



Saving lives

Improving public health by increasing access to safe water and sanitation

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Summary

Improving public health by increasing access to safe water and sanitation is one of the ten development objectives of the Australian aid program.

Access to safe water and basic sanitation combined with good hygiene behaviours (WASH) underpins Australia's ability to deliver public health outcomes and significant economic benefits for developing countries.

Australia's approach will centre on three pillars:

1. Increased access to safe water and basic sanitation: Facilitate increased access to safe water and basic sanitation that results in the provision of universally accessible facilities
2. Improved hygiene behaviour: Support the development of increased capacity to ensure hygiene promotion services bring about sustainable behaviour change
3. Creating sustainable services: Support policies and strategies to keep services operating through effective governance and partnerships with multilateral agencies, civil society and business.

Investment in WASH programs will use delivery mechanisms and partnerships that are effective and deliver real results for poor people.

Australia will continue to focus support for WASH on East Asia and the Pacific with expanding programs in Africa and South Asia, particularly to support improvements in global sanitation by 2015.

Purpose

The fundamental purpose of Australia's aid program is to help people overcome poverty.¹ Improving public health by increasing access to safe water and sanitation is one of the ten development objectives of the aid program, helping to achieve this purpose. This thematic strategy outlines Australia's approach to the strategic goal of saving lives that helps people overcome poverty through:

- Increased access to safe water and basic sanitation
- Improved hygiene behaviour
- Creating sustainable services.

Australian Government investment in water, sanitation and hygiene (WASH) programs will focus on Africa, East Asia, South Asia and the Pacific. Investments in these regions will be targeted to ensure WASH programs improve the health and quality of life of poor people.

Parallel thematic strategies on "Saving lives: improving the health of the world's poor" will guide complementary investments in public health. Complementary thematic strategies on "Sustainable economic development" and "Private sector development" will also guide future investments in safe water and sanitation.

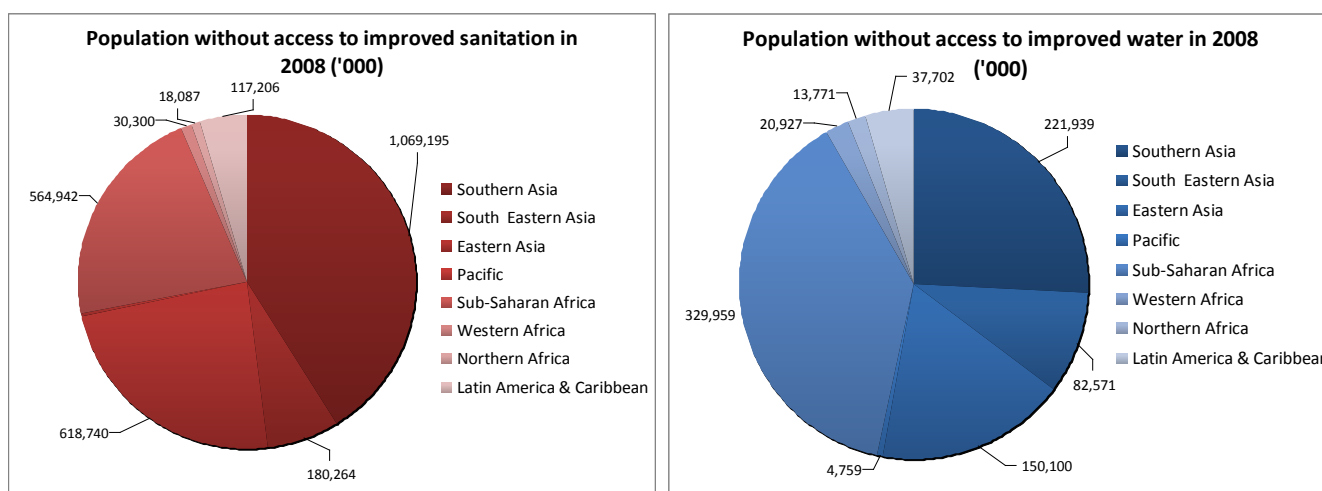
The Australian Government is committed to ensuring the cross-cutting themes of gender equality and improved governance continue to underpin its investment in WASH. This thematic strategy helps to support progress on these important themes of Australia's aid program.

Context

Having access to safe water and basic sanitation is vital to everyone's life. The negative impacts on the health and quality of life of people who do not have such access are huge. This is particularly the case for poor and vulnerable people. This is why Millennium Development Goal 7 includes a target to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

According to the 2010 report of the United Nations Children's Fund (UNICEF) – World Health Organization Joint Monitoring Programme, *Progress on Sanitation and Drinking Water*, almost 900 million people in the world do not have access to safe drinking water. The situation with access to basic sanitation is even worse, with 2.6 billion people not using basic sanitation facilities.ⁱⁱ

Figure 1: Regional distribution of people without access to basic sanitation or improved water sources in 2008ⁱⁱⁱ.



At the current rate of progress the world will miss the Millennium Development Goal target for sanitation by about 13 per cent with more than 2.7 billion people still lacking access to basic sanitation.^{iv} At least 1 billion people, or 17 per cent of the world's population, defecate in the open.^v This is especially a problem for the poorest people—the poorest 20 per cent of those living in Sub-Saharan Africa are 16 times more likely to defecate in the open than are the wealthiest 20 per cent living in the region.^{vi}

While the world is on track to meet the Millennium Development Goal target for access to safe water by 2015, the level of access varies. Water supply is often intermittent and coverage does not reach the poorest people. Many gains made through increasing coverage are now at risk due to weak management systems, lack of human resource capacity and unmaintained infrastructure. For example, an average of 36 per cent of rural hand pumps in 20 countries in Sub-Saharan Africa no longer work.^{vii}

Rationale for investing in WASH

Access to safe water and basic sanitation, combined with good hygiene behaviours, underpins the ability to make significant public health gains. For example, more than 1.5 million children around the world die each year as a result of diarrhoea, a water-borne disease and the second leading cause of deaths for children. Improved access to safe water and sanitation will lower the incidence of diseases carried by water, improving public health, especially for women and children.



The economic impacts on individuals, communities and countries caused by lack of access to safe water and basic sanitation, and poor hygiene practices, are significant. For example, a 2007 Water and Sanitation Program (World Bank) study found that Indonesia lost IDR 56 trillion (USD 6.3 billion) or approximately 2.3 per cent of gross domestic product in 2005 because of poor sanitation and poor hygiene practices.^{viii}

As well as supporting the strategic goal of saving lives, increasing access to safe water and basic sanitation supports many other development objectives—preventing large-scale disease, improving nutrition, providing children with access to better education, empowering women in leadership roles, enhancing the lives of people with disability, increasing dignity of the poor, sustaining cleaner environments, investing in sustainable economic growth and improving governance in service delivery.

Australia's approach to WASH

Through the Australian Agency for International Development (AusAID), Australia's investments in WASH will improve public health by increasing access to safe water and basic sanitation, improving hygiene behaviour and supporting sustainable service delivery. Work will centre on three pillars to deliver real results:


1. **Increased access to safe water and basic sanitation:** Facilitate increased access to safe water and basic sanitation by funding activities that result in the provision of universally accessible facilities.
2. **Improved hygiene behaviour:** Support the development of increased capacity and tools to ensure hygiene promotion services bring about sustainable behaviour change.
3. **Creating sustainable services:** Support policies and strategies that keep services operating after they are built. This includes better governance through public sector reform and improving service delivery through partnerships with civil society and the private sector.

Pillar 1: Increased access to safe water and basic sanitation

The Australian Government will invest in activities providing access to clean water and basic sanitation services. This will include large systems comprising water source works, treatment plants, transmission and distribution systems in cities and towns, as well as smaller facilities such as piped systems, boreholes and hand-dug wells for villages. For sanitation, support will range from large wastewater collection and treatment systems to promoting on-site latrine facilities for single houses. Support will be given to activities establishing demand-led services and using technology suited to local conditions and local supply chains. This will help communities access the services they need, provide economic growth opportunities for local people, encourage private sector investment and promote sustainable services.

Small towns and market centres play a critical role in providing business, social and administrative services to their surrounding areas. It is important that these centres provide adequate clean water and basic sanitation services. The Australian Government will therefore support WASH activities in secondary cities, small towns and market centres.

Although people living in cities and large towns tend to have better access to water and sanitation than do those living in rural areas, there are still millions in urban areas without safe, sustainable access to these services. Australia will therefore increase its attention to improving water and sanitation in urban



slums and peri urban areas and will work with others to collect and share information about how to help slum dwellers.

Australia will take an inclusive approach in its education and awareness-raising activities in support of the sector with a focus on improving maternal health, helping more girls attend school and empowering women.

WASH activities in schools provide a unique opportunity to build and share knowledge on the importance of having access to safe water and basic sanitation and to follow good hygiene practices. If children have access to these services, they are more likely to be in good health, which helps them to attend school. It has also been found that providing water and separate sanitation facilities to girls in schools tends to increase their participation, particularly if they are menstruating.^{ix} WASH programs funded by Australia will increase the number of schools with water, sanitation and hand-washing facilities.

Since women make daily household decisions relating to WASH they should be targeted both as consumers and people who can influence change in family hygiene behaviours. Involving women on management committees of water supply systems often makes a transformational change in gender roles in the community. Australia will look for innovative ways to involve women in the management of water services so they can build their leadership skills in broader community affairs, politics, decision making and peacebuilding.

Box 1: Targeted budget support to rural water supply and sanitation—working through Government systems in Vietnam

Limited access to clean water and sanitation has a serious impact on the health and livelihoods of Vietnam's poor, particularly in rural areas. In 2008–09, about 74 per cent of people had access to clean water, but less than 55 per cent had access to hygienic latrines.

The Government of Vietnam is responding to this challenge through a five-year national water and sanitation program (2007–11). Australia is a principal donor to this program, which has achieved good results. One hundred and fifty medium-to-large scale piped water schemes were built or upgraded and hygienic latrines were provided to 504 schools, 181 health clinics and markets, and 100 000 households. Under the program, access to water and sanitation in targeted provinces increased 4 per cent faster than the national average. Australia will use the experience from this and other activities to apply similar approaches elsewhere.

Pillar 2: Improved hygiene behaviour

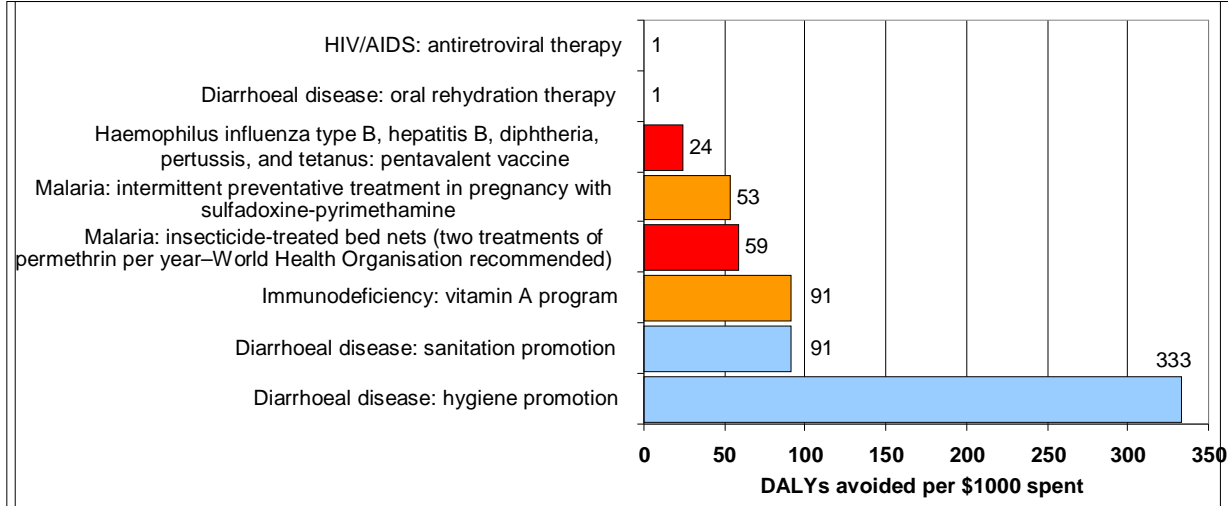
Many of the world's poor, particularly children, die or are incapacitated as a result of water-borne diseases or other diseases associated with poor sanitation and hygiene. While increasing access to safe water and basic sanitation is important to improving people's health and quality of life, by itself it is not enough. Potential health and other benefits can only be fully realised when people use the new services properly, making the investment in access more effective. Good hygiene practices—for example, washing hands with soap after going to the toilet and other critical times—are essential. For communities to progress from open defecation to basic sanitation requires creating demand for improved sanitation and better behaviours while increasing supply of suitable materials and services. It is also important to include women, children and other vulnerable groups, such as the elderly and people with a disability, in hygiene promotion activities as they can have a strong influence on their families.




Hygiene behaviour change programs need to be locally developed and relevant to local socio-cultural factors. This will encourage sustainable behaviour change and create ability and opportunity to put these into practice. It is also important to understand and target what motivates behaviour change. For example, it may be more effective to deliver messages about the social acceptance of, rather than the health benefits of, having clean hands. In some cultures, where there are taboos around discussing sanitation and hygiene practices, innovative ways to analyse behaviours and design effective sanitation programs are needed to encourage take up.

Figure 2* below shows the cost effectiveness of some child survival interventions (measured by disability-adjusted life years or DALYs avoided per \$1000 invested). It shows that hygiene promotion provides good value for money in reducing deaths due to diarrhoeal diseases.

Figure 2: The cost effectiveness of child survival interventions.



Commitment by partner governments at all levels, by health sector institutions and the private sector, makes an important contribution to sustainable long-term change in hygiene practices, which are key to preventing large-scale outbreaks of disease. Australia will prioritise support for partner governments to help their health sectors better implement hygiene promotion.



Box 2: Improvement in health

Research undertaken by leading health professionals shows that improvement in the hygiene practices of individuals has a significant impact on their health and the health of others. One study undertaken in rural southern Nepal found that when birth attendants washed their hands before helping deliver babies, the mortality rate of newborns was reduced by approximately 19 per cent. It was also found that the risk of newborn babies dying was reduced by 44 per cent if mothers washed their hands with soap and water or antiseptic before handling them.^{xi}

Pillar 3: Creating sustainable services

Improved results in public health by increasing access to safe water and sanitation will only be achieved if service delivery is sustainable. Most countries have some level of infrastructure planning to enable at least a portion of their population to receive water and sanitation services. Many also have plans to expand the reach of these services. However, gains made in increasing coverage are at risk due to low sustainability. In many cases services are of poor quality and not reliable. The Australian Government will therefore help developing country governments promote reforms that support long-term service delivery. This will also include improving governance and strengthening the ability of organisations to deliver WASH services, recover costs, improve investment planning and private sector development.

Experience from around the world indicates that people, even the poorest, are generally willing to pay for water and sanitation provided they receive good quality and reliable service. Fair and transparent regulation encourages investors to invest in the sector, service providers to operate good quality services and consumers to pay for those services. When consumers, particularly poor men and women as well as organisations representing people with disability, participate in decisions on facility design and service levels, they are more willing to pay for water services. Australia will support developing country governments to create fee structures that are equitable, affordable and sustainable, including for the poorest people.

The Australian Government's aid policy as set out in *An Effective Aid Program for Australia* states that the aid program will support private sector development and partnerships with civil society organisations where they are effective and provide the best delivery mechanism. Special effort is needed to involve the domestic private sector in building, implementing and operating water and sanitation services. At the community level this can be achieved by stimulating demand for these services through community management groups, developing market chains and building the skills of local tradespersons. Australia will explore ways to capitalise on the significant contributions the private sector and civil society can make in service delivery.

Sustainable water and sanitation services need to be well managed with assets well maintained. This requires spare parts supply chains and establishing ways for citizens to engage with service providers. Australia will support activities that help introduce and develop appropriate management models and improve the skills of service providers, both management and staff. There will be a focus on building capacity, cost recovery and water safety planning at local government levels, recognising the trend of national governments to decentralise service delivery.

For many community-based water supply and sanitation systems, it is essential that community members, especially women, be trained in operating, maintaining and financing systems on the ground. It is also essential to have management and technical support at regional or national level. Water and sanitation activities supported through the Australian aid program will build the skills of community members, particularly women, to take on leadership roles, such as the through the successful community-based training program for women in Bangladesh (see below).



Box 3: Community-based training of women^{xii}

UNICEF supported a community-based training project in Bangladesh that taught women to repair and maintain hand-pumps. Ordinarily women rather than men are at home during the day, which is when a hand-pump mechanic would be available to make repairs. It is not usual practice for men to visit women if they are not part of a close family, making it difficult to organise the repair of their hand-pumps. The community-based training course has made it easier for households to maintain their hand-pumps. An important added benefit is that women who have the skills to make repairs have been given the chance to earn an income and enjoy greater status in their communities.

Outcomes for WASH programs

WASH sector programs will seek to achieve a range of outputs and outcomes aligned with the three pillars such as:


- number of additional people with access to safe water
- number of additional people with access to basic sanitation
- increased number of people practicing improved hygiene behaviours
- increased number of locations with hand washing facilities with soap
- increased number of schools with water, sanitation and handwashing facilities with soap
- increased number of countries with a government-led WASH sector policy
- increased percentage of women members of institutions responsible for planning and overseeing the operation and management of water and sanitation services.

WASH programs will be monitored and evaluated. Data will be collected and disaggregated for reporting on delivering results, including poverty levels and the impact on women and people with a disability. Appendix A presents indicative WASH indicators.

Where Australia will work

We will continue to invest in neighbouring countries in East Asia and the Pacific because this is where Australia's national interests are most prominent and where there are large gaps in clean water and basic sanitation services. There will be high growth in support for WASH in Africa and South Asia, where need is great and poverty is high, particularly to improve global sanitation by 2015. The Australian Government will continue to ensure development assistance is provided in a way that safeguards communities and infrastructure investments from environmental and social disruption risks.

In many cases the resources allocated for WASH infrastructure need to be used more efficiently and align with investments by partner governments, private sector and other donors to deliver real results. This can be done incrementally by better understanding how to promote policy reform and address governance issues around public financial management and procurement. Using results based payments which are effective in mobilising local capacity is one way of improving aid effectiveness. Greater support will be given to activities that target the poor and get more women, people with disability and other vulnerable groups involved. Partnerships with civil society organisations will also be used to reach the poorest and most disadvantaged people in the community.

A decorative border at the top of the page consists of two rows of circular icons. The icons represent various WASH (Water, Sanitation, and Hygiene) concepts, including water drops, hands being washed, toilets, people using water, and other related symbols. The icons are arranged in a repeating pattern across the width of the page.

Investment support for WASH infrastructure will be complemented by global engagement on policy, knowledge management, research and capacity building work to improve effectiveness and sustainability through co-financing projects with the Asian Development Bank, African Development Bank and World Bank



Appendix A: Indicative WASH Indicators

The following indicators may be used to monitor and evaluate the results of Australia's WASH assistance. A detailed sector results framework will be developed.

Note: data will be disaggregated by sex, socio-economic quintile and relevant disability criteria where possible.

Pillars for Australia's investment in education	Indicators for WASH outcomes	Indicators for WASH outputs
Pillar 1. Increased access to safe water and basic sanitation	<p>Number of additional people with access to safe water</p> <p>Number of additional people with access to basic sanitation</p>	<p>Number of household connections to piped water supply systems or improved point source water supply</p> <p>Number of households with an improved sanitation facility</p> <p>Number of schools and other community facilities with water, sanitation and hand washing facilities with soap</p> <p>Number of education programs provided on improved hygiene practices</p>
Pillar 2. Improved hygiene behaviour	<p>Number of people practicing improved hygiene behaviours</p>	
Pillar 3. Creating sustainable services	<p>Increased number of countries with a government-led WASH sector policy</p> <p>Number of water sector organisations with improved capacity</p> <p>Increased percentage of women members of institutions responsible for planning and overseeing the operation and management of water and sanitation services</p>	<p>Number of additional water and sanitation service providers monitored independently</p> <p>Number of WASH investments delivered through government financial management and procurement systems in developing countries</p> <p>Number of WASH service providers with sustainable fee structures</p> <p>Amount of 'non-revenue' water lost through cases including theft and leakage from poorly maintained water infrastructure</p>

ⁱ *An Effective Aid Program for Australia: Making a real difference – Delivering real results*, Response to the Independent Review of Aid Effectiveness, July 2011.

ⁱⁱ UNICEF and the World Health Organization, Joint Monitoring Program, *Progress on Sanitation and Drinking Water* 2010, p. 6.

ⁱⁱⁱ UNICEF and the World Health Organization Joint Monitoring Program *Progress on Sanitation and Drinking Water* 2010 Update, data for 2008, available at www.wssinfo.org

^{iv} UNICEF and the World Health Organisation, Joint Monitoring Program, *Progress on Sanitation and Drinking Water* 2010, p. 8.

^v UNICEF and the World Health Organisation, Joint Monitoring Program, *Progress on Sanitation and Drinking Water* 2010, p. 12.

^{vi} UNICEF and the World Health Organisation, Joint Monitoring Program, *Progress on Sanitation and Drinking Water* 2010, p. 30.

^{vii} UNICEF, presentation by Clarissa Brocklehurst at WASH Conference 2011, Brisbane, Australia, <http://www.watercentre.org/wash-2011-keynotes>, accessed on 30 June 2011.

^{viii} Water and Sanitation Program, World Bank *Economic Impacts of Sanitation in Indonesia*, p. 22.

^{ix} Water Aid Report, *Is menstrual hygiene and management an issue for adolescent school girls?* 2009, p. 11. The report found that 53 per cent of high-school girls surveyed in four Nepal districts reported absences from school during menstruation. Key reasons for this were a lack of privacy to clean and wash themselves (41 per cent) and not having a place to dispose of used cloths (28 per cent).

^x World Bank, *Disease Control Priorities in Development Countries, Second Edition*, 2006, pp. 35–86, cited in Water Aid, *Tackling the Silent Killer, The Case for Sanitation*, July 2008, p. 9.

^{xi} Rhee, V, Mullary, LC, Subarna, Khatry, K, Katz, J, LeClerq, SC, Darmastadt, GL & Tielsch, JM, *Arch Pediatr Adolesc Med* 2008; 162 (7) 603–608, cited in UNICEF report *Soap, toilets and taps: A foundation for healthy children*, February 2009, p. 11.

^{xii} UNICEF, *Soap, toilets and taps: A foundation for healthy children*, 2009, p. 25.