

# Tackling the water, sanitation and hygiene sustainability crisis

The urgent need for action

August 2019



WaterAid/Basile Ouedraogo



**WaterAid**

**This Advocacy Brief provides an overview of the water, sanitation and hygiene (WASH) sustainability crisis, and summarises the actions needed to ensure lasting, transformational change. It draws on a number of existing resources, particularly WaterAid's Sustainability framework.<sup>1</sup>**

## Introduction

In 2019, 785 million people don't have clean water close to home, and 2 billion people don't have a decent toilet of their own. 3 billion people in the world – two in five – lack good hygiene at home. And yet at current rates of progress, least developed countries won't reach everyone with decent toilets until 2109.<sup>2</sup> Achieving the Sustainable Development Goals (SDGs) – which aim not only for everyone, everywhere to have clean water and sanitation by 2030, but for these services to also be safely managed – will clearly require a significant acceleration in rates of progress.

However, at least as important as the imperative to do more is the urgent need to do better. An unacceptably high number of WASH services fail to continue working, meaning many of those people

we think have access are actually experiencing a poor level of service,<sup>3</sup> or none at all. Universal access to these services will not be achieved unless current rates of failure are addressed – to ensure the services put in place and the practices introduced, have a lasting impact in people's lives.

### What do we mean by sustainability?

Sustainability is about whether or not WASH services and good hygiene practices continue to work and deliver benefits over time. No time limit is set on those continued services, behaviour changes and outcomes. In other words, sustainability is about lasting benefits achieved through the continued enjoyment of water supply and sanitation services and hygiene practices.

1. This note was prepared by Clare Battle. It builds on the WaterAid (2011) *Sustainability framework*, drafted by Richard Carter, Vincent Casey and Erik Harvey.

2. WHO/UNICEF (2019). *Progress on household drinking water, sanitation and hygiene 2000-2017*. Joint Monitoring Programme. Geneva: World Health Organisation.

3. For example, poor water quality, service outages and latrines that collapse or are not emptied.

## The sustainability crisis

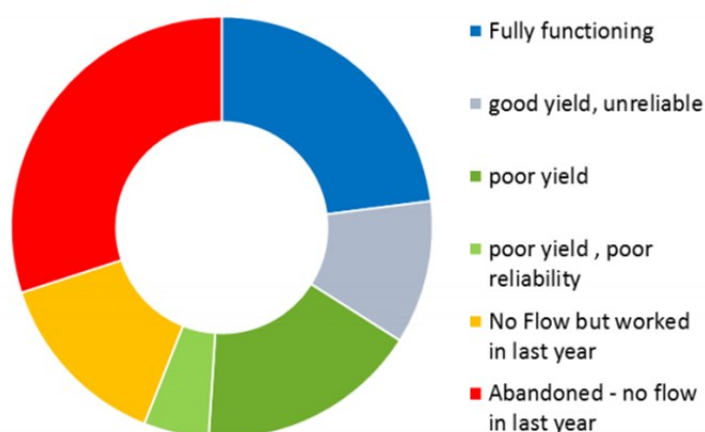
There is extensive evidence from many low-income countries that newly delivered WASH services often perform effectively for a period, and then either fall into disrepair or otherwise fail to provide continuing benefits to their users. In addition, the key drivers behind sustained hygiene and sanitation behaviour change are frequently being overlooked, meaning the attitudes and behaviours likely to lead to the greatest health benefits are often not being fully realised or sustained. Studies conducted over the last decade show that:

- 30–40% of rural water systems fail prematurely or are down for extended periods of time.<sup>4</sup>
- Only 33% of a sample of toilets constructed as part of India's Swachh Bharat missions were deemed sustainably safe (eliminating risks of contamination in the long term).<sup>5</sup>
- In 2011, it was anticipated that handpump failure in Africa alone over the last 20 years represented a failed investment of between \$1.2 to \$1.5 billion.<sup>6</sup>

- Sustainability assessments of WaterAid's own programmes over the last seven years show between 15% and 33% of water services, and 11% and 55% of sanitation services, are not functioning after only 5 years.

It is clear that sustaining water and sanitation services and good hygiene behaviour is a significant challenge in many developing countries. More attention needs to be paid by governments and other service providers to skilfully manage and maintain facilities that are appropriate, affordable and accessible.

### Functionality assessed for boreholes equipped with hand pumps within Uganda<sup>7</sup>



4. Lockwood H, Smits S (2011). *Supporting Rural Water Supply: Moving towards a Service Delivery Approach*. Practical Action Publishing Ltd; 2011.

5. WaterAid India (2017). *Quality and sustainability of toilets: A rapid assessment of technologies under Swachh Bharat Mission – Gramin*. Available at: <https://www.wateraidindia.in/publications/quality-and-sustainability-of-toilets-2017> (accessed 02 Aug 2019).

6. World Bank (2011). *WASH Sustainability Forum*. Available at: <https://www.aquaconsult.co.uk/wp-content/uploads/BMGF-WASHSustainabilityForumReport-2011.pdf> (accessed 02 Aug 2019).

7. Owor M, MacDonald AM, Bonsor HC, et al (2017). *UPGro Hidden Crisis Research Consortium – Survey 1 Country Report – Uganda*.



## Why does sustainability matter?

Access to water and sanitation are human rights. Yet millions of people living in extreme poverty are being failed by systems that cannot ensure sustainable, affordable and accessible water and sanitation services. And because of deficiencies in the way services are monitored, these failures are often invisible. This is unacceptable.

Tackling the sustainability crisis is also vital for other reasons, including cost-effectiveness and good stewardship of sector resources. In other words, money invested in improving sustainability is money well spent, and helps countries move away from a dependence on aid. On the other hand, failure to ensure sustainability can exacerbate and accentuate the dependence of communities on external organisations. It can also undermine trust, weaken accountability and deter investments in the WASH sector if results claimed by governments, WASH agencies, or donors do not last.

Lastly, there is evidence that even occasional short-term failures in water supply or water treatment can quickly reverse many of the hard-won public health benefits that come from raising the standard of water supply services.

## What is behind the sustainability crisis?

There are many inter-related reasons why sustainability poses such a challenge to the WASH sector, with three in particular that stand out:

The first is the **limited capacity** (in the sense of knowledge, skills and material resources) of communities, local government institutions and other service providers to manage services and ensure hygiene behaviours are repeated.

The second is the **inadequacy of financial revenues** to cover the full operation, maintenance and capital maintenance costs of infrastructure. Analysis highlights that services are often introduced without any consideration for how much they will cost users to run.<sup>8</sup> Users are not able to afford the cost of major repairs, there is often no budget for pit waste emptying, no provision is made for permanent behaviour change promotion. The end result of these challenges is service failure.

The third relates to **broader systemic failures** caused by the approaches to service delivery of different stakeholders in the WASH sector. Policies can be unclear in relation to who will be responsible for supporting communities to manage WASH services, finance

8. Franceys R, Pezon C (2010). *Services are forever: The importance of capital maintenance (CapManEx) in ensuring sustainable WASH services.*

services or provide ongoing technical support to service users. And support from external stakeholders has often been carried out in a fragmented way, with competing agendas and a general disregard or lack of support for government policies and processes. The consequence of this is confusion over who is responsible for keeping services running, and users being left with poor quality services. Although coordination between sector stakeholders has seen improvements in recent years,<sup>9</sup> these challenges have been entrenched for a long time and their legacy continues to frustrate progress.

In addition, climate change, disasters, and increasing pressure on water and land resources from growing populations and competing uses, all affect service sustainability and must be addressed.

Progress has also been further undermined by the promotion of simplistic solutions. In particular, community management of water and sanitation services is often promoted as a means of achieving sustainability. However, the evolution of community management as a response to weaknesses in public service provision has largely failed to deliver the expected results, and its promotion as the ideal model of service delivery is now increasingly challenged.<sup>10,11,12</sup>

## Tackling the crisis

Sustainable service supply and hygiene behaviours are dependent on:

- Good governance
- Technical expertise
- Managerial skills and capacity
- Adequate resources
- Financial management
- Appropriate technology
- Opportunities for innovation and adaptive management

Governments also have a responsibility to ensure the right enabling environment is in place for investment and accountability. In particular, evidence shows that the countries and cities that have been most successful in accelerating access to sustainable WASH services are those that have built well-coordinated and well-planned sectors with diagnostic mechanisms capable of identifying and addressing the bottlenecks holding back progress.

WaterAid's own Sustainability framework<sup>1</sup> highlights five common characteristics of sustainable water and sanitation services and hygiene practices:

9. SWA (2015). *Four Collaborative Behaviours for the Development of Sustainable WASH Services for All*.

10. RWSN (2010). *Myths of the rural water supply sector*. Available at: [rural-water-supply.net/\\_ressources/documents/default/226.pdf](http://rural-water-supply.net/_ressources/documents/default/226.pdf) (accessed 02 Aug 2019).

11. Lockwood H, Casey V, Tillett W (2018). Management models for piped water supply services. Available at: [washmatters.wateraid.org/publications/management-models-for-piped-water-supply](http://washmatters.wateraid.org/publications/management-models-for-piped-water-supply) (accessed 02 Aug 2019).

12. McNicholl D (2019). Toolkit for Enterprises Managing Rural Water Supply Systems. Available at: [washmatters.wateraid.org/publications/toolkit-for-enterprises-managing-rural-water-supply-systems](http://washmatters.wateraid.org/publications/toolkit-for-enterprises-managing-rural-water-supply-systems) (accessed 02 Aug 2019).

- There must be real demand from users which is evidenced in the consistent use of improved water and sanitation services and the practice of improved hygiene behaviours.
- There must be adequate revenue to cover recurrent costs, with appropriate tariff structures that include the poorest and most marginalised.
- There must be a functioning management and maintenance system comprising tools, supply chains, transport, equipment, training and individuals/institutions with clear responsibilities.
- Where services are managed by communities or institutions, there must be effective external support to those community-level structures and institutions.
- The natural resource and environmental aspects of the system must be given due attention.

Delivering sustainable WASH services that are capable, accountable, and responsive to all therefore requires a whole-systems approach, which both strengthens the capability of the WASH sector to deliver sustained performance improvements, and empowers communities to leverage urgent action from decisionmakers or duty-holders. Without strong systems in place to turn policies into action, to build a workforce of skilled professionals to plan, manage and maintain services, and to check how money is being spent, there is a risk of poor quality services which fail to provide benefits over time.

## WaterAid's approach

WaterAid, like many organisations, has always striven for sustainability. Its achievements in delivering long-term change have been impressive in some places, and less so in others. In the countries where WaterAid works, and more widely in the developing world, the picture among other organisations, including governments and utilities, is similarly mixed. Achieving sustainability is a continuing challenge.

Recognising that the WASH system is complex – with many different people, processes and institutions involved – WaterAid's approach to sustainability is underpinned by systems thinking. This ensures we look at the bigger picture, working with others to strengthen the whole system: all of the people, processes, and institutions necessary for the delivery and sustainability of WASH services. By doing so, we ensure our service delivery, capacity building, and advocacy and influencing work will have real and lasting impact.

To instil strong systems capable of managing services into the future, we make sure we build the skills and capacities of governments and service providers, whilst also strengthening peoples' capability to hold their governments and service providers to account for the delivery of sustainable services. We believe that the more local

people and organisations can hold their governments and service providers to account to deliver on their responsibilities and commitments, the more accountable and responsible these bodies become, delivering quality, sustainable services that transform people's lives for good.

We also focus on selecting the right technology for the local situation. There's no point installing a water pump in a remote village if the pump requires expensive spare parts that are only produced overseas. To ensure the most appropriate technology is used, we aim to work with local partners and communities every step of the way – from project planning right through to training on maintenance after installation is done. If the people who are going to use these facilities aren't involved, the chances of failure are much higher.

Finally, improving sustainability is about making solutions more effective through development and innovation. We are constantly exploring new solutions across all aspects of sustainability, whether this is via new technologies, new behaviour change strategies, or improvement to the institutions and regulatory frameworks that underpin services. We use an internal monitoring process – known as Post-Implementation Monitoring Survey (PIMS) – to highlight any sustainability issues in our work, and allow us to adapt our approaches and programmes to be more effective in the future.

## Recommendations

To deliver on the ambition of the SDGs, water points which fail to deliver clean water, latrines which fill and are never emptied or re-located, and hygiene behaviours which change but are not sustained, must become things of the past. Achieving this will require changes in policy and practice across the WASH sector.

**National governments** are ultimately responsible for ensuring that WASH services are delivered to all citizens and for deciding how these services should be delivered, be this through local government, utilities, the private sector, community-based organisations or by households themselves. In particular, they must:

- Ensure service providers have the skills, resources and systems necessary to deliver and maintain permanent water and sanitation services, including mechanisms for diagnosing bottlenecks and delivering course corrections to address sustainability failures.
- Strengthen monitoring systems which include data from all sector stakeholders and use that data to deliver improvements in services.
- Regularly review functionality and utilisation of services, and sustainability of hygiene practices in the nation as a whole.

- Integrate planning to ensure sustainable management of shared water resources to improve health and prosperity and to reduce environmental pollution from untreated industrial, agricultural and human waste.

**Donor organisations** must:

- Move from projectised approaches toward supporting the capabilities of service authorities and providers to deliver sustainable services for all.
- Move away from measuring success in relation to user numbers and immediate outputs, and strengthen incentives for attention to the levels of quality required to ensure services last.
- Move towards longer term funding commitments (beyond 5 years) that allow sufficient time for strengthening of district and national institutions.
- Support governments to develop robust planning, implementation and monitoring systems as part of their national development plans.

**Non-governmental organisations (NGOs)** have a responsibility to:

- Design exit strategies that ensure that the right elements are in place to achieve lasting services, from the outset of their projects and programmes.
- Ensure that adequate sustainability aspects are understood and factored in at the outset of service design.
- Effectively monitor sustainability of interventions and act upon challenges, refining their programmes and policies in response to lessons learned.
- Work with governments and other sector players to foster and strengthen elements required to achieve lasting services.
- Empower communities to demand improved services.

WaterAid is an international not-for-profit, determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation. Only by tackling these three essentials in ways that last can people change their lives for good.

WaterAid is a registered charity: Australia: ABN 99 700 687 141. Canada: 119288934 RR0001. India: U85100DL2010NPL200169. Japan: 特定非営利活動法人ウォーターエイドジャパン (認定NPO法人) WaterAid Japan is a specified non-profit corporation (certified NPO corporation). Sweden: Org.nr: 802426-1268, PG: 90 01 62-9, BG: 900-1629. UK: 288701 (England and Wales) and SC039479 (Scotland). USA: WaterAid America is a 501(c) (3) non-profit organization.

