



A Little Light Relief?

Most people in the developed world are fortunate: they can take proper sanitation for granted. But billions in poorer countries are denied this most basic of human needs. They suffer indignity and disease, and their societies suffer as well. Alex Kirby reports on the economic upside of sanitation.

Photos: SXC/Colin Parsons

Hello. I'm Alex. I live in the United Kingdom and I'm a regular sort of guy – Mr. Average, perhaps. So, as the typical citizen of a prosperous country in the early 21st century, I probably visit the toilet six or eight times a day, or about 2,500 times a year. Over my lifetime, I shall spend about three entire years there. How fortunate that I usually take some improving reading matter with me.

But suppose I'd been living around 150 years ago. For me, and for everyone else, life would have been drastically different. One of the most fundamental differences – certainly for those in towns and cities – would have been the lack of sanitation. Denied my comfortable seclusion behind a locked door, I should have hunted, probably in vain, for a bit of privacy in the open air, as would all my friends and neighbours. And the (ahem) results of our excursions would have remained for the elements to disperse. Drinking the water was definitely not recommended. The Industrial Revolution which began in the late 1700s meant Northern Europe's urban population increased enormously, sometimes by more than 60 percent in a decade. As the numbers grew, disease ran rife. In Liverpool, my home city, the rich might live till about 35, the poor and jobless for about 15 years.

Europe's towns were ravaged by infectious diseases, including tuberculosis, diphtheria, measles, smallpox, typhoid and typhus. But the scourge which more than any other forced a change was cholera. In 1853-54 it killed more than 10,000 Londoners, and the hot summer of 1858 produced the legendary Great Stink of London, repelling all those who went near the River Thames – including Members of Parliament. The result? By 1866 most of the capital had a sewer network carrying contaminated water safely away to new treatment works. Clean water was available, if you knew where to find it.

Fast Forward

Now let's fast-forward again to the present day – but half a world away. Picture Numiki, in her twenties, living in the Kenyan capital, Nairobi – and not in the modern city the tourists see, but in one of the hopefully-titled “informal settlements,” like Matopeni or Kibera. Before she goes off to work Numiki needs to do what most of us do first thing every day, and that's to relieve herself. The few pit latrines nearby are too foul to contemplate, overflowing cesspools that pour their filth straight onto the ground and into people's homes. She cannot hope for

cleanliness, and probably not for privacy either, unless she heads out into the chilly half-light of dawn before her neighbours are astir. And if she ventures too far she may be attacked. Dignity? Forget it.

So quite likely she resorts to that tried and trusted remedy, the flying toilet. It's very simple: you defecate into a plastic bag, tie it up and hurl it as far as you can. Where it lands – your neighbour's roof, perhaps – it remains, and perhaps it bursts, a magnet for swarms of flies. Or perhaps your erratic aim means your bag catches an unlucky passer-by. It's a wretched start to the day for Numiki, and her problem doesn't end there. If you don't urinate as often as you need, your kidneys and bladder may be damaged. To avoid that, some people drink less than they should, and become dehydrated. So poor or non-existent sanitation is a constant nagging worry. It may also shorten Numiki's life. Bacteria, viruses and parasites in human waste transmit cholera, typhoid and other killer diseases. For Numiki's little brother Enoch the odds are significantly shorter, because diarrhoea is the second-biggest worldwide killer of children aged under five. Every 15 seconds, a child somewhere dies from a sanitation- or water-related illness.

Health is Wealth

For Numiki and Enoch proper sanitation is a dream, as it is for the 2.6 billion people still without it - more than two people in five of those alive today. Existing like this is a human tragedy for every one. And it is a tragedy for their societies, because it makes economic progress impossible.

In 2007, a London magazine, the BMJ (formerly the British Medical Journal), published the results of a survey of 11,000 of its readers worldwide. Asked to name the greatest medical advance since 1840, they chose sanitation. For them, clean drinking water and proper waste disposal ranked above everything else, even anaesthesia. And if you have ever undergone surgery, or had a tooth extracted, that gives you some idea of the paramount importance doctors attach to sanitation.

Sustainable access to improved sanitation, good hygiene habits and decent water unlock the door that bars so many millions of people from climbing out of poverty. It is the poor who suffer most now, so improving their health provides the biggest returns: essentially, the healthier they are, the better they will be able to work. They will grow more, and their nutrition will improve. They will learn more, too: 11 percent more girls attend school when there is sanitation which affords them proper privacy. Fewer children will die in their early years. Britain's sanitary revolution was sparked largely by a determination to cut the impact of acute

infectious diseases which killed the working men who put food on the table for their families. The reformers argued that this would cut the costs of poor relief, and they were right. The United Kingdom is today one of the world's richest countries, and it owes much of its economic strength to the reformers' work. What Britain did in the 19th century will work in Kenya for Numiki and Enoch today, and for everyone who shares their indignities and privations.

It Doesn't Have to Be a Pipe Dream

The lessons from a century and a half ago are still relevant today. The reformers inadvertently struck upon a pro-poor strategy in their sanitation efforts. Along with changes to environment and infrastructure came in due course improved individual hygienic behaviour. Better sanitary solutions and water supply were good for everyone, a classic win-win situation that pays big dividends. What's more, with hindsight and 21st century knowledge, such dividends can be won through an almost mind-boggling array of solutions - large or small scale, complex or simple technology, urban or rural perspective, policy or educational efforts - that will make 22nd century citizens ask: what took so long?

By Alex Kirby

Former BBC Environment Correspondent
e-mail: alex.kirby@keble.oxon.org



THE "SILENT HIGHWAY"-MAN

In the middle of the 19th Century, editorial cartoonists in London lamented the rise in sewage carried into the river Thames - killing off fish, risking public health and causing the "Great Stink" that caused the House of Commons to be abandoned. Illustration: www.CartoonStock.com



Sustainable access to improved sanitation, good hygiene habits and decent water unlock the door that bars so many millions of people from climbing out of poverty. Photos: POOProductions.