

## The economic case for WASH

The economic case for water, sanitation and hygiene (WASH) is widely recognised. For example:

- The World Health Organization (WHO) estimates that for every US\$1 invested in water and sanitation, there is an economic return of US\$4 by keeping people healthy and productive<sup>1</sup>.
- The World Bank has stated that hygiene promotion is one of the most cost-effective health interventions<sup>2</sup>.

There are strong economic arguments for investing in WASH. According to the UN's *Human development report*, lack of safe water, sanitation and hygiene causes Sub-Saharan African countries annual losses equivalent to 5% of GDP, more than the entire continent receives in development aid<sup>3</sup>. In Bangladesh, US\$4.2 billion is lost annually due to inadequate sanitation – equivalent to 6.3% of the country's GDP<sup>4</sup>. A recent study of 18 African countries, representing over half of Africa's population, showed losses of \$5.5 billion every year due to poor sanitation, with the largest losses caused by premature deaths, including children under five<sup>5</sup>.

### WASH boosts economic growth

The total global economic loss associated with inadequate water supply and sanitation has been estimated at US\$260 billion annually<sup>6</sup>. According to WHO, an additional investment of US\$535 billion is needed between 2011 and 2015 to achieve universal access to safe water and sanitation<sup>7</sup>; however, the economic benefits of improved water supply and, in particular, sanitation far outweigh the investment costs. For example, according to WHO, economic benefits from sanitation could range from US\$3.1 to US\$16.6 for every US\$1 invested<sup>8</sup>.

In aggregate, the total annual economic benefits of achieving universal access to water supply and sanitation are estimated at over US\$220 billion annually – as a 'bare minimum'<sup>9</sup>.

### WASH is good for business

Improved water resource management, water supply and sanitation contribute significantly to increased economic productivity. The biggest potential gains are in time-saving – amounting to over 70% of the economic benefits from universal water and sanitation access. Additional positive impacts include increased property values, tourism and business opportunities<sup>10</sup>.

## WASH is cost-effective

WHO estimates that the cost of delivering universal access to WASH would result in significant financial savings to the global economy. As highlighted in figures 1 and 2 below, at the very least, the benefit-cost ratio for the necessary intervention varies from 2.8 in Sub-Saharan Africa to 8.0 in East Asia, and the global economic return is US\$5.5 per dollar invested for sanitation and US\$2 for water.

In its recent study, WHO increased the cost estimates to include operation and maintenance as well as new infrastructure, and chose very conservative estimates for the values of time and lives saved. Even though they do not also include 33 specific, well documented benefits stemming from increased access to water and sanitation – such as improved education levels due to higher school enrolment; safety, privacy and dignity impacts on quality of life; and greater income based on rising property values and reduced access fees – (because the evidence for how to quantify them is inadequate<sup>11</sup>), they nevertheless demonstrate the striking economic case for WASH investment.

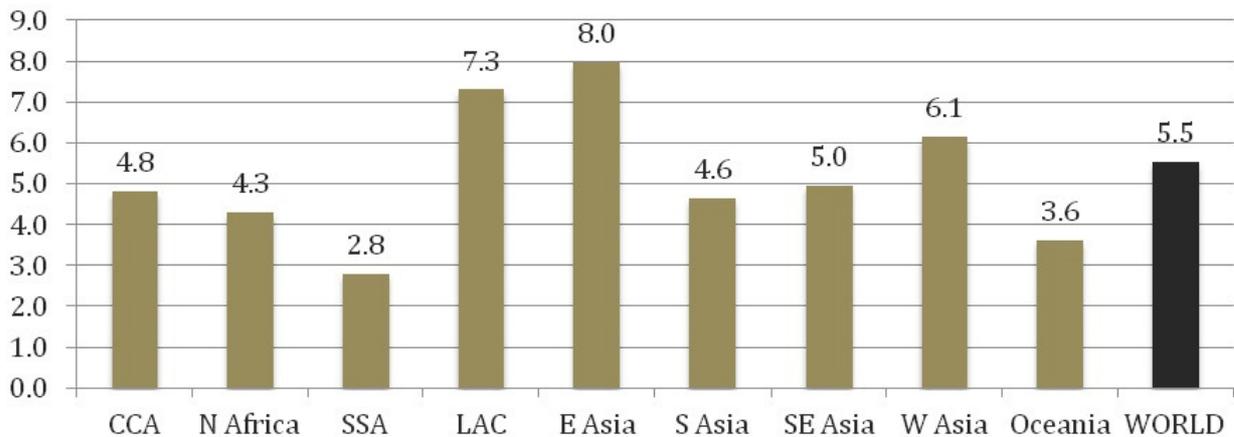


Figure 1: Benefit-cost ratios of interventions to attain universal access to sanitation, by region<sup>12</sup>

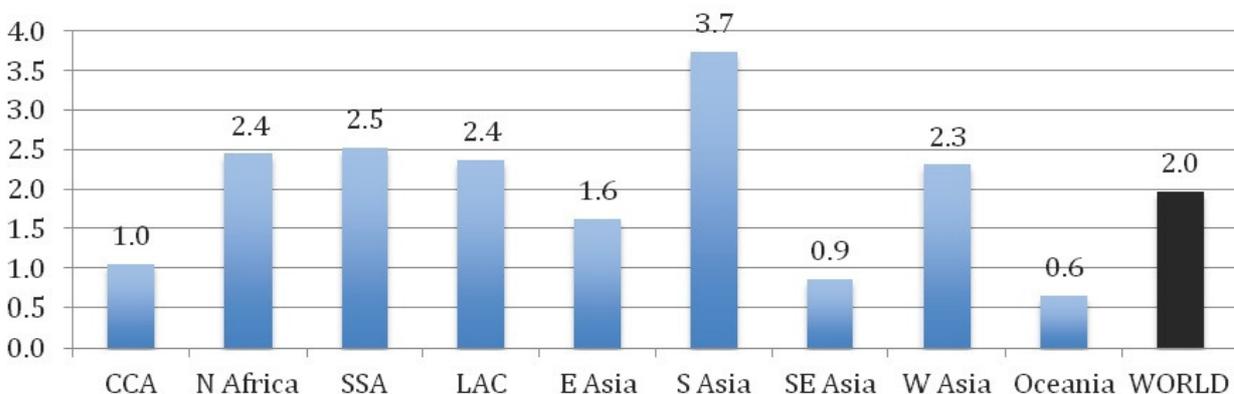


Figure 2: Benefit-cost ratios of interventions to attain universal access to improved drinking water sources, by region<sup>13</sup>

## WaterAid's post-2015 vision

WaterAid's vision for post-2015 is an ambitious new development framework unifying poverty eradication and sustainable development objectives, supported by a renewed global partnership ensuring effective resource mobilisation and mutual accountability for progress achieved. To ensure that everyone, everywhere has access to safe water, sanitation and hygiene (WASH) the framework should:

- 1 Include a dedicated goal on water and sanitation and set ambitious targets to achieve universal access to WASH by 2030 that prioritise the following<sup>14</sup>:
  - No-one practises open defecation.
  - Everyone has safe water, sanitation and hygiene at home.
  - All schools and health facilities have safe water, sanitation and hygiene.
  - Water, sanitation and hygiene are sustainable and inequalities in access have been progressively eliminated.
- 2 Recognise that universal access to WASH is an essential component of an integrated approach to tackling poverty, hunger, ill-health and inequality.
- 3 Recognise that achieving and sustaining universal access to WASH depends on establishing accountable systems for equitable and sustainable management of water resources.

## Endnotes

<sup>1</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*, p4. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>2</sup> Jamison D T et al (eds) (2006 2<sup>nd</sup> ed) *Disease control priorities in developing countries*, Chapter 41. OUP and World Bank

<sup>3</sup> Based on percentage estimate from UN Development Programme (2006) *Human development report*. Available at: [www.hdr.undp.org/en/media/HDR06-complete.pdf](http://www.hdr.undp.org/en/media/HDR06-complete.pdf)

<sup>4</sup> The Water and Sanitation Programme (2007) *The economic impacts of inadequate sanitation in Bangladesh*. Available at: [www.wsp.org/sites/wsp.org/files/publications/ESI-Bangladesh-Brochure.pdf](http://www.wsp.org/sites/wsp.org/files/publications/ESI-Bangladesh-Brochure.pdf)

<sup>5</sup> The World Bank (2012) *Economic impacts of poor sanitation in Africa*

<sup>6</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*, p5. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>7</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*, p41. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>8</sup> Depending on the region and technologies applied, and the value that is attributed to infant lives saved and productive time gained. See Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*, p45. WHO, Geneva,

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Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>9</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*, p32, 47. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>10</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*, p25. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>11</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*, p26. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>12</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>13</sup> Hutton G (2012) *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*. WHO, Geneva, Switzerland. Available at:

[www.who.int/water\\_sanitation\\_health/publications/2012/global\\_costs/en/index.html](http://www.who.int/water_sanitation_health/publications/2012/global_costs/en/index.html)

<sup>14</sup> WHO/UNICEF Joint Monitoring Programme shared vision for progressive realisation of the human right to water and sanitation. See [www.wssinfo.org/post-2015-monitoring/overview](http://www.wssinfo.org/post-2015-monitoring/overview) for full technical proposals for post-2015 WASH targets and indicators.