

SANITATION FOR ALL



THE DRIVE TO 2015

SANITATION FOR ALL

Making the right a reality

Almost 40 per cent of people in the world still lack access to improved sanitation. Currently, 2.5 billion people without a proper toilet are at risk of poor health and enjoy few economic opportunities. They often live in degraded environments and are being denied a basic human right. Access to basic sanitation is not a charitable impulse, it is a legal entitlement. The Sanitation Drive to 2015 urges governments and other stakeholders to make this right a reality.

Sanitation is a human right

In 2010, the United Nations General Assembly and the Human Rights Council recognized clean drinking water and safe sanitation to be a human right essential to the full enjoyment of life and all other human rights.¹

Declaring that access to sanitation and water is a human right constitutes an important step towards making it a reality for everyone. It means that:

- Access to basic sanitation and safe water is an entitlement, rather than a commodity or a service provided on a charitable basis.
- Progress on access to basic sanitation must be accelerated.
- Efforts should focus on those least served, including the hardest to reach and most vulnerable.
- Communities and vulnerable groups need to be empowered and engaged in decision-making processes.
- The means and mechanisms available within the United Nations human rights system should be used to monitor nations' progress towards realizing the right to water and sanitation, and to hold governments accountable.

Common misconceptions regarding the human right to sanitation

Misconception	Clarification
The right entitles people to free sanitation.	Sanitation services need to be sustainable and affordable for all. People are expected to contribute financially or otherwise to the extent that they can.
The right entitles everyone to a household service.	Sanitation facilities need to be within, or in the vicinity of, the household and can include facilities such as pit latrines.
A country is in violation of the right if not all of its people have access to sanitation.	The requirement is that governments take steps to progressively realize the right, using the maximum resources available.

¹ Resolution adopted by the General Assembly 64/292, 'The human right to water and sanitation', A/64/L.63/Rev.1, Sixty-fourth session, Agenda item 48, 3 August 2010; and the Resolution adopted by the Human Rights Council, 'Human rights and access to safe drinking water and sanitation', A/HRC/15/L.14, Fifteenth session, Agenda item 3, 24 September 2010.

Open defecation is the most extreme manifestation of poor sanitation

The Sanitation Drive to 2015 focuses on ending open defecation, defined as defecation in fields, forests, bushes, bodies of water or other open spaces.

Today, 1.1 billion people – 15 per cent of the world's population – have no alternative other than to practise open defecation, the most extreme manifestation of poor sanitation.² It disproportionately affects the poorest and most marginalized and is strongly related to the spread of major killer diseases such as diarrhoea.

Why is defecating in the open an affront to human rights? Catarina de Albuquerque, the United Nations Special Rapporteur on the human right to safe drinking water and sanitation, explains: "Dignity closely relates to self-respect, which is difficult to maintain when being forced to squat down in the open, with no respect for privacy, not having the opportunity to clean oneself after defecating and facing the constant threat of assault in such a vulnerable moment."³

Take action!

Concerted action is needed if we are to transform the right to water and sanitation into a reality.

In 2010, the United Nations called for a redoubling of efforts towards meeting the MDG targets and lent its support to a global effort – the Sanitation Drive to 2015. The Drive to 2015 advocates for increased political focus on sanitation, better targeting of funding, coordinated efforts based on proven successes, involvement of communities and individuals in decision making, and efforts to ensure that all people have access to information and services.

Importantly, it focuses on ending open defecation. The Sanitation Drive urges us all to tackle this inequity by giving priority to the poorest and most marginalized populations.

Take action for sanitation by kick-starting your own Sanitation Drive to 2015 campaign!

Visit www.sanitationdriveto2015.org to:

- Find an online toolkit that includes the Planners' Guide, fact sheets, postcards and more ideas for making your campaign successful.
- Share your success stories and nominate 'Sanitation Drivers' who have been leaders in ending open defecation and promoting sanitation. See www.sanitationdrive2015.org/take-action/be-a-sanitation-driver for more information.

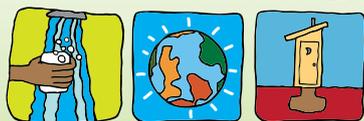
² WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation, *Progress on Drinking Water and Sanitation: 2012 update*, United Nations Children's Fund and World Health Organization, New York and Geneva, 2012.

³ Human Rights Council, 'Promotion and Protection Of All Human Rights, Civil, Political, Economic, Social And Cultural Rights, Including The Right to Development', Report of the independent expert on the issue of human rights obligations related to access to safe drinking water and sanitation, Catarina de Albuquerque, 1 July 2009, p. 19.



About us: The Sanitation Drive to 2015 builds on the United Nations resolution endorsed by all Members States in 2010 – calling for redoubled efforts to meet the MDG target to halve the number of people living without sustainable access to basic sanitation. UN-Water, which includes 30 United Nations entities and 22 partners, is coordinating the work. Civil society groups around the globe have pledged their support.

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Sanitation is a good economic investment

The Sanitation Drive to 2015 calls on all countries to increase investments, while better targeting funding to meet Millennium Development Goal (MDG) target 7c – to halve, by 2015, the proportion of the population without sustainable access to basic sanitation. For both social and economic development, sanitation is an excellent economic investment, yielding an average return of US\$5.50 for every dollar invested.¹

Toilets increase national gross domestic product (GDP)

In the past, it was difficult to prove that the lack of proper toilets curbs economic growth. Today, a number of studies indicate strong links between sanitation coverage and a range of sectors that drive economic growth. These 'bottom-line' numbers highlight the cost of poor sanitation and are starting to gain the attention of finance ministers and decision makers.

Toilets represent a business opportunity

Worldwide, 2.5 billion people do not have a safe toilet.² Many of them are willing to pay for improved sanitation services. They represent a vast market, with the potential to generate substantial revenues for entrepreneurs who offer affordable and sustainable sanitation solutions.

Business opportunities exist on several levels. The most apparent opportunity is in construction of new latrines and facilities, which provides jobs for masons, construction workers, labourers, painters, and tile producers and installers.

The safe reuse of urine and composted faeces as fertilizer holds potential for multiple economic benefits in a local economy, while reducing unsafe reuse practices that have adverse health consequences. Treating human waste for biogas to produce cooking fuel can create jobs, while providing a much-needed service. It also improves indoor air quality, which accounts for a significant proportion of acute respiratory infections in women and children.

Toilets reduce health costs

The numbers are striking. If even a fraction of the money spent dealing with health problems caused by poor sanitation was directed to improving sanitation services and changing behaviour, many more people would be enjoying a healthier life. Hygiene and sanitation are among the most cost-effective public health interventions. More children die of diarrhoea, a preventable condition directly linked to faecal exposure, than of AIDS, malaria and measles combined.³

How much is poor sanitation costing countries?

The World Bank's Water and Sanitation Programme recently assessed the annual economic impact of poor sanitation in a range of countries, and concluded that the costs were equivalent to:

- US\$448 million in Cambodia, around 7.2 per cent of the GDP.^a
- US\$53.8 billion in India, around 6.4 per cent of the GDP.^b
- US \$6.3 billion in Indonesia, around 2.3 per cent of the GDP.^a
- US\$17.5 million in Liberia, around 2.0 per cent of the GDP.^c
- US\$4.2 billion in Pakistan, around 6.3 per cent of the GDP.^b
- US\$3 billion in Nigeria, around 1.3 per cent of the GDP.^c

In Africa, the majority of these costs to production come from annual premature deaths, including children under age 5, due to diarrhoeal disease.

Other significant costs are productivity losses from poor sanitation, and time lost through the practice of open defecation.

a. Water and Sanitation Programme, *Economic Impacts of Sanitation in Southeast Asia – A four-country study conducted in Cambodia, Indonesia, the Philippines and Vietnam under the Economics of Sanitation Initiative*, WSP, Jakarta, 2008.

b. Water and Sanitation Programme, 'South Asia: Economics of Sanitation Initiative'. www.wsp.org/wsp/content/south-asia-economic-impacts-sanitation, WSP, 2012, accessed 17 July 2012.

c. Water and Sanitation Programme, 'Africa: Economics of Sanitation Initiative', www.wsp.org/wsp/content/africa-economic-impacts-sanitation, WSP, 2012, accessed 17 July 2012.

¹ Hutton, Guy, and Laurance Haller, *Evaluation of the Costs and Benefits of Water and Sanitation Improvements at the Global Level*, World Health Organization, Geneva, 2004.

² WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), 'Progress on Drinking Water and Sanitation: 2012 update', United Nations Children's Fund and World Health Organization, New York and Geneva, 2012, p. 15.

³ United Nations Children's Fund and World Health Organization, *Diarrhoea: Why children are still dying and what can be done*, UNICEF and WHO, New York and Geneva, 2009, p. 1.

Even when diarrhoea does not kill, it severely debilitates, making people – particularly children – more susceptible to a host of illnesses, including acute respiratory infection and chronic undernutrition. This undermines school attendance and economic productivity. The cost of treating diarrhoeal disease drains national budgets and family incomes. Preventing diarrhoea relieves government and personal financial burdens and frees resources for development objectives.

Toilets make education investments go further

Many developing countries are increasing education spending to meet the MDG targets for universal primary school completion. For a host of reasons, that spending will have more impact if some money goes towards providing toilets for students and teachers, with separate facilities for girls.

Each year, children lose 272 million school days due to diarrhoea.⁴ Children enduring intense whipworm infections are absent from school twice as much as their worm-free peers. Not only do these illnesses rob children of school attendance and achievement, they have a negative impact on their development. The average IQ loss per worm infection is 3.75 points, representing 633 million IQ points lost for the people who live in low-income countries⁵ – thereby impacting on their countries' development potential and deepening the cycle of poverty. Knowledge on disease transmission indicates that 100 per cent of infections caused by soil-transmitted parasitic worms can be prevented with adequate sanitation, hygiene and water.⁶

Girls are often reluctant to attend school, and parents are disinclined to send them, if there are no safe, private toilets for them to use. This is particularly true once menstruation has begun. School environments that encourage girls to stay in school have far-reaching implications for women's health and a nation's economy.⁷ In developing countries, each 1 per cent increase in female secondary schooling typically results in a 0.3 per cent increase in economic growth.⁸

Toilets protect water – clean water generates wealth

Poor sanitation limits the impact of efforts to improve drinking-water quality. The risks of water contamination during household storage and handling sharply increase in environments that lack toilets.

Contamination of local water resources used to supply drinking water can lead to unnecessary investment in more distant and expensive sources. Water resources are an important asset. Polluted rivers and lakes near urban centres often mean that more distant reservoirs must be tapped, or built, in order to meet the growing needs of urban populations for clean water. Avoiding pollution of nearby water sources can reduce new construction and transport costs. Agriculture, fish farming, energy production and large-scale industrial processes, all suffer economic from the increased treatment and other costs due to water pollution by faecal contamination. The travel and tourism industry is one of the largest and most dynamic industries in today's global economy, expected to have generated about 9 per cent of total GDP and provided for more than 260 million jobs in 2011.⁹ This represents 8 per cent of global employment. Because health, safety and aesthetic considerations heavily influence people's choice of a holiday destination, good sanitation is a prerequisite for a thriving tourism sector.

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⁴ Hutton, Guy, and Laurance Haller, *Evaluation of the Costs and Benefits of Water and Sanitation Improvements at the Global Level*, *Water, Sanitation and Health Protection of the Human Environment*, World Health Organization, Geneva, 2004.

⁵ World Health Organization, *Report of the Third Global Meeting of the Partners for Parasite Control: Deworming for health and development*, WHO, Geneva, 2004, p. 15.

⁶ Bethony, Jeffrey, et al., 'Soil-Transmitted Helminth Infections: Ascariasis, trichuriasis, and hookworm', *The Lancet*, vol. 367, no. 9521, 6 May 2006, pp. 1521–1532.

⁷ Global Call to Action for WASH in Schools, *Raising Clean Hands: Advancing learning, health and participation through WASH in Schools*, United Nations Children's Fund, New York, 2010, p. 11.

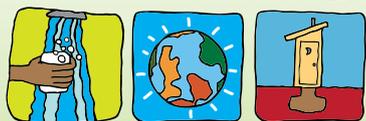
⁸ Chabaan, Jad, and Wendy Cunningham, *Measuring the Economic Gain of Investing in Girls: The girl effect dividend*, Policy Research Working Paper 5753, World Bank, Washington, D.C., 2011.

⁹ World Travel and Tourism Council, 'Travel & Tourism: Economic impact 2012 – World', WTTC, London, 2012, p. 1.



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Sanitation brings dignity, equality and safety

It is estimated that 2.5 billion people, nearly 40 per cent of the world's population, live without proper sanitation. More than 1.1 billion people have no sanitation facilities at all. Instead of using a toilet, they defecate in fields, forests and other open spaces.¹ Others resort to buckets or plastic bags that get thrown in ditches, along the roads or in bodies of water. Sanitation will provide them with dignity, equity and safety – and ultimately human rights.

Providing dignity for women and girls

While having a toilet is important for everyone, access to safe, clean toilets brings particular benefits to women and girls. Sexual harassment and rape are a risk for many women who wait until nightfall and seek the privacy of darkness to relieve themselves. Freed from the need to defecate in the open, they no longer have to suffer the indignity of physical and verbal abuse or humiliation.

Women and girls don't need toilet facilities just for defecation; they also need privacy and dignity when menstruating. Menstruation, pregnancy and the post-natal period become more problematic if women have nowhere to adequately take care of themselves.

Separate toilets at school mean more girls are likely to attend in the first place, and more girls are likely to stay on after puberty to complete their education.

Women place a higher value on access to private sanitation facilities than men but often remain unheard.² There is a real need for facilities that meet women's physical and psychological demands and preferences, and these can be readily achieved by including women in the design and placement of these facilities.

Significant inequalities – between and within countries

The WHO/UNICEF Joint Monitoring Programme (JMP) on Water Supply and Sanitation publishes estimates of global access to water supply and sanitation services every two years. The latest report, in 2012, indicates that 2.5 billion people worldwide do not use improved sanitation.

It also noted marked disparities between regions and countries. People in South Asia and sub-Saharan Africa have particularly poor access to sanitation. Access to improved sanitation covers only 41 per cent of the population in South Asia and 30 per cent in sub-Saharan Africa, compared with an average across all developing countries of 56 per cent.

Differences within countries

The JMP report also highlights important disparities within countries:

- Between **rural and urban** areas: 7 out of 10 people without sanitation live in rural areas.
- Between **rich and poor**: In Sierra Leone, for example, a person from the richest quintile of the population is 29 times more likely to have access to a non-shared sanitation improved facility, than a person from the poorest quintile.
- Between **ethnic groups**: Minority groups often experience poorer access to sanitation than the majority population. For example, in Latin America, disparities are often seen between indigenous and non-indigenous people.

¹ WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation, *Progress on Drinking Water and Sanitation: 2012 update*, United Nations Children's Fund and World Health Organization, New York and Geneva, 2012, p. 15.

² United Nations Human Rights Office of the High Commissioner, 'Women and Girls and Their Right to Sanitation', www.ohchr.org/EN/NewsEvents/Pages/Womenandgirlsrighrttosanitation.aspx accessed, 17 July 2012.

Protecting people who are disabled, elderly or sick

Some of the poorest and most marginalized people in the world are those with physical disabilities, the elderly, and those with HIV and AIDS or long-term illnesses. These people are also the ones whose needs are often overlooked.

Disabled people face social hurdles in the form of prejudice, pity or stigma from other members of the community. Because they are frequently unable to negotiate obstacles in the natural or human-made environment, their social isolation can be mirrored by physical isolation. Access to improved sanitation is fundamental to ensuring the dignity, safety and equality of this group of people and to enhance their social inclusion.

Additionally, sanitation can also play an important role in reducing the risks of associated infections. It can greatly improve quality of life, and make home-based care for people living with HIV and AIDS, and chronic illnesses, easier and more dignified.

The equity imperative

The primary focus of the SanitationDrive to 2015 is on ending open defecation. Open defecation, the most extreme manifestation of poor sanitation, is an immense problem. It is also a practice where inequalities between different social groups are starkly evident.

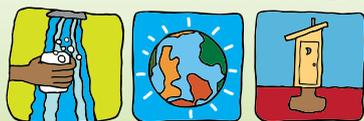
The Drive to 2015 urges governments to tackle this inequity by giving priority to the poorest and most marginalized populations including those who are disabled, elderly or sick. It advocates for increased political focus on sanitation, better targeting of funding, coordinated efforts based on proven successes, involvement of communities and individuals in decision making, and efforts to ensure that all people have access to information and services.

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Sanitation is vital for good health

Globally, diseases caused by exposure to our faeces are making us sick. Diarrhoea is not the only health effect of poor hygiene and sanitation – cholera, dysentery, worms, trachoma, pneumonia and malnutrition, to name just a few, could also be reduced through improved sanitation and hygiene.

More than 800,000 children under age 5 die every year due to diarrhoeal diseases.¹ Diarrhoea is caused when the pathogens present in our faeces end up in our stomachs. This happens when we do not wash our hands after using a latrine or toilet, or before we prepare and eat food. Pathogens can also be transmitted by food, water, soil, animals and flies.

Diarrhoea, the second leading cause of deaths in children under age 5 in developing countries, is primarily due to poor hygiene and sanitation.¹

Proper sanitation and improved hygiene can build barriers to prevent the spread of these diseases. Open defecation and inadequate sanitation creates a source from which communicable diseases can spread, placing society as a whole at risk.

Diarrhoea is the second biggest killer of children under 5 in the world, despite intensive international efforts to reduce the number of deaths it causes.² Oral rehydration therapy (ORT) has more than halved the global toll of acute watery diarrhoea during the past 20 years. The remaining deaths are increasingly due to persistent and bloody diarrhoea, which does not respond to ORT. For these, the best cure is prevention – through better hygiene and sanitation.

Diarrhoea is closely linked to undernutrition, a condition that is associated with more than a third of all deaths among children under age 5.³ Repeated episodes of diarrhoea and parasite infections lead to reduced absorption of nutrients. This contributes to malnutrition, thus continuing the cycle of ill health. For example, undernourished children have weakened immune systems and are at a higher risk for developing pneumonia, which kills more children under age 5 than any other disease.⁴ This chain reaction illustrates that hygiene and sanitation are fundamental for child survival and the health of the whole population. Ending open defecation is the first step in breaking this cycle.

Control of **cholera** is a major problem in several Asian countries, as well as in Africa. From 2004–2008, the World Health Organization received notifications of more than 830,000 cases, representing a 24 per cent increase in cases reported for this most recent five-year period. Proper personal and food hygiene, coupled with hygienic disposal of human excreta, is an effective intervention to prevent the spread of cholera.

Intestinal worms affect an estimated 400 million school-aged children in the developing world.⁵ Worms are spread when children inadvertently ingest human faeces or food contaminated with faeces. This happens mainly when proper latrines or toilets and hand-washing facilities are

1 United Nations Children's Fund, *Pneumonia and Diarrhoea: Tackling the deadliest diseases for the world's poorest children*, UNICEF, New York, 2012, p. 8.

2 World Health Organization, 'Diarrhoeal Disease', www.who.int/mediacentre/factsheets/fs330/en/index.html, 17 July 2012.

3 World Health Organization, 'Children: Reducing mortality', www.who.int/mediacentre/factsheets/fs178/en/index.html, accessed 17 July 2012.

4 United Nations Children's Fund, *Pneumonia and Diarrhoea: Tackling the deadliest diseases for the world's poorest children*, UNICEF, New York, 2012, p. 7.

5 United Nations Children's Fund, 'Water, Sanitation and Hygiene', www.unicef.org/media/media_45481.html, accessed 17 July 2012.

lacking. Chronic hookworm infections are associated with reduced physical growth and impaired intellectual development. Worms have an enormous impact on children's ability to learn. Children suffering from intense whipworm infections miss twice as many school days as their worm-free.⁶

Trachoma occurs worldwide, most often in poor rural communities in developing countries. Around 6 million people are blind due to trachoma, and more than 150 million are in need of treatment.⁷ Simple prevention includes improving sanitation and encouraging children to wash their face with clean water.

Polio is another faecal-oral disease; for centuries, the only line of defence we had was improved sanitation. Since the development of effective vaccines in the 1950s, the importance of sanitation in controlling polio is often forgotten.

Good sanitation and hygiene stop the spread of diseases

One hundred per cent of roundworm, whipworm and hookworm cases are related to poor water, sanitation and hygiene.⁸ Improving the disposal of human excreta can reduce illness due to diarrhoea. When combined with hand washing, this impact can be doubled.

It is very difficult, however, to properly dispose excreta when it is spread over a large area, and hand washing is more difficult in the bush. Sanitation improvements save children's lives and improve their health, growth and development. In addition to lowering the rates of diarrhoea, improved excreta disposal and hand washing reduces parasitic infections, worm infections and trachoma.

What happens when we stop open defecation and improve sanitation?

- **Lower mortality** (rates of death) due to diarrhoea – a 34 per cent reduction through improved sanitation, which could be doubled if accompanied by hand washing with soap.⁹
- **Better nutrition**, reduced stunting and increased height among children, due to the reduction in diarrhoea and other life-threatening diseases.
- **Improved learning** and retention among school children due to reduction in worms and other sanitation related diseases.

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⁶ WHO 2005, 'Report of the Third Global Meeting of the Partners for Parasite Control: Deworming for Health and Development', Geneva 2005, p.15

⁷ World Health Organization, 'Water Related Diseases: Trachoma', www.who.int/water_sanitation_health/diseases/trachoma/en, accessed 17 July 2012.

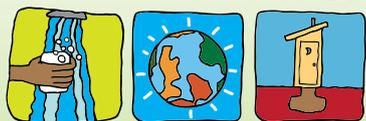
⁸ Bethony, Jeffrey, et al., 'Soil-Transmitted Helminth Infections: Ascariasis, trichuriasis, and hookworm', *The Lancet*, vol. 367, no. 9521, 6 May 2006, pp. 1521–1532.

⁹ CHERG 2010. Sandy Cairncross, Caroline Hunt, Sophie Boisson, Kristof Bostoen, Val Curtis, Isaac CH Fung, and Wolf-Peter Schmidt. Water, sanitation and hygiene for the prevention of diarrhoea. *Int. J. Epidemiol.* 2010 39: i193-i205.



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Sanitation sustains clean environments

A healthy living environment depends on adequate sanitation. Without sanitation systems, human waste enters groundwater and surface waters. Faeces deposited during open defecation contaminate the land. Accumulated excrement dumped from buckets or latrines on fields, streams or rivers is an environmental hazard. This is often accompanied by inadequate disposal of sewage via pipes and through seepage from pit latrines.

In the developing world, roughly 90 per cent of sewage is discharged untreated into rivers, lakes and coastal areas,¹ with a widespread negative impact on health. Each year, an estimated 2.5 billion cases of diarrhoea occur among children under age 5. Water and sanitation interventions can reduce diarrhoea child deaths by 88 per cent.²

The sanitation crisis is particularly severe in high-density informal settlements across the globe. With no way to safely dispose of either faeces or garbage, around a billion slum dwellers must resort to 'flying toilets', plastic bags that are used then thrown away, and to dumping human waste in public spaces.

This situation is not limited to urban settlements and can be found in impoverished suburbs, small market towns, large villages, peri-urban settlements and other places across the developing world. Worldwide, about 1.1 billion people still defecate in the open,³ leaving their faeces on the ground to contaminate the surrounding environment, enter waterways and, eventually, impact the livelihood and health of entire communities.

Living in a squalid environment harms physical and psychological health. It is stigmatizing, often presents employment challenges and deepens human poverty. Poor sanitation creates a host of health hazards, as well as a bleak and disheartening visual landscape. Roads are full of mud, puddles and piles of garbage and debris, along with disease-carrying insects, microbes and rodents. Odours are often unpleasant, sometimes overpowering.

Ending open defecation is crucial

If open defecation is widely practised, a healthy living environment that supports human dignity and is free of disease-transmitting conditions is impossible. This is one reason countries called for an end to open defecation, in the United Nations resolution that established the Drive to 2015. Related facts include:

- Globally, 15 per cent of the population still defecates in the open.⁴
- Rates are highest in Asia and sub-Saharan Africa, at 44 per cent and 27 per cent, respectively.⁵
- Faecal sludge collected in latrines is frequently not taken to treatment plants. Instead, it is dumped into the environment, due to a lack of regulation and enforcement, or inadequate infrastructure.

Sanitation and waste-water treatment support environmental sustainability

If we look beyond the immediate health implications of open defecation, we find significant environmental damage due to large amounts of untreated sewage and faecal sludge discharged untreated into rivers, lakes and coastal areas. Often this practice is associated with the developing world. It is, however, still an issue in other regions, including Eastern Europe, where waste-water treatment plants are currently being developed.

¹ Corcoran, Emily, et al., editors, *Sick Water? The central role of wastewater management in sustainable development – A rapid response assessment*, United Nations Environment Programme, UN-HABITAT and GRID-Arendal, www.grida.no, 2010.

² United Nations Children's Fund and World Health Organization, *Diarrhoea: Why children are still dying and what can be done*, UNICEF and WHO, New York and Geneva, 2009, p. 1.

³ WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation, *Progress on Drinking Water and Sanitation: 2012 update*, United Nations Children's Fund and World Health Organization, New York and Geneva, 2012, p. 15.

⁴ Ibid, p. 15.

⁵ Ibid, p. 18.

This type of pollution impacts the usability of ground and surface water, and leads to severe disruption of environmental processes and the destruction of ecosystems. Aquatic dead zones, locations with reduced or no oxygen in the water, have grown to cover 245,000 kilometres of marine environment, including in Asia, the Caribbean, Europe and North America. In South-East Asia alone, 13 million metric tons of faeces are released into inland water sources every year – along with 122 million cubic metres of urine and 11 billion cubic metres of grey water.⁶ This presents a major health threat to people who depend on open streams and wells for their drinking water, as well as an economic challenge to people whose livelihoods depend on fisheries.

Along rivers, upstream water users usually enjoy better-quality water, whereas downstream users are often faced with diluted 'sewage sinks'. The impact of poor waste-water systems and non-existent sanitation is costing billions of dollars and degrading ecosystems. It is also hindering achievement of the Millennium Development Goals, sustainable development, jobs, labour productivity, environmental sustainability, as it jeopardizes the health of hundreds of millions of people worldwide.

Water pollution stemming from poor sanitation costs South-East Asia more than US\$2 billion per year. In Indonesia and Viet Nam, it creates environmental costs of more than US\$200 million annually, primarily from the loss of productive land.⁷

Reusing waste has many benefits

Sanitation involves a range of actions, but for a sustainable environment and community health, the top priority is preventing contact with excreta and its host of biological pathogens.

Ending open defecation is an essential first step. Innovative approaches, such as Community-led Total Sanitation, help establish defecation-free practices within communities by raising awareness and supporting community-wide responsibilities.

To realize full health, social and economic benefits, additional waste-management techniques must be considered, providing sustainable sewage and faecal sludge management in addition to sewage treatment. This does not necessarily involve investment in large-scale infrastructure; small, decentralized systems can be even more effective.

Sustainable sanitation offers innovations in productive sanitation by reusing nutrients contained in sewage and sludge. Reuse has a number of advantages. It can be used as a fertilizer in organic agriculture, allowing for the production of more food with less land. The approach can help reduce the use of expensive inorganic fertilizers. Capturing the energy in sludge for biogas production helps alleviate reliance on conventional energy sources and provides an affordable energy source for cooking. Reusing treated waste water for irrigation reduces consumption of drinking water for these purposes. All these practices must be carried out safely and in accordance with standards such as World Health Organization Guidelines for safe reuse of waste water.

Handled properly, good sanitation and productive disposal of human waste can create employment while boosting public and ecosystem health. Instead of being a problem source, human waste, whether managed at the household level or collected in urban waste-water treatment systems, can be an environmental asset – leading to improved food and energy security, health and economic activity.

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⁶ Water Supply and Sanitation Collaborative Council, 'Resources', www.wsscc.org/resources/resource-statistics, accessed 17 July 2012.

⁷ Water and Sanitation Programme, *Economic Impacts of Sanitation in South East Asia: A four country study conducted in Cambodia, Indonesia, the Philippines and Vietnam under the Economics of Sanitation Initiative*, February 2008, p. 32.



About us: The Sanitation Drive to 2015 builds on the United Nations resolution endorsed by all Member States in 2010 – calling for redoubled efforts to meet the MDG target to halve the number of people living without sustainable access to basic sanitation. UN-Water, which includes 30 United Nations entities and 22 partners, is coordinating the work. Civil society groups around the globe have pledged their support.

www.sanitationdrive2015.org