

Opinion

Water, sanitation essential for development

BY DR. BJØRN LOMBORG

THERE are plenty of things, which those of us lucky enough to live in the industrialised world take for granted; running water and flush toilets are among the most basic of these. 2.5 billion — almost half the developing world — lack even a basic latrine and one billion have to resort to what is politely known as open defecation. In Zimbabwe, nearly 5.7 million people in rural areas still lack basic sanitation, and across sub-Saharan Africa it affects almost 450.5 million people.

Seven hundred and fifty million people have no access to any type of basic source of drinking water. Each day, 136 million town dwellers spend more than 40 minutes each day fetching water. Each day, more than 600 million in rural areas spend more than an hour fetching their water. In rural Zimbabwe, almost 2.6 million people still lack basic water access, a fate shared with nearly 275 million across sub-Saharan Africa.

The good news is that we can do something. Over the past 25 years, more than two billion have gained access to better water and almost two billion to sanitation.

Moreover, it turns out to be a good investment. Investing a dollar in basic sanitation can provide \$3 worth of benefits. Basic water supply into the home can do even more good, giving more than \$4 in

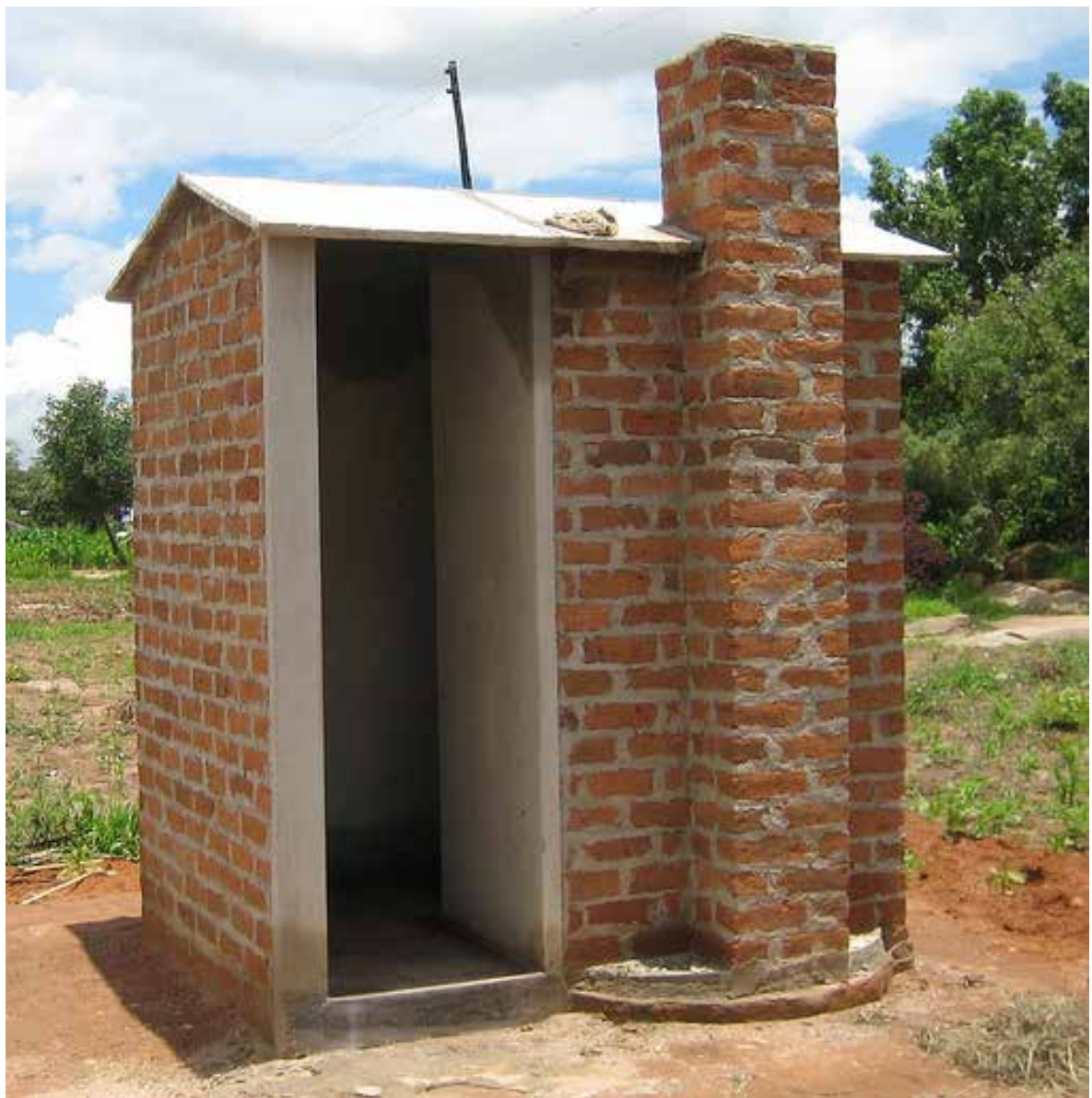
benefits for each dollar spent. Getting rid of open defecation can help to the tune of \$6 per dollar spent.

Doing this sort of analysis is difficult but very worthwhile. At the turn of the Century, the global community committed to a set of targets under the umbrella of the Millennium Development Goals, aimed at improving the world as much as possible over the next 15 years. Their water and sanitation goal helped two billion people get better access.

Now, with the deadline fast approaching, 193 national governments are aiming to build on the successes already achieved and agree on a new set of targets to improve people's lives even more by 2030.

But resources and capabilities are not infinite, so we have to get this right. That's why the Copenhagen Consensus Center has asked more than 60 teams of expert economists to analyse some of the more promising proposals put forward and make their own recommendations for which should make the final cut. Get it right, and limited resources can be used to make a real difference to the world over the next 15 years. Get it wrong, and the world's poorest are the ones who will suffer.

So, what is the case for prioritising clean water and sanitation? The most obvious benefit comes in the form of better health. Providing even basic latrines and hand-washing facilities can make



A pit latrine. Some households in rural areas cannot afford them. Picture: flickr.com

a big impact on the spread of disease. There are a number of water-borne infectious diseases that could be curtailed. The biggest and deadliest are those that cause diarrhoea, including cholera and a range of viral infections. These are a significant cause of death, particularly among young children, but infected adults may be too ill to work, and older children unfit to go to school.

The other big benefit is time-saving. The analysis of the basic water supply and sanitation targets assumes that people in rural villages no longer have to spend an hour a day on average fetching water, but can collect the same amount in 20 minutes. In urban areas — which will contin-

ue to grow fast over coming decades — it is expected that people will halve the time needed to collect water from 40 to 20 minutes. For an American or European it may still sound onerous, but the time saving and health improvement which comes from even something as rudimentary as this would be an enormous benefit for hundreds of millions of people.

Because we will add an extra billion people to the global population over the next 15 years, getting water and sanitation to everyone will require a substantial effort. However, a team of economists from the World Bank has estimated that providing sanitation for three billion more people will cost about \$31 billion annually.

This is the cost of providing such low-cost solutions as pour-flush and dry pit latrines in rural areas and flush toilets to a septic tank in urban areas, shared by less than 30 people. Yet, the benefits will amount to \$92 billion annually, about three-quarters of which are time benefits, and the remaining one-quarter are health benefits (it omits environmental benefits). This means that every dollar spent on sanitation will help the world's most vulnerable about \$3, measured in better health and less time wasted.

Providing improved water to an extra 2.3 billion people will cost \$14 billion annually. This doesn't mean industrialised world standard of piped water to every household, but simply providing a protected community source of water, such as a well, spring and borehole, or collected rainwater that can be reached within 30 minutes or less. Yet, again it will create much larger benefits, with less disease and death and with less wasted time. In all, the benefits are estimated at \$52 billion annually, so that each dollar spent will generate \$4 of benefits.

One stop on the way to better sanitation is simply avoiding open defecation in rural areas with shared latrine or communal toilets. Because this is even cheaper at \$13 billion annually, each dollar can deliver a substantial benefit of \$6.

In short, there is a strong case for investing in improved water supplies and sanitation. This would help half this world's population and benefit the poorest the most. The economic case is as strong as the moral one.

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Women doing laundry in an open space. Access to potable water will improve lives