The hidden world of sanitation workers

Media briefing





WaterAid





Introduction

Somappa, 52, uses a plastic

bag to protect a wound on his

manually empties a pit latrine

with his co-workers. Bangalore,

India, August 2019.

foot from getting infected as he

Every year, the human race produces over 350 million tonnes of poo - that's enough to fill 140,000 Olympic swimming pools!¹¹ Unless that human waste is properly dealt with, every single gram will pose a significant health risk to us and our planet.

Ensuring that our contact with human waste ends when we leave the toilet is one of the most important jobs in society, and yet around the world sanitation workers remain mostly unseen and unappreciated. To mark World Toilet Day and this year's theme of 'Leaving no one behind',² the International Labour Organization (ILO), WaterAid, the World Bank and the World Health Organization (WHO) are highlighting the plight of sanitation workers as one of the most vulnerable groups in society.

These workers range from public or private employees with proper equipment, benefits and legal protection, to some of the most marginalised, poor and discriminated members of society. Despite providing an essential public service, an uncounted number of sanitation workers around the world work in conditions that are hazardous and stigmatising – violating both their dignity and basic human rights. Few countries in the developing world have any guidelines to protect these workers, leaving them exposed to a litany of health and safety issues. There are no global statistics, but in India alone between 2017 and late 2018, there was on average one death of a sanitation worker every five days in the country, according to official data.³ Other sources⁴ estimate three times as many, over three deaths every five days." Countless more suffer repeated infections and injury, and have their lives cut short by the everyday risks of the job.

Today, only 45% of the world's population have access to a private toilet where the human waste is safely disposed of - so-called 'safely managed sanitation'. Two billion people still lack access to even a basic sanitation service - and in turn have to practise open defecation, use pits or hanging latrines that empty into rivers or lakes, or share their toilet with multiple households.5

Progress on closing the gap between those with and those without basic sanitation is woefully slow. Access to decent toilets that properly manage waste is a human right and also forms part of Sustainable Development Goal (SDG) 6



which aims to bring clean water and sustainable sanitation to everyone, everywhere by 2030. For the SDGs that we have data for, it is evident that the goal for safely managed sanitation is one that is furthest behind. If we continue at current rates of progress, in some countries we will not bring safely managed sanitation to everyone for centuries.

We will need many more sanitation workers around the world if we are to achieve these ambitious targets, but their health and the guality of their lives are rarely considered. Safely managed sanitation must go hand in hand with a safe and dignified working environment for those who run and maintain the sanitation service that protects our health.6

In the most extensive global report on the issue to date, ILO, WaterAid, the World Bank and WHO have come together to shed light on this hugely neglected issue. This briefing brings together findings from the report *The Health, Safety and* Dignity of Sanitation Workers, and the stories of workers from around the world, to help identify ways to improve the lives and wellbeing of these workers.

People are dying every day because of poor sanitation services – from both the diseases caused by human waste being unsafely released into the environment, and also the dangers that sanitation workers are exposed to when carrying out their jobs. Safely managed sanitation must



2 / The hidden world of sanitation workers

i. The median weight of human faeces produced daily is 128 grams. Annually this ii. The Ministry of Social Justice and Empowerment reported 323 deaths in 2017 is 46.72 kilograms or 0.04672 tonnes per person. The population is 7.53 billion. An Olmypic swimming pool holds the equivalent of 2500 tonnes of poo or water.

and 46 deaths between January-July 2018. This is a total of 369 deaths over a 577-day period.

include decent working conditions for the workers on the frontline who make sure our sanitation services continue to function. Without safely managed sanitation for all, we will never end extreme poverty.

Olivier Batoro, 37, a manual pit emptier, has just come out of the pit and is suffering from dizziness, Ouagadougou, Burkina Faso, July 2019.

• Manual pit emptiers throw the waste water they collected from a sump at an unofficial and open dumping place, Ouagadougou, Burkina **Faso, July 2019.**

• A worker unblocks a sewer/drain which is located in the kitchen of a private house. Hyderabad, India, August 2019.



The hidden world of sanitation workers / 3

Sanitation around the world



Living without safely managed sanitation threatens the health, education and livelihoods of billions of people. Everyone, everywhere has the right to sanitation, but progress on achieving this promise encapsulated by SDG 6 is slow. What does access look like around the world?⁵

• Safely managed sanitation:

A hygienic household toilet that is not shared with other households and where waste is safely disposed of in situ, or transported and treated offsite.

How many people have this? 3.4 billion (45%)

Basic sanitation:

A hygienic household toilet that is not shared with others.

How many people have this? 2.2 billion (29%)

• Limited sanitation:

A hygienic toilet that is shared between several households.

How many people have this? 627 million (8%)

• Unimproved sanitation:

A toilet that does not hygienically separate human waste from contact with people, such as a latrine over an open pit or a water body.

How many people have this: 701 million (9%)

• Open defecation:

People relieving themselves in open fields, near railway tracks or in secluded areas.

How many people do this: 673 million (9%)



Are we making progress?

Between 2000 and 2017, 2.1 billion people gained access to at least a basic sanitation service and the percentage of the global population practising open defecation halved. However, basic access falls below the ambition of SDG6, which has a target level of safely managed sanitation services. At current rates of progress, everyone in Sub-Saharan Africa will not have access to safely managed sanitation until 2403 – a shocking 373 years behind schedule.ⁱⁱⁱ Unless we can dramatically increase the speed of progress, meeting SDG 6 will take centuries, not the decade we have remaining.

Which countries are furthest behind?⁵

Country

Ethiopia Chad South Sudan Madagascar Papua New Guinea Niger Benin Togo Sierra Leone Liberia



• Poor sanitation has a significant impact on daily life in high density, poor, urban areas like this one. Ifelodun, Lagos, Nigeria, September 2016.

Samka Akhter using a public toilet in Dhaka, Bangladesh. October 2018.

Which countries have made the most progress?⁵

Country

| Micronesia | |
|-------------------------------------|--|
| Cambodia | |
| Nepal | |
| Lao People's Democratic Republic | |
| India* | |
| Cabo Verde | |
| Lesotho | |
| Indonesia | |
| Vietnam | |
| Mauritania | |
| While this report was being r | |

eport was being prepared, the Government of India's Management Information System (MIS) data on sanitation declares a 100% achievement of basic sanitation coverage in rural⁷ areas and a similar situation in urban⁸ areas.

Total population without access to basic sanitation (%)

People who to limited sanitation (%)

People who have access have access to unimproved sanitation (%)

People who practise open defecation (%)

| 93% | 7% | 63% | 22% |
|-----|-----|-----|-----|
| 92% | 7% | 18% | 67% |
| 89% | 8% | 18% | 63% |
| 89% | 16% | 29% | 45% |
| 87% | 2% | 70% | 14% |
| 86% | 10% | 9% | 68% |
| 84% | 20% | 10% | 54% |
| 84% | 26% | 10% | 48% |
| 84% | 34% | 33% | 18% |
| 83% | 27% | 16% | 40% |

| % of pop to at lea | Annual rate of change | |
|-----------------------|--------------------------|------|
| 2000 | 2017 | |
| 25% | 88% | 3.75 |
| 19% | 59% | 2.90 |
| 15% | 62% | 2.76 |
| 28% | 74% | 2.72 |
| 16% | 60% | 2.54 |
| 40% | 74% | 1.99 |
| 9% | 43% | 1.99 |
| 41% | 73% | 1.88 |
| 52% | 84% | 1.83 |
| 17% | 48% | 1.82 |

The hidden world of sanitation workers / 5

iii. This is calculated by extrapolating a yearly rate of progress of 0.21 for the region from the time period 2000-2017.

Sanitation systems

Sanitation workers, (L-R)
 Anjanappa 38, Narasimhulu
 40 and Gangalappa 45 try
 to unblock a sewer using
 bamboo rods. Bangalore,
 India, August 2019.

Where does our poo go? Ideally, all human waste should be properly captured and treated to prevent it from coming into contact with people and the environment – making us sick and polluting rivers and seas. But even in wealthy, developed countries, treatment of human waste can be imperfect. For example, 12% of people in France still lack access to safely managed sanitation, despite being classed as a high-income country.

Where people rely on pits and septic tanks, the sanitation chain for a well-developed and managed system looks like this:



In reality, for the 55% of the world's population who don't have access to a safely

managed sanitation system, many parts of the chain are non-existent or ineffective.



Barrels are used by sanitation workers to safely remove faeces from a household pit latrine in Inanda, a township in eastern KwaZulu-Natal, Greater Durban metropolitan area, South Africa, March 2019.

 Ajuloju Ganiyu, 24, emptying the contents of a 'gully sucker'

 a sewage disposal truck in Lagos, Nigeria, September 2016.

| Stages of the sanitation chain | What can go wrong? |
|--------------------------------|---|
| Toilet | Nearly 700 million people still practise open defecation. Where toilets exist, they may also empty directly into the environment or river, ill-designed pit latrines may contaminate the groundwater and septic tanks can overflow when not serviced. |
| Containment | Pits and tanks need emptying, but this often happens in unsafe conditions, polluting the environment and putting the health and life of emptiers at risk. |
| Transport | Faecal sludge may spill during transport and sewers may leak. |
| Treatment | Sewers too often discharge directly into rivers, lakes or seas. Emptiers may have no choice but to dump the faecal sludge in fields, open drains or water bodies. Where treatment plants exist, they are not always functional or treating the waste effectively. |
| End use/disposal | Some waste is left untreated and treated waste is sometimes disposed of, reused in an unsafe manner, or released straight into the environment. |





Sanitation workers are those who work in any part of the sanitation chain. Their jobs can include cleaning toilets, emptying pits and septic tanks, cleaning sewers and manholes and operating pumping stations and treatment plants. In many developing countries, they are often informal workers, unprotected by laws or labour rights. At each stage of the sanitation chain, they can be exposed to hazardous waste material. This briefing focuses on sanitation workers in the emptying and transport stages, which are the most common and riskier tasks.

Types of work

Sewer work – maintaining and unblocking sewers, drains and manholes when they are flooded by rainwater and clogged by waste. Where advanced machinery is lacking, this sometimes involves physically entering the sewer and unblocking the drains by hand with no protective equipment and clothing. Many workers have died in sewers from drowning or from inhaling the toxic fumes.⁹

• Pit and septic tank emptying – emptying and cleaning pits and septic tanks, and then transporting human waste for treatment or disposal. This work can be done by hand with rudimentary tools, and often involves entering into the pit or tank. These workers are at risk of asphyxiation from the toxic fumes in septic tanks, or of injury or death if the walls of the pit collapse. Alternatively, the work can be carried out with advanced tools and mechanical equipment, or even motorised vacuum trucks. However, these workers may still face similar risks.

Manual scavenging – in South Asian countries, manual scavenging describes any type of sanitation work carried out without adequate protection – leading to direct contact with human waste. This includes manually emptying and cleaning pits and dry latrines and carrying the waste away. The work is normally undertaken by people considered low caste, belonging to religious minorities or other vulnerable groups. In addition to health and safety risks, manual scavenging is highly stigmatising and is a serious violation of human rights due to the unsafe working environment and associated discrimination.

Plight of sanitation workers





The conditions that sanitation workers must work in depend heavily on the wider sanitation and urban landscape in countries. There are however some common factors that the most vulnerable sanitation workers in developing countries experience that impact their health, lives and dignity.

Extreme health hazards

Asthma, cholera, typhoid, hepatitis, polio, eye and skin burns, blunt trauma, gastroenteritis6 and others, the list of illnesses and injuries faced by sanitation workers is seemingly endless. They often come into direct contact with human waste and work in confined and dangerous spaces. Toxic gases, such as ammonia, carbon monoxide and sulphur dioxide,¹⁰ in septic tanks and sewers can cause workers to lose consciousness or die. It is not uncommon for workers to have no form of protective or safety equipment despite the obvious hazards of their work. This can lead to injuries and infections caused by sharp objects such as razors, syringes or broken glass. Many sanitation workers resort to working under the influence of alcohol or drugs in an attempt to escape from the harsh realities of their work, which further increases their risk of accidents.

Little and inconsistent pay

How much a sanitation worker is paid for working these essential jobs varies significantly. In the most extreme circumstances, manual workers, in India are paid with food rather than money. In Senegal and Haiti, workers report households failing to pay at all once the work has been completed. The informality of many aspects of sanitation work in the developing world leaves workers with no consistent income and further exacerbates the inequalities they face.

Stigma and discrimination

Low-grade sanitation work can trap entire families in multigenerational cycles of poverty. In some countries, sanitation work is a socially stigmatising issue, so workers often operate at night to hide their job from their communities. In India and Bangladesh, manual scavenging is seen to belong to the lowest level of the caste system, they face discrimination and little to no opportunities to leave this type of work behind for them or their children.



• A group of women from the Valmiki community. Valmikis are a sub-caste of the 'Scheduled' or 'Dalit' caste, they are forced to inherit the occupation of manual scavenging from their parents or upon marriage. Amanganj, Madhya Pradesh, India. December 2018.

A hand showing a syringe found inside a family's pit latrine by Olivier Batoro whilst he was emptying it by hand. Ouagadougou, Burkina Faso, July 2019. The barrels, the shovels and the pickaxes... they are not durable because the faecal sludge gnaws at them and damages them quickly. If the sludge can damage such materials that are rubber or iron, what about the body of those who enter the pits to empty them?

Inoussa Ouedraogo, manual emptier in Ouagadougou, Burkina Faso. We still follow the age-old ways. We are given one kilogram of rice or some other food grains in this tokra [basket]. Occasionally, we get money too.

Ashadevi Rawat, septic tank cleaner in Sangrav village in Rajpur Block, India.

No rights

Policies, laws and regulations surrounding sanitation workers are often nonexistent. Where they do exist, they tend to be weak, only covering some types of sanitation workers, or lack the required financing and enforcement mechanisms. The riskiest types of work are informal in many countries. There have been laws passed intended to ban manual empty – in India or Senegal for example – but in reality, this may cause this type of work to fall into the black market, exacerbating the problem and leaving sanitation worker even less protected.

●● They say that we should do what we are meant to do; that is cleaning dirt. ●●

Manju Valmiki, a manual scavenger in Amanganj, Madhya Pradesh, India.

Country focus

India

With a population of 1.3 billion people, India faces enormous challenges in providing and maintaining clean water and safely managed sanitation services for its people. Significant progress has been made on improving access to clean water and decent toilets, but access to safely managed sanitation services still lags behind.⁵

Some sources estimate that there are around five million sanitation workers in India (including toilet cleaners), two million of which are working in high-risk conditions.¹¹ Those affected by manual scavenging are the most vulnerable and stigmatised group, mostly belonging to the lowest rungs of India's caste system, known as 'Dalits'. The job is often handed down through generations, with little opportunity to escape the cycle.

Despite manual scavenging being outlawed by the Government in 1993, and the law strengthened in 2013, over 20,000 people were identified as manual scavengers in 2018¹² and other estimates point to this number being much higher.

Some of these workers, predominantly women and



girls, are involved in the manual cleaning of dry 'bucket' latrines, carrying the waste away in baskets. Others are involved in cleaning railway tracks and other areas where people practise open defecation, generally with very rudimentary tools.

Manual scavenging often involves hazardous working conditions, with the workers using their bare hands or basic tools to clean, handle and dispose of untreated human waste. It is common for workers to be immersed in human waste, with some even losing their lives whilst cleaning septic tanks or unblocking sewers. Between 2017 and late 2018, there was an average of one death of a sanitation worker every five days in the country, according to official data.³ Other sources⁴ estimate three times as many, with over three deaths every five days.

Most of these workers are not formally recognised, meaning they have no benefits or social protection. Pay is very poor, and workers are often at risk of extortion – some even being paid with leftover food rather than money. Workers face widespread and systemic discrimination; their human rights are violated and there are very few opportunities for them to move away into other jobs.

When it comes to operating sewers, pits, septic tanks and treatment facilities, there is a substantial formal and permanent sanitation workforce, with basic working conditions that are protected by law. However, the less desirable and high-risk jobs are frequently sub-contracted to temporary informal workers who are lacking in such protections.¹³ As such, manual scavenging is also common in these operations, with workers operating without protective equipment.

Progress has been made in terms of advocating for the rights of sanitation workers and identifying appropriate solutions. Many local and international organisations continue to raise awareness and empower sanitation workers.



Meenadevi is 58 and cleans dry latrines. Her mother in law also worked to clean dry latrines, and died doing the job.

Initially, I used to feel nauseated. I wasn't ready and felt ashamed to work because of the stigma attached to it. But now I'm used to the foul smells. Poverty leaves you with no option. With the amount of discrimination we face, what else can we do to feed our stomach? Give us another job and we will leave this one immediately.

> India banned manual scavenging in 1993 with the Employment of Manual Scavenging and Construction of Dry Latrines (Prohibition) Act. In 2013, the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act (PEMSR) again prohibited manual scavenging and aimed to provide rehabilitation for those employed in this work. A year later, the Supreme Court of India ruled that manual scavenging violates international human rights commitments. The Government has recently developed an action plan to end direct contact with human waste, but they clearly still have a long way to go in order to end manual scavenging for good.

Meenadevi, 58, manually removing faeces from a dry latrine. She has rudimentary tools with which to do this work. Dehri-on-sone, Bihar, India, December 2018.

Country focus

Tanzania





Juma Ng'ombo has been working as a sanitation worker in Dar es Salaam since 2003. He operates a machine called a 'Gulper' which is used to empty toilets in the crowded city settlements.

● The Gulper is helping our work a lot, because it is able to reach all corners of the streets and houses where the big trucks cannot pass. When we are collecting the liquid waste, we protect ourselves by wearing gloves, boots, masks, and using sanitiser. I chose this job myself because I had an uncle who did this work, I learnt until I was able to do the job myself. I saw that this job can help me improve my life. ●● Tanzania's largest city, Dar es Salaam, has seen unprecedented growth during the past few decades. Unplanned settlements have popped up all over the city, which often rely on the inadequate sanitation and water services.

Most of these settlements use pit latrines, but the streets are often too narrow for vacuum trucks so people either manually empty their pit latrines into streams, or pay 'frogmen' – community members who provide this service.

A frogman's work is dangerous as they do not have the appropriate equipment needed to empty the pits safely and hygienically. Instead, they use buckets and work without protective clothing, leaving them vulnerable to diseases. Some frogmen have died doing this work, often when heavy rain has caused pit latrines to collapse.

In some communities in Tanzania, initiatives have been set up to turn human waste into a business. A faecal sludge management plant was constructed to recycle waste into charcoal and biogas that can then be sold. Community members pay for the emptying service in instalments and the poorest do not have to pay anything. This helps ensure the service is available to everyone and that the sanitation workers have the proper equipment and a safe working environment.¹⁴

Juma Ng'ombo, 52, at a faecal sludge disposal site, displaying a stamp that authorises him to dispose of faecal sludge, Temeke, Dar es Salaam, Tanzania, June, 2019.

 Juma Hamisi, 29, (left) and Juma Ng'ombo,
 52, (right) lowering the gulper machine into a pit latrine, Temeke, Dar es Salaam, Tanzania,
 June, 2019.



Burkina Faso is a landlocked country in West Africa with a population of just over 20 million people. According to the Government, only 22.6% of the population have access to basic sanitation.¹⁵ Progress towards universal access to clean water and decent toilets is very slow.

Most sanitation workers do not have any formal training and regularly come into direct contact with human waste. Manual emptiers use buckets, ropes and shovels to empty pits and septic tanks, with little to no protective equipment. They may dispose of the waste they collect directly into the environment or open drains.¹⁶

Manual emptiers are often marginalised members of society and report consuming drugs, traditional medicines and alcohol whilst carrying out their work to mask the horror of the conditions.

Wendgoundi Sawadogo, 45, sits between his co-workers Tanga Zongo, 44, (left) and Yadega Sawadogo, 41, (right) they are taking a little rest outside a family courtyard, after having emptied a latrine, Ouagadougou, Burkina Faso, July 2019.

 Wendgoundi Sawadogo, 45, uses a rope to lower himself into a pit latrine to empty it manually. Ouagadougou, Burkina Faso, July 2019.

 Wendgoundi Sawadogo,
 45, manual emptier, washing himself outside a courtyard, after having emptied a sump,
 Ouagadougou, Burkina Faso,
 July 2019. Wendgoundi Sawadogo has worked as a manual emptier in Ouagadougou, Burkina Faso's capital city for 15 years. He works for local households in the area who contact him directly for his services:

You have no paper to show that this is your profession. When you die, you die. You go with your bucket and your hoe without recognition, without leaving a trace anywhere or a document that shows your offspring that you have practiced such a job. When I think of that, I'm sad. I do not wish any of my children to do the work I do.



Country focus

Burkina Faso



Country focus

Bangladesh is one of the most densely populated countries

in the world. Significant progress has been made since 2000 in ending open defecation, but only 48% of the population have access to basic sanitation.⁵

Bangladesh

The sanitation workforce is made up of both formal public workers who have more secure positions, income and benefits at minimal level, and informal workers who face many more challenges. Informal 'sweepers' or emptiers often work without tools or protective equipment – regularly coming into direct contact with human waste and often working at night to avoid detection in their communities. They are stigmatised and discriminated against – living in segregated 'sweeper colonies' which are unhygienic slum-like areas offering poor and overcrowded living conditions. Even formal public 'sweepers' often execute the same practice of working without protective equipment during their work.

Uttam has been working as a septic tank emptier since he was 21 years old. He is frustrated by the authorities who do not recognise workers or give them their rights.¹⁷

● I want my rights and to live in a better environment. How can I ever be expected to improve my situation otherwise? How can my daughter ever be expected to have a better life than mine? Nobody looks at us or thinks about us. I'm not asking for wealth, just the basics – just a little dignity. ●●



Uttam Kumar, a septic tank emptier in Khulna, Bangladesh.







 Inoussa Ouedraogo, 48, emptying a family latrine, Ouagadougou, Burkina Faso, July 2019.

The hidden world of sanitation workers / 15

What can be done?

Gangalappa, 52, manual sewer unblocker in Bangalore, India, August 2019.

Senzi Dumakude, 32, a worker on a municipal crew that uses flexible rods to clear blockages in pipes that feed into the main sewer lines, Greater Durban metropolitan area, South Africa, March 2019.

Julius Chisengo, 49, sanitation worker, standing in front of a motorised gulper truck, Kigambon-Umawa, Dar es Salaam, Tanzania, June, 2019

• Kaverappa, 54, Bangalore, India, August 2019.

Wendgoundi Sawadogo, 45, manual emptier, Ouagadougou, Burkina Faso, July 2019.



Decent toilets and safe working conditions are human rights.¹⁸

Sanitation workers provide a vital public service that is essential for a country's health and development. The world will never end poverty until everyone, everywhere has access to decent toilets, but this provision must go hand in hand with protecting the life, health and dignity of those who work to bring us these essential services.

Many of the challenges sanitation workers face stem from their lack of visibility in society. They can be stigmatised, marginalised and their voices ignored by the people in power.

Improving the lives of sanitation workers will take action from many different parts of society:

• **Governments** should put in place laws that recognise the work of the sanitation workforce and ratify relevant international labour standards.

• **Governments** must put an end to manual scavenging, and offer rehabilitation and alternative livelihoods for those affected, especially women.

 Governments should formalise sanitation work by providing workers with decent working conditions and social protection, and by enforcing regulations.

• Governments and human rights organisations should support sanitation workers' efforts to organise and realise their rights, including through unions and associations.



• Development agencies and donors need to ensure that the rights and welfare of sanitation workers are embedded into all urban sanitation programmes.

• **Communities and the public** must recognise the vital work that sanitation workers carry out, from which we all benefit, and support their struggles.

For further information on policy asks and requirements please see the full report, available at: washmatters.wateraid.org/blog/the-healthsafety-and-dignity-of-sanitation-workers-a-blindspot-in-safely-managed-sanitation

Filling the gaps

Far too little is known about the workers and working conditions of the people who provide this essential public service. The most vulnerable sanitation workers – those doing the lowestgrade type of work – often work informally or do not want to be acknowledged because of stigma, so it is impossible to estimate how many people are working in this domain worldwide.

Similarly, we don't know how many sanitation

worker deaths there are around the world, and the estimates we do have are likely to be a huge underestimation, further masking the desperate situation so many of these workers face. Lack of good quality evidence and data makes it more difficult to persuade governments to take decisive action to improve the lives of sanitation workers. Researchers, governments and development agencies all have a role to play in helping to build the evidence base and to take action based on those findings.

Tackling the toilet taboos

Defecation is a normal part of life for every single human being, yet talking about toilets – what goes in them and where that goes – is not a normal part of our everyday or political discourse. If we can't talk about toilets openly, it becomes harder for change to happen – whether that is getting politicians to increase provision, doing more research into issues around human waste disposal, or sanitation workers demanding their working rights and greater community acceptance.

Appendix: Global access to sanitation services⁵

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|--|--|---|--|--|
| Afghanistan | 43 | 10 | 34 | 13 |
| Albania | 98 | 2 | <1 | <1 |
| Algeria | 88 | 8 | 3 | <1 |
| American Samoa | 54 | 45 | <1 | <1 |
| Andorra | >99 | <1 | <1 | <1 |
| Angola | 50 | 20 | 10 | 20 |
| Anguilla | 97 | 2 | <1 | <1 |
| Antigua and Barbuda | 88 | 4 | 8 | <1 |
| Argentina | - | - | - | - |
| Armenia | 94 | <1 | 6 | <1 |
| Aruba | - | - | - | - |
| Australia | >99 | <1 | <1 | <1 |
| Austria | >99 | <1 | <1 | <1 |
| Azerbaijan | 93 | 3 | 5 | <1 |
| Bahamas | 95 | 3 | 2 | <1 |
| Bahrain | >99 | <1 | <1 | <1 |
| Bangladesh | 48 | 23 | 29 | <1 |
| Barbados | 97 | 2 | <1 | <1 |
| Belarus | 98 | 2 | <1 | <1 |
| Belgium | >99 | <1 | <1 | <1 |
| Belize | 88 | 9 | 2 | <1 |
| Benin | 16 | 20 | 10 | 54 |
| Bermuda | >99 | <1 | <1 | <1 |
| Bhutan | 69 | 9 | 22 | <1 |
| Bolivia (Plurinational State of) | 61 | 17 | 9 | 13 |
| Bosnia and Herzegovina | 95 | <1 | 4 | <1 |
| Botswana | 77 | 6 | 6 | 11 |

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|---|--|---|--|--|
| Brazil | 88 | <1 | 10 | 1 |
| British Virgin Islands | - | - | - | - |
| Brunei Darussalam | - | - | - | - |
| Bulgaria | 86 | 14 | <1 | <1 |
| Burkina Faso | 19 | 27 | 6 | 47 |
| Burundi | 46 | 12 | 40 | 3 |
| Cabo Verde | 74 | 6 | <1 | 20 |
| Cambodia | 59 | 6 | 3 | 32 |
| Cameroon | 39 | 19 | 35 | 7 |
| Canada | >99 | <1 | <1 | <1 |
| Caribbean Netherlands | - | - | - | - |
| Cayman Islands | - | - | - | - |
| Central African Republic | - | - | - | - |
| Chad | 8 | 7 | 18 | 67 |
| Channel Islands | 99 | <1 | 2 | <1 |
| Chile | >99 | <1 | <1 | <1 |
| China | 85 | 6 | 9 | <1 |
| China, Hong Kong Special Administrative Region | 96 | <1 | 4 | <1 |
| China, Macao Special Administrative Region | - | - | - | - |
| Colombia | 90 | 5 | 2 | 3 |
| Comoros | 36 | 13 | 50 | <1 |
| Congo | 20 | 34 | 37 | 9 |
| Cook Islands | 98 | <1 | 2 | - |

18 / The hidden world of sanitation workers

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|--|--|---|--|--|
| Costa Rica | 98 | <1 | 1 | <1 |
| Côte d'Ivoire | 32 | 22 | 20 | 26 |
| Croatia | 97 | 2 | <1 | - |
| Cuba | 93 | 3 | 4 | <1 |
| Curaçao | 99 | <1 | <1 | <1 |
| Cyprus | >99 | <1 | <1 | <1 |
| Czech Republic | >99 | <1 | <1 | <1 |
| Democratic People's Republic of Korea | 83 | 1 | 16 | <1 |
| Democratic Republic of the Congo | 20 | 20 | 47 | 12 |
| Denmark | >99 | <1 | <1 | <1 |
| Djibouti | 64 | 6 | 13 | 17 |
| Dominica | - | - | - | - |
| Dominican Republic | 84 | 11 | 2 | 3 |
| Ecuador | 88 | 9 | <1 | 2 |
| Egypt | 94 | 4 | 1 | <1 |
| El Salvador | 87 | 11 | <1 | 1 |
| Equatorial Guinea | 66 | 10 | 21 | 3 |
| Eritrea | - | - | - | - |
| Estonia | >99 | <1 | <1 | <1 |
| Eswatini | 58 | 27 | 8 | 7 |
| Ethiopia | 7 | 7 | 63 | 22 |
| Falkland Islands (Malvinas) | >99 | <1 | <1 | <1 |
| Faroe Islands | - | - | - | - |
| Fiji | 95 | 5 | <1 | <1 |
| Finland | >99 | <1 | <1 | <1 |
| France | 99 | 1 | <1 | <1 |
| French Guiana | 92 | <1 | 8 | <1 |
| French Polynesia | 97 | <1 | 3 | - |
| Gabon | 47 | 27 | 22 | 3 |

* While this report was being prepared, the Government of India's Management Information System (MIS) data on sanitation declares a 100% achievement of basic sanitation coverage in rural⁷ areas and a similar situation in urban⁸ areas.

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|-------------------------------|--|---|--|--|
| Gambia | 39 | 27 | 33 | 1 |
| Georgia | 90 | 1 | 9 | <1 |
| Germany | >99 | <1 | <1 | <1 |
| Ghana | 18 | 50 | 13 | 18 |
| Gibraltar | >99 | <1 | <1 | <1 |
| Greece | 99 | 1 | <1 | <1 |
| Greenland | >99 | <1 | <1 | <1 |
| Grenada | 91 | 2 | 3 | 4 |
| Guadeloupe | >99 | <1 | <1 | <1 |
| Guam | - | - | - | - |
| Guatemala | 65 | 12 | 19 | 5 |
| Guinea | 23 | 30 | 33 | 14 |
| Guinea-Bissau | 21 | 16 | 47 | 17 |
| Guyana | 86 | 10 | 3 | <1 |
| Haiti | 35 | 27 | 18 | 20 |
| Holy See | - | - | - | - |
| Honduras | 81 | 9 | 4 | 6 |
| Hungary | 98 | 2 | <1 | <1 |
| Iceland | 99 | 1 | <1 | <1 |
| India* | 60 | 13 | 2 | 26 |
| Indonesia | 73 | 12 | 5 | 10 |
| Iran (Islamic Republic of) | 88 | 10 | 2 | - |
| Iraq | 94 | 1 | 5 | <1 |
| Ireland | 91 | 7 | 2 | <1 |
| Isle of Man | - | - | - | - |
| Israel | >99 | <1 | <1 | <1 |
| Italy | 99 | <1 | 1 | <1 |
| Jamaica | 87 | 12 | <1 | <1 |
| Japan | >99 | <1 | <1 | <1 |
| Jordan | 97 | 1 | 1 | <1 |
| Kazakhstan | 98 | 2 | <1 | <1 |
| Kenya | 29 | 22 | 38 | 10 |
| Kiribati | 48 | 13 | 10 | 28 |
| Kuwait | >99 | <1 | <1 | <1 |

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|--|--|---|--|--|
| Kyrgyzstan | 97 | 3 | <1 | <1 |
| Lao People's Democratic Republic | 74 | 3 | 2 | 21 |
| Latvia | 92 | 2 | 6 | <1 |
| Lebanon | 98 | 1 | <1 | <1 |
| Lesotho | 43 | 20 | 10 | 27 |
| Liberia | 17 | 27 | 16 | 40 |
| Libya | >99 | <1 | <1 | <1 |
| Liechtenstein | >99 | <1 | <1 | <1 |
| Lithuania | 93 | 2 | 5 | <1 |
| Luxembourg | 98 | 2 | <1 | <1 |
| Madagascar | 11 | 16 | 29 | 45 |
| Malawi | 26 | 13 | 55 | 6 |
| Malaysia | >99 | <1 | <1 | - |
| Maldives | >99 | <1 | <1 | <1 |
| Mali | 39 | 15 | 39 | 7 |
| Malta | >99 | <1 | <1 | <1 |
| Marshall Islands | 83 | 6 | <1 | 10 |
| Martinique | >99 | <1 | <1 | <1 |
| Mauritania | 48 | 8 | 12 | 32 |
| Mauritius | 96 | 4 | <1 | <1 |
| Mayotte | - | - | - | - |
| Mexico | 91 | 7 | 1 | <1 |
| Micronesia (Federated States of) | 88 | <1 | 12 | - |
| Monaco | >99 | <1 | <1 | <1 |
| Mongolia | 58 | 28 | 3 | 10 |
| Montenegro | 98 | <1 | 2 | <1 |
| Montserrat | - | - | - | - |
| Morocco | 89 | 4 | <1 | 7 |
| Mozambique | 29 | 5 | 39 | 27 |
| Myanmar | 64 | 9 | 17 | 9 |
| Namibia | 35 | 12 | 4 | 49 |
| Nauru | 66 | 31 | 1 | 3 |

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|--------------------------------|--|---|--|--|
| Nepal | 62 | 14 | 3 | 21 |
| Netherlands | 98 | 2 | <1 | <1 |
| New Caledonia | >99 | <1 | <1 | <1 |
| New Zealand | >99 | <1 | <1 | <1 |
| Nicaragua | 74 | 6 | 13 | 7 |
| Niger | 14 | 10 | 9 | 68 |
| Nigeria | 39 | 21 | 21 | 20 |
| Niue | 97 | <1 | 3 | <1 |
| North Macedonia | >99 | <1 | <1 | <1 |
| Northern Mariana Islands | 79 | 19 | 2 | <1 |
| Norway | 98 | 2 | <1 | <1 |
| Oman | >99 | <1 | <1 | <1 |
| Pakistan | 60 | 10 | 20 | 10 |
| Palau | >99 | <1 | <1 | <1 |
| Panama | 83 | 6 | 6 | 4 |
| Papua New Guinea | 13 | 2 | 70 | 14 |
| Paraguay | 90 | 3 | 6 | <1 |
| Peru | 74 | 11 | 8 | 7 |
| Philippines | 77 | 15 | 3 | 5 |
| Poland | 99 | 1 | <1 | <1 |
| Portugal | >99 | <1 | <1 | <1 |
| Puerto Rico | 97 | <1 | 3 | <1 |
| Qatar | >99 | <1 | <1 | <1 |
| Republic of Korea | >99 | <1 | <1 | <1 |
| Republic of Moldova | 76 | 11 | 13 | <1 |
| Réunion | >99 | <1 | <1 | <1 |
| Romania | 84 | <1 | 15 | <1 |
| Russian Federation | 90 | <1 | 10 | <1 |
| Rwanda | 67 | 14 | 17 | 2 |
| Saint Helena | >99 | <1 | <1 | <1 |

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|--|--|---|--|--|
| Saint Kitts and Nevis | - | - | - | - |
| Saint Lucia | 88 | 11 | <1 | <1 |
| Saint Pierre and Miquelon | - | - | - | - |
| Saint Vincent and the Grenadines | 87 | 3 | 6 | 3 |
| Samoa | 98 | <1 | 2 | <1 |
| San Marino | >99 | <1 | <1 | <1 |
| Sao Tome and Principe | 43 | 6 | 4 | 47 |
| Saudi Arabia | >99 | <1 | <1 | <1 |
| Senegal | 51 | 17 | 18 | 14 |
| Serbia | 98 | <1 | 2 | <1 |
| Seychelles | >99 | <1 | <1 | <1 |
| Sierra Leone | 16 | 34 | 33 | 18 |
| Singapore | >99 | <1 | <1 | <1 |
| Sint Maarten (Dutch part) | 99 | <1 | 1 | <1 |
| Slovakia | 98 | 2 | <1 | <1 |
| Slovenia | >99 | <1 | <1 | <1 |
| Solomon Islands | 34 | 6 | 7 | 54 |
| Somalia | 38 | 15 | 19 | 28 |
| South Africa | 76 | 15 | 8 | 1 |
| South Sudan | 11 | 8 | 18 | 63 |
| Spain | >99 | <1 | <1 | <1 |
| Sri Lanka | 96 | 3 | <1 | <1 |
| Sudan | 37 | 8 | 31 | 24 |
| Suriname | 84 | 11 | 2 | 3 |
| Sweden | >99 | <1 | <1 | <1 |
| Switzerland | >99 | <1 | <1 | <1 |
| Syrian Arab Republic | 91 | 8 | <1 | - |
| Tajikistan | 97 | 2 | <1 | <1 |
| Thailand | 99 | 1 | <1 | <1 |
| Timor-Leste | 54 | 9 | 18 | 20 |

20 / The hidden world of sanitation workers

| Country | % of population with at least basic sanitation | % of population with limited sanitation | % of population with unimproved sanitation | % of population practising open defecation |
|--|--|---|--|--|
| Тодо | 16 | 26 | 10 | 48 |
| Tokelau | 97 | 3 | <1 | <1 |
| Tonga | 93 | 1 | 6 | <1 |
| Trinidad and Tobago | 93 | 6 | <1 | <1 |
| Tunisia | 91 | 5 | 4 | <1 |
| Turkey | 97 | <1 | 2 | <1 |
| Turkmenistan | 99 | 1 | <1 | <1 |
| Turks and Caicos Islands | 88 | <1 | 10 | 2 |
| Tuvalu | 84 | 7 | 1 | 7 |
| Uganda | 18 | 18 | 58 | 6 |
| Ukraine | 96 | 2 | 2 | <1 |
| United Arab Emirates | 99 | <1 | <1 | <1 |
| United Kingdom | >99 | <1 | <1 | <1 |
| United Republic of Tanzania | 30 | 17 | 41 | 12 |
| United States Virgin Islands | >99 | <1 | <1 | <1 |
| United States of America | >99 | <1 | <1 | <1 |
| Uruguay | 97 | 2 | <1 | <1 |
| Uzbekistan | >99 | <1 | <1 | <1 |
| Vanuatu | 34 | 35 | 31 | <1 |
| Venezuela (Bolivarian Republic of) | 94 | <1 | 3 | 3 |
| Vietnam | 84 | 4 | 10 | 3 |
| Wallis and Futuna Islands | >99 | <1 | <1 | <1t |
| West Bank and Gaza Strip | 97 | 3 | <1 | <1 |
| Western Sahara | - | - | - | - |
| Yemen | 59 | 5 | 16 | 20 |
| Zambia | 26 | 18 | 37 | 19 |
| Zimbabwe | 36 | 28 | 11 | 25 |

References

- 1 Cartmell et al (2015). *The Characterization of Feces and Urine: A Review of the Literature to Inform Advanced Treatment Technology.* Crit Rev Environ Technol. Available at: ncbi.nlm. nih.gov/pmc/articles/PMC4500995/ (accessed 24 Jul 2019).
- 2 UN Water (2019). World Toilet Day 2019 – "Toilets for all" means leaving no one behind. Available at: worldtoiletday. info/ (accessed 12 Sep 2019).
- 3 The Indian Express (2018). One manual scavenging death every five days: Official data. Available at: indianexpress.com/ article/india/official-data-shows-onemanual-scavenging-death-every-fivedays-5361531/ (accessed 24 Jul 2019).
- 4 International Dalit Solidarity Network (2018). Justice Denied: Death of workers engaged in manual scavenging while cleaning septic tank or sewer. Available at: idsn.org/wp-content/ uploads/2018/12/Report-Justice-Denied-Death-of-workers-engaged-inmanual-scavenging-while-cleaning-the-Septic-tank-or-Sewer2.pdf (accessed 5 Aug 2019).
- 5 WHO/UNICEF Joint Monitoring Programme (2019). Progress on household drinking water, sanitation and hygiene, 2000-2017. p.8. New York: UNICEF/WHO. Available at: washdata. org/reports (accessed 24 Jul 2019).
- 6 WHO (2018). Guidelines on Sanitation and Health. Available at: who.int/ water_sanitation_health/publications/ guidelines-on-sanitation-and-health/ en/ (accessed 8 Aug 2019).
- 7 Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India (2019). Household toilet coverage across India (rural). Available at: sbm.gov.in/ sbmdashboard/IHHL.aspx. (accessed 9 Oct 2019.
- 8 Ministry of Housing and Urban Affairs, Government of India (2019). *Swachh Bharat Urban*. Available at: http:// swachhbharaturban.gov.in/dashboard/ (accessed 9 Oct 2019).
- 9 India Today (2019). 7 suffocated to death while cleaning hotel sewer in Gujarat's Vadodara. indiatoday.in/india/ story/7-suffocated-to-deathwhilecleaning-hotel-sewer-in-gujarats-vadodara-1549381-2019-06-15 (accessed 5 Aug 2019).

- 10 Wisconsin Department of Health (2017). *Sewer Gas*. Available at: dhs. wisconsin.gov/air/sewergas.htm (accessed 5 Aug 2019).
- 11 Dalberg Advisors (2017). Sanitation worker safety and livelihoods in India: a blueprint for action. Phase I: understanding the problem. Available at: sanitationworkers.org/wpcontent/uploads/2018/04/Phase-1-Understanding-the-Problem-Part-I.pdf (accessed 6 Aug 2019).
- 12 Business Standard (2018). Over 20,500 manual scavengers identified in India: Govt survey. Available at: businessstandard.com/article/pti-stories/over-20-500-manual-scavengers-identifiedin-india-govt-survey-118100200781_1. html (accessed 5 Aug 2019).
- 13 ILO, WaterAid, World Bank and WHO (2019). *Health, Safety and Dignity* of Sanitation Workers. Available at: washmatters.wateraid.org/healthsafety-dignity-sanitation-workers (accessed 31 Jul 2019).
- 14 WaterAid (2019). *Turning waste into wealth in Tanzania*. Available at: washmatters.wateraid.org/blog/turning-waste-into-wealth-in-tanzania (accessed 31 Jul 2019).
- 15 Ministere de l'eau et de l'assainissement, Burkina Faso (2019). Programme National d'assainissement des eaux usees et excreta. Available at: eauburkina. org/images/Assainissement/ DOSSIER_2018/RAPPORT_BILAN2018/ BILAN_NATIONAL_PNAEUE_2018_ DEF_14_05_2019.pdf (accessed 31 Jul 2019).
- 16 WaterAid (2018). Les Vidangeurs Manuels: Quels rôles dans l'Assainissement des quartiers périphériques et non lotis de Ouagadougou? Available at: eauburkina.org/images/ Assainissement/DOSSIER_2018/ RAPPORT_BILAN2018/BILAN_ NATIONAL_PNAEUE_2018_ DEF_14_05_2019.pdf (accessed 19 Aug 2019).
- 17 SNV Netherlands Development Organisation. (2019). City Cleaners. Stories of those left behind. Available at: snv.org/public/cms/sites/default/ files/explore/download/english_book_ design_v3.pdf. (accessed 5 Aug 2019).
- 18 International Labour Organization (2013). ILO Statement to the Third Committee of the 68th General Assembly. New York. Available at: ilo.org/ newyork/speeches-and-statements/ WCMS_229015/lang--en/index.htm (accessed 19 Aug 2019).



The hidden world of sanitation workers / 23

About this briefing

This briefing was created using research from a report on the health, safety and dignity of sanitation workers that was commissioned by the the ILO, WaterAid, World Bank and the WHO. The report examined case studies of sanitation workers in nine countries: Bangladesh, Bolivia, Burkina Faso, Haiti, India, Kenya, Senegal, South Africa and Uganda. The report can be viewed at: washmatters.wateraid.org/health-safety-dignitysanitation-workers

Written by Emily Pritchard with support from Fiona Callister, Andrés Hueso, Lisa Martin, Laura Summerton, Ella Lines, WaterAid India, WaterAid Bangladesh, WaterAid Burkina Faso, WaterAid Tanzania, the International Labour Organization, the World Bank and the World Health Organization.

November 2019

wateraid.org ilo.org worldbank.org who.int

#SanitationWorkers #WorldToiletDay

Front cover images:

Muniraju, 37, showing his hands covered in soil and faeces as he manually empties a pit latrine. Bangalore, India, August 2019.

Munirju, 37, helps Kaverappa, 54, out of a pit latrine after they have manually emptied it. Bangalore, India, August 2019.

WaterAid is an international not-for-profit, determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation. Only by tackling these three essentials in ways that last can people change their lives for good.

For more information or to arrange interviews please contact WaterAid's global media team:

Global/UK:

Emily Pritchard, EmilyPritchard@wateraid.org

Lisa Martin, LisaMartin@wateraid.org

Fiona Callister, FionaCallister@wateraid.org

Australia:

Kevin Hawkins, Kevin.Hawkins@wateraid.org.au

Canada:

Aneesha Hampton, AHampton@wateraidcanada.com

India:

Pragya Gupta, PragyaGupta@wateraid.org

Sweden:

Magdalena Olsson, Magdalena.Olsson@wateraid.se;

Petter Gustafsson, Petter.Gustafsson@wateraid.se

USA:

Emily Haile, EmilyHaile@wateraid.org



WaterAid is a registered charity: Australia: ABN 99 700 687 141. Canada: 119288934 RR0001. India: U85100DL2010NPL200169. Japan: WaterAid Japan is a specified non-profit corporation (certified NPO corporation) Sweden: Org.nr: 802426-1268, PG: 90 01 62-9, BG: 900-1629. UK: 288701 (England and Wales) and SC039479 (Scotland). US: WaterAid America is a 501(c) (3) non-profit organization.