



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.

Take action!

Take action for sanitation by kick-starting your own Sanitation Drive to 2015 campaign. Visit www.sanitationdriveto2015.org for more information.

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.



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