Running Dry
Tackling the myths about urban water and sanitation

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What’s holding back universal access to water and sanitation in cities?

Water & Sanitation for the Urban Poor (WSUP) has identified five myths which are stopping investors, agencies and policymakers from properly addressing the inadequate access to essential water and sanitation services in cities across Africa and South Asia.

Myth one: Struggling utilities are unable to serve the poorest

Myth two: Water should be free

Myth three: Communities should be responsible for their own services

Myth four: We should only focus on household facilities

Myth five: Building toilets alone will solve the sanitation crisis

Why do these myths matter?

Rapid urban growth and urbanisation in sub-Saharan Africa and South Asia has the potential to bring enormous benefits to both regions, lifting millions out of poverty.

In 2000, just a third of sub-Saharan Africans lived in urban areas. By 2035, it will be over half.

In South Asia, 250 million more people are expected to live in cities over the next 15 years.

But these regions will only reap the benefits of this massive demographic change if urbanisation is managed well.

Clean water and safe sanitation are two of humanity’s most basic requirements. They underpin good health, the ability to get and keep a job, go to school, and other critical areas of human development, and dignity.

Yet in today’s cities, huge settlements are emerging which lack these essentials. Authorities at present are barely keeping pace with current demand for basic services.

Every month, these settlements grow further in size, often with arrivals from rural areas coming in search of better jobs and a better standard of living.

Clean water and safe sanitation in urban areas is integral to the Sustainable Development Goals, especially Goal 6 – “ensure availability and sustainable management of water and sanitation for all”, and Goal 11 – “make cities and human settlements inclusive, safe, resilient and sustainable.”

At present, we are not on track to achieve these goals.

But it is not a lost cause. We need to do much more to recognise approaches that are working, and to focus efforts on responses that can be scaled up right across urban areas.

It’s vital that we overcome the five myths identified in this report, so that clean, readily available and affordable water and safe, dignified sanitation can be extended to all citizens living in urban areas.
Myth One: Struggling utilities are unable to serve the poorest

The reality: Much-maligned, publicly owned utilities can deliver services for the poorest communities

Utilities are often seen as the reason why water access is not universal, because they have failed to extend their networks to keep pace with the expanding urban areas which they serve. But we take a different view.

Utilities are the solution to comprehensive, safe water access in cities. Water needs to be managed by a single entity which is responsible for the entire system, from source to human settlement.

If different communities across an urban area manage their own water needs, with no single institution looking at water availability and quality, then everyone suffers. Lack of oversight and planning across the municipality means that service levels will be inconsistent and water quality will vary, perhaps even leading to water supplies running out.

To create universal access to water in urban areas, a utility with reach across a city is the only option.

But utilities have a difficult time in developing countries, and most are not able to serve all of their customer base, let alone invest in further expansion. Critically under-funded, with poorly trained staff, weak governance and failing infrastructure, it can be hard for them to turn themselves around.

Investing in utilities and helping them to become stronger so that they can build up services for the people who need them most, is one of the most important steps that we can take to tackle the water crisis.

The first step is often the creation of a dedicated low-income customer unit – acknowledging that poorer residents have different requirements than higher-income customers, and therefore need a different approach. This has been transformative for vulnerable residents in many cities where WSUP operates.

But WSUP has found that a more comprehensive approach is required for a utility to provide for all of the residents in the area which it serves. This means improvements across the utility: from HR, to marketing, asset management, procurement and governance.

Utility transformation in Nairobi

In Nairobi, WSUP has worked with the city utility - Nairobi City Water & Sewerage Company - to help provide services to the rising population living in informal settlements.

We helped the utility set up a dedicated team for low-income residents, which has now grown to around 200 staff who are all focused on the city’s poorest residents.

The department’s jurisdiction covers 80 settlements with a total estimated population of 1.3 million.

Residents without an official connection from the utility, pay exorbitant rates for water from one of the many cartels operating in the communities. Once connected to the utility supply, their water is safer and more affordable.

Working with WSUP, Nairobi Water has been able to extend the water network into communities, fix leaking pipes and dilapidated infrastructure, improving services across this fast-growing city.
Myth Two: Water should be free

The reality: Water is a human right, but people should still pay for it. Even the poorest.

In the heat of elections, aspiring politicians often issue a rallying cry: “If you elect me, I’ll provide water for free!” This might make for clever politics, but it’s usually a terrible idea for sustainable water access.

Water is a human right, as agreed by the United Nations in 2010.

But this doesn’t mean that it should be provided for free. To do so would lead to the collapse of water systems worldwide.

For water to get captured, made safe to drink and delivered to people’s homes, a system needs to be in place – and that system needs investment. If the institution managing that system is not able to charge users, then in all likelihood they will not prioritise delivering a good service.

So what does this mean for provision of services to the poorest?

WSUP believes it is far better to recognise residents of informal settlements as a customer segment, and figure out how to provide services which are affordable and meet their needs.

After all, if residents don’t have piped water close to their houses, they will almost certainly be buying it at a much higher price on the black market, so proper connections can save residents money.

Regarding sanitation, our experience has been that the poorest urban residents are much less likely to be able to pay for some or all the costs required. A toilet can often cost hundreds of dollars; paying to have a pit or septic tank emptied can also be a sizeable investment, and one that is substantially less appealing for residents than other services or goods.

So in our view some element of subsidisation, say, from tax revenues, is necessary (although curiously, “toilets for free” is a much less popular campaign promise).

It remains the case, though, that requiring some level of investment from the user is vital to ensure that people value, and feel a sense of ownership, over the services that are being provided.

Generating customers in Maputo

In Maputo, Mozambique, WSUP worked with the water utility to extend its water network and convert 145,000 slum residents into paying customers.

Before the project began in 2010, residents either had to buy water from a neighbour, which was extremely inconvenient, or at a high price from an informal vendor.

Following extension of the public water network in 2016, the number of customers in 10 marginalised communities increased by 78%. At the same time, the proportion of customers paying their bills increased by 30%, partly as a result of greater efforts by the utility to engage with customers.

Customers in these communities paid an average of $4.85 per month, and the initial connection fee was reduced by half.

Sixty percent of the new customers thought that the new service was a reasonable price.
Myth Three: Communities should be responsible for their own services

The reality: Community ownership can result in poor services. We should be aiming for community buy-in instead.

Traditional thinking in development is that community ownership is always positive. If communities own the tools for improving their lives, then there is a greater chance of the tools being used in the right way.

But community ownership in water and sanitation across large urban areas can be problematic. If each neighbourhood in a densely populated informal slum drilled a borehole and started extracting water from underground, who would ensure that the underground reserves didn’t run out? How can wastewater be safely treated without use of treatment plants owned by the public sector?

WSUP is a firm advocate of gaining community buy-in – it’s vital that we understand what people need, and what they will pay for. When we see residents as customers, rather than passive beneficiaries, then it becomes clear that services need to appeal to residents, so that they will pay for them.

But water and sanitation services cannot simply be managed differently from one community to the next.

To manage effective distribution of water across an urban area, a single institution must have oversight and accountability for managing the entire system, even if it then chooses to sub-contract some elements to community-based organisations or the private sector.

But community-run initiatives do still have a major role to play in one area: building trust.

A lack of trust between residents of informal settlements and utilities is a major issue.

Residents, who often feel let down by the apparent failure of the public sector to address their needs, are often unwilling to engage with municipal authorities over basic services; and can be unwilling to pay, even when they are being offered access to clean, cheap water.

Community-based organisations can help bridge this trust gap, showing residents why they should invest in improved sanitation or clean water, and improving payment rates, which in turn encourages municipal authorities to continue to invest in the poorest communities.

Community participation in Madagascar

In cities in Madagascar, WSUP has supported communities to participate in the delivery of water services, while still ensuring that the national utility retains overall responsibility.

This has been achieved through the creation of Water User Associations: community-led groups which operate services on behalf of the utility, JIRAMA.

The arrangement ensures that communities have a say in how the service is delivered, where facilities are built and also lets residents operate the services, boosting local employment. The water comes from JIRAMA’s water supply network, meaning that the water quality and availability is monitored; and JIRAMA allows the associations to retain profits so that they can be invested in improvements to the community.

To date, water supplied by Water User Associations in the capital Antananarivo and two other cities, Mahajanga and Toliara, has benefitted over 100,000 of the poorest urban residents.
Myth Four: We should only focus on household facilities

The reality: Community sanitation facilities can help bridge the gap when household facilities are not viable.

Everyone deserves that gold standard of a toilet for each household, and this is reflected in the targets for Sustainable Development Goals (SDGs), which aims for every household to have their own toilet by 2030.

But in cramped urban settlements where the poorest and most marginalised live, there simply isn’t the space – nor money – for each household to have their own toilet.

Shared sanitation facilities have a poor reputation. In urban slums, many are nothing more than a hole dug in the ground shared by several families, or a flimsy structure of bamboo and aluminium sheets. Undignified and inhumane, often dangerously inaccessible for the elderly, children or pregnant women, there is no management of waste, contributing to spread of diarrhoeal diseases in the community.

This is where shared toilets play a critical role. Not all shared toilets are good toilets. But some shared toilets are well constructed, with plenty of space, light, lockable stalls and running water. Facilities like this ensure safety, dignity, and help to create healthier, more productive communities. It is no exaggeration to say that clean toilets give residents something to be proud of.

But they are not easy to implement. They require careful planning, setting up community management committees to operate facilities, and a clear commitment from everyone to look after the facility. It requires partnership between the communities and the municipality, which residents are often mistrustful of.

Shared facilities are not recognised within the top two tiers of service classification in the SDGs. This presents a challenge for municipal authorities seeking to align with the SDGs.

But the latest review of progress towards SDG 6 (clean water and sanitation) recognises that, “Shared sanitation nevertheless remains an important interim solution, especially for poorer households in rapidly growing urban areas in low income countries.”

WSUP welcomes this evolving position and continues to advocate for investment in high-quality shared sanitation.

Shared facilities in Mozambique

In Maputo, Mozambique, we worked with municipal authorities to design a model for shared sanitation which is benefitting around 9,000 vulnerable residents and acting as a template for other similar projects around the city.

The project meant residents of the Nhlamankulu district could stop using dangerous, squalid, pit latrines and benefit from facilities that were well-lit, accessible, and dignified.

WSUP’s approach placed an emphasis on community participation, placing the needs of women and girls at the centre of centre of activity to ensure that facilities could meet their needs. Women were involved in every step, from siting and design of facilities through to adopting leadership positions in community management groups.

The scheme was endorsed by Maputo’s municipal council, with backing from the city Mayor, and shared sanitation facilities are now being rolled out to other communities.
Myth Five: Building toilets will solve the sanitation crisis

The reality: Solving the waste management conundrum is bigger than just building toilets.

It’s easy to associate sanitation with toilets, and certainly well-designed, accessible, toilets bring huge benefits in terms of dignity and safety. But just as important as building toilets is figuring out what to do with the human waste.

In urban settlements, unmanaged waste often contaminates the water supply, causing diarrhoeal diseases to spread.

Instead, this waste needs to be moved out of communities and safely treated. Unless cities can do this, they will not be able to address the health issues related to poor sanitation.

Sewers are a solution in developed countries. But building networks of sewers into informal settlements is unlikely to happen any time soon on a major scale, because of the huge cost, and the complexity of installing infrastructure in such densely populated areas.

So what do people do? When pits overflow, people call a pit-emptier often: a shockingly backward trade where poorly protected workers empty the pits at night, sometimes using nothing more than a bucket.

Waste is usually then dumped nearby where it contaminates the community. In the rainy season, pits can suddenly overflow, spreading harmful waste throughout the streets and near where children are playing.

Much more needs to be done to improve the business of removing sanitation waste from the environment.

Managing sanitation waste in Bangladesh

In Bangladesh, nearly half of the 55 million people living in urban areas lack access to sanitation facilities from which waste can be safely collected and removed for treatment.

As a result, huge quantities of waste from toilets are dumped into drains or rivers, contaminating the environment and posing a serious public health risk.

A particular challenge is that the poorest residents struggle to pay for a safe service to empty their toilets when they get full.

WSUP’s response to this challenge has been the establishment of a new service which is affordable for low-income residents. The service, known as SWEEP, operates in three cities, including the capital Dhaka. Residents pay for a vacuum tanker to empty their septic tanks and have the waste taken away for treatment.

To create this service, WSUP set up partnerships between entrepreneurs and the public sector so that operators can transport waste to publicly owned treatment facilities.

To ensure that the service could reach the poorest, yet still be financially viable, WSUP requires that 30% of customers are low-income, and pay a lower tariff than higher income customers.
“Now thanks to this water kiosk, we have safe water near our home.” - Ramiaramanana, Madagascar

Water & Sanitation for the Urban Poor (WSUP) is a not-for-profit company that helps transform cities to benefit the millions who lack access to water and sanitation.

We work in seven countries in sub-Saharan Africa and Asia, supported by an office in the UK. Since inception, we have helped nearly 20 million people access better water, sanitation and hygiene services.