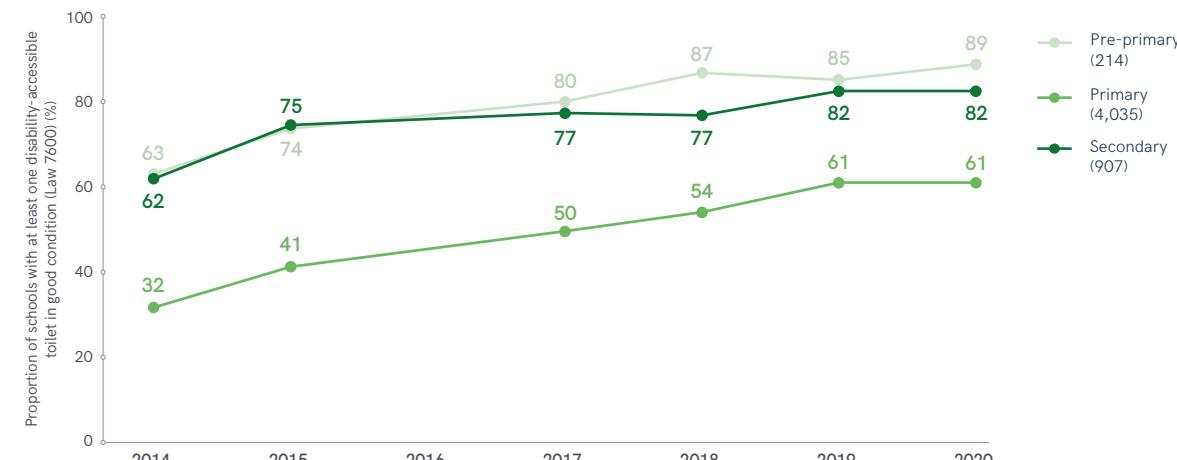


FIGURE 45 Proportion of pre-primary, primary and secondary schools with at least one disability-accessible toilet in good condition in Costa Rica 2014–2020 (%)

In a third of schools in rural Tajikistan, teachers reported that students with disabilities had difficulties accessing WASH services

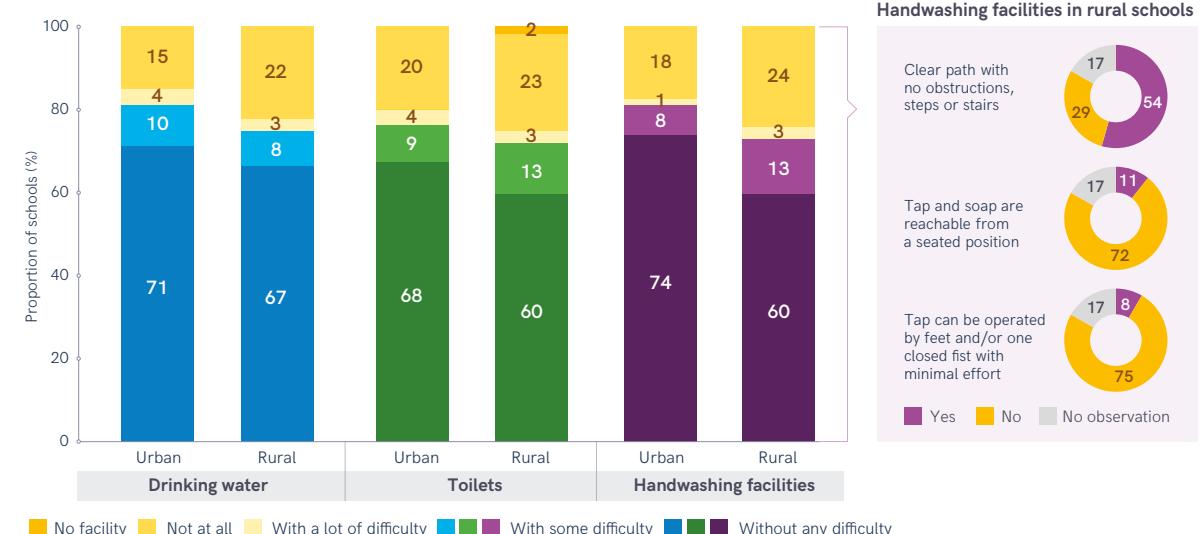


FIGURE 46 Proportion of urban and rural schools in Tajikistan in which students with disabilities or other special needs are able to access WASH facilities, by level of difficulty (%)



Increasingly, data are being collected on the number of students with disabilities as well as the type and extent of disabilities. For example, in Fiji student learning profiles record the extent to which students have functional difficulties with seeing, hearing, gross motor actions, fine motor actions, speaking, learning (general), learning (specific), behaviour/attention/socialization, and emotions. In some countries data on the number of students with disabilities can be combined with information on disability-accessible WASH services (Figure 47). Analysis of school-level data from four countries shows that 24% of schools in the Syrian Arabic Republic, 29% of schools in Liberia and Nigeria, and 40% of schools in Lao People's Democratic Republic had students with disabilities but no disability-accessible toilets.



In 4 countries with data available, more than 1 in 5 schools had students with disabilities but no disability-accessible toilets

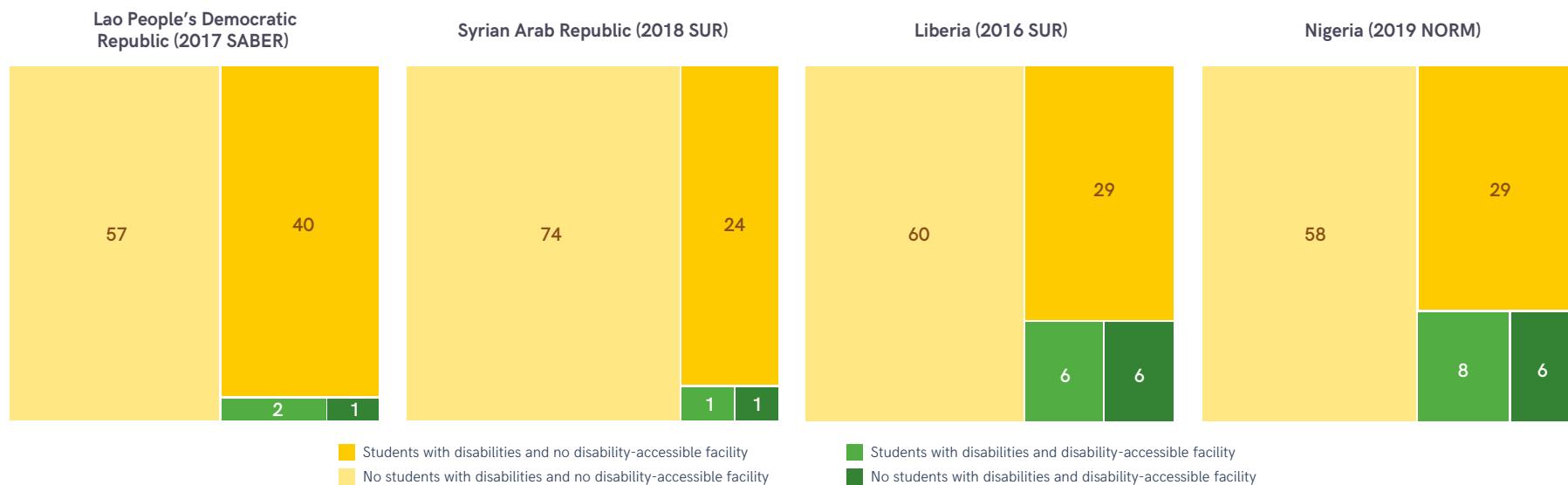


FIGURE 47 Proportion of schools with disabled students and with disability-accessible toilets in selected countries with data 2017–2019 (%)



In countries with disaggregated data available it is also possible to analyse sub-national inequalities in coverage of disability-accessible WASH in schools (Figure 48). In 2020, 47% of schools in Brazil had sanitation facilities accessible to students with limited mobility, but coverage was much lower in rural schools (20%) than in urban schools (60%), and in pre-primary schools (41%) than in secondary schools (67%). But the biggest gap in accessibility is between Federative districts: just one in six schools in Amazonas have accessible toilets, compared with nine out of ten schools in the capital Distrito Federal. A 2020 survey in the United Republic of Tanzania showed that 56% of schools had disability-accessible drinking water sources. It found smaller disparities between urban and rural (45%) and between school levels, but there was a gap of 20 % pts between public (54%) and private (72%) schools, and children in Kusini Unguja region were three times more likely to have accessible drinking water sources than children in Simiyu region. Only half (53%) of schools in Gabon had disability-accessible handwashing facilities in 2021 and sub-national inequalities were less pronounced but coverage was twice as high among schools in the province of Estuaire (63%) than in Ogooué Ivindo (31%).



Disaggregated data reveal significant sub-national inequalities in disability-accessible WASH in schools

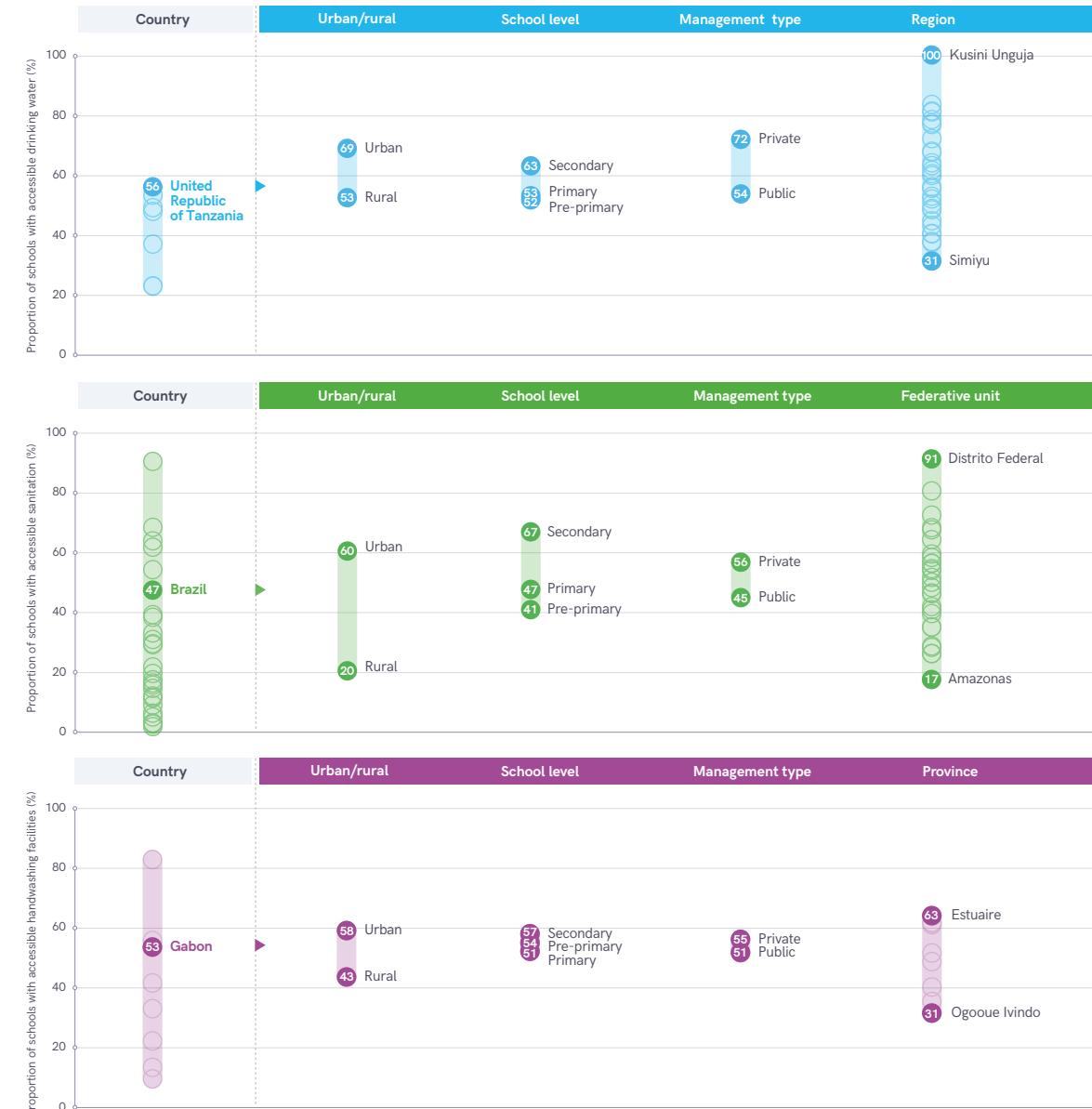


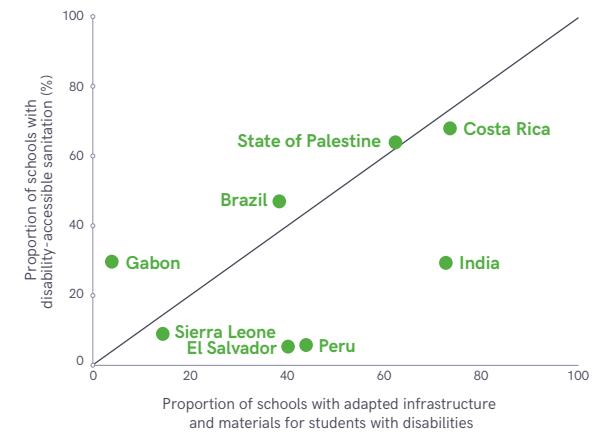
FIGURE 48 Sub-national inequalities in coverage of drinking water, sanitation and hygiene facilities accessible to students with limited mobility in the United Republic of Tanzania, Brazil and Gabon, 2020–2021 (%)



The provision of disability-accessible infrastructure in schools goes far beyond drinking water, sanitation and hygiene services. The UNESCO Institute of Statistics (UIS) compiles general information on the proportion of schools in each country with 'adapted infrastructure and materials for students with disabilities' (SDG 4.a.1 d). Adapted infrastructure is defined as any built environment related to education facilities that is accessible to all users, including those with different types of disability, to be able to gain access to use and exit from them²⁶. Adapted materials include learning materials and assistive products that enable students and

teachers with disabilities/functioning limitations to access learning and to participate fully in the school environment²⁷. Figure 50 combines survey data on coverage of disability-accessible toilets with UIS data on general coverage of adapted infrastructure and materials. It shows that in five out of eight countries with both types of data available, schools were more likely to have adapted infrastructure and materials. For example, in El Salvador two out of five schools have adapted infrastructure and materials, but just 1 out of 20 have disability-accessible toilets.

In most countries with data available schools were more likely to have adapted infrastructure and materials than disability-accessible toilets



²⁶ Accessibility includes ease of independent approach, entry, evacuation and/or use of a building and its services and facilities (such as water and sanitation) by all of the building's potential users, with an assurance of individual health, safety and welfare during the course of those activities.

²⁷ Accessible learning materials include textbooks, instructional materials, assessments and other materials that are available and provided in appropriate formats, such as audio, braille, sign language and simplified formats, that can be used by students and teachers with disabilities/functioning limitations.

FIGURE 49 Proportion of schools with adapted infrastructure and materials, and with accessible sanitation facilities, by country (%)

SECTION 4

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 norms and standards for global monitoring of drinking water, sanitation and hygiene (WASH) in households. Following agreement of the Sustainable Development Goal (SDG) targets in 2015, the scope of JMP global monitoring was expanded to include WASH in schools and WASH in health care facilities.

In 2016, the JMP convened an expert group to develop core questions and indicators for monitoring WASH in schools and subsequently established a methodology for generating internationally comparable estimates to support global monitoring of related SDG targets 6.1, 6.2 and 4.a. In 2018, the JMP published a global baseline report, containing harmonized national, regional and global estimates, followed by a progress update in 2020. The following is a brief summary of the JMP methodology for monitoring WASH in schools, which builds on established methods for monitoring WASH in households and will continue to be refined over time. For more detailed information on JMP definitions and methods please refer to the resources listed in Table A3.

Data collection and validation for WASH in schools

The JMP releases updated estimates every two years. The first step is to compile national data sources containing information about drinking water, sanitation and hygiene services in schools. The data search involves systematically visiting the websites of national statistical offices, sector institutions such as ministries of education, health, water and sanitation, and other regional and global databases. UNICEF and WHO regional and country offices also provide support to identify newly available datasets in consultation with national authorities. Data are then extracted, cleaned, analysed and added to JMP country files for WASH in schools.

The second step is to validate national estimates. The JMP country files contain a complete list of national data sources and show how information from each source has been used to generate internationally comparable estimates for each year in the reference period (from 2000 to the year prior to publication). In the last quarter of the year before publication, draft estimates are circulated to WHO and UNICEF country offices for a two-month period of country consultation and technical feedback from national authorities.

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, and these sometimes differ from national statistics which may use different definitions and/or methods. The purpose of the consultation is not to compare JMP estimates and national statistics but to review the completeness or correctness of the datasets in the JMP country file and to verify the interpretation of national data in the JMP estimates.

The JMP also extracts information on other relevant indicators included in national monitoring systems which are not part of the existing JMP service ladders. These data are used for additional analysis on issues of interest, such as menstrual health, disability and pandemic preparedness and response, but are not included in JMP country files due to limited data availability and lack of commonly agreed indicator definitions and methods for producing national, regional and global estimates.

Data disaggregation

JMP estimates are routinely disaggregated by service level based on the SDG service ladders for schools

(no service, limited, basic) and by relevant settings (urban, rural, pre-primary, primary, secondary). Where possible, estimates are also disaggregated by other relevant stratifiers of inequality to facilitate further analysis in JMP reports.

Data sources and coverage

The primary sources of national data are routine Education Management Information Systems (EMIS) and periodic (non-EMIS) censuses and school facility surveys. Other sources of national data include regional monitoring initiatives such as the European Protocol on Water and Health, and secondary information compiled by the UNESCO Institute of Statistics. Where available, the JMP uses primary sources rather than secondary sources and uses original microdata or tabulations provided by national authorities rather than summary reports.

The 2022 JMP update on WASH in schools draws on a total of 1,321 data sources (since 2000), 1,029 of which were used to produce estimates for 182 countries²⁸. Figure A1 shows that almost twice as many datasets were used to generate national estimates for drinking water (895) and sanitation (806) than for hygiene (497).

National data are only included if they meet minimum standards for data quality and coverage. For example, EMIS or census data are only used if the response rate is at least 33%. Survey data are only used if there are at least 50 schools per domain. Sub-national surveys are only used if they are representative of rural or urban schools.

The JMP extracts data that are representative of

²⁸ For the purposes of this report, 'countries' refers to countries, areas and territories included in the United Nations Population Division World Population Prospects, 2019 revision.

National data sources used in the JMP reports on WASH in schools

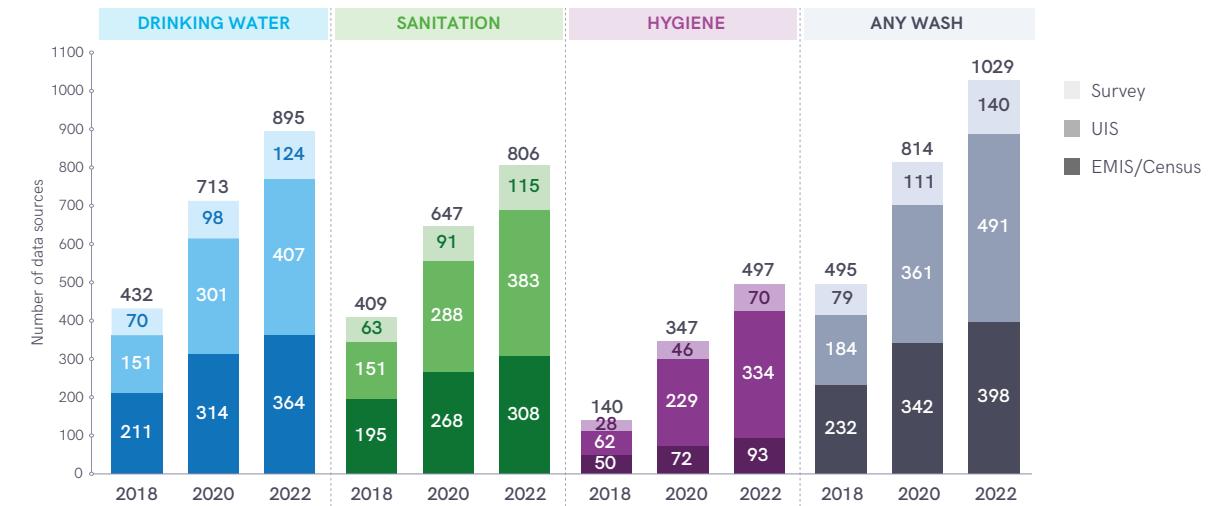


FIGURE A1 Number of national data sources used in the JMP 2018 baseline report, 2020 progress update and 2022 data update, by type

national, urban and rural schools and pre-primary, primary and secondary schools. The JMP relies on official data published by national authorities but detailed information on the overall distribution by education level and by type of school (e.g. public, private, religious, community, and schools for disadvantaged groups) is not always available.

Unless otherwise categorized by national authorities, all schools with primary-level students are counted as 'primary', all schools with secondary-level students are counted as 'secondary', and all schools with pre-primary-level students are counted as 'pre-primary'²⁹. This means some schools may be double-counted and the total number of schools does not necessarily equal the sum of the pre-primary, primary and secondary schools.

²⁹ Where data are available for early childhood development centres, these are counted as 'pre-primary'.

The JMP uses UNESCO UIS³⁰ data on pre-primary, primary and secondary school-age populations and imputes values for countries with incomplete time series and for countries with no school-age data. Urban and rural school-age populations are calculated using the percentage of the population residing in urban areas, as reported by the UN Population Division.

JMP definitions

The JMP classifies drinking water and sanitation technologies into improved and unimproved types. Improved drinking water sources are designed to protect against contamination, while improved sanitation facilities are designed to hygienically separate excreta from human contact (Table A2). Handwashing facilities may be fixed or mobile

³⁰ Downloaded November 2019. <<http://data.uis.unesco.org>>.

and include sinks 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.

The first step in the estimation process is to compile information on the types of facilities available in order to estimate the proportion of schools with improved and unimproved water and sanitation facilities and the proportion of schools with and without handwashing facilities.

The second step is to compile information on the level of service provided, specifically the availability of drinking water, availability of single-sex toilets that are usable at the time of the survey, and presence of water and soap for handwashing. Information on facility types and service levels is then combined to estimate the proportion of schools providing a basic, limited or no service.

Data analysis and country estimates

The JMP uses a simple linear regression to generate estimates from all the available data points for each of the nine primary indicators (Table A1)³¹.

Proportion of schools with:		
DRINKING WATER	SANITATION	HYGIENE
• Any water facility	• Any sanitation facility	• Any handwashing facility
• An improved water source	• An improved sanitation facility	• A handwashing facility with water
• A basic water service	• A basic sanitation service	• A basic hygiene service

TABLE A1 JMP primary indicators for WASH in schools

³¹ The ‘Charts’ tab in a country file helps visualize trends over time by showing both the data points used and the resulting estimates.

	DRINKING WATER	SANITATION
Improved facilities	Piped supplies <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Flush and pour-flush toilets connected to sewers
	Non-piped supplies <ul style="list-style-type: none"> • Unprotected wells and springs 	On-site sanitation <ul style="list-style-type: none"> • 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		Networked sanitation <ul style="list-style-type: none"> • Flush and pour-flush toilets flushed to open drain or elsewhere*
		On-site sanitation <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Open water sources located above ground including rivers, lakes, ponds, streams, canals, reservoirs, irrigation channels 	Open defecation <ul style="list-style-type: none"> • Defecation in the bush or field or ditch • Defecation into surface water, including beach, river, stream, sea, or drainage channel

* 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.

TABLE A2 JMP classification of improved and unimproved facility types

These estimates are used to calculate the remaining schools with no facility or unimproved facilities and with a limited service.

Trends are calculated if there are two or more data points available spanning at least four years. If the data points span fewer than four years, an average is used. Separate regressions are made for national,

urban and rural, and for pre-primary, primary and secondary schools where data are available. A national estimate can also be calculated from urban and rural estimates or pre-primary, primary and secondary estimates. If data are only available for primary schools, a national estimate may also be calculated.



Global availability of data on basic WASH in schools

% of school-age population (# countries, areas and territories) in 2021	BASIC DRINKING WATER						BASIC SANITATION						BASIC HYGIENE					
	National	Urban	Rural	Pre-primary	Primary	Secondary	National	Urban	Rural	Pre-primary	Primary	Secondary	National	Urban	Rural	Pre-primary	Primary	Secondary
World (234)	60% (133)	26% (22)	55% (30)	9% (16)	61% (124)	59% (112)	60% (123)	26% (27)	54% (29)	7% (16)	61% (114)	61% (106)	57% (121)	23% (21)	50% (29)	6% (12)	55% (113)	57% (108)
SDG regions																		
Australia and New Zealand (2)	83% (1)	0% (0)	0% (0)	0% (0)	86% (1)	81% (1)	83% (1)	0% (0)	0% (0)	0% (0)	86% (1)	81% (1)	83% (1)	0% (0)	0% (0)	0% (0)	86% (1)	81% (1)
Central and Southern Asia (14)	83% (10)	89% (5)	92% (6)	3% (1)	94% (9)	96% (9)	82% (9)	89% (5)	92% (5)	3% (1)	92% (7)	94% (7)	81% (6)	76% (4)	80% (5)	0% (0)	78% (5)	81% (5)
Eastern and South-Eastern Asia (18)	37% (14)	1% (5)	2% (2)	13% (2)	38% (14)	33% (12)	37% (14)	2% (6)	3% (3)	13% (2)	38% (14)	33% (11)	32% (14)	2% (6)	3% (3)	13% (2)	34% (14)	33% (13)
Europe and Northern America (53)	69% (28)	0% (1)	0% (0)	1% (1)	70% (25)	68% (25)	68% (26)	0% (1)	0% (0)	2% (2)	68% (24)	67% (24)	72% (30)	0% (1)	0% (0)	1% (1)	72% (28)	71% (28)
Latin America and the Caribbean (50)	17% (22)	7% (2)	29% (7)	37% (3)	16% (20)	13% (21)	39% (19)	9% (4)	20% (6)	12% (4)	39% (18)	30% (17)	8% (17)	3% (1)	24% (6)	4% (1)	7% (16)	26% (18)
Northern Africa and Western Asia (25)	55% (18)	9% (3)	18% (2)	1% (1)	44% (15)	33% (14)	55% (15)	9% (3)	7% (2)	1% (1)	46% (12)	49% (13)	66% (17)	9% (3)	18% (2)	1% (1)	58% (14)	40% (13)
Oceania (21)	91% (13)	0% (0)	0% (0)	91% (3)	90% (13)	89% (13)	91% (13)	0% (0)	0% (0)	86% (2)	90% (13)	89% (13)	90% (12)	0% (0)	0% (0)	91% (3)	89% (12)	88% (12)
Sub-Saharan Africa (51)	64% (27)	33% (6)	62% (13)	8% (5)	66% (27)	50% (17)	61% (26)	35% (8)	62% (13)	7% (4)	61% (25)	52% (20)	60% (24)	33% (6)	62% (13)	7% (4)	61% (23)	54% (18)
Other regional groupings																		
Landlocked Developing Countries (32)	88% (24)	19% (5)	64% (12)	8% (2)	86% (20)	65% (14)	76% (17)	26% (8)	64% (11)	6% (1)	75% (15)	55% (11)	84% (20)	21% (6)	65% (13)	2% (1)	83% (19)	65% (14)
Least Developed Countries (46)	71% (31)	27% (6)	57% (12)	8% (5)	71% (30)	54% (19)	63% (29)	27% (9)	54% (13)	7% (5)	62% (27)	55% (22)	69% (27)	28% (7)	58% (13)	7% (4)	68% (26)	58% (19)
Small Island Developing States (53)	49% (29)	5% (1)	6% (1)	28% (3)	46% (28)	43% (30)	48% (29)	5% (1)	0% (0)	27% (2)	44% (27)	40% (26)	49% (28)	5% (1)	6% (1)	28% (3)	46% (27)	42% (28)
Fragile contexts (57)	61% (35)	40% (10)	65% (18)	6% (6)	69% (32)	58% (20)	56% (32)	39% (12)	63% (19)	6% (6)	63% (28)	57% (21)	56% (29)	30% (10)	53% (18)	6% (5)	53% (23)	46% (17)
Income groupings																		
Low income (29)	65% (18)	12% (3)	53% (8)	3% (2)	66% (18)	43% (11)	58% (18)	10% (5)	47% (8)	2% (2)	58% (17)	43% (13)	62% (16)	12% (3)	53% (8)	1% (1)	63% (15)	46% (10)
Lower middle income (50)	80% (34)	59% (11)	74% (17)	12% (7)	85% (32)	84% (26)	80% (30)	61% (14)	75% (18)	12% (8)	85% (28)	86% (26)	77% (27)	53% (11)	67% (17)	10% (6)	75% (24)	77% (22)
Upper middle income (55)	14% (32)	3% (3)	4% (5)	11% (7)	10% (27)	11% (27)	20% (27)	3% (3)	2% (3)	4% (5)	17% (23)	16% (22)	12% (28)	1% (2)	3% (4)	2% (5)	8% (25)	15% (26)
High income (82)	76% (44)	1% (5)	0% (0)	0% (0)	74% (42)	75% (43)	75% (43)	1% (5)	0% (0)	1% (1)	73% (41)	74% (40)	76% (45)	1% (5)	0% (0)	0% (0)	74% (44)	75% (45)

<30% coverage

30-49% coverage

50-100% coverage

FIGURE A2 Proportion of relevant school-age population for which data were available on basic WASH in schools in each domain, by SDG region, % of school-age population (# countries)

Regional and global estimates for WASH in schools

Regional and global estimates are made by aggregating country-level estimates of the populations of school-age children with and without WASH services in school, and are only made if data are available for at least 30% of the school-age population in each domain (total, urban, rural, and pre-primary, primary and secondary schools). In countries with incomplete trend data, the school-age population is calculated using linear regression. In countries with no data, values are imputed based on an average proportion of the population that is school-age within the relevant M49 sub-region³². The JMP does not use these 'imputed' statistics to produce country-level estimates. Urban and rural school-age populations are calculated based on the proportion of the national population that lives in urban areas.

Global estimates use imputed values based on SDG regional groupings (see Annex 2). Estimates for basic, limited and no services are then normalized to ensure they add up to 100%.

Figure A2 shows global and regional coverage of data on basic WASH in schools for the school-age population in 2021. Data availability varied widely between regions, areas (rural and urban) and education levels. The biggest data gaps were observed in pre-primary schools, urban and rural areas for each domain.

³² For more details on M49 sub-regions, see <https://unstats.un.org/unsd/methodology/m49/overview>.



General	JMP website: https://washdata.org JMP reports: https://washdata.org/reports JMP data: https://washdata.org/data JMP country files: https://washdata.org/data/downloads# JMP country consultations: https://washdata.org/how-we-work/jmp-country-consultation
Schools	JMP WASH in schools methodology (draft November 2021): https://washdata.org/report/jmp-2021-wins-methodology-draft-nov-2021 Core questions and indicators for monitoring WASH in schools in the Sustainable Development Goals: 2018 update: https://washdata.org/report/jmp-core-questions-monitoring-wash-schools-2018 Meeting report - expert group meeting on monitoring WASH in schools in the Sustainable Development Goals: https://washdata.org/report/june-2016-wins-expert-group-meeting-report Drinking water, sanitation and hygiene in schools: global baseline report 2018: https://washdata.org/report/jmp-2018-wash-schools-final Progress on drinking water, sanitation and hygiene in schools: special focus on COVID-19: https://washdata.org/report/jmp-2020-wash-schools
Relevant materials focused on WASH in households	JMP Methodology: 2017 update and SDG baselines (Available in English): https://washdata.org/report/jmp-methodology-2017-update

TABLE A3

Useful resources for detailed information on JMP definitions and methods

ANNEX 2

Regional groupings

SUSTAINABLE DEVELOPMENT GOALS: REGIONAL GROUPINGS

AUSTRALIA AND NEW ZEALAND:

Australia, New Zealand.

CENTRAL ASIA AND SOUTHERN ASIA: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Kazakhstan, Kyrgyzstan, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan, Uzbekistan.**EASTERN ASIA AND SOUTH-EASTERN ASIA:**
Brunei Darussalam, Cambodia, China (Hong Kong Special Administrative Region), China (Macao Special Administrative Region), Democratic People's Republic of Korea, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Myanmar, Mongolia, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste, Viet Nam.**EUROPE AND NORTHERN AMERICA:** Albania, Andorra, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bermuda, Bulgaria, Canada, Channel Islands, Croatia, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Holy See, Hungary, Ireland, Iceland, Isle of Man, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland,

Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Saint Pierre and Miquelon, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America.

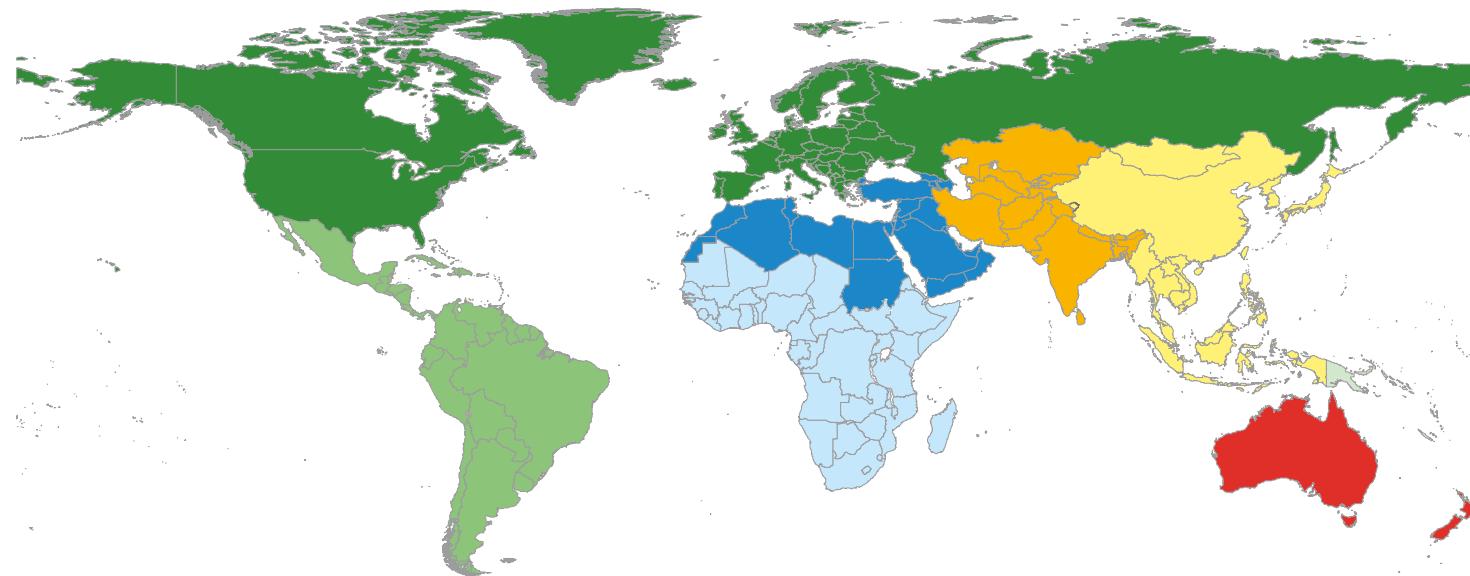
LATIN AMERICA AND THE CARIBBEAN: Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Bonaire, Sint Eustatius and Saba (Caribbean Netherlands), Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands (Malvinas), French Guiana, Guadeloupe, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint-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).

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, Sudan, Syrian Arab Republic, Tunisia, Türkiye, United Arab Emirates, Western Sahara, Yemen.

OCEANIA (EXCLUDING AUSTRALIA AND NEW ZEALAND): American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna Islands.

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



OTHER REGIONAL GROUPINGS

LANDLOCKED DEVELOPING COUNTRIES (LLDCS):

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

LEAST DEVELOPED COUNTRIES (LDCS):

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

Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zambia.

SMALL ISLAND DEVELOPING STATES (SIDS):

American Samoa, Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bonaire, Sint Eustatius and Saba (Caribbean Netherlands), British Virgin Islands, Cabo Verde, Cayman Islands, Comoros, Cook Islands, Cuba, Curaçao, Dominica, Dominican Republic, Fiji, French Polynesia, Grenada, Gwadeloupe, 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-Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint-Martin (French part), Saint Vincent and the Grenadines, Samoa, São Tomé and Príncipe, Seychelles, Singapore, Sint Maarten (Dutch part), Solomon Islands, Suriname, Timor-Leste, Tonga, Trinidad and Tobago, Turks and Caicos Islands, Tuvalu, United States Virgin Islands, Vanuatu.

FRAGILE CONTEXTS (OECD, 2021)

Afghanistan, Angola, Bangladesh, 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, 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, Togo, Uganda, United Republic of Tanzania, Venezuela, Yemen, Zambia, Zimbabwe.

ANNEX 3

National WASH in schools estimates

COUNTRY, AREA OR TERRITORY	Year	School-age population (thousands)					NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY				
		% urban	% pre-primary	% primary	% secondary	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)
Afghanistan	2021	13 418	26	8	48	44	66	13	22	-	-	24	-	-	26	-	-	58	17	25	75	-	-
Albania	2021	486	63	15	34	51	64	-	-	-	-	-	-	-	-	-	-	56	-	-	73	-	-
Algeria	2021	9 921	74	7	45	48	90	2	8	-	-	-	-	-	-	-	-	85	<1	15	92	7	1
Andorra	2021	11	88	18	35	47	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Angola	2021	12 459	67	12	48	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anguilla	2021	3 100	15	50	36	>99	<1	<1	-	-	-	-	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1
Antigua and Barbuda	2021	20	24	14	51	35	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Argentina	2021	10 979	92	20	40	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Armenia	2021	601	63	21	28	50	98	-	-	-	-	-	-	-	-	-	-	99	-	-	97	-	-
Australia	2021	4 568	86	7	51	42	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Azerbaijan	2021	1 928	57	25	28	47	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Bahrain	2021	302	90	22	42	36	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Bangladesh	2021	44 455	39	19	33	48	81	14	5	85	13	2	90	7	4	-	-	80	15	6	95	5	<1
Barbados	2021	43	31	14	44	42	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Belarus	2021	1 491	80	24	32	45	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Belgium	2021	1 995	98	20	41	39	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1
Belize	2021	108	46	14	43	43	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-
Benin	2021	4 585	49	16	43	42	43	37	21	-	-	-	-	-	-	-	-	43	39	19	-	-	16
Bermuda	2021	9	100	6	40	54	-	-	-	-	-	-	NA	NA	NA	-	-	-	-	-	-	-	-
Bhutan	2021	193	43	12	46	42	72	19	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bolivia (Plurinational State of)	2021	3 277	70	15	43	42	-	-	-	-	-	<1	84	-	-	-	-	-	-	-	-	-	-

Key: No estimate NA Not applicable

Note: For JMP estimate methods see Annex 1. For unrounded estimates see <https://washdata.org>.

COUNTRY, AREA OR TERRITORY	Year	School-age population (thousands)					NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY		
		% urban	% pre-primary	% primary	% secondary	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	
Botswana	2021	775	72	22	48	31	-	<1	-	-	-	-	-	-	-	-	-	-	<1	-	-	<1		
Brazil	2021	40 703	87	9	36	55	-	14	-	-	3	-	43	-	-	21	-	-	16	-	-	9		
British Virgin Islands	2021	5	49	11	45	44	91	-	-	-	-	-	-	-	-	-	-	-	94	6	<1	88		
Brunei Darussalam	2021	106	79	19	39	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Burkina Faso	2021	9 050	31	22	39	38	61	5	33	-	-	23	-	37	-	-	29	62	5	33	46	15	39	
Burundi	2021	4 318	14	18	46	36	46	7	47	-	-	-	-	-	48	3	49	45	6	50	52	39	9	
Cabo Verde	2021	153	67	20	41	39	-	<1	-	-	-	-	-	-	-	-	-	-	<1	>99	<1	<1		
Cambodia	2021	4 962	25	21	42	37	76	2	22	80	1	19	75	2	22	62	<1	38	83	4	14	82	<1	17
Cameroon	2021	9 918	58	16	43	41	37	27	36	-	-	29	-	65	-	-	39	37	20	43	-	-	-	
Cayman Islands	2021	11	100	13	43	44	>99	<1	<1	-	-	-	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1	
Central African Republic	2021	2 163	43	21	38	41	16	7	77	-	-	-	-	-	-	-	49	16	3	81	-	-	58	
Chad	2021	7 345	24	23	39	38	37	<1	63	-	-	-	-	-	-	-	41	30	<1	70	-	-	50	
Chile	2021	3 771	88	20	40	40	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	
China	2021	254 343	63	20	41	39	-	-	<1	-	-	-	-	-	-	-	-	-	<1	-	-	<1		
China, Hong Kong Special Administrative Region	2021	868	100	22	41	37	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1	
China, Macao Special Administrative Region	2021	81	100	22	45	33	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1	
Colombia	2021	10 611	82	21	35	44	-	-	-	-	-	-	55	12	33	-	-	-	-	-	-	-	-	
Comoros	2021	337	30	21	39	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Congo	2021	2 262	68	22	40	38	54	-	-	-	-	-	-	-	-	-	-	54	-	-	-	-		
Cook Islands	2021	4	76	12	41	47	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
Costa Rica	2021	927	81	15	46	38	84	6	10	-	-	16	-	3	-	2	86	3	11	76	19	5		
Croatia	2021	647	58	24	26	50	95	<1	4	-	-	-	-	-	-	-	-	-	-	-	-	-		
Cuba	2021	1 833	77	19	41	40	>99	<1	<1	-	-	<1	-	-	-	-	>99	<1	<1	>99	<1	<1		
Côte d'Ivoire	2021	10 671	52	21	39	40	-	-	50	-	-	32	-	72	-	-	42	-	-	56	-	-	14	
Democratic Republic of the Congo	2021	37 102	46	24	42	34	-	-	58	-	-	-	-	-	-	-	44	-	-	58	-	-	-	
Denmark	2021	1 020	88	17	43	40	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Djibouti	2021	261	78	16	37	48	-	-	8	-	-	4	-	17	-	-	-	-	9	-	-	7		

COUNTRY, AREA OR TERRITORY	NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY				
	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)								
Botswana	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Brazil	-	-	4	-	-	4	-	-	9	-	-	6	-	-	3	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
British Virgin Islands	87	13	0	-	-	-	-	-	-	-	-	-	94	6	0	80	20	0	91	9	<1	-	-	-	-	-	-	>99	<1	<1	80	20	<1					
Brunei Darussalam	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	-	-	-	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1					
Burkina Faso	52	28	20	-	-	-	-	-	-	-	-	-	58	24	18	56	12	32	32	-	-	-	-	-	-	-	-	-	33	-	-	16	-	-				
Burundi	45	50	5	-	-	-	-	-	-	-	-	-	35	56	9	93	7	0	18	15	67	-	-	-	-	-	-	52	17	31	18	13	68	14	21	64		
Cabo Verde	93	6	1	-	-	-	-	-	-	-	-	-	92	8	0	93	7	0	86	-	-	-	-	-	-	-	-	83	-	-	>99	<1	<1					
Cambodia	32	30	37	39	23	38	32	31	37	21	13	66	41	34	25	47	36	17	68	5	27	74	5	21	67	5	28	61	4	35	73	5	22	67	6	27		
Cameroon	39	-	-	-	-	-	-	-	-	-	-	-	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Cayman Islands	>99	0	0	-	-	-	NA	NA	NA	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1			
Central African Republic	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Chad	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Chile	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
China	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	-	-	<1			
China, Hong Kong Special Administrative Region	>99	0	0	100	0	0	NA	NA	NA	-	-	-	100	0	0	100	0	0	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1			
China, Macao Special Administrative Region	>99	0	0	100	0	0	NA	NA	NA	-	-	-	100	0	0	100	0	0	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1			
Colombia	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Comoros	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Congo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Cook Islands	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
Costa Rica	81	16	4	83	14	3	93	3	4	97	0	3	77	20	3	94	1	5	81	<1	19	-	-	17	-	-	10	-	-	5	79	<1	21	89	2	9		
Croatia	95	5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99	<1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Cuba	>99	0	0	-	-	0	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Côte d'Ivoire	-	-	49	-	-	43	-	-	64	-	-	59	-	-	52	-	-	3	-	-	65	-	-	57	-	-	79	-	-	42	-	-	71	-	-	36		
Democratic Republic of the Congo	-	-	14	-	-	-	-	-	-	-	15	-	-	35	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Denmark	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1			
Djibouti	-	-	9	-	-	9	-	-	25	-	-	-	-	-	-	-	-	5	-	-	15	94	-	-	-	-	-	-	-	-	-	91	-	-	-	-	-	-

COUNTRY, AREA OR TERRITORY	Year	School-age population (thousands)						NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY		
		% urban	% pre-primary	% primary	% secondary	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)		
Dominica	2021	12	71	11	50	38	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Dominican Republic	2021	2 876	83	20	40	40	-	-	-	-	-	-	69	7	24	-	-	-	-	-	-	-	-	-	
Ecuador	2021	4 961	64	24	38	38	79	14	7	88	4	9	77	14	10	91	3	7	82	8	10	93	3	4	
Egypt	2021	29 468	43	16	47	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
El Salvador	2021	1 684	74	19	41	41	82	15	4	-	-	3	-	-	3	-	-	6	80	16	4	84	12	4	
Equatorial Guinea	2021	442	74	23	43	34	-	-	72	-	-	-	-	-	-	-	-	75	-	-	74	-	-	49	
Eritrea	2021	1 330	42	17	36	47	-	-	30	-	-	-	-	-	-	-	-	59	-	-	35	-	-	20	
Estonia	2021	229	69	25	40	35	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	<1	
Eswatini	2021	429	24	20	47	33	-	-	14	-	-	-	-	-	-	-	-	-	-	-	17	-	-	10	
Ethiopia	2021	42 755	22	22	41	37	15	8	76	-	-	-	37	13	50	-	-	-	15	6	80	22	31	47	
Fiji	2021	269	58	20	39	41	87	3	9	-	-	-	-	-	-	90	4	6	87	2	12	90	2	8	
Finland	2021	965	86	24	39	37	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	<1	
France	2021	12 556	81	20	34	46	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	<1	
Gabon	2021	743	90	23	36	40	60	16	23	62	28	11	18	36	46	59	24	17	59	14	27	57	29	14	
Gambia	2021	1 010	63	29	39	32	-	-	24	-	-	39	-	-	61	-	-	38	-	-	13	-	-	12	
Georgia	2021	783	60	22	43	36	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	<1		
Germany	2021	12 480	78	19	24	57	>99	<1	<1	-	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
Ghana	2021	10 702	58	15	42	43	78	<1	21	85	9	7	73	10	17	79	12	9	78	12	11	79	15	6	
Gibraltar	2021	5	100	13	51	36	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	-	>99	<1	<1	>99	<1	<1	
Grenada	2021	24	37	15	52	33	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	99	1	<1		
Guatemala	2021	5 534	52	23	42	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Guinea	2021	5 455	37	21	39	40	-	-	47	-	-	36	-	-	74	-	-	33	37	<1	63	-	-	14	
Guinea-Bissau	2021	767	45	23	42	35	63	2	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Guyana	2021	200	27	21	44	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Haiti	2021	3 878	58	20	38	42	-	-	45	-	-	-	-	-	-	-	-	-	-	48	-	-	63		
Honduras	2021	2 817	59	21	42	36	>99	-	-	-	-	-	91	5	4	-	-	-	76	-	-	71	-	-	
Hungary	2021	1 496	72	24	24	52	>99	<1	<1	-	-	-	-	-	-	-	-	<1	>99	<1	<1	>99	<1	<1	
India	2021	369 667	35	20	32	48	74	21	4	72	21	6	67	26	7	-	-	-	67	26	7	75	19	6	
Indonesia	2021	65 792	57	15	43	42	73	8	19	-	-	<1	-	-	<1	70	2	27	72	8	20	75	11	14	

COUNTRY, AREA OR TERRITORY	NATIONAL		URBAN		RURAL		PRE-PRIMARY		PRIMARY		SECONDARY		NATIONAL		URBAN		RURAL		PRE-PRIMARY		PRIMARY		SECONDARY												
	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)											
Dominica	>99	0	0	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	>99	<1	<1									
Dominican Republic	-	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
Ecuador	59	30	11	63	28	9	56	25	19	62	27	10	59	27	14	68	25	8	51	26	23	49	35	17	52	18	30								
Egypt	>99	0	0	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	-								
El Salvador	88	6	7	92	5	3	86	6	8	87	6	7	87	5	7	92	4	4	-	-	-	-	-	-	-	-	-								
Equatorial Guinea	-	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
Eritrea	33	21	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
Estonia	>99	0	0	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	-								
Eswatini	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
Ethiopia	40	20	39	-	-	-	23	54	23	-	-	-	39	21	40	61	11	28	20	<1	80	-	-	-	1	2	97								
Fiji	76	18	6	-	-	-	-	-	-	-	-	-	83	16	2	80	17	3	70	21	9	-	-	-	-	70	7	23							
Finland	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	>99	<1	<1						
France	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	>99	<1	<1						
Gabon	-	-	37	-	-	26	-	-	57	-	-	26	-	-	43	-	-	28	59	20	21	79	6	15	62	7	31	83	5	13					
Gambia	63	37	0	56	-	-	44	-	-	38	-	-	83	17	0	78	22	0	-	-	-	-	-	-	-	-	-	-	-	-					
Georgia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-					
Germany	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1					
Ghana	59	23	18	72	18	10	57	17	26	64	21	15	62	18	20	65	19	16	54	8	38	65	6	29	45	10	46	56	7	37					
Gibraltar	>99	0	0	100	0	0	NA	NA	NA	-	-	-	100	0	0	100	0	0	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	>99	<1	<1			
Grenada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	-	-	-	-	-	>99	<1	<1							
Guatemala	76	-	-	-	-	-	-	-	-	-	-	-	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Guinea	52	31	17	-	-	5	-	-	25	-	-	14	52	29	19	-	-	2	-	-	62	-	-	-	-	-	-	-	-	-	62	-	-		
Guinea-Bissau	37	23	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	7	18	-	-	-	-	-	-	-	-	-	-	-			
Guyana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Haiti	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Honduras	-	-	-	-	-	-	-	-	-	23	68	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Hungary	>99	0	0	-	-	-	-	-	-	100	0	0	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	<1	>99	<1	<1	>99	<1	<1		
India	86	0	14	87	0	13	84	0	16	-	-	-	86	0	14	84	0	16	53	23	25	58	26	16	52	22	26	-	-	53	22	25	53	29	17
Indonesia	47	40	13	-	-	-	-	-	-	28	53	19	43	44	13	55	26	18	66	3	31	-	-	-	-	-	57	5	38	66	4	33			

COUNTRY, AREA OR TERRITORY	Year	School-age population (thousands)					NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			
		% urban	% pre-primary	% primary	% secondary	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)		
Iran (Islamic Republic of)	2021	16 395	76	8	49	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Iraq	2021	13 376	71	16	45	39	60	24	15	-	-	-	-	-	-	-	-	2	-	-	19	-	-	9	
Israel	2021	2 311	93	22	42	36	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Italy	2021	8 806	71	17	31	52	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Jamaica	2021	716	57	20	48	32	95	-	-	-	-	-	-	-	-	-	-	93	-	-	97	3	<1		
Jordan	2021	3 207	92	16	43	41	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Kenya	2021	20 702	28	22	40	38	-	-	-	-	-	-	72	3	25	-	-	-	-	-	-	-	-		
Kiribati	2021	43	56	21	40	39	76	-	-	-	-	-	-	-	-	-	-	67	-	-	86	-	-		
Kuwait	2021	835	100	15	38	46	>99	<1	<1	>99	<1	<1	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Kyrgyzstan	2021	1 997	37	32	29	39	-	-	-	-	-	-	59	<1	41	-	-	-	-	-	-	-	-		
Lao People's Democratic Republic	2021	2 269	37	21	34	46	56	11	33	-	-	18	-	-	43	-	-	56	11	33	-	-	-		
Latvia	2021	253	68	33	48	19	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Lebanon	2021	1 774	89	20	37	43	59	<1	40	-	-	-	-	-	-	-	57	3	40	60	3	37	61	3	37
Lesotho	2021	656	29	21	47	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Liberia	2021	1 948	53	23	41	36	50	2	48	-	-	-	-	-	-	-	-	44	-	-	65	11	24	-	-
Libya	2021	1 762	81	15	45	40	17	67	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Madagascar	2021	10 389	39	22	34	43	37	<1	63	-	-	-	-	-	-	-	-	37	<1	63	-	-	74	-	-
Malawi	2021	7 988	18	22	41	37	78	16	6	-	-	3	68	24	8	-	-	87	6	7	82	14	4	-	-
Malaysia	2021	7 510	78	13	40	47	97	3	<1	-	-	-	-	-	-	-	-	95	5	<1	99	1	<1	-	-
Maldives	2021	105	41	22	50	28	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	-	-
Mali	2021	8 736	45	26	41	33	70	24	6	87	10	3	60	14	26	-	-	70	28	2	-	-	-	-	-
Marshall Islands	2021	21	78	13	43	44	63	-	-	-	-	-	-	-	-	-	-	68	-	-	57	-	-	-	-
Mauritania	2021	1 799	56	22	40	39	51	-	-	-	-	-	-	-	-	-	-	51	-	-	-	-	58	-	-
Mauritius	2021	231	41	11	36	53	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	-	-
Mexico	2021	33 824	81	21	40	40	-	-	-	-	-	-	-	-	-	61	29	10	-	-	-	-	-	-	
Monaco	2021	7 100	19	31	50	>99	<1	<1	-	-	-	-	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1	-	-
Mongolia	2021	1 009	69	31	35	35	74	24	2	85	15	<1	73	25	2	-	-	73	24	3	73	25	1	-	-
Montserrat	2021	1	9	15	48	37	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	-	-	

COUNTRY, AREA OR TERRITORY	NATIONAL	URBAN	RURAL	PRE-PRIMARY	PRIMARY	SECONDARY	NATIONAL	URBAN	RURAL	PRE-PRIMARY	PRIMARY	SECONDARY
	Basic sanitation services (improved, usable and single-sex) Limited sanitation services (improved, not usable or not single-sex) No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex) Limited sanitation services (improved, not usable or not single-sex) No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex) Limited sanitation services (improved, not usable or not single-sex) No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex) Limited sanitation services (improved, not usable or not single-sex) No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex) Limited sanitation services (improved, not usable or not single-sex) No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex) Limited sanitation services (improved, not usable or not single-sex) No sanitation service (no facility or unimproved)	Basic hygiene services (facility with water and soap) Limited hygiene services (facility with water, but no soap) No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap) Limited hygiene services (facility with water, but no soap) No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap) Limited hygiene services (facility with water, but no soap) No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap) Limited hygiene services (facility with water, but no soap) No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap) Limited hygiene services (facility with water, but no soap) No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap) Limited hygiene services (facility with water, but no soap) No hygiene service (no facility or no water)
Iran (Islamic Republic of)	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
Iraq	57 34 9	- - -	- - -	- - -	- - -	- - -	- 2	- - -	- 18	- - -	- 7	- 66
Israel	>99 0 0	- - -	- - -	- - -	- - -	- - -	100 0 0	100 0 0	100 0 0	>99 <1 <1	>99 <1 <1	>99 <1 <1
Italy	>99 0 0	- - -	- - -	- - -	- - -	- - -	100 0 0	100 0 0	100 0 0	>99 <1 <1	>99 <1 <1	>99 <1 <1
Jamaica	96 - -	- - -	- - -	- - -	- - -	- - -	94 - -	97 3 0	97 3 <1	- - -	- - -	97 3 <1
Jordan	- - 0	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
Kenya	- - 0	- - -	0 50	46 4	- - -	- - -	- - -	- - -	- - -	- - -	2 13	85 -
Kiribati	66 - -	- - -	- - -	- - -	- - -	- - -	72 - -	60 - -	- - -	- - -	- - -	- - -
Kuwait	>99 0 0	100 0 0	- - -	- - -	- - -	- - -	100 0 0	100 0 0	>99 <1 <1	>99 <1 <1	>99 <1 <1	>99 <1 <1
Kyrgyzstan	- - -	- - -	- - -	- - -	- 22	- - -	- - -	- - -	- - -	- - -	9 -	- - -
Lao People's Democratic Republic	32 46 22	23 61 16	11 63 26	- - -	- - -	32 46 22	- - -	- - -	35 25 40	37 - -	26 - -	50 35 31
Latvia	>99 0 0	- - -	- - -	- - -	- - -	100 0 0	100 0 0	>99 <1 <1	- - -	- - -	- - -	>99 <1 <1
Lebanon	93 7 1	- - -	- - -	- - -	- - -	92 7 1	92 7 1	95 4 1	36 60 4	- - -	34 62 4	34 62 5
Lesotho	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
Liberia	27 40 33	- - -	- - -	- - -	- - -	- - -	24 37 39	35 48 17	- - -	- - -	- - -	- - -
Libya	61 39 0	- - -	- - -	- - -	- - -	- - -	- - -	- - -	13 82 5	- - -	- - -	- - -
Madagascar	- - 28	- - -	- - -	- - -	- - -	- - -	- - -	36 - -	21 - -	- - -	- - -	- - -
Malawi	66 18 16	74 4 22	62 22 16	- - -	- - -	79 3 19	53 12 35	21 3 76	- - -	55 13 11	76 -	28 13 58
Malaysia	>99 1 0	- - -	- - -	- - -	- - -	99 1 0	100 0 0	98 2 <1	- - -	- - -	- - -	97 3 <1
Maldives	96 - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	18 -	- - -	- - -	- - -
Mali	30 51 19	25 66 9	42 39 19	- - -	- - -	30 51 19	20 - -	63 18 19	74 14 12	38 14 48	- - -	63 18 19
Marshall Islands	78 - -	- - -	- - -	- - -	- - -	65 - -	92 - -	69 - -	- - -	- - -	- - -	63 - -
Mauritania	31 9 60	- - -	- - -	- - -	- - -	27 13 60	32 - -	- - -	- - -	- - -	- - -	- - -
Mauritius	>99 0 0	- - -	- - -	- - -	- - -	100 0 0	100 0 0	93 - -	- - -	- - -	- - -	94 - -
Mexico	74 - -	- - -	- - -	- - -	- - -	6 74	- -	80 - -	- - -	- - -	- - -	82 -
Monaco	>99 0 0	- - -	- - -	NA NA NA	- - -	100 0 0	100 0 0	>99 <1 <1	- - -	NA NA NA	- - -	>99 <1 <1
Mongolia	63 21 16	70 30 0	58 18 24	- - -	- - -	70 16 14	63 21 15	41 36 23	53 34 13	35 41 24	- - -	44 36 20
Montserrat	>99 0 0	- - -	- - -	- - -	- - -	100 0 0	100 0 0	>99 <1 <1	- - -	- - -	- - -	>99 <1 <1

COUNTRY, AREA OR TERRITORY	Year	School-age population (thousands)					NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			
		% urban	% pre-primary	% primary	% secondary		Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	
Morocco	2021	8 994	64	15	45	40	85	-	-	-	-	-	-	-	-	-	-	-	75	-	-	94	-	-	
Mozambique	2021	13 097	38	23	48	29	-	-	-	-	-	-	48	<1	52	-	-	-	-	-	-	-	-	-	-
Myanmar	2021	12 181	31	15	37	48	77	-	-	-	-	-	-	-	-	-	-	-	74	-	-	82	-	-	
Namibia	2021	807	53	16	53	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nauru	2021	4 100	22	42	36	-	>99	<1	<1	-	-	-	NA	NA	NA	-	-	-	>99	<1	<1	>99	<1	<1	
Nepal	2021	7 804	21	11	35	54	47	33	21	-	-	-	-	-	-	-	-	-	39	-	-	76	-	-	
Netherlands	2021	2 786	93	19	39	42	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Nicaragua	2021	1 763	59	20	45	36	54	18	28	-	-	-	45	2	53	-	-	-	-	-	-	-	-	-	
Niger	2021	10 693	17	23	40	36	-	-	83	-	-	-	20	18	61	-	-	-	-	-	83	48	7	45	
Nigeria	2021	69 321	53	9	50	41	35	25	41	45	39	16	30	11	59	-	-	-	31	23	46	49	19	32	
Niue	2021	0	47	7	44	49	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Norway	2021	1 011	83	18	44	38	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Oman	2021	889	87	16	34	50	>99	<1	<1	-	-	-	-	-	-	-	-	-	-	<1	-	-	<1		
Pakistan	2021	68 479	37	15	37	47	-	-	34	83	1	16	66	<1	34	-	-	-	63	<1	37	85	<1	15	
Palau	2021	4 81	20	41	39	89	11	<1	-	-	-	-	-	-	-	-	-	84	-	-	95	-	-		
Panama	2021	1 081	69	17	43	41	34	-	-	-	-	<1	-	-	-	-	-	27	-	-	41	-	-		
Papua New Guinea	2021	3 570	13	27	41	32	47	6	47	-	-	-	-	-	-	-	34	8	58	46	6	48	65	23	12
Paraguay	2021	2 027	62	20	40	40	72	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	
Peru	2021	7 443	79	22	42	36	77	8	15	84	9	7	67	8	25	76	10	14	77	7	15	75	12	13	
Philippines	2021	26 981	48	8	50	42	45	29	26	-	-	-	-	-	-	-	-	-	45	29	26	46	28	25	
Poland	2021	5 997	60	25	39	36	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Portugal	2021	1 406	67	18	39	43	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Qatar	2021	375	99	23	43	34	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Republic of Korea	2021	7 053	81	22	39	39	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Republic of Moldova	2021	473	43	29	27	44	92	8	<1	-	-	-	-	-	-	-	-	-	-	<1	-	-	<1		
Romania	2021	3 208	54	17	31	52	72	-	-	-	-	-	-	-	-	-	67	-	-	64	-	-	85	-	-
Russian Federation	2021	25 735	75	30	28	42	-	-	1	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	
Rwanda	2021	4 784	18	23	41	36	64	-	-	-	-	-	-	-	-	-	-	59	-	-	77	-	-		
Saint Kitts and Nevis	2021	10	31	13	50	36	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		

COUNTRY, AREA OR TERRITORY	NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			
	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)							
Morocco	82	14	4	82	-	-	56	-	-	-	-	-	81	12	8	96	4	0	88	-	-	-	-	-	-	NA	NA	NA	-	-	-						
Mozambique	-	-	-	-	-	-	26	41	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	<1	94	-	-	-							
Myanmar	74	-	-	-	-	-	-	-	-	-	-	-	72	-	-	71	-	-	59	-	-	-	-	-	-	-	-	-	-	-	-						
Namibia	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Nauru	93	7	0	-	-	-	NA	NA	NA	-	-	-	100	0	0	83	17	0	80	-	-	-	-	-	-	-	-	-	-	-	-						
Nepal	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Netherlands	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	>99	<1	<1	>99	<1	<1					
Nicaragua	12	59	29	-	-	-	12	57	31	-	-	-	-	-	-	-	-	-	40	-	-	-	-	-	-	31	-	-	-	-	-	-					
Niger	25	12	63	28	23	48	23	6	71	-	-	-	26	8	66	-	-	44	15	-	-	-	-	-	-	4	3	92	-	-	15	-	-	16	-	-	
Nigeria	38	20	43	54	20	27	28	19	53	-	-	-	35	19	47	41	22	37	19	11	70	30	15	55	12	10	79	-	-	18	11	71	20	13	66		
Niue	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1			
Norway	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1			
Oman	98	2	0	-	-	-	-	-	-	-	-	-	-	0	-	0	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Pakistan	-	-	25	66	18	16	34	38	28	-	-	-	34	31	35	60	36	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Palau	89	11	0	-	-	-	-	-	-	-	-	-	84	-	-	95	-	-	89	-	-	-	-	-	-	-	-	-	-	84	-	-	95	-	-		
Panama	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-	-	-	-	-	-	-	53	-	-	56	-	-	-	-	-		
Papua New Guinea	46	12	42	-	-	-	-	-	-	45	13	42	46	12	42	69	10	21	12	43	46	-	-	-	-	-	12	41	46	11	43	46	16	44	40		
Paraguay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Peru	80	16	3	89	9	2	71	26	4	79	16	5	80	18	2	85	11	4	-	-	28	-	-	15	-	-	41	-	-	29	-	-	27	-	-	22	
Philippines	74	18	8	-	-	-	-	-	-	-	-	-	70	22	8	90	3	7	61	18	21	-	-	-	-	-	-	-	64	16	21	52	24	24			
Poland	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Portugal	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Qatar	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Republic of Korea	>99	0	0	-	-	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Republic of Moldova	-	-	0	-	-	-	-	-	-	-	-	-	64	-	-	64	-	-	87	-	-	72	-	-	-	-	-	-	64	-	-	64	-	-			
Romania	72	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Russian Federation	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	28	66	18	16	73	10	17	52	12	37	-	-	-	-	-	-	-	-	-	-	-	
Rwanda	68	16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Saint Kitts and Nevis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	>99	<1	<1

COUNTRY, AREA OR TERRITORY	Year	School-age population (thousands)					NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			
		% urban	% pre-primary	% primary	% secondary		Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	
Saint Lucia	2021	31	19	12	50	38	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	>99	<1	<1	
Saint Vincent and the Grenadines	2021	23	53	13	50	37	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	99	1	<1				
Samoa	2021	70	18	15	41	43	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	>99	<1	<1	
San Marino	2021	5	98	16	32	52	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	>99	<1	<1	
Sao Tome and Principe	2021	88	75	21	41	37	-	-	15	-	-	-	-	-	-	39	-	-	10	-	-	5			
Saudi Arabia	2021	8 170	85	22	43	35	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	>99	<1	<1	
Senegal	2021	6 988	49	22	40	38	-	-	15	-	-	4	-	-	31	-	-	16	-	-	21	-	-	2	
Serbia	2021	1 019	57	25	25	50	98	<1	3	-	-	-	-	-	-				-	-	-	-	-	-	
Seychelles	2021	22	58	14	42	43	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	>99	<1	<1	
Sierra Leone	2021	3 256	43	22	39	40	49	<1	51	-	-	-	-	-	-	58	<1	41	52	<1	47	66	<1	34	
Singapore	2021	505	100	22	46	32	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	-	>99	<1	<1	>99	<1	<1	
Slovakia	2021	888	54	19	26	55	>99	<1	<1	-	-	-	-	-	-				>99	<1	<1	>99	<1	<1	
Slovenia	2021	329	55	19	40	41	>99	<1	<1	-	-	-	-	-	-				>99	<1	<1	>99	<1	<1	
Solomon Islands	2021	274	25	22	40	38	36	24	40	-	-	-	-	-	-	26	30	43	43	25	32	59	21	20	
Somalia	2021	6 691	47	23	41	35	-	-	45	-	-	-	-	-	-	-	-	-	-	-	46	-	-	37	
South Africa	2021	17 949	68	27	45	29	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
South Sudan	2021	4 454	21	24	41	35	51	16	33	61	4	35	48	11	41	-	-	11	51	9	40	-	-	13	
Spain	2021	6 912	81	18	41	41	>99	<1	<1	-	-	-	-	-	-				>99	<1	<1	>99	<1	<1	
Sri Lanka	2021	5 206	19	15	32	52	85	<1	14	-	-	-	-	-	-				82	-	-	87	-	-	
State of Palestine*	2021	1 686	77	16	30	55	>99	<1	<1	78	19	3	81	18	2	-	-	-	>99	<1	<1	>99	<1	<1	
Sudan	2021	15 283	36	16	44	40	43	20	37	61	21	18	39	23	39	-	-	-	43	20	36	-	-	-	
Switzerland	2021	1 268	74	14	40	46	>99	<1	<1	-	-	-	-	-	-				>99	<1	<1	>99	<1	<1	
Syrian Arab Republic	2021	5 325	56	24	39	38	49	49	2	-	-	-	-	-	-				49	48	2	49	49	2	
Tajikistan	2021	3 229	28	33	29	39	79	8	14	93	4	3	73	9	18	-	-	-	-	-	-	-	-	-	
Thailand	2021	11 956	52	18	39	42	>99	<1	<1	-	-	-	-	-	-				>99	<1	<1	>99	<1	<1	
Timor-Leste	2021	472	32	22	39	39	70	-	-	-	-	-	-	-	-				71	-	-	62	-	-	
Togo	2021	3 368	43	22	39	39	38	-	-	-	-	-	-	-	-				33	-	-	54	-	-	
Tokelau	2021	0	0	10	41	49	>99	<1	<1	NA	NA	NA	-	-	-				>99	<1	<1	>99	<1	<1	

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

COUNTRY, AREA OR TERRITORY	NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY			
	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation services (improved, usable and single-sex)	Limited sanitation services (improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)	Basic hygiene services (facility with water and soap)	Limited hygiene services (facility with water, but no soap)	No hygiene service (no facility or no water)							
Saint Lucia	>99	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Saint Vincent and the Grenadines	>99	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Samoa	>99	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
San Marino	>99	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Sao Tome and Principe	76	8	16	-	-	-	-	-	-	-	15	70	15	15	-	-	11	-	-	10	-	-	-	-	-	-	-	-	12	-	-	<1					
Saudi Arabia	>99	0	0	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Senegal	16	67	17	-	-	0	-	-	21	-	42	9	75	16	40	51	8	22	7	72	-	-	59	-	-	74	-	-	25	4	72	9	-	-			
Serbia	99	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	98	<1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Seychelles	>99	0	0	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Sierra Leone	20	43	37	-	-	-	-	-	-	-	10	66	25	46	11	43	25	46	29	-	-	-	-	-	-	-	8	-	-	22	-	-	20				
Singapore	>99	0	0	100	0	0	NA	NA	NA	-	-	100	0	0	100	0	0	>99	<1	<1	>99	<1	<1	NA	NA	NA	-	-	>99	<1	<1	>99	<1	<1			
Slovakia	>99	0	0	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Slovenia	>99	0	0	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Solomon Islands	17	19	64	-	-	-	-	-	-	-	9	26	65	10	25	66	22	25	53	12	13	75	-	-	-	-	19	13	68	3	7	90	3	8	89		
Somalia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
South Africa	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
South Sudan	37	42	21	67	22	11	40	23	37	-	9	37	42	22	-	-	5	18	1	80	45	-	-	13	-	-	-	-	18	1	80	-	-	-			
Spain	>99	0	0	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1					
Sri Lanka	92	8	0	-	-	-	-	-	-	-	91	-	-	93	7	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
State of Palestine	96	3	0	79	21	0	84	16	0	-	0	99	1	0	99	1	0	21	78	1	11	80	9	24	72	4	-	-	-	<1	-	-	<1				
Sudan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	10	8	18	75	15	23	62	5	16	79	-	-	8	18	75	-	-	-
Switzerland	>99	0	0	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1				
Syrian Arab Republic	49	16	35	-	-	-	-	-	-	-	51	16	33	47	13	40	21	27	52	-	-	-	-	-	-	-	-	22	27	51	23	28	49				
Tajikistan	47	35	18	58	36	6	43	35	22	-	-	-	-	-	-	-	26	13	61	41	15	44	20	12	68	-	-	-	-	-	-	-	-	-	-		
Thailand	>99	0	0	-	-	-	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1					
Timor-Leste	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-	-	-	-	-	61	-	-	52	-	-	-				
Togo	79	-	-	-	-	-	-	-	-	-	78	-	-	68	-	-	18	-	-	-	-	-	-	-	-	19	-	-	16	-	-	-					
Tokelau	>99	0	0	NA	NA	NA	-	-	-	-	100	0	0	100	0	0	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1					

COUNTRY, AREA OR TERRITORY	Year	School-age population (thousands)					NATIONAL			URBAN			RURAL			PRE-PRIMARY			PRIMARY			SECONDARY		
		% urban	% pre-primary	% primary	% secondary	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	Basic water services (improved and available)	Limited water services (improved, not available)	No water service (no facility or unimproved)	
Tonga	2021	36	23	14	41	45	99	-	-	-	-	-	-	-	-	-	-	98	-	-	99	-	-	
Tunisia	2021	2 872	70	20	40	39	-	-	15	-	-	-	-	-	-	-	-	-	-	-	13	-	-	<1
Turkmenistan	2021	1 775	53	24	30	46	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
Turks and Caicos Islands	2021	7	94	15	44	41	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
Tuvalu	2021	4	65	20	38	41	76	24	<1	-	-	-	-	-	-	-	-	75	25	<1	76	24	<1	
Uganda	2021	21 085	26	22	46	33	73	23	4	-	-	<1	54	34	12	-	-	73	23	4	-	-	-	
Ukraine	2021	4 955	70	22	31	47	-	-	3	-	-	<1	-	-	4	-	-	-	-	3	-	-	3	
United Arab Emirates	2021	1 294	87	17	38	45	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
United Republic of Tanzania	2021	23 021	36	15	50	35	56	21	23	72	20	8	51	15	34	49	14	37	50	22	28	70	19	12
United States of America	2021	62 114	83	20	40	41	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
Uruguay	2021	701	96	19	40	40	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
Uzbekistan	2021	9 603	50	28	27	45	79	2	19	88	7	5	65	18	17	76	16	8	90	-	-	89	-	-
Vanuatu	2021	111	26	15	42	43	-	-	59	-	-	-	-	-	-	-	-	65	-	-	51	-	-	58
Venezuela (Bolivarian Republic of)	2021	7 599	88	23	43	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Viet Nam	2021	21 444	38	20	35	45	96	-	-	-	-	-	-	-	-	-	-	96	-	-	-	-	-	
Yemen	2021	11 049	39	22	41	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Zambia	2021	8 244	45	29	44	27	79	4	17	-	-	-	79	5	16	-	-	78	3	18	-	-	-	5
Zimbabwe	2021	6 050	32	15	50	35	61	28	11	-	-	-	-	-	-	-	-	60	29	11	63	26	12	

ANNEX 4

Regional and global WASH in schools estimates

REGION	Year	School-age population (thousands)					NATIONAL		URBAN		RURAL		PRE-PRIMARY		PRIMARY		SECONDARY							
		% urban	% pre-primary	% primary	% secondary		Basic water service (Improved and available)	Limited water service (Improved, not available)	No water service (No facility or unimproved)	Basic water service (Improved and available)	Limited water service (Improved, not available)	No water service (No facility or unimproved)	Basic water service (Improved and available)	Limited water service (Improved, not available)	No water service (No facility or unimproved)	Basic water service (Improved and available)	Limited water service (Improved, not available)	No water service (No facility or unimproved)						
SDG REGIONS																								
Australia and New Zealand	2021	5511	86	8	49	43	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1			
Central and Southern Asia	2021	547165	37	19	34	48	75	16	10	76	17	8	69	20	11	-	-	67	21	12	79	14	7	
Eastern and South-Eastern Asia	2021	438594	60	18	41	41	76	19	6	-	-	-	-	-	-	-	74	20	6	75	20	5		
Europe and Northern America	2021	187640	78	20	36	44	>99	<1	<1	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1		
Latin America and the Caribbean	2021	151061	80	18	39	43	-	-	15	-	-	4	-	-	30	67	20	13	-	-	16	-	11	
Northern Africa and Western Asia	2021	142899	61	17	41	41	73	13	14	-	-	-	-	-	-	-	-	74	10	16	90	6	4	
Oceania	2021	4749	22	25	40	34	51	6	43	-	-	-	-	-	-	36	9	55	50	6	44	68	19	13
Sub-Saharan Africa	2021	417857	41	19	44	37	46	15	40	57	28	15	46	12	42	-	-	36	44	13	44	50	20	30
OTHER REGIONAL GROUPINGS																								
Least Developed Countries	2021	382506	35	20	41	39	56	8	37	-	-	10	55	13	31	-	-	38	53	8	39	67	8	25
Landlocked Developing Countries	2021	194321	30	22	40	38	53	9	37	-	-	8	48	18	34	-	-	-	51	8	41	55	12	33
Small Island Developing States	2021	18497	55	21	41	38	69	<1	31	-	-	-	-	-	-	-	-	69	<1	31	75	<1	25	
Fragile contexts	2021	605518	42	18	42	40	52	12	37	68	18	15	55	9	37	-	-	-	50	10	40	67	10	23
INCOME GROUPINGS																								
Low income	2021	257487	33	21	42	37	46	8	46	-	-	15	43	18	39	-	-	39	45	8	47	47	15	39
Lower middle income	2021	926310	43	17	38	45	69	15	16	71	21	8	65	18	17	-	-	-	63	18	20	75	14	11
Upper middle income	2021	504093	69	20	39	41	-	-	3	-	-	-	-	-	-	-	-	-	-	-	4	-	2	
High income	2021	199080	82	19	38	43	>99	<1	<1	-	-	-	-	-	-	-	-	>99	<1	<1	>99	<1	<1	
WORLD	2021	1895475	53	19	39	42	71	14	15	-	-	6	59	21	20	-	-	67	14	18	76	14	10	

Key: - No estimate

REGION	NATIONAL	URBAN	RURAL	PRE-PRIMARY	PRIMARY	SECONDARY	NATIONAL	URBAN	RURAL	PRE-PRIMARY	PRIMARY	SECONDARY
	Basic sanitation service (Improved, usable and single-sex)	Limited sanitation service (Improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation service (Improved, usable and single-sex)	Limited sanitation service (Improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation service (Improved, usable and single-sex)	Limited sanitation service (Improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)	Basic sanitation service (Improved, usable and single-sex)	Limited sanitation service (Improved, not usable or not single-sex)	No sanitation service (no facility or unimproved)
SDG REGIONS												
Australia and New Zealand	>99	<1	<1	-	-	-	>99	<1	<1	>99	<1	<1
Central and Southern Asia	81	5	14	80	8	12	74	10	16	73	11	17
Eastern and South-Eastern Asia	69	-	-	-	-	-	-	-	-	65	31	4
Europe and Northern America	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1
Latin America and the Caribbean	74	21	5	-	-	4	-	-	6	75	21	4
Northern Africa and Western Asia	86	10	4	-	-	-	-	-	-	91	<1	9
Oceania	48	12	40	-	-	-	-	-	-	47	12	41
Sub-Saharan Africa	44	32	24	54	28	18	36	36	28	-	-	-
OTHER REGIONAL GROUPINGS												
Least Developed Countries	49	33	19	-	-	7	38	44	19	-	-	-
Landlocked Developing Countries	50	27	22	-	-	12	37	40	23	-	-	-
Small Island Developing States	69	6	25	-	-	-	-	-	-	71	5	24
Fragile contexts	47	30	23	55	29	16	36	39	25	-	-	-
INCOME GROUPINGS												
Low income	47	28	25	-	-	-	35	40	25	-	-	-
Lower middle income	72	13	16	75	11	14	66	15	19	-	-	-
Upper middle income	-	-	3	-	-	-	-	-	-	2	-	-
High income	>99	<1	<1	-	-	-	-	-	-	>99	<1	<1
WORLD	72	16	13	-	-	10	49	30	21	-	-	-





UN-Water Reports

UN-Water coordinates the efforts of United Nations entities and international organizations working on water and sanitation issues. By doing so, UN-Water seeks to increase the effectiveness of the support provided to Member States in their efforts towards achieving international agreements on water and sanitation. UN-Water publications draw on the experience and expertise of UN-Water's Members and Partners.

PERIODIC REPORTS

SDG 6 Progress Update 2021 – Summary

This summary report provides an executive update on progress towards all targets of SDG 6 and identifies priority areas for acceleration. The report, produced by the UN-Water Integrated Monitoring Initiative for SDG 6, presents new country, regional and global data on all the SDG 6 global indicators.

SDG 6 Progress Update 2021 – 8 reports, 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: Progress on Drinking Water, Sanitation and Hygiene (WHO and UNICEF); 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). The reports, produced by the responsible custodian agencies, present new country, region and global data on the SDG 6 global indicators.

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

The JMP is affiliated with UN-Water and is responsible for global monitoring of progress towards SDG 6 targets for universal access to safe and affordable drinking water and adequate and equitable sanitation and hygiene services. Every two years the JMP releases updated estimates and progress reports for WASH in households, schools and health care facilities.

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

GLAAS is produced by the World Health Organization (WHO) on behalf of UN-Water. It provides a global update on the policy frameworks, institutional arrangements, human resource base, and international and national finance streams in support of 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).

United Nations World Water Development Report

The United Nations World Water Development Report is UN-Water's flagship report on water and sanitation issues, focusing on a different theme each year. The report is published by UNESCO, on behalf of UN-Water and its production is coordinated by the UNESCO World Water Assessment Programme. The report gives insight on main trends concerning the state, use and management of freshwater and sanitation, based on work done by the Members and Partners of UN-Water. Launched in conjunction with World Water Day, the report provides decision-makers with knowledge and tools to formulate and implement sustainable water policies. It also offers best practices and in-depth analyses to stimulate ideas and actions for better stewardship in the water sector and beyond.

Policy and Analytical Briefs

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

UN-WATER PLANNED PUBLICATIONS

• UN-Water Policy Brief on Gender and Water

• Update of UN-Water Policy Brief on Transboundary Waters Cooperation

• UN-Water Analytical Brief on Water Efficiency

• Country Acceleration Case Studies

More information: www.unwater.org/publications

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DRINKING WATER IN SCHOOLS IN 2021

- 133 countries and 7 out of 8 SDG regions had national estimates for basic drinking water services in schools.
- 71% of schools had a basic drinking water service, 14% had a limited service, and 15% had no service.
- 546 million children lacked a basic drinking water service at their school, including 288 million whose school still had no water service.
- Achieving universal access (>99%) to basic drinking water services in schools by 2030 would require a 14x increase in the current rate of progress.

SANITATION IN SCHOOLS IN 2021

- 123 countries and all 8 SDG regions had national estimates for basic sanitation services in schools.
- 72% of schools had a basic sanitation service, 16% had a limited service, and 13% had no service.
- 539 million children lacked a basic sanitation service at their school, including 240 million whose school still had no sanitation service.
- Achieving universal access to basic sanitation services in schools by 2030 would require a 3x increase in the current rate of progress.

HYGIENE IN SCHOOLS IN 2021

- 121 countries and 7 out of 8 SDG regions had national estimates for basic hygiene services in schools.
- 58% of schools had a basic hygiene service, 17% had a limited service, and 25% had no service.
- 802 million children lacked a basic hygiene service at their school, including 480 million whose school still had no hygiene service.
- Achieving universal access to basic hygiene services in schools by 2030 would require a 5x increase in the current rate of progress.



JMP website: <https://washdata.org>