



WaterAid – water for life
The UK's only major charity dedicated exclusively to the provision of safe domestic water, sanitation and hygiene education to the world's poorest people

Urban work



Photo credit: Brent Stirton

Nearly 50% of the world's population now live in urban areas and every day a further 180,000 people move to cities from the country. As more poor people migrate to towns and cities to escape rural poverty and seek better opportunities, the populations living in overcrowded, insanitary conditions in urban slums continue to rise. There are now at least 750 million people living in urban squatter settlements without adequate shelter or basic services and without legal title to their land.

The numbers of people living in these settlements is expanding so rapidly that governments are unable to keep up with the necessary infrastructure development and services like water and sanitation are woefully inadequate. Because of the increasing need WaterAid has pledged to increase its urban work to help ensure that these, some of the world's poorest people, gain access to water and sanitation.

Urban work

WaterAid's projects were initially all in rural areas until 1990 when it began working in urban areas on a small scale. Now WaterAid has, or is developing, urban projects of differing scales in all of the 15 countries in Africa and Asia where it works. WaterAid is aiming to allocate around 30% of its funds to urban work in the future to help address this huge, growing problem.



WaterAid/Daniel O'Leary

The scale of the problem varies greatly from city to city and town to town. In large urban centres like Dhaka, Bangladesh, the problem is vast; here the population has risen from 250,000 in the early 1970s to more than 12 million today. Millions of people live in the city's slums in such crowded conditions that many are even forced to live on the wrong side of flood barriers, in homes that flood annually.

Across the developing world in towns and cities of all sizes there are thousands of similar unplanned squatter settlements without facilities. Millions live "off the map" in communities that are unrecognised by the authorities and ignored in city development plans.

Different solutions and approaches are needed for

each problem but WaterAid is developing models of working in urban contexts that can be adapted to each situation. Much of WaterAid's experience of working in urban areas is from Asia and WaterAid is now taking lessons from there to expand its work further into the towns and cities of Africa.

The problems

Unplanned slum and squatter settlements have numerous problems associated with water and sanitation provision and unsafe hygiene. Families often have no choice but to live in small, makeshift huts crowded together in vast, unplanned areas. Without toilets, drainage systems or rubbish collection services refuse and human waste fill

the areas. Without safe water on tap people are forced to collect what they can find. Water and sanitation-related diseases are rife - exacerbated by the overcrowded conditions and poor hygiene. In many cities in developing countries you will see raw sewage flowing into rivers while only feet away children swim and adults wash themselves and their clothes.

Often the settlements are unofficial and so, without legal tenure, the people living in them are not entitled to connections to basic facilities like water and sanitation. These settlements are also vulnerable to demolition as governments reclaim the land for other uses.

Water

Water can be hard to find in these dense urban areas. And the choices are hard. Women and children either have to walk a long way to find safe water or use water from polluted sources such as factory outflows or unprotected wells. This leads to water-related diseases such as cholera, typhoid and dysentery; diseases which around the world kill a child every 15 seconds.

Another alternative is to buy jerry cans of water, often of dubious quality, from vendors at vastly inflated prices. The poorest people from Dar es Salaam, Tanzania, spend an average of 10% of their income on water from vendors. They pay far more per litre than the better off, who can secure piped connections or afford to invest in their own wells. In times of severe shortages, vendors increase their charges twenty fold, making it even less affordable.

Because water is so hard to find, or is so expensive to buy, families are only able to collect a small amount every day which affects their ability

to wash themselves, their homes and their clothes regularly. They are also hindered from washing by the lack of privacy. This inability to wash regularly furthers the spread of disease.

Sanitation and hygiene

In dense, overcrowded urban conditions it is often difficult for people to find space to build latrines. Many have to defecate in the open or share whatever limited facilities are available which tend to offer no privacy, safety or hygiene. In Addis Ababa, Ethiopia, like many cities, women report being prisoners of daylight as they are ashamed to go to the toilet in the open during the day.

In Dhaka makeshift latrines hang over waterways, while in many slums without any other disposal facilities, human waste is simply thrown out in plastic bags. Because of this human waste and refuse collect in stagnant pools spreading disease and contaminating water sources. The problem is made worse during the rainy season when rubbish and excrement are washed into cramped living areas.

In these conditions it is virtually impossible to remain healthy and clean. Diseases spread rapidly among the crowded conditions and the little money that slum dwellers earn often has to be spent on medicines to help the sick recover.

Solutions

Finding solutions in urban areas can be complex. Communities tend to be less cohesive than in rural areas and this can make development programmes hard. As community involvement is central to the success of WaterAid's projects initial work often focuses on forming, or finding existing,

community groups to take projects forward.

The higher population density in most urban areas means there is increased chance of groundwater pollution in hand-dug wells and pit latrines can fill too quickly and eventually pollute groundwater supplies. While tubewells that reach deeper water sources can be a viable option, and septic tanks are sometimes used, different water and sanitation technologies are often needed instead. Where appropriate, a preferable solution is to negotiate with the local government or water or sewerage providers to connect slum communities to the city's existing piped water supplies and sewerage systems.



WaterAid/Caroline Irby

WaterAid and its partners help community groups to build and manage communal tapstands along with toilet and washing facilities, which have separate places for men, women and children. WaterAid's partners have found that children are often scared of the dark, enclosed spaces of latrine blocks and also get bumped from the queue by adults; so have built child friendly toilets instead painted with bright murals.

The communal water and sanitation facilities are owned and managed by the communities themselves; people are charged a small, affordable amount to use the

latrines and to collect water and these funds pay for full time attendants to maintain the projects, pay the municipal water and sewerage bills, keep the facilities clean, buy soap and provide security. Children and those who are unable to pay are let in for free.

In some cases WaterAid's partners apply for land tenure on behalf of slum dwellers so that there is a legal site or negotiated access where water and sanitation connections can be made. Without this involvement communities are effectively barred from having these facilities.

Hygiene

WaterAid and its partners carry out hygiene education in a variety of ways to ensure that the communities gain the maximum health benefits from their projects. In some areas hygiene workers are trained to carry out house-to-house visits, act plays or give talks at community meetings. Another option is to teach children who then pass the messages that they have learnt on to their friends and families.

Messages include the promotion of washing hands before eating and after going to the latrine (which can reduce diarrhoeal diseases by over 40%), wearing shoes to the latrine to help prevent the spread of hookworm, storing food and water hygienically and washing bodies, clothes and homes regularly.

WaterAid also funds some environmental sanitation projects such as rubbish disposal services and helps communities with footpath building to enable them to create a healthier, more hygienic living environment.

Advocating change

Connecting communities to cities' water and sanitation services can initially be problematic due to land tenure

problems and facility managers believing that low income families from slum settlements will be unable to pay for water and sanitation services. However, as these connections usually provide much cheaper water than that which slum dwellers buy from vendors, they are prepared to pay for these facilities themselves, sometimes with no or minimal subsidy.



WaterAid/Abir Abdullah

In some areas where projects have been very successful communities have been able to repay all of the initial construction costs in addition to the running costs. In others like

Bamako, Mali the community has invested more than they have needed to into their water and sanitation schemes so that they can carry out other development work, while in India some communities have even lent money to their neighbours so that they can set up similar projects.

WaterAid is now able to use the success of these projects to persuade more water and sanitation providers that developments in low-income urban areas are viable. For example, following the communities' success in building sewerage that they funded themselves in Faisalabad, Pakistan, the local government agreed to pipe water to the community as well. In Bangladesh the Dhaka Water Supply and Sanitation Authority has now reduced the security deposit that NGOs have to pay for a water connection in some squatter settlements following WaterAid and its partners' interventions.

Statistics from UN-Habitat (www.unhabitat.org)

How can anyone deliberately build a new slum? Anything is possible in Dhaka. Because the city lies on very low ground and has next to no sanitation, much of the human waste ends up being carted to the outskirts of the ever-growing city and is dumped on ground that regularly floods. But so scarce is building land that even these stinking cesspits are valuable and entrepreneurs take them over to build streets on stilts which they then let out to the poorest people. The city is literally being built on its own excrement.

John Vidal, The Guardian's Environment Editor on visiting the slums of Dhaka with WaterAid

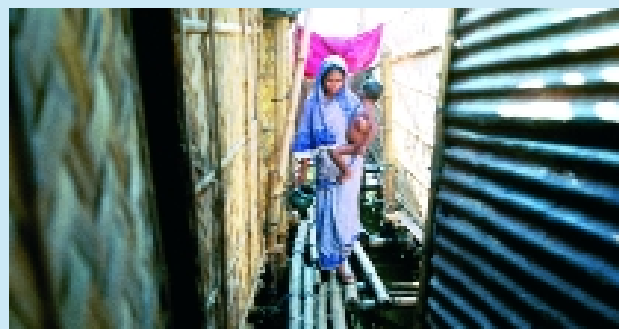


Photo credit: Martin Argles

Case studies:



WaterAid/Abir Abdullah

The cost of living

Ruby describes what life is like living in the Balar Math Slum in Dhaka, Bangladesh. "This slum has existed for 10 years and is in a shocking state," she says. "Hanging latrines feed straight into a rubbish-filled ditch in the middle of the slum. 5000 households live here with no clean water and no sanitation.

Many people get very ill here and I think it all stems from the open latrines. Smell the stench, it's disgusting. We get fevers, coughs and terrible diarrhoea and there are no healthcare facilities that we can use.

We spend lots of time bringing water from a handpump about 20 minutes' walk away. There are only old handpumps though and they are not deep enough and the sinking water table means that only a small amount of water can be drawn from them each day. You have to queue for at least two hours to get the water.

I earn between 500-1000 taka (£4.50-£9) per month and I have to spend about 100 taka (90p) on water. At least we are surviving. Our biggest fear is that we get evicted from the slum by the government."



WaterAid/Libby Clarke

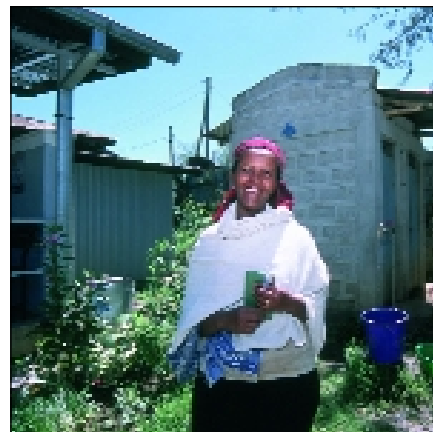
Self help groups

The Karuvattupettai slum was the site for WaterAid's first project in Tiruchirappalli, a city in the state of Tamil Nadu in south India. WaterAid's partner Gramalaya has built communal toilet blocks in the slum and the community has formed self help groups, which then created sanitation and hygiene education (SHE) teams that maintain the toilets.

Mrs Lakshmi works as one of the caretakers, collecting the latrine users' fees. "I am one of two people employed to look after the latrines. We charge per use of the latrines in order to fund the maintenance. People are prepared to pay money to use the latrines as they know the funds pay to keep the latrines clean. If people are unable to pay, for instance if they are sick or disabled, then we let them in for free. The money pays for repairs, light bulbs, soap and cleaning materials. The money left over is now being used to build a community hall.

Diseases have fallen dramatically here since the latrine blocks were built. There used to be cases of brain fever, elephantitis, malaria and jaundice. Brain fever was spread by mosquitoes which had bitten pigs. The pigs have gone now as there is no longer any food for them – they used to eat the faeces from our open defecation.

Our husbands support us as they have seen the improvements in all our living conditions, which help them keep well enough to go to work."



WaterAid/Caroline Irby

Water on tap

"I can now have a shower, use the latrines, get water and wash my clothes freely," explains Zenebech Zewede from Addis Ababa, Ethiopia, when she talks about the differences that a WaterAid-funded project has brought to her life.

"Before I had to pay 25c (1.5p) for every bucket of water and I had to go a long way to collect it. Now I can buy three buckets for just 15c (0.9p) and it is very near to my house. Before I could only get two buckets a day, but now, thanks to the project, I can collect four if I need to. Even buying more water costs me less than before and it is much closer too. I represent all of my community when I say thank you for this project.

Before, when I needed the latrine I used to have to go in the neighbourhood. It is a big gift to be clean. I have a five year old son and it is better for him too. I want my son to become educated now and to develop his position."



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