



# State of the World's **SANITATION**

An urgent call to transform sanitation for better health, environments, economies and societies

## Summary report



World Health  
Organization

unicef 

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Published by UNICEF and WHO  
Programme Division/WASH  
3 United Nations Plaza  
New York, NY 10017 USA  
[www.unicef.org/wash](http://www.unicef.org/wash)

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Suggested citation: *State of the World's Sanitation: An urgent call to transform sanitation for better health, environments, economies and societies*. New York: United Nations Children's Fund (UNICEF) and the World Health Organization, 2020.

ISBN: 978-92-4-001547-0

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Edited by Jeff Sinden. Publication design by Blossom and all graphs designed by Cecilia Silva Venturini.



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# Summary report

Sanitation is vital to health, child development and social and economic progress. Without it, we cannot fulfil child rights, and good physical, mental and social well-being is unattainable. Sanitation was recognized as a distinct right by the United Nations General Assembly in 2015. In that same year, Member States committed to the 2030 Agenda for Sustainable Development, including target 6.2 of the Sustainable Development Goals (SDGs): "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations".

**The world is alarmingly off-track to deliver sanitation for all by 2030.** Despite progress, over half the

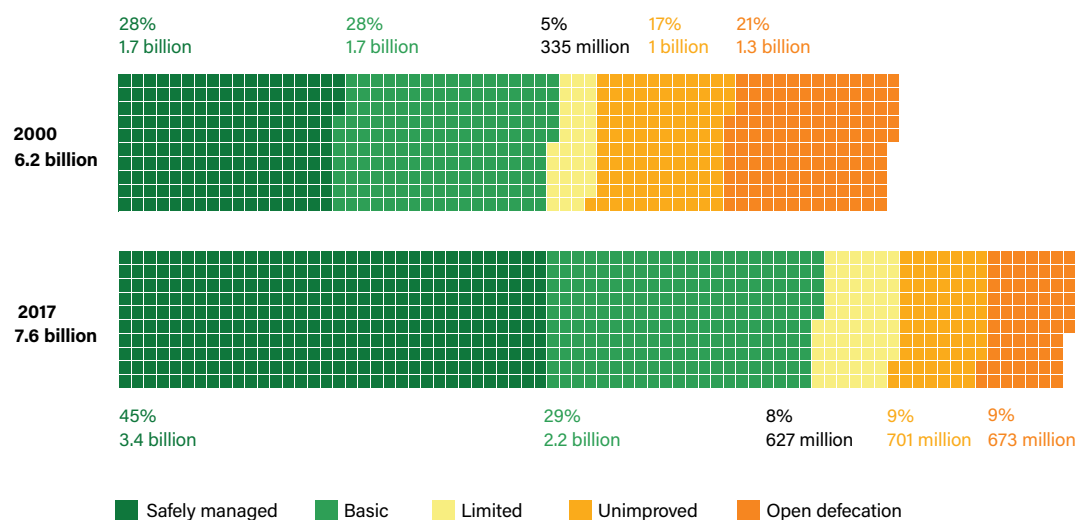
world's population, 4.2 billion people, use sanitation services that leave human waste untreated, threatening human and environmental health. Of those, 673 million people have no toilets at all and practise open defecation. An estimated 367 million school-age children attend schools without toilets. More than 10 per cent of health care facilities have no sanitation service whatsoever. Only 32 per cent of forcibly displaced people have basic sanitation.

**With only 10 years left until 2030, the rate at which sanitation coverage is increasing will need to quadruple if the world is to achieve the SDG sanitation targets.**

At the current rate of progress, sanitation for all will not be a reality until the twenty-second century.

## Despite progress, 2 billion people still lack even a basic level of sanitation service

### GLOBAL SANITATION COVERAGE, 2000-2017



Note: Each square represents 10 million people.

## What is safe sanitation?



## What does the future look like with and without progress on sanitation?

### ACCELERATION

#### CHILD SURVIVAL

More children survive and grow up to be healthy adults.

#### HEALTH SERVICES

Less stress on health systems. Higher utilization of health services, particularly among women, due to better facilities. Fewer healthcare acquired infections.

#### CHOLERA

Elimination of cholera in 20 countries with recurrent outbreaks and no more uncontrolled outbreaks in fragile settings.

#### POLIO

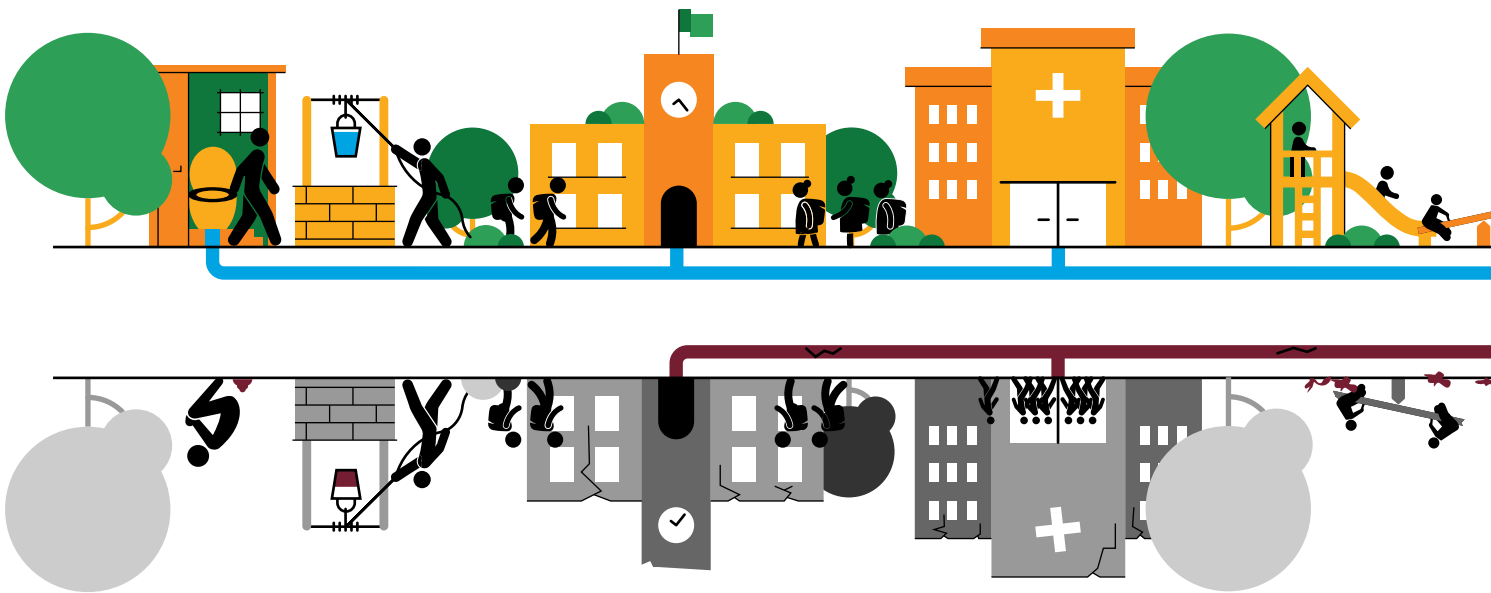
Polio could become the second human disease in history to be eradicated freeing humanity from a debilitating virus.

#### INTESTINAL WORMS

Achievement of global targets for control of neglect tropical diseases stand a greater chance of being met. Infections are less likely to rebound if drug administration is scaled back.

#### NUTRITION

Children can realize the full benefits of investment in better nutrition, are less stunted and learn and achieve more at school.



#### CHILD SURVIVAL

Every year 830,000 people will die from preventable diseases.

#### HEALTH SERVICES

Health services in communities with poor sanitation will be burdened with treating preventable infections. Where health centres lack sanitation, women will choose not to give birth there and there will be more infections among patients.

#### CHOLERA

Outbreaks will continue in hotspots with poor sanitation. Precious funds will be spent on WASH for outbreak response that could be more sustainably spent on sanitation to fix the underlying cause.

#### POLIO

The goal of global eradication may remain just out of reach due to re-emergence in areas with poor sanitation.

#### INTESTINAL WORMS

Regular drug administration will keep infections at bay, but people will continue to be re-infected where open defecation and use of untreated wastewater for irrigation is practiced.

#### NUTRITION

Repeated diarrhoea, caused by poor sanitation, resulting in poor gut function will prevent people, especially children, from absorbing the nutrients in food needed to grow and thrive.

### BUSINESS AS USUAL

**ANTIMICROBIAL RESISTANCE (AMR)**

Less antimicrobial use for preventable infections extending the useful life of last line of defense antimicrobials. Fewer untreatable sanitation related infections such as drug resistant typhoid.

**SAFETY AND MENTAL HEALTH**

Dignity, safety, less stress contributing to more equal world

**FOOD SAFETY**

Safe use of wastewater and sludge in agriculture, horticulture and aquaculture can support nutrition and the circular economy and also reduce use of chemical fertilizers and recover some of the cost of sanitation services.

**ENVIRONMENTAL JUSTICE**

Communities – particularly those with lower incomes – have a cleaner environment and healthier neighborhoods.

**CLIMATE CHANGE**

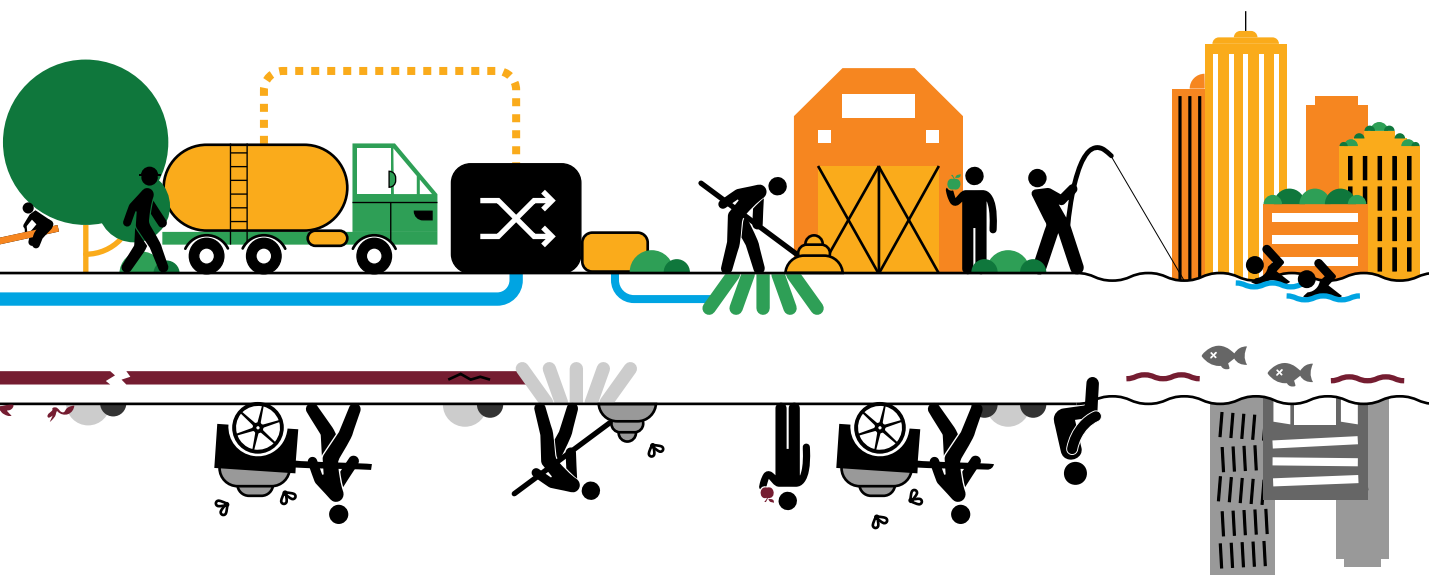
Resilient sanitation services protect investments in essential sanitation services and ensure sanitation systems are better prepared to cope with future shocks

**DECENT WORK**

Millions of new formalized jobs created that will sustain sanitation services, contribute to the green economy and protect public health

**RECREATION**

Millions of new formalized jobs created that will sustain sanitation services, contribute to the green economy and protect public health



**ANTIMICROBIAL RESISTANCE (AMR)**

Hundreds of millions of doses of antimicrobials will be used each year for infections that could have been prevented with better sanitation. Wastewater laden with resistant bacteria will continue to spread AMR.

**SAFETY AND MENTAL HEALTH**

Without sanitation at home, schools and workplaces people, especially women and girls will continue to suffer of anxiety, shame and fear while trying to find a safe place urinate, defecate and manage menstrual hygiene.

**FOOD SAFETY**

Increasing water scarcity and urbanization will increase demand from peri-urban farms for water and nutrients. Unsafe use of wastewater and sludge will cause outbreaks and a increase in chronic foodborne diseases.

**ENVIRONMENTAL JUSTICE**

Poor and marginalized groups, particularly in low lying areas, will continue to be disproportionately affected by other people's unmanaged faecal sludge and sewage.

**RECREATION**

Beaches polluted with wastewater will continue to deter or sicken swimmers and damage economies in places that rely on clean water bodies for tourism and sports events.

**CLIMATE CHANGE**

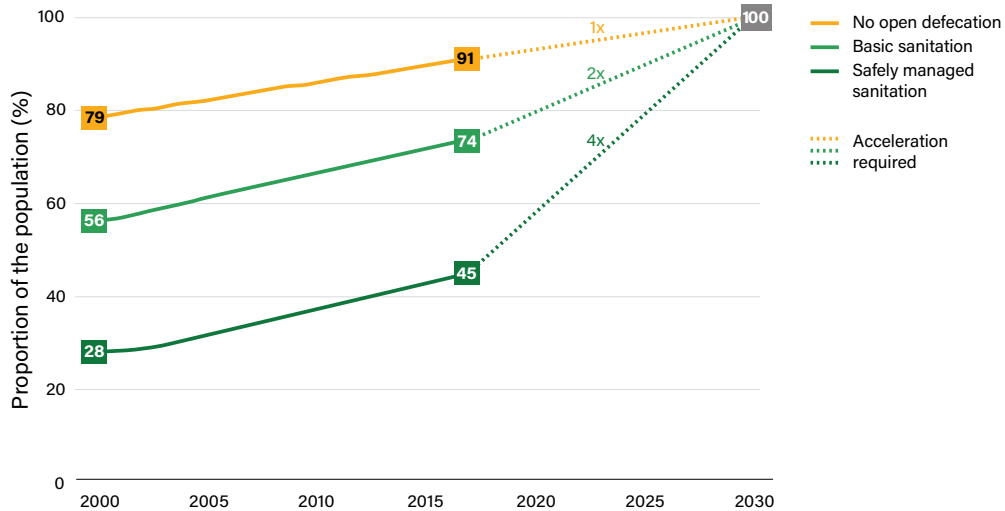
Sanitation system will become more vulnerable to flooding from storms and sea level rise or have less water for flushing and conveying sewage. Even small losses will affect the health of whole communities.

**DECENT WORK**

Sanitation workers, especially in the informal sector, will continue to suffer indignity and disease and even death though poor working conditions.

## Achieving universal access by 2030 will require dramatic acceleration in current rates of progress

PERCENTAGE OF POPULATION WITH SANITATION SERVICES IN 2000 AND 2017, AND RATE OF CHANGE REQUIRED TO MEET SDG TARGETS BY 2030



**While the challenge is significant, history shows that rapid progress is possible.** Many countries have made rapid progress in sanitation coverage within a generation, transforming lives, the environment and the economy. In the 1960s and 1970s, Malaysia, the Republic of Korea, Singapore and Thailand produced rapid and remarkable results to achieve total sanitation coverage. More recently, countries such as Ethiopia, India and Nepal have dramatically reduced open defecation and made progress towards universal access to basic sanitation. In each case, the common factor has been strong political leadership, with government playing an important role in setting policies and plans, mobilizing investment, regulating services, galvanizing widespread participation and continuously learning and adapting.

### Sanitation is a human right.

Everyone is entitled to sanitation services that ensure privacy, dignity and safety, and that are accessible and affordable. To safeguard health and the environment, everyone needs sanitation services that prevent exposure to unmanaged wastewater and harmful, unmanaged waste.

**Sanitation is also a public good,** providing benefits across society in improved health and economic and social development. To accelerate progress, sanitation must be defined as an essential public service, foundational for a healthy population and prosperous society. Progress also requires responsibility and accountability across multiple sectors and levels of government for ensuring sanitation for all – along all steps of the sanitation service chain, from the toilet, to treatment and disposal, to end use.

**Lack of safe sanitation leads to multiple negative outcomes. It can cause illness and disease,** particularly among children, such as diarrhoea, worm infections and stunting. **The impacts of poor sanitation disproportionately affect the most vulnerable** and disadvantaged, particularly women and people living with disabilities. **Sanitation workers, who are essential to sustain services, often face higher health risks, stigma and marginalization** in an unhealthy and unregulated environment.

Even if some households have sanitation facilities, poor sanitation elsewhere in the



community can have a negative impact on everyone, through open defecation or discharge of untreated wastewater. In addition to the hard-to-quantify effects on dignity, safety and gender equality, **there are significant financial costs related to lack of sanitation**, including preventable health care costs, lost income, forgone educational opportunities, decreased productivity and costs resulting from environmental pollution.

**Achieving universal access to safe sanitation will be expensive, but inaction brings even greater costs.**

Lack of sanitation results in greater recurrent and preventable healthcare costs, lost income and educational opportunities, loss of productivity, and environmental pollution. Investments in sanitation – particularly safely-managed sanitation services – avert these costs

and generate positive externalities across society.

The economic benefits of sanitation have been estimated at about five times the cost. Estimates indicate that between 2017 and 2030, the annual cost to achieve universal sanitation would be US\$105 billion (including capital costs and operations and maintenance, with basic sanitation costing US\$36 billion per year and safely managed sanitation US\$69 billion per year). The total global average capital cost per beneficiary to gain access to safely managed sanitation is US\$24.

**Strong government leadership at the highest level is key** to accelerate investment in sanitation services and to ensure that all of society reaps the benefits.



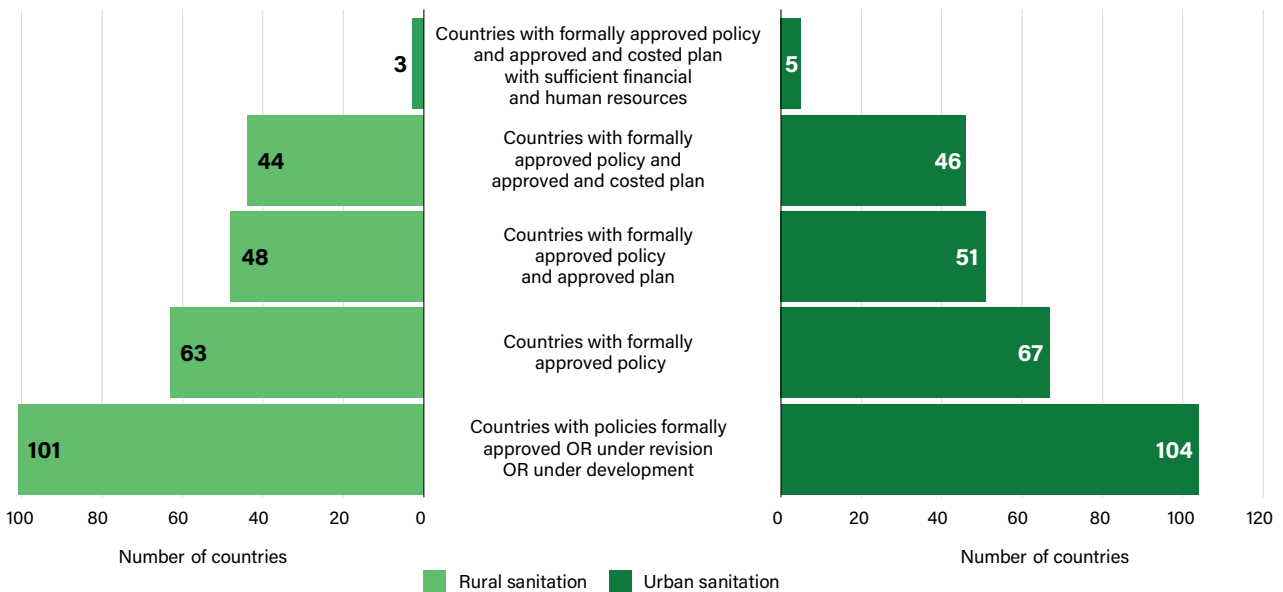
Sustainable and effective water, sanitation and hygiene (WASH) service delivery is determined not only by infrastructure but also by complex institutional, governance and financial management systems. Currently, sanitation suffers from chronic under-prioritization, lack of leadership, under-investment and a lack of capacity.

**Most countries have national policies and plans for sanitation, yet few have adequate human and financial resources to support them.** Many countries' sanitation policies have significant gaps. For instance, about one-quarter of countries where open defecation is practiced lack specific policies and plans to address

the practice. Similarly, the critical issue of faecal sludge management is not addressed in a quarter of urban sanitation policies or plans. Further, regulatory institutions often lacking sufficient funds and human resources to undertake surveillance and enforcement of regulations. Often, operations and maintenance are not well planned, with costs not covered through existing tariffs and user fees. Countries are responding to the SDG imperative to 'leave no one behind', with over two-thirds of countries reporting that they have policy measures to reach poor populations with sanitation. However, only one quarter have identified the means of funding these policies.

**Few countries have formally approved, adequately resourced sanitation policies**

**NUMBER OF COUNTRIES REPORTING FORMALLY APPROVED POLICIES SUPPORTED BY RESOURCED PLANS, 2019**



# Imagining a better future: A dramatic acceleration in progress is possible

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Investment in five key 'accelerators' – **governance, financing, capacity development, data and information, and innovation** – identified under the UN-Water SDG 6 Global Acceleration Framework – can be a pathway towards countries' achievement of safe sanitation for all, with coordinated support from the multilateral system and partners. A World Health Organization (WHO) analysis categorized countries into five groups according to historical rates of sanitation progress and asked: "how many more people could be reached if every country accelerated to match the highest achievers in their group?". With just this shift, an additional 200 million people would gain access in the next five years, bringing the world much closer to universal access by 2030.

Governments must ensure that coverage extends to entire communities, deploying a mix of approaches and services. Sanitation programmes must ensure universal access and use of toilets that safely contain excreta. Sanitation coverage must extend beyond the household so that everyone in schools, health care facilities, workplaces and public places has access. Incremental progress, addressing the highest risks first, must ensure safe management at all steps of the sanitation chain to be sustainable and to truly protect public health and the environment as described in the WHO Guidelines on Sanitation and Health.

## 1. **Good governance begins with leadership, effective coordination and regulation**

Sanitation needs to be defined as an essential service for which government is responsible and can be held accountable. Sanitation must be

recognized as a multi-sectoral issue that has impacts across health, social development, education, the economy and the environment. Sanitation must be included in national policies, strategies and plans, and needs to be backed by adequate human and financial resources. Sanitation service provision, including through the private sector and informal provision, should be supported through a legislative framework and policies, accompanied by standards for service quality throughout the sanitation chain (sewered and non-sewered) and a simple, transparent, effective regulatory and enforcement environment, allowing innovation, cost recovery and provision for serving the poor and vulnerable. Clearly defined leads and institutional arrangements that avoid gaps and overlaps in mandates across the sanitation service chain, have enabled success in many countries. Safe sanitation can be delivered effectively through a mix of approaches and systems tailored to the local context. Well-balanced regulation is key to ensuring effective risk management, while also developing effective and innovative responses. This extends to the sanitation workforce, which requires increased regulation and formalization.

## 2. **Smart public finance unlocks effective household and private investment**

Most countries report insufficient resources to meet their national sanitation targets. Identifying and mobilizing appropriate funding sources and financing instruments is critical if countries are to meet their aspirations in the most cost-effective and efficient manner. Public funding

is important to lay the foundation for safe sanitation services that reach the poorest, and to galvanize other actors' contributions in the sector. Government investments must be used strategically to attract and optimize other investments, recognizing that most funding for sanitation comes from households themselves in the form of tariffs, user fees and toilet purchases. There are multiple sources of funding for sanitation that governments can access and combine, including taxes, transfers from external donors, and tariffs and user fees. Various forms of repayable finance can be mobilized, such as loans, bonds and other financing instruments. Governments must make evidence-based decisions on the allocation of funds and hold service providers accountable. Governments can enter into public-private partnerships to access financing and expertise from the private sector. In addition to sanitation systems and services, governments must also budget for the costs associated with a conducive enabling environment, sustained over the long-term, particularly concerning building and maintaining institutional and regulatory capacity.

### **3. Capacity at all levels drives progress and sustains services**

The lack of emphasis historically placed on sanitation has resulted in significant capacity shortfalls throughout the system. Developing a strong sanitation sector will require a larger workforce with better skills. Capacity development is more than training. It encompasses human resource development, organizational development and research and innovation. National governments need the skills to develop and administer effective strategies, policies, costed plans and regulations. To adopt new approaches, local government and utilities need to have the necessary capacity to oversee and deliver service-

oriented sanitation and to implement effective cost recovery mechanisms. Supporting the private sector to capitalize on the 'sanitation economy' – a marketplace of products and services, renewable resource flows and data and information related to sanitation – requires building the skills of service providers and their ability to respond to environmental conditions and climate change.

### **4. Reliable data support better decision-making and stronger accountability**

Reliable, consistent and, whenever possible, disaggregated data are essential to stimulate political commitment, inform policymaking and decision-making, and enable well-targeted investments and course corrections to maximize health, environmental and economic gains. The value of survey and census data can be increased by using harmonized questions that allow comparison with other surveys and enable tracking of national, regional and global indicators. Robust sanitation monitoring mechanisms are needed at the lowest administrative level, using existing structures and linked with existing reporting and accountability structures at the local and national level.

### **5. Innovation leads to better approaches and helps meet emerging challenges**

Achieving universal access to safe sanitation requires innovative solutions. New approaches and systems can 'future-proof' the sector against disease outbreaks, urbanization, climate change and increasing pressure on natural resources, with solutions that are practical, cost-effective and scalable. Adopting such innovations can also support equality and universality of services, helping extend sanitation to the hardest-to-reach areas and groups. Increased urbanization and migration call for new ways of



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meeting the needs of high-density populations living in poverty, often in informal settlements. In rural areas, context-specific, community-based approaches help ensure sustainable services for all. Climate change and mounting resource pressure necessitate innovative ways to deliver services that will be resilient and enable resource-recovery. Governments must think beyond conventional sewerage systems, which are costly and time-consuming to install. Governments can enable innovation through sound regulation, performance criteria and standards that reduce risk but do not stifle new ideas and entrepreneurship.

This report presents the state of sanitation in the world today and is intended to increase awareness of the progress made towards achieving the SDG targets for sanitation, and to identify opportunities to meet the challenges that remain. It calls on Member States, the United Nations system and partners to urgently rise to these challenges as part of the SDG 6 Global Acceleration Framework.

By presenting best practices, case studies, successes and challenges, this report seeks to inspire Member States and all stakeholders to learn from each other and work together towards achieving universal access to safe sanitation by 2030.

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ISBN: 978-92-4-001547-0

