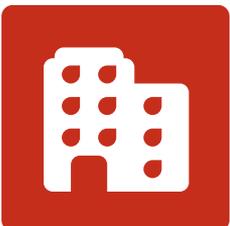
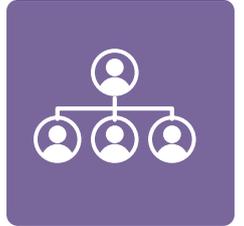


System strengthening for inclusive, lasting WASH that transforms people's lives

Practical experiences from the SusWASH programme



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Acronyms

AMCOW	African Ministers' Council on Water
BCD	Behaviour Centred Design
BMGF	Bill and Melinda Gates Foundation
CAFs	Community Accountability Facilitators
CD	Curricula Development
CLTS	community-led total sanitation
CLTSH	community-led total sanitation and hygiene
CP	country programme
CSBAG	Civil Society Budget Advocacy Group
CSO	civil society organisation
CWA	Cambodian Water Association
DCC	District Coordination Committee
DPHE	Directorate of Public Health and Environment
DPO	disabled people's organisation
DWA	district-wide approach
E&I	equity and inclusion
GIZ	Gesellschaft für Internationale Zusammenarbeit
GKMA	Greater Kampala Metropolitan Area
HCF	healthcare facility
HMIS	Health Management Information System
IEC	information, education and communication
ISAF	Implementation of the Social Accountability Framework
JMP	Joint Monitoring Programme
JSR	Joint Sector Review
KCCA	Kampala Capital City Authority
LGD	Local Government Department
LC1	local council chairperson
LCCA	life-cycle costing analysis
LSO	local support organisation
MDG	Millennium Development Goal
MHM	menstrual hygiene management
MRD	Ministry of Rural Development
MIS	management information system

MISTI	Ministry of Industry, Science, Technology and Innovation
MoH	Ministry of Health
MWE	Ministry of Water and Environment
MOWIE	Ministry of Water, Irrigation and Environment
MRR	Making Rights Real
NAP	National Action Plan
NGO	non-governmental organisation
NIS	National Institute of Statistics
NOC	No Objection Certificate
NRSP	National Rural Support Programme
NWSC	National Water and Sewerage Corporation
ODF	open defecation-free
O&M	operation and maintenance
PAP	Provincial Action Plan
PATS	Pakistan Approach to Total Sanitation
PCRWR	Pakistan Council of Research in Water Resources
P&D	Planning and Development Department
PDRD	Provincial Department of Rural Development
PEA	political economy analysis
PHED	Public Health and Engineering Department
PWD	people with disabilities
RO	reverse osmosis
SDG	Sustainable Development Goals
SEMIS	Sindh Education Management Information System
SMC	school management committee
SSSP	Saaf Suthro Sindh Programme
STEDA	Sindh Teacher Education Development Authority
STEDA	Sindh Teacher Education Development Authority
SusWASH	Sustainable water, sanitation and hygiene
UC	union council
UNGA	United National General Assembly
WASH	water, sanitation and hygiene
WASHCO	water, sanitation and hygiene committee
WWO	woreda water office
WWT	woreda WASH team

Executive summary

This report shares WaterAid's practical experiences of system strengthening for more inclusive and sustainable water, sanitation and hygiene (WASH) as part of the SusWASH programme. Strong systems are needed to ensure WASH gains last and deliver benefits to everyone in society. The SusWASH programme is a five-year, H&M Foundation-funded initiative (2017–2022), implemented in Cambodia, Ethiopia, Pakistan and Uganda, with a global learning component. Case studies featured in this report focus on stable and unstable, rural and urban contexts.

This report is not a formal independent evaluation. It is a learning report based on lessons emerging from the programme so far. The report is targeted at WASH practitioners, governments and donors implementing or funding WASH system strengthening, as well as those who are interested in doing so.

Sustainable Development Goal (SDG) 6 (clean water and sanitation) is seriously off track. Billions of people still lack access to clean water, decent sanitation and good hygiene.¹ Many countries will not achieve universal access to even basic levels of service by 2030 unless governments and donors assign greater importance to delivering and sustaining WASH with more emphasis placed on reaching marginalised people.

- **Zahra, 15, has to walk almost 8km to collect water for her family, sometimes going twice a day. Dengeza, Safoge, Gololcha, East Bale, Oromia, Ethiopia, May 2018.**

The structure of this report

- **Section 1** provides background to the SusWASH programme, gives a history of WASH system strengthening, describes the components of WASH systems and sets out our theory of change.
- **Section 2** describes the tools and approaches used to understand the WASH system in SusWASH focus countries and our framework for measuring change.
- **Section 3** presents our experiences of strengthening WASH systems in SusWASH focus countries, drawing out evidence of change and lessons learned.
- **Section 4** consolidates our lessons learned, highlighting leverage points and interlinkages between different parts of the WASH system that affect achievement of inclusive and sustainable WASH. It makes recommendations for WASH practitioners and donors implementing system strengthening programmes and sets out next steps.



WaterAid/Behailu Shiferaw

Four interlinked challenges currently stifle progress:

- Poor WASH sustainability
- Social exclusion and weak accountability
- Poor WASH scalability
- Insufficient prioritisation and resourcing of learning and adaptation

These issues are symptomatic of weaknesses in WASH systems and are exacerbated by poor environmental sustainability, growing demand for water, weak governance, structural inequalities and climate change – highlighting the imperative for implementers to use systems thinking to tackle them. The COVID-19 pandemic has further exposed weaknesses in WASH systems; not just in low and middle-income countries but high income countries too.^{2,3}

Systems thinking is relatively new to the WASH sector, but the health sector has been applying it for some time as a means of ensuring health gains are effective and sustained.

We understand the WASH system to be all of the people, behaviours, policies, processes, resources, interactions and institutions necessary for delivery of inclusive, lasting, universal access to WASH. Much like an ecosystem consists of a biological community of interacting organisms and their physical environment, relevant literature sums up the WASH system as actors, factors and the interlinkages between them.^{4,5,6} We have used a variety of different tools to understand the WASH system in each focus country and designed programmes that tackle systemic barriers to sustainability and inclusion, as well as capitalise on leverage points that bring about change in the system.

We have developed a theory of change based on five broad outcome areas which represent groupings of different WASH system components. The SusWASH programme is underpinned by continuous analysis, learning and adaptation, facilitated by a global learning function. We have also developed an evolving measurement framework to capture changes in the WASH system and understand the effectiveness of our approach.

System strengthening means understanding that WASH exists in complex systems with many component parts and within different social, economic, political and environmental contexts.

It involves identifying and working to address the barriers in behaviours, policies, processes, resources, interactions and institutions that block achievement of inclusive, lasting, universal access to WASH.

Common barriers, linkages, dependencies and interactions between different actors and factors were observed in the WASH system in all four focus countries. Several approaches were used to strengthen the WASH system.

These included:

- Convening actors and facilitating dialogue.
- Providing technical assistance and building capacity.
- Strengthening WASH delivery and behaviour change models.
- Empowering people to demand their rights and fulfil their responsibilities.
- Generating evidence, documentation and sharing lessons learned.
- Influencing and advocating for greater sustainability and inclusion.
- Continuously analysing, learning and adapting ways of working.

We have learned a number of lessons about system strengthening as a result of implementing SusWASH so far:

- System strengthening takes time, involves heavy interaction with government and is most effective when aligned with government timelines.
- Flexibility to change approaches that are not working or no longer relevant is essential. Organisational management processes and donor reporting requirements have to enable adaptive management of programmes.

- Adaptive management requires a culture of regular learning, reflection and course correction to be embodied within organisational processes. Whole teams need to be built and sufficiently resourced around learning. Learning is most impactful when teams have an existing culture of regular review, reflection and adaptation built into management procedures, as well as an environment in which it is ok to fail and learn.
- A global learning function that facilitates reflection and cross-country learning is essential for strengthening organisational understanding about how system change happens. The same function, with sufficient budget, can consolidate lessons learned and mobilise technical expertise from inside and outside the organisation to enhance programme effectiveness.
- It is necessary to allocate sufficient resources and time to understand problems, power relationships, causal factors and leverage points that might drive change in the WASH system in a given context. At the same time, it is important not to get bogged down in over-analysing the system. Analysis should aim to build a common understanding of barriers to sustainability and inclusion, leverage points and consensus on which aspects to prioritise.
- Close collaboration between practice and policy staff is essential. When practice and policy teams do not work towards the same outcomes, relevance of work is low and progress is slow. Performance tends to be highest when practice and policy teams work well together and when staff have the latitude to engage in both practice and policy arenas. This encourages use of evidence from practice to influence policy decisions and align practice priorities with emerging policy topics.
- Gender equality and social inclusion must be continuously mainstreamed through all system strengthening activities. In order to change systems, we need to be persistent in bringing in the principles and standards of the human rights to water and sanitation. This can be challenging as these concepts may be controversial or culturally sensitive in some contexts.
- System strengthening necessitates a long-term commitment to working with a district until the WASH system is 'good enough' to ensure that inclusive, lasting WASH will reach everyone. Moving around between multiple districts and leaving districts when the WASH system is still weak will not result in lasting outcomes. System strengthening programmes therefore necessitate a strong funding pipeline behind them of 10 years plus.

Skills, experiences and perspectives required by teams and partners working on system strengthening interventions

- Facilitation and collaboration
- Critical thinking and analysis
- Advocacy and influencing
- Interpersonal and communication
- Understanding of government processes and ways of working
- Traditional WASH skills, for example: water and sanitation engineering, hydrogeology, sanitation and hygiene behaviour change
- Understanding of gender and social inclusion issues and principles of the human rights to water and sanitation
- Understanding of public finance
- Data analysis
- Strong programme and adaptive management to enable learning and course correction

Achievements of the SusWASH programme so far

Cambodia

- 44,532 people reached with improved sanitation in communities and 8,514 people benefiting from improved WASH in healthcare facilities.
- National WASH management information system (MIS) strengthened.
- National and Provincial Action Plans (PAPs) reviewed and updated based on up-to-date data.
- Civic Champions Leadership Programme institutionalised within government decentralisation programmes to ensure ongoing sanitation service and hygiene behaviour change delivery at local levels.
- WASH decision makers in sub-national government institutions demonstrate greater understanding of challenges faced by marginalised people.

Ethiopia

- 12,230 people reached with improved water supply and 5,096 children benefiting from improved water supply in schools.
- Costed district WASH plan developed attracts non-governmental organisation (NGO) investment in WASH.
- Woredaⁱ WASH Team (WWT) established with clear roles and responsibilities. WWT plays leadership role in coordination and planning of WASH delivery.

Pakistan

- 59,398 people reached with improved sanitation in communities and 18,095 children benefiting from improved sanitation in schools.
- WASH messages integrated into national school curriculum and MHM teacher training manuals endorsed by Sindh Government.
- Sindh Education Management Information System (SEMIS) includes indicators to track school WASH.

Uganda

- 40,140 people reached with improved sanitation services in healthcare facilities and 4,635 children reached with improved sanitation in schools.
- Mayors' Forum strengthens government leadership and improves coordination between the Kampala Capital City Authority's (KCCA) political and technical wings, leading to approval of sanitation ordinance regulating sanitation in the city.
- Empowered citizens are monitoring WASH budget expenditure in public institutions and holding their leaders to account.
- Evidence used to inform WASH in healthcare facilities (HCFs) guidelines and national policy discourse on cross-sector WASH integration.

We have not undertaken a cost-benefit analysis to compare the merits of system strengthening with more conventional approaches to WASH implementation. This would require an in-depth evaluation. However, it is well known that more conventional approaches, implemented without broader efforts to strengthen the wider environment into which WASH is introduced, fall short when it comes to ensuring WASH is sustained and inclusive. Consequently, we believe that funding system strengthening is a cost-effective investment because of the increased likelihood that WASH gains will be sustained and reach those left behind.

i. Woreda is the Amharic term for district. Woredas are sub-divided into kebeles (wards).

Section 1.0: Introduction – WASH system strengthening and the SusWASH programme

SusWASH is a five-year system strengthening initiative (2017–2022) which aims to improve living conditions and advance the fulfilment of the SDGs by ensuring sustainable and inclusive access to WASH. The programme is implemented in four countries (Cambodia, Ethiopia, Pakistan and Uganda) with an overarching global component to facilitate cross-country learning and technical support. The total budget is 79,000,000 SEK (~£6,750,000). SusWASH has provided us with an opportunity to apply system strengthening and learn about what drives and hinders system change. This report captures learning related to our practical implementation of system strengthening, providing insights on the utility of system strengthening as a way of working and on the human resources, skills, internal processes, learning cultures and adaptive management required to bring about positive change.

1.1 The problem

SDG 6 (clean water and sanitation) is seriously off track. Billions of people still lack access to safe WASH.¹ Lack of progress on SDG 6 is undermining global health, education, prosperity, women's empowerment and gender equality.⁷ Many countries will not achieve universal access to even basic levels of service by 2030 unless governments and donors assign greater importance to delivering and sustaining WASH, with emphasis placed on reaching marginalised people and ensuring WASH gains and service levels are maintained by in-country institutions on an ongoing basis.

In the countries where WaterAid works, the permanent institutions required to deliver, scale and sustain inclusive WASH are generally underfunded, under capacitated and lack accountability to all segments of the population. Government-led planning, monitoring and budgeting processes can be weak, with insufficient finance allocated to reach the most marginalised, service continuity, ongoing behaviour change and completion of the sanitation chain. Barriers to private sector involvement exist, particularly in rural areas. Public demand for improved WASH and adoption of good WASH behaviours remain inconsistent.

The rural water supply sector has evolved over the last 40 years to include sanitation and then hygiene as core components. It has also moved from the centralised hardware-based supply model of the 1980s to demand-driven community management in the 1990s.⁸ Serious sustainability concerns associated with both delivery models prompted a stronger appreciation of the need for improved external support from government and service providers. At the same time some NGOs shifted from a needs-based approach to a rights-based approach, placing greater emphasis on the obligations of the state to ensure WASH access for all. Greater decentralisation of WASH responsibilities to local government has not always come with the financial and human resource capital needed to enact these responsibilities.

Four interlinked challenges continue to stifle progress despite changing approaches to WASH delivery and management. These are:

- 1. Poor WASH sustainability:** Positive gains in WASH coverage are reversed as services fall into disrepair, service levels decline and improved behaviours lapse.⁹
- 2. Social exclusion and weak accountability:** Service providers and regulators do not consistently prioritise poor and marginalised

people for provision of improved WASH and the needs of poor and marginalised people may not be considered in the provision of WASH. Marginalisation can occur as a result of a combination of factors including a person's income, age, gender, ethnicity, class, caste, sexuality, disability or health status and can inhibit WASH access. Mechanisms for holding service providers and regulatory authorities to account are typically weak.

- 3. Poor WASH scalability:** Despite the existence of widely-used delivery approaches, low financial and institutional capacity mean that service provision and behaviour change strategies cannot meet current demand, let alone keep pace with growing demand.
- 4. Insufficient prioritisation and resourcing of learning and adaptation:** Limited space for reflection on what works and what does not, coupled with a fear of admitting to and learning from failure, leads to the same mistakes being made and continuous application of ineffective implementation approaches.⁵

These four interlinked challenges are symptomatic of weaknesses in the 'system' and highlight the need to use 'systems thinking' as a means of addressing them. If efforts are not made to tackle the systemic causes of these challenges, WASH implementers run the risk of applying outdated, ineffective delivery approaches that only bring about localised, short-lived results and reinforce dependency on external agencies.

Unless barriers in the system are addressed by all actors through collective action, progress towards achievement of SDG 6 will remain seriously off track and the human rights to water and sanitation will not be realised.

1.2 Systems thinking and WASH

WASH programmes are not isolated entities where there is a straightforward 'best practice' model that can be applied consistently to gain consistent results.⁶ Each programme exists in a wider system of complex social, political, environmental, institutional and technical factors. The interplay between these different factors and the interactions between different actors dictates what barriers stand in the way of WASH sustainability, scalability and inclusion as well as what drivers and leverage points can be used to bring about change.^{4,10} Systems thinking is increasingly being adopted by WASH practitioners as a means of understanding and dealing with this complexity.⁶

Systems thinking has its origins in Complex Adaptive Systems Theory, which enables a more networked understanding of the environment in which actions are taken. The health sector has been applying systems thinking for some time and defines the health system as 'all the organisations, institutions, resources and people whose primary purpose is to improve health'.¹¹ This approach then breaks the system down into more manageable component parts or 'building blocks' that include: service delivery; health workforce; health information systems; access to essential medicines; financing; and leadership and governance.

Over the last 16 years, WASH practitioners have also sought to break the WASH system down into more manageable sub-components. For example, Harvey and Reed (2004) define several building blocks for hand pump sustainability.¹² In 2009, WaterAid set out five building blocks for a functional WASH sector, which included: policy/strategy; coordination; institutional arrangements; finance; and performance monitoring.¹³ These building blocks are linked to political and economic development which drive change in the system as a whole. WaterAid's

Sustainability framework considers different elements required for WASH sustainability.⁹ The World Bank's Country Status Overview (CSO) series; the UN-Water Global Analysis and Assessment of Sanitation and Drinking-water (GLAAS),¹⁴ the Sanitation and Water For All partnership (SWA)¹⁵ and UNICEF's WASH Bottleneck Analysis Tool (WASH BAT)¹⁶ all use building blocks as a means of breaking down the WASH system into easier to manage component parts. A number of WASH actors have developed WASH system building block frameworks and tools including WaterAid,^{17,18} IRC-WASH,¹⁹ Water For People,²⁰ WSUP²¹ and Agenda for Change.²² Although there are many frameworks for analysing the system and, to a lesser extent, monitoring change within it, there is a surprising level of commonality between all building block-based frameworks and tools.²³

It is clearly necessary to look beyond building blocks and consider the interactions and causal relationships that exist between components of the WASH system to really understand how change happens. The collective effect of how different components of the WASH system work together varies in different contexts. Building blocks are a useful way to break the system down into more manageable units for the purposes of participatory barrier analysis or identification of priority actions for programme design, but it is also necessary to understand social, political and environmental factors as well as power relationships that exist between individuals and their motivations and incentives to discern how the system functions. In other words, it is important to be mindful of the wider political economy which influences how the system behaves. When it comes to measuring change in the system, building block-based analysis can be useful. However, it is important to complement such analysis with assessments of inequalities, power relationships, institutional performance, service levels and the outcomes of JSR processes so as not to overlook important drivers necessary for progress.

There is always a trade-off in WASH programmes between the time and resources that can feasibly be spent understanding the WASH

system and resourcing efforts to strengthen it. It is often not possible, desirable or useful to exhaustively map every component of the system. Rather, system mapping is meant to explore and build consensus about what is important to consider.²⁴ Likewise, it is not necessary to work somewhere until the WASH system is perfect. The aim, for international NGOs (INGOs) like WaterAid, is to catalyse an improvement in the system so that it becomes 'good enough' to ensure sustainable and inclusive WASH. Application of adaptive management during programme implementation means it is possible to adjust work plans as understanding of the system deepens. As system change takes time, a long-term commitment to working in a district is required. Moving around between districts and closing out of districts after a short period of time may not result in lasting change.

The term 'system' sometimes invokes connotations of 'the establishment' or 'the deep state', but systems thinking does not simply encompass the supply side administrative functions of government or the workings of the state. Much like an ecosystem consists of a biological community of interacting organisms and their physical environment, relevant literature sums up the WASH system as actors, factors and the interlinkages between them.^{4,5,6} We understand the WASH system to be all of the people, behaviours, policies, processes, resources, interactions and institutions necessary for delivery of inclusive, lasting, universal access to WASH.²⁵

WaterAid is moving away from using the term 'sector strengthening' as it implies a supply side only effort. The benefit of using a systems framing is that it enables a more comprehensive, joined up way of working that encompasses empowerment, behaviour change and demand creation. Sustainability, gender equality, social inclusion, cross sector integration and scaling WASH provision are all intrinsically linked. Systems thinking provides a means of understanding barriers to achieve these WASH objectives and a roadmap for addressing them through system strengthening.

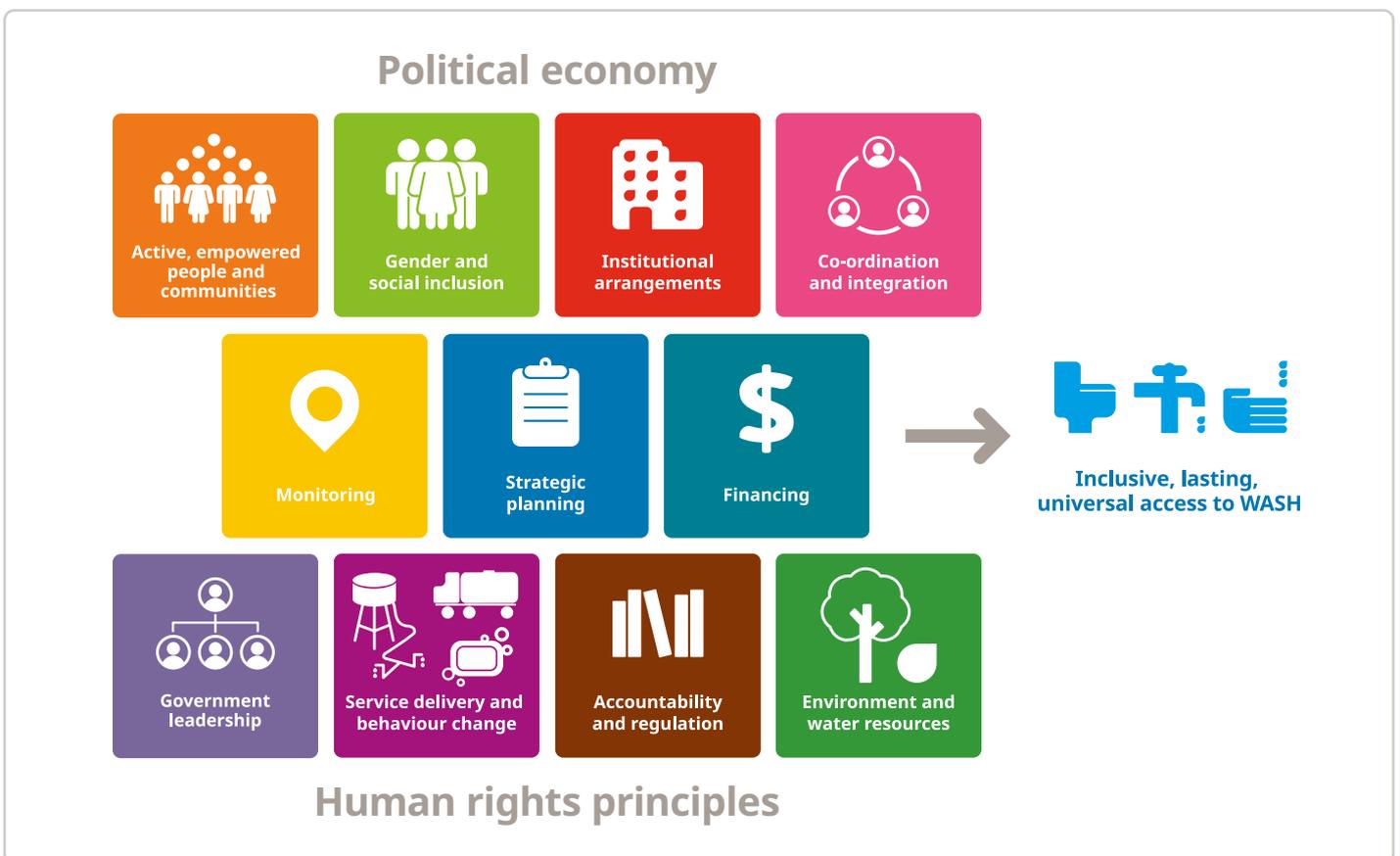
1.3 System strengthening and human rights

In 2010, the UN General Assembly recognised the human rights to water and sanitation through resolution 64/292 which calls upon states and international organisations to enable the provision of clean water and sanitation for all.²⁶ This obligation is consistent with efforts to strengthen WASH systems to ensure these human rights are realised. Systems thinking encourages a focus on stakeholder participation and the underlying societal barriers that prevent people from accessing WASH. Practitioners could do more to integrate the use of the human rights principles, standards and the obligations of governments,²⁷ service providers and people as drivers of system change. Similarly, the role of public pressure in driving system change could feature more strongly in some of the building block frameworks used to understand the dimensions of the WASH system. Unless efforts to improve the efficient functioning of institutions are people-centred and rights-based, it is likely

that inequalities in access will continue to prevail. Strong public voice is a key bottom-up driver of system change. Consequently, WaterAid blends systems thinking with the underlying principles associated with the human rights to water and sanitation as well as efforts to build solidarity and empower all people to collectively claim their rights while fulfilling their own obligations.

1.4 Components of a WASH system

The strength of the WASH system is not simply a sum of its component parts. The collective effect of how component parts interact and work together is also important.⁴ All components are interlinked and interdependent; to strengthen one component will likely require complementary, collaborative and cross-sectoral efforts in a number of components. Emphasis is placed on government leadership and active, empowered people who collectively express their demand for WASH, play their role in



● Figure 1: Interacting components of a WASH system.

undertaking improved WASH behaviours and push for improvements to service levels. The human rights principles of non-discrimination and equality, access to information and transparency, participation, accountability and sustainability underpin our way of working. Figure 1 sets out the components of the WASH system. These components interact in different ways in different contexts.

Active, empowered people and communities are needed to monitor and ensure the continuation of responsive and accountable service provision and therefore the enjoyment of the human rights to water and sanitation. The realisation of the human rights to water and sanitation, in practice, requires a demand for improved services as well as a commitment to undertake improved WASH behaviours. It requires interaction between WASH users and service providers/regulators underpinned by an awareness of rights.

Strong government leadership is needed to ensure sustainable WASH is prioritised for investment and WASH interventions are coordinated to reach the most marginalised. Without government leadership, WASH interventions will be fragmented, unaligned to government policy and may not reach a larger scale.

Gender and social inclusion. In all countries there are population groups and people who are excluded from services because of where they live, the group they belong to or their individual identity. Ingrained power imbalances, cultural barriers and marginalisation must be tackled to ensure everyone's WASH needs are met.

Institutional arrangements typically refer to institutions at all levels having clear roles and responsibilities, set out in government policy, with adequate human and financial resources available to fulfil these roles and responsibilities. This includes capacity in terms of available skills and staff to fill roles.

Coordination and integration. Government-led coordination of WASH actors around one plan is necessary to avoid duplication of effort and fragmented interventions that do not adhere to national standards. Integration of WASH across health, education and other sectors is necessary to achieve scale, sustainability and gender-inclusive outcomes.

Monitoring of sector performance enables progress to be tracked against sector targets and helps to inform where course correction is necessary. Ongoing service level monitoring, using harmonised indicators, helps government to develop strategic plans identifying where they and others should invest in WASH and target support to sustain WASH gains.

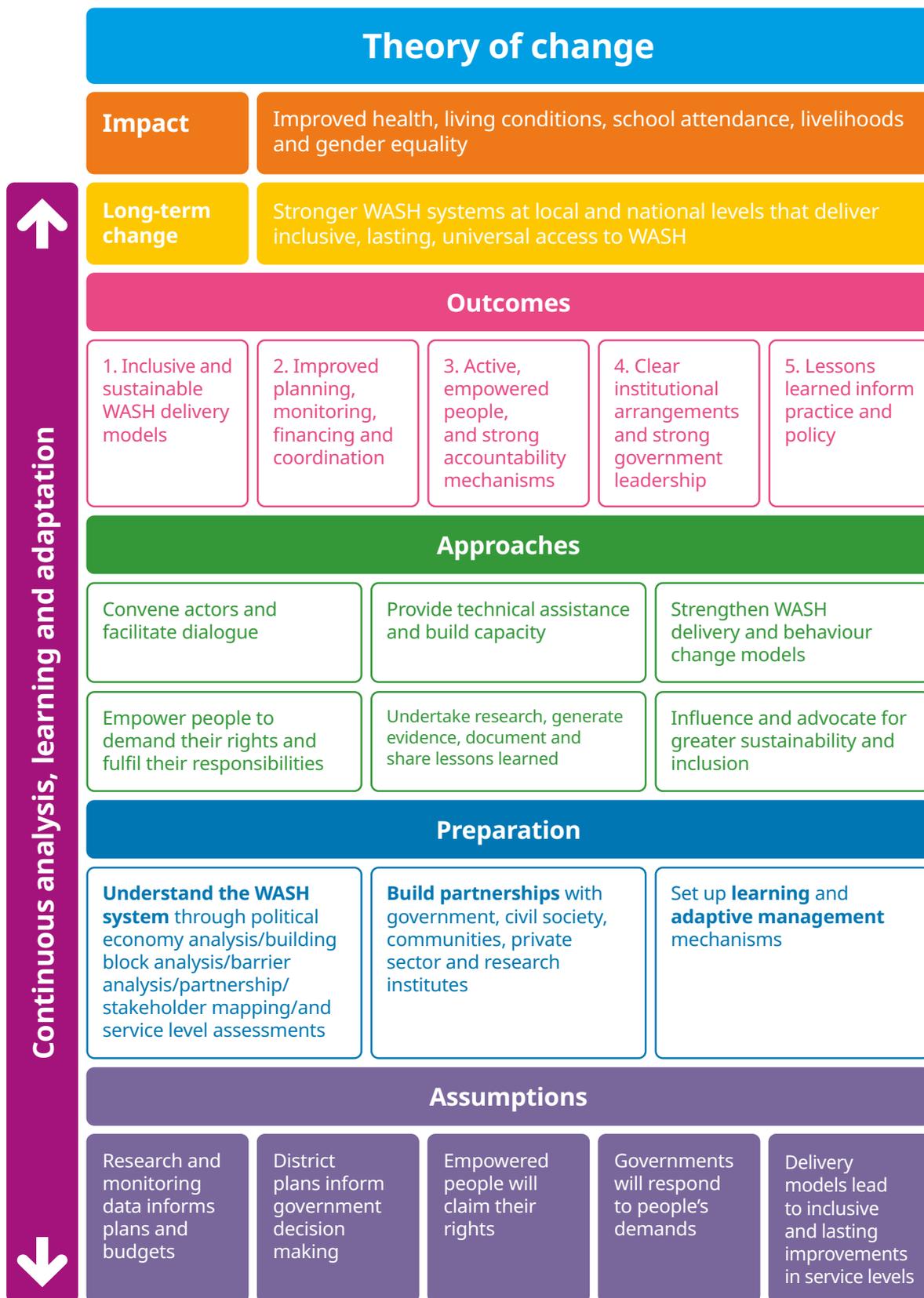
Strategic planning. Policies, strategies and plans at the national and local government level need to set out clear targets, standards and pathways for achieving and sustaining WASH delivery, align stakeholders behind a common vision, define clear roles and enable mobilisation of resources.

Financing. Sector financing strategies that cover all WASH life-cycle costs and consider economic inequalities, are critical for realisation of inclusive, lasting, universal access. Low public and private sector investment, inadequate fiscal decentralisation, ineffective processes for timely release of funds and low prioritisation of revenue allocation for capital maintenance, ongoing support and behaviour change mean WASH targets are not met or sustained.

Service and behaviour change delivery. WASH should be available to all on an ongoing basis. Service options, management arrangements, technologies, procurement processes, quality control processes and behaviour change strategies are necessary to deliver inclusive WASH and to sustain it. Service options have to be appropriate to the context in which they are implemented and resilient to various threats, including climate change.

Accountability and regulation. Governments are responsible for developing policies, laws and regulations and making decisions that affect people in society. Whilst WASH commitments may exist on paper they may not be implemented unless governments are held to account. Similarly, service providers, WASH users, donors, NGOs and civil society actors have responsibilities that may not be exercised unless they too are held to account.

Environment and water resources. Access to WASH is dependent upon the availability of sufficient quantities of good quality water. This is dependent upon well-managed water resources, healthy ecosystems and well-managed disaster mitigation.



● Figure 2: Theory of change.

1.5 Theory of change

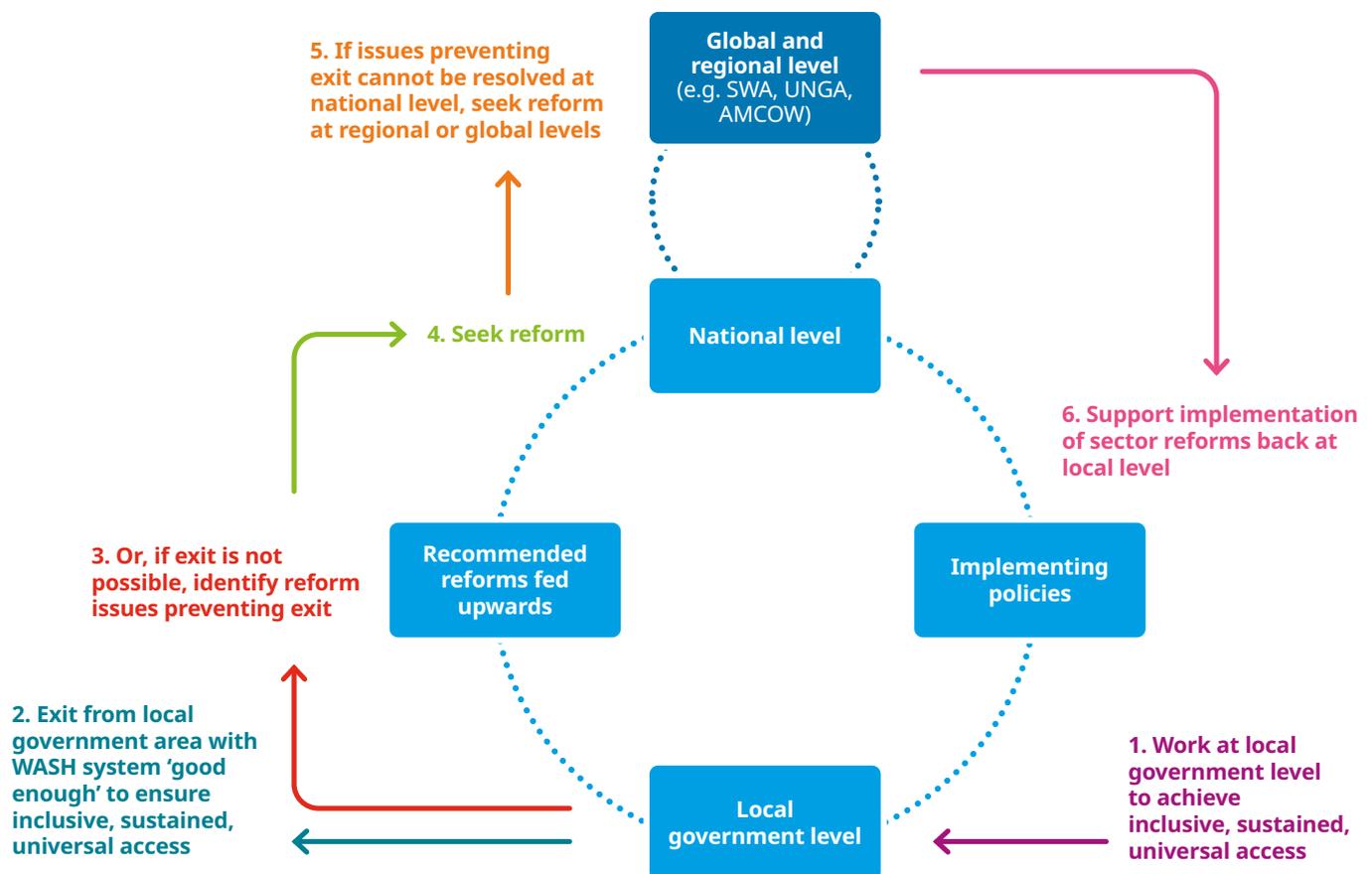
Figure 2 shows the theory of change applied in the SusWASH programme. This has been contextualised in each focus country to respond to national and sub-national barriers and priorities. We seek to bring about system change through partnership, thought leadership, practice advocacy, policy advocacy, campaigning, capacity development, empowerment and convening of sector actors around common goals. These efforts are informed by political economy analysis (PEA), our service delivery work, research, budget tracking and a continuous process of analysis, learning and adaptation.

The SusWASH programme is structured under five outcome areas (see Figure 2), each bringing together several components of the WASH system. All five outcomes are closely interlinked and interdependent. We believe that these

outcomes, alongside an understanding of power dynamics and leverage points, are needed for a strong WASH system that delivers inclusive, lasting, universal access to WASH.

Our way of working requires complementary and reinforcing efforts at community, district, national and global levels to identify and tackle all barriers to WASH sustainability, scale and inclusion (see Figure 3). The district is the geographical entry point for WaterAid support.²⁸ When barriers are identified at the district or city-level, efforts are targeted at higher levels (e.g. provincial or national levels) to seek sectoral reform. Global or regional level efforts (e.g. through SWA) are designed to complement national level reform processes. Once national level reform has been realised, we support its application and enforcement (e.g. through capacity development and mobilising civil society voices for policies to be implemented) back at the district level.

● **Figure 3: WaterAid works at multiple levels to unblock the systemic barriers to WASH inclusion, sustainability and scale.**





Section 2.0: Designing a system strengthening programme and measuring change

This section describes how focus districts were selected. It sets out the different tools and approaches that were used to understand the system and identify barriers to sustainability, inclusion and scale. It also details how change is being measured during programme implementation. A process of adaptive management has been used throughout the programme to refine approaches in response to contextual changes and challenges arising along the way. Lessons have been documented and shared.

2.1 Selecting focus districts

Target rural districts and urban centres were agreed with national and provincial government at the outset of the programme. The primary criteria for area selection was based on the number of poor and marginalised people lacking access to basic water supply, sanitation and hygiene, coupled with national or provincial government preferences dictating where the programme should focus.

The SusWASH programme is focused on the following rural districts and urban centres:

Country	Town, district, region and province	Context	Estimated population
Cambodia	Rolea Bier, Samakki Meanchey Districts and Kampong Chhnang Province	Rural, slightly remote, stable (no recent social unrest)	108,193 (Rolea Bier District) 78,203 (Samakki Meanchey District) 530,000 (Kampong Chhnang Province)
Ethiopia	Gololcha Woreda (District), East Bale Zone, Oromia Region	Remote rural and small town (some political tension impacting on movement)	127,183 (Gololcha Woreda) 37.3 million (Oromia Region)
Pakistan	Thatta District, Sindh Province	Rural	979,817 (Thatta District) 47.89 million (Sindh Province)
Uganda	Greater Kampala Metropolitan Area (GKMA)	Urban, stable (no recent social unrest)	4,000,000

Details about the characteristics of these districts appear in the specific country sections.

2.2 Understanding the WASH system

The first year of the SusWASH programme was dedicated to analysing the strengths and weaknesses of the WASH system, identifying leverage points, building new partnerships, and setting up processes for learning and adaptation. Efforts were guided by WaterAid country programme (CP) strategies and significant stakeholder engagement through participatory workshops at district and provincial levels, focus group discussions and key informant interviews. WaterAid staff co-designedⁱⁱ the programme with government, civil society and private sector stakeholders, agreeing a common vision and work plan, building local ownership for realisation of programme outcomes.ⁱⁱⁱ This concerted time and effort to establish new local partnerships, build trust, understand the context and co-design interventions was a critical precursor for sustainability, forming a solid foundation for implementation in subsequent years.

The participatory tools and approaches used to analyse the strength of the WASH system and inform the design of the SusWASH programme^{iv} varied in each country. Some of the tools included:

- **Political economy analysis^v** to understand how a country's history, politics, interests and power relationships drive decision making. Actors, factors, leverage points and actions that could accelerate progress at national and sub-national levels are mapped out. WaterAid CP strategies feature this kind of analysis^{vi} and a dedicated study was done in Cambodia.
- **Willing and able assessments.** This tool helps to assess the willingness and ability of different actors to ensure WASH is delivered and sustained to all people. In workshops,

a grid comprising four quadrants is placed on the floor. The four quadrants are marked with 'willing and able', 'willing but unable', 'unwilling but able' and 'unwilling and unable'. Participants position themselves in the quadrant that they feel is most relevant to the context they are working in, thereby building consensus and informing the balance between efforts that seek to build institutional capacity and those that seek to strengthen accountability and empower people to demand better services. This exercise was undertaken in all countries and generated rich qualitative information about the barriers different stakeholders face in fulfilling their WASH-related roles and responsibilities.

- **Barrier analysis** to understand the social, financial, environmental, institutional, legal, capacity and technical barriers driving poor WASH sustainability and marginalisation. This was undertaken during the SusWASH inception phase with all countries as a means of facilitating deeper discussion beyond superficial symptoms of poor sustainability and marginalisation. There is often no single root cause or barrier identified when this analysis is done.
- **Building block assessments** were undertaken in all countries to assess the strength of different components of the WASH system. In some instances, this assessment was conducted separately for water and sanitation sub-sectors. A variation of the tool applies a gender lens to all building blocks to understand the extent to which gender equality is considered and addressed in the system.^{vii} Since the start of the SusWASH programme in 2017, 'strong government leadership', 'active and empowered people and communities',

ii. For more details about the process of designing the SusWASH programme, read this blog. Available at: washmatters.wateraid.org/blog/taps-and-toilets-arent-enough-designing-wash-programmes-that-strengthen-the-system (accessed 29 Jul 2020).

iii. In some instances, WaterAid was the only NGO/civil society actor working in the district (e.g. in Gololcha woreda, Ethiopia). In this case, primary partners/collaborators were district administration and relevant district offices.

iv. See WaterAid's *Sector Strengthening Programme Design Toolkit* for full details of tools used. Available at: washmatters.wateraid.org/publications/sector-strengthening-programme-design-toolkit (accessed 16 Sep 2020). This toolkit is under review and an updated version will be available online soon.

v. WaterAid's Political Economy Analysis Toolkit is available to download (see Sector Strategy Tool for details): Available at: washmatters.wateraid.org/sites/g/files/jkxooof256/files/PEA%20complete%20toolkit.pdf (accessed 29 Jul 2020).

vi. In some instances country teams had already undertaken a PEA as part of their CP strategy development. In these cases, country teams used their existing PEA to inform their project design.

vii. WaterAid's *Practical guidance to address gender equality while strengthening water, sanitation and hygiene systems* is available to download at: washmatters.wateraid.org/publications/practical-guidance-gender-equality-strengthening-water-sanitation-hygiene-systems (accessed 22 Sep 2020).

'accountability and regulation', 'environment and water resources' and 'gender and social inclusion' have all been added. As the tool has evolved, it has been used to guide discussions about system change throughout the programme.

- **Marginalisation and power analysis** to identify the people within a community who face barriers accessing WASH was carried out in Cambodia. This analysis is most effectively done in collaboration with civil society organisations (CSOs) that represent marginalised people, e.g. disabled people's organisations (DPO) or women's groups.
- **Stakeholder/partnership mapping**^{viii} to identify suitable partners and establish which dimensions of the WASH system are already being tackled by others to avoid duplication, strengthen collaborative efforts and clarify the added value of the programme.
- **Hygiene formative research** to understand drivers and motivations of people's behaviours based on cultural norms, interests and aspirations.

- **'WhoDoesWATER' game** to assess the roles and responsibilities of those involved in the operation, maintenance and management of water services and identify gaps in delivery models. The tool was also adapted to cover sanitation services.
- **Service level assessments**, either using secondary source data, primary data collection or as part of broader studies, were undertaken in all countries, but not necessarily at the beginning of the programme.

The majority of these tools have been applied in participatory workshops involving both government and non-government actors. With strong facilitation, these highly visual tools create vibrant debate about the strengths and weaknesses of the WASH system and where investment is needed. The interactive nature of these tools encourages people to be up on their feet, discussing in small groups, and presenting viewpoints for further debate. The tools can be used in remote rural areas with limited power supplies. Bringing stakeholders together to discuss these barriers helps to build a common understanding of challenges and how they might be overcome with collective and coordinated efforts.



● Workshop participants assess the strength of the WASH system from a gender perspective in Kampong Chhnang Province, Cambodia.

viii. WaterAid Partnerships in Practice Toolkits are available to download at: washmatters.wateraid.org/publications/partnerships-in-practice-tools (accessed 29 Jul 2020).

2.3 Learning and adaptive management

Learning how change happens is central to system strengthening. A global function responsible for facilitating reflection, learning and adaptation was budgeted for at the beginning of the programme. Several mechanisms were set-up to generate, capture and share learning as well as to facilitate course correction (see Box 1).

The practical application of system strengthening requires openness and an ability to adapt to change along the way. As in any complex system there are always blockages and challenges that cannot be foreseen until programme implementation is underway.

Changes in political leadership, staff changes at national and local government levels, in municipalities, civil society groups, partner organisations and within WaterAid itself mean that new relationships have to be formed on a continuous basis. Political instability, new government regulations, social unrest, disasters and global pandemics lead to significant delays.

Service delivery models, capacity strengthening plans and influencing strategies thought to be relevant at the beginning of a project may not be effective as time progresses, so completely new plans and strategies must be devised to respond to new challenges.

Adaptive management helps to design, implement and monitor programmes that are able to respond to unforeseen events. It involves maintaining a focus on fixed outcomes, but being flexible in relation to the change pathways required to achieve them, as well as activities and outputs. It involves ongoing engagement with the context where implementation takes place and regularly reviewing, reflecting and re-planning to accommodate challenges arising. Adaptive management emphasises learning as a means of better understanding the systems we seek to influence – through trying new approaches, failing and adapting. It requires willingness to adjust programmes in response to new learning.

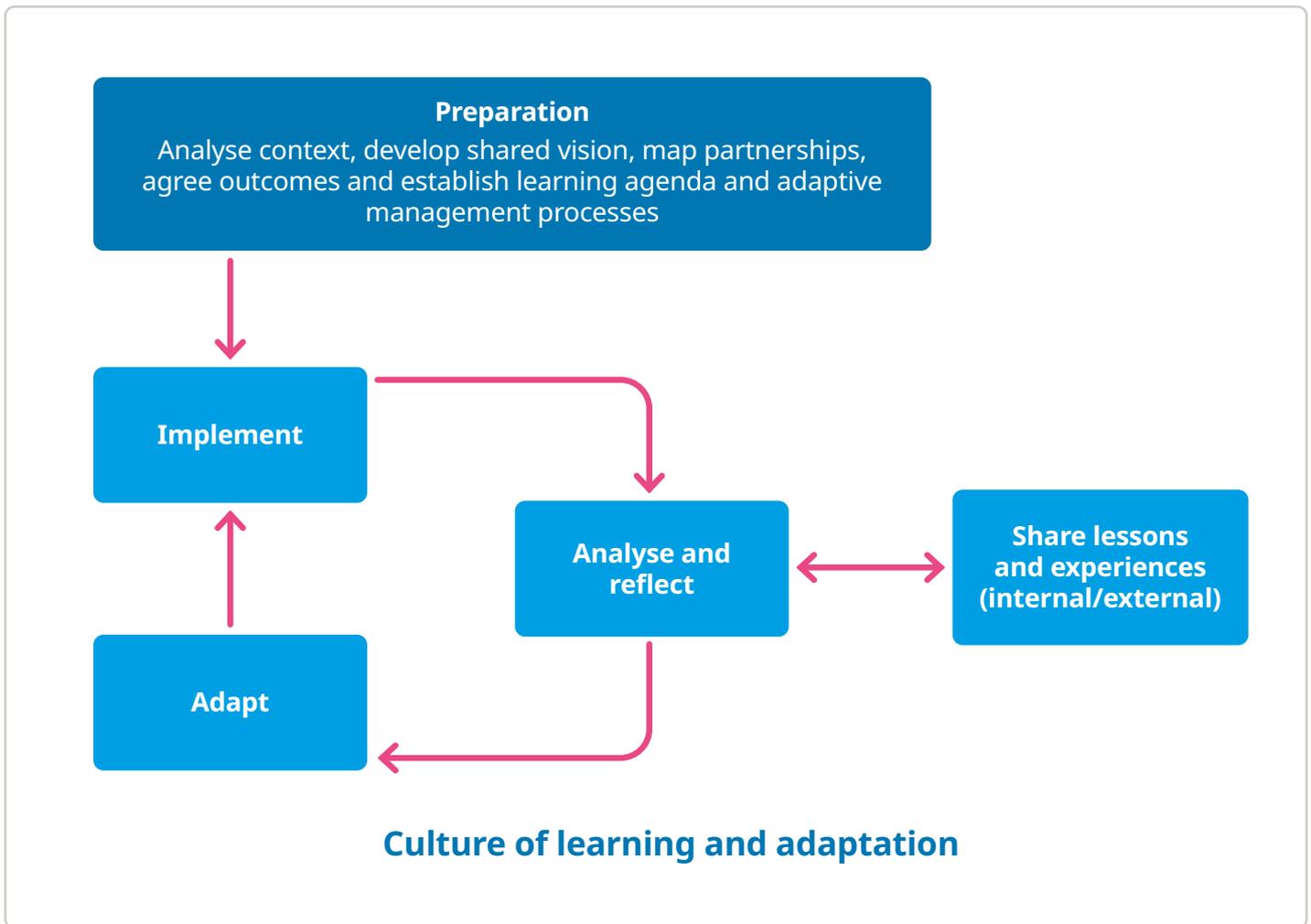
Box 1: Activities facilitated by the global learning function to generate, capture and share learning

Internal:

- Monthly cross-country learning calls
- Monthly global-CP support calls
- Ad hoc global-CP support visits
- Annual global learning workshops
- Online learning and discussion platform
- Online knowledge management and information database
- Internal webinars and cross-departmental meetings
- CP-CP learning exchanges
- Quarterly newsletter

External:

- Sharing with sector platforms and networks
- Sharing at global sector conferences
- Production of short films
- Production of the SusWASH webpage
- Production of the global learning report
- Production of blogs



● **Figure 4: The cycle of adaptive management and learning.**

Adaptive management requires flexibility within donor reporting frameworks and programme budgets. It also requires flexibility in WaterAid's organisational planning, procurement and budgeting processes. More specifically, this way of working requires a structured process for continuous monitoring, reflection, learning and adaptation at both country and global levels. This has been led in SusWASH through a global learning and adaptive management function. This global function has supported country teams to review and adapt programme plans in response to changing contexts. It has also facilitated knowledge sharing and reflection on lessons learned.

Furthermore, it has provided technical support on specific areas of the WASH system, including methods to measure system change. This function is not only required to achieve programme objectives but also to maintain effective and clear communications with the donor about changes and progress to date. Donor flexibility and commitment to financing this function has been a key enabler of the adaptive management approach applied within SusWASH.

Box 2: Example indicators used to measure change

- Government demonstrate greater commitment and leadership for WASH.
- Increased budget for WASH, particularly capital maintenance costs.
- Government and service providers use WASH data to inform their decision making.
- Communities actively engage with user feedback mechanisms (particularly women and marginalised people).
- Concerns raised by communities are addressed by service authorities/providers in a timely manner.
- District plans incorporate full life-cycle cost components.
- MIS uses harmonised indicators aligned to the WHO/UNICEF Joint Monitoring Programme (JMP).

2.4 Measuring change

A shift in focus towards system change requires a change in the way we measure change/success. The SusWASH programme has led WaterAid to develop an organisational system change measurement framework. This is being developed with support from the Osprey Foundation and is being piloted by the SusWASH CPs. It continues to evolve and will be reviewed and adapted with the aim of rolling it out to all WaterAid CPs in 2021.

The framework loosely builds on the building block assessment but enables recording of information that details interactions and leverage points, so we can capture how the system is functioning. Updating the framework involves five steps: steps 1 and 2 record the characteristics of the district or province where work is targeted, including the strength of each system building block. In step 3, priority weaknesses are recorded along with planned approaches and partnerships needed to resolve them. Step 3 also involves definition of context-specific, time-bound short-, medium- and long-term outcomes. Example indicators to measure change are listed in Box 2. Steps 4 and 5 involve recording progress against indicators, setbacks and lessons learned. While the framework focuses largely on progress made at the city/district/provincial level, efforts and progress made at higher levels can also be recorded.

We have found that transitions between one building block state and another take significant time. It is therefore necessary to look for evidence of change as a lead indicator along the way. In SusWASH, we define evidence of change as positive or negative results that are indicative of progress towards outcomes. These are not necessarily transitions from one building block state to another.

- **Zainab, 35, and her husband, Tamachi, sitting with their daughter, Sana, on a pakha they made in the village of Tamachi Mallah, Union Council Doomani, District Thatta, Province Sindh, Pakistan, May 2018.**



WaterAid/Sibtain Haider

Section 3.0: Country case studies





3.1 Cambodia

Background

SusWASH is focused on system strengthening at national, provincial and district levels, specifically in Kampong Chhnang Province where 93% of the population lives in rural areas. Kampong Chhnang is one of Cambodia's 25 provinces located in the central part of the country.

We selected Kampong Chhnang Province (and the target districts) based on a list of criteria – which included the openness and reception of the relevant provincial/district governments. Despite this, we spent significant time building trust with the government, which allowed us to make progress.

WASH system analysis

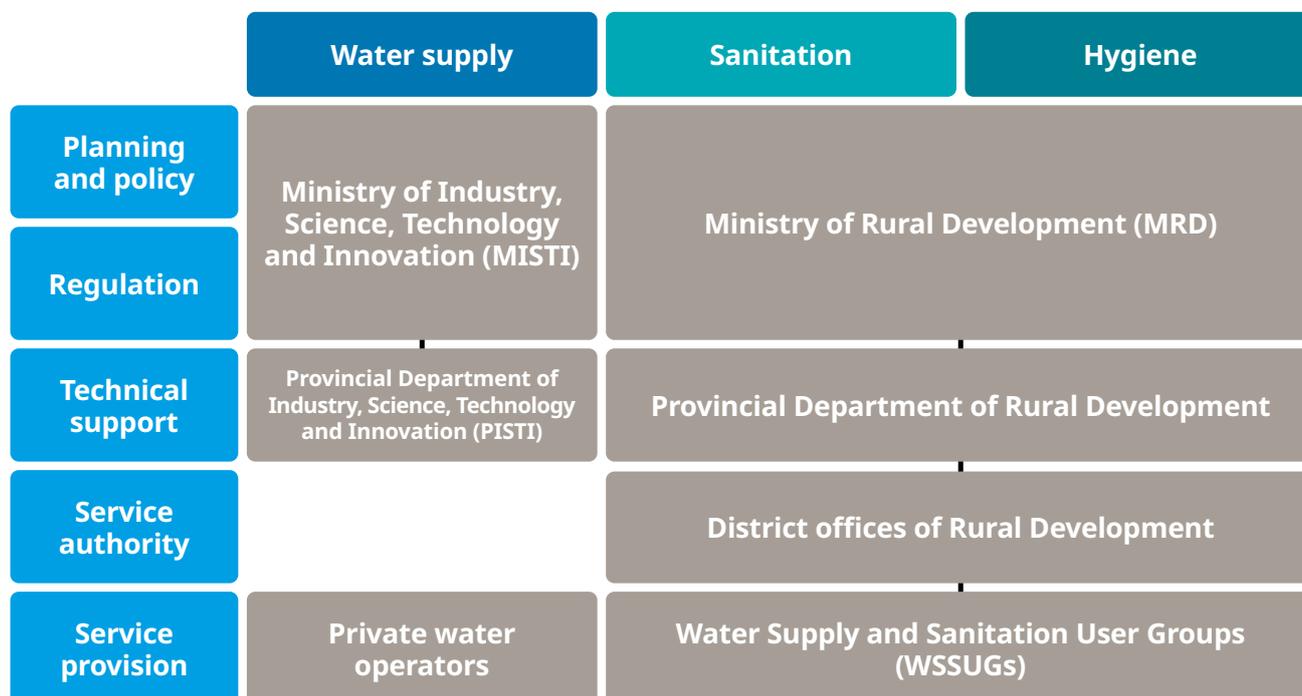
Cambodia has not enshrined the human rights to water and sanitation in its constitution. The National Policy for Water Supply and Sanitation gives direction for providing WASH in urban and rural sub-sectors. Investments in the rural sub-sector are guided by the National Action Plan 2019–2023 (NAP), which articulates the costs of achieving universal access by 2025.

In 2020, the Ministry of Interior announced the official decentralisation of administrative functions from national level to all provinces and districts in Cambodia – with the formal transfer of functions and resources for sanitation and the operation and maintenance (O&M) of rural water supply.



● **Figure 5: Location of districts in Kampong Chhnang where SusWASH is implemented in Cambodia.**

● **Figure 6: Overview of institutional arrangements showing who is responsible for rural WASH in Cambodia.**



Key blockages to inclusive WASH provision and sustainability:

- **Institutional arrangements:** High turnover of government staff, particularly after elections, results in capacity gaps and the need for new relationships to be forged on an ongoing basis. All bilateral or multilateral projects are channelled through Ministry of Rural Development (MRD), which causes top-down implementation in a limited number of geographic areas.
- **Finance:** Inadequate budget allocations for WASH and heavy dependence on external support.
- **Coordination and planning:** Absence of a joint roadmap across MRD and Ministry of Industry, Science, Technology and Innovation (MISTI) for effectively institutionalising and facilitating the engagement of the private sector.
- **Service delivery:** Absence of sustainable post-construction support arrangement in the rural water supply subsector.

- **Monitoring:** The new MIS is operational but only 50% of the indicators are being collected. This still needs to materialise into evidence-based planning and budgeting.
- **Accountability and regulation:** Limited enforcement of regulations by service authorities vis-à-vis service providers for water quality or faecal sludge management.

Topline findings from participatory context analysis in Kampong Chhnang Province:

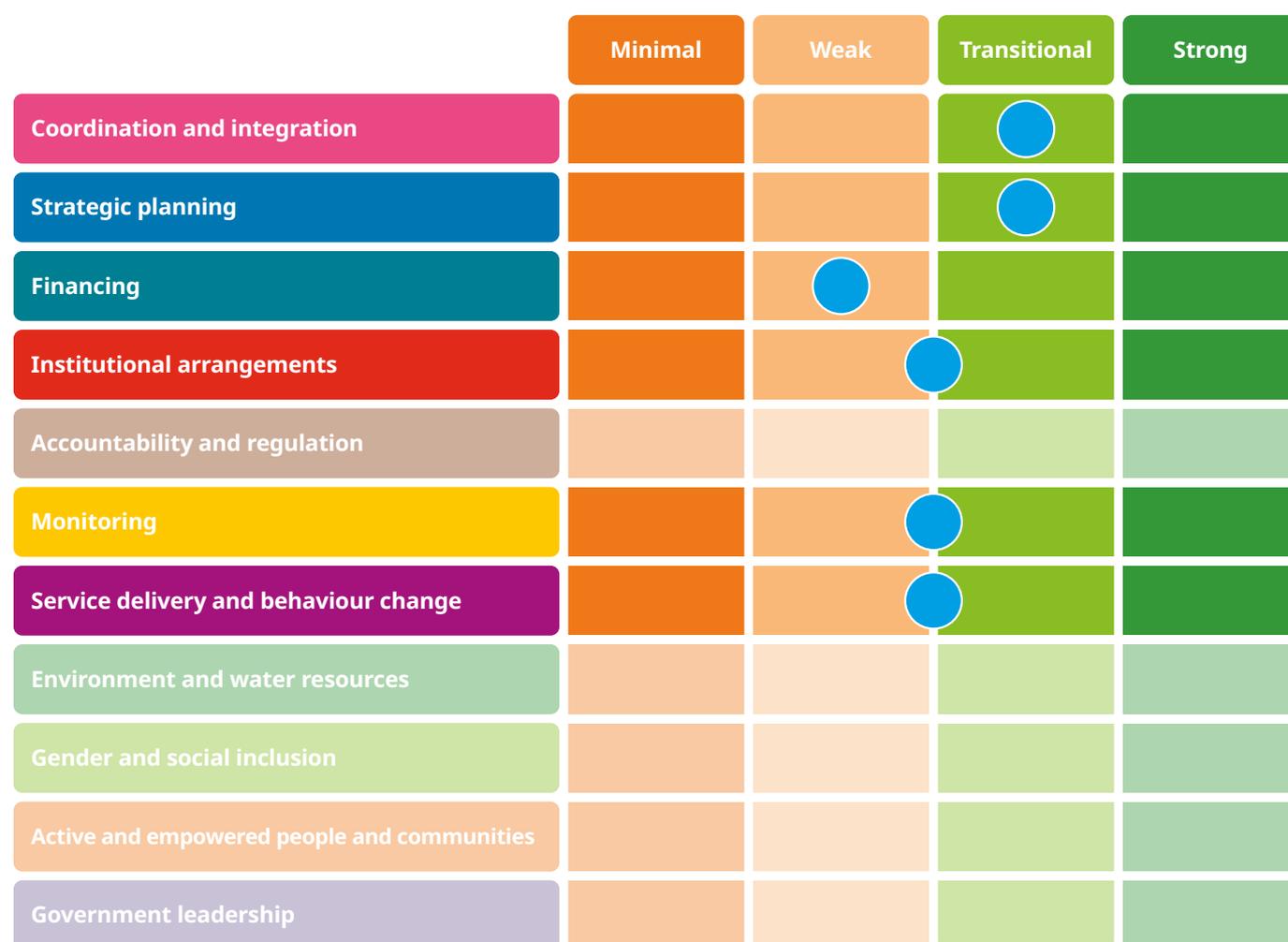
- **Willingness and ability of stakeholders to effect change:** Key barriers raised by those who were willing, but felt unable, included limited finance, human capacity, transportation and technical support. Working to alleviate these barriers was identified as a means of unlocking the energy of local government staff who could act as WASH champions.
- **Motivations of local stakeholders to effect change:** This revealed public recognition, financial incentives and the ability to learn new skills as motivational factors.

- **Marginalisation** was also examined to understand which people are most marginalised and excluded from WASH access – this analysis examined health status, age, gender, disability, disaster exposure, economic status and ethnic group.
- **Building block assessment:**^{ix} The results of which are presented in Figure 7. The building blocks that are faded were added to the building block framework after 2017 when the assessment took place.

WASH service levels within Kampong Chhnang as of 2018 are presented in Figure 8.

To respond to the identified weaknesses in the WASH system, we focused our efforts on strengthening national and sub-national government leadership, planning and monitoring processes; local level institutional arrangements; accountability of private water suppliers towards marginalised people; and the voice of marginalised people to demand their rights to water and sanitation.

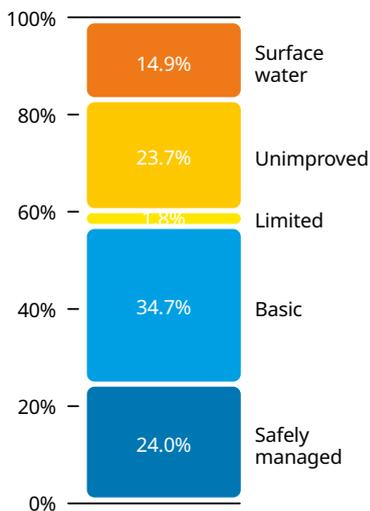
● **Figure 7: Results of participatory building block assessment in Kampong Chhnang Province, Cambodia.**



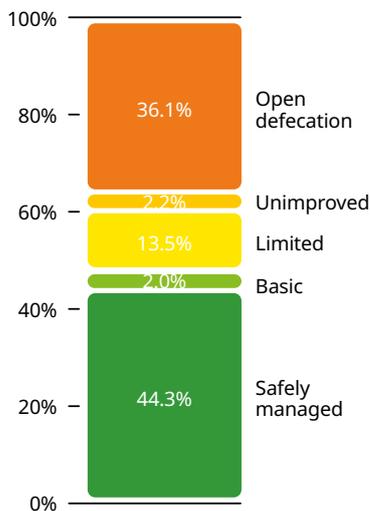
ix. Since this initial assessment, WaterAid Cambodia has since elaborated and contextualised the tool. You can download a summary and detailed version. Available at: washmatters.wateraid.org/publications/sub-national-wash-sector-sustainability-analysis-tool-kampong-chhnang-cambodia (accessed 29 Jul 2020).

● **Figure 8: Overview of WASH service levels in Kampong Chhnang Province.**

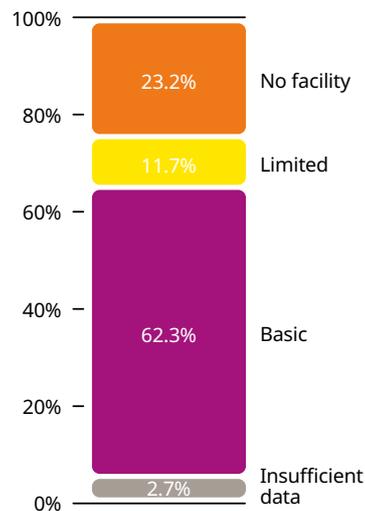
Water service levels



Sanitation service levels



Hygiene service levels



Outcome 1: Inclusive and sustainable WASH delivery models

3.1.1 Towards safely managed water in Kampong Chhnang Province

In support of the national government’s ambitions to achieve SDG 6.1 (safe affordable drinking water for all), we partnered with Sevea Consulting to undertake an assessment of the current and potential water supply service delivery options in every commune of Kampong Chhnang Province. The aim of the assessment was to develop a concrete set of recommendations and tools for improving sustainable access to safely managed water supply services. The study took into account: water resource availability, water demand and availability of water service providers. It sought to map out the feasibility of different service delivery models accordingly (see Figure 9). The recommendations and tools were targeted at government, investors, NGOs and technical suppliers.

● **Kangkep Village, Chranouk Commune, Kampong Leang district, Kampong Chhnang, Cambodia, April 2019.**

The assessment categorised communes into four types (easy, challenging, hybrid and non-viable) based on the viability of delivering commune-wide piped water supplies. 18 communes were categorised as 'easy' (fully coverable by licensed private piped supply) while nine were considered 'non-viable'. 21 and 17 communes were categorised as 'challenging' and 'hybrid' respectively.

Alternative or complementary service options were proposed in areas where piped water was non-viable or in areas where it would be necessary to complement piped water services with other water supply options to reach full coverage (hybrid). Other water supply options included community or privately-run water kiosks dispensing bottled water, rainwater harvesting and water tankers, as well as micro-scale piped systems (for less than 450 households) and franchised or decentralised piped models, not currently implemented in Cambodia.

Evidence of change

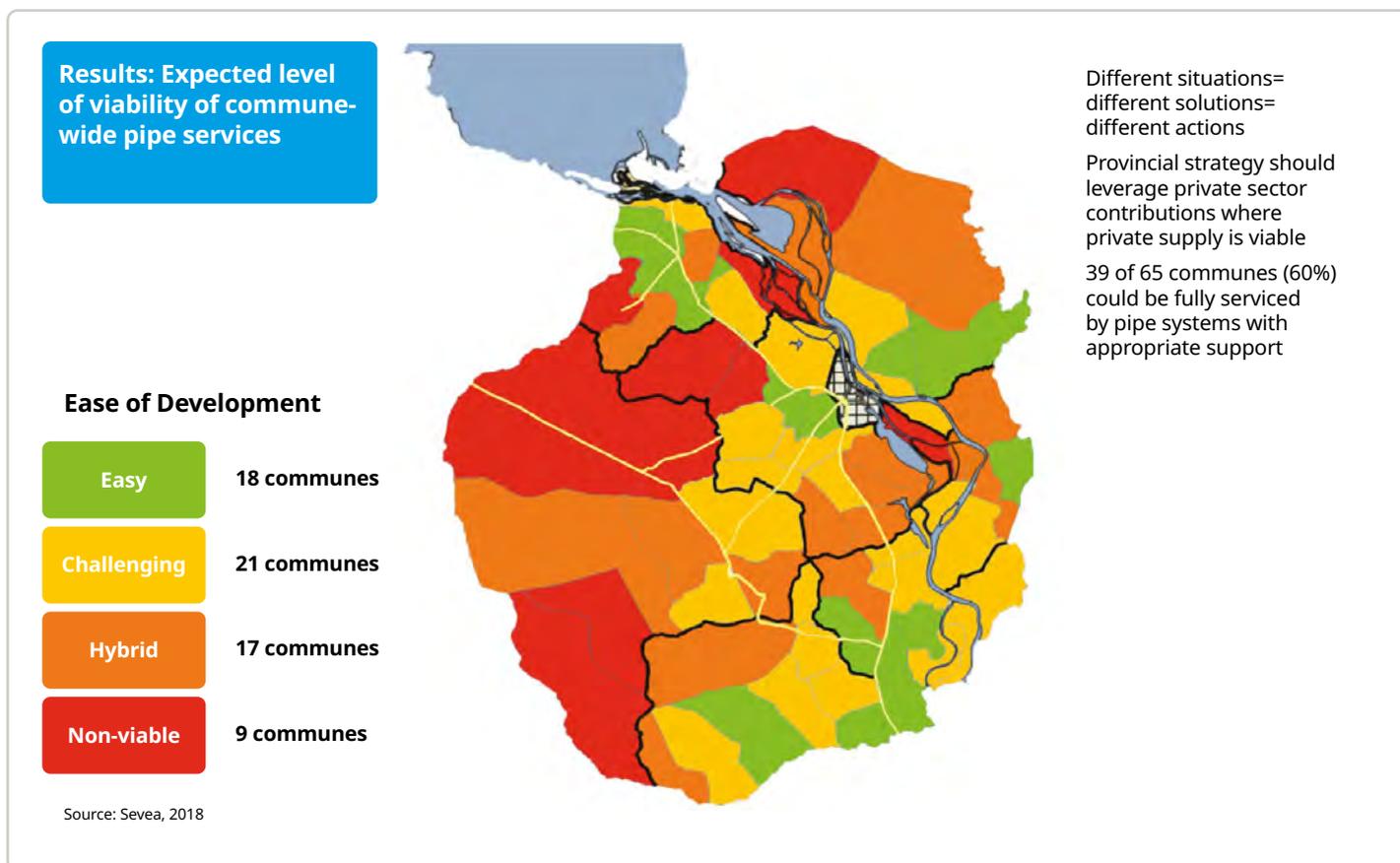
Finance:

- Study results attracted additional investment in WASH in the province. Following the dissemination of the study results, the World Bank decided to expand its focus to include Kampong Chhnang Province as part of its \$30 million support loan and technical assistance package to MISTI.
- The study results were used by one district and one private sector actor to direct investments in hand pump-based water supply services in two 'non-viable' areas.

Government leadership:

- MISTI has approached Sevea Consulting to scale-up the study to all other provinces in Cambodia. They plan to use the results to inform investment decisions and licensing application approvals.

● **Figure 9: A map illustrating areas of Kampong Chhnang Province which are most viable for developing piped water supply services.**



- Following a request from the Minister of Rural Development, WaterAid, with Sevea Consulting, have now developed a decision making tool to support implementers (state and non-state) in identifying the most appropriate water service delivery model for their context. It then sets out the minimum requirements for each water supply option and the steps needed to establish the service.

Coordination:

- The tool and study results are helping to improve coordination between MRD and MISTI, both of whom have mandates to improve rural water supplies.

Lessons learned

- Different levels of government approach water supply planning differently. At sub-national level, they seem more concerned with ensuring services are delivered to the people who need them. While the national level seems more influenced by theory, politics and big-picture approaches.
- Bringing the two Ministries together for joint planning is not a short-term or quick fix. There are entrenched attitudes and competition for funds that prevent this. However, given the right materials to discuss and with the right people in the room, we think we are making some progress.
- Overall, we found working with MISTI, who oversees private-sector water supply, to be really refreshing. MISTI are very focused on regulation and innovation. They show initiative and seem to align behind a vision where all Cambodians have safely managed water. This internal culture definitely influenced how the study was taken up by MISTI. The leadership of MISTI, by the former head of the Phnom Penh Water Supply Authority, may have helped to create this culture.

Outcome 2: Improved planning, monitoring, financing and coordination

3.1.2 Strengthening national and provincial monitoring and planning for rural WASH

We worked with the MRD and development partners to strengthen the national MIS for rural WASH.^x We also supported the review and development of national and provincial WASH action plans (NAP and PAP).^{xi}

In 2016, the first national action plan (NAP1) was launched presenting a roadmap towards universal, sustainable WASH in Cambodia. However, at that time, there was no comprehensive database from which to set a baseline or support planning and investment. The NAP1 therefore called for the establishment and regular updating of an MIS.

MRD set up and led a collaborative sector working group tasked with developing a national MIS. Our role was to support with tool development, orientation and training, data analysis and report writing. The first phase of the MIS gathered data on six output indicators including: number of villages triggered, certified open defecation-free (ODF) and sustaining ODF status; availability of affordable sanitation materials; and number of communes allocating budget for WASH in plans.

As part of the review of the NAP and PAP, we also worked with the National Institute of Statistics (NIS), the MRD, the Provincial Department of Rural Development (PDRD), and the Provincial Department of Planning (PDP) in Kampong Chhnang to conduct a pilot WASH service level survey. The 2018 survey was the first province-wide baseline of WASH service levels, aligned to the JMP in the country. The pilot fed into development of PAPs, informed WASH programme priorities, and built the capacity of authorities at provincial and district levels to collect WASH service level data.

x. Please see learning note for full details available on WASHMatters. Available at: washmatters.wateraid.org/publications/supporting-government-led-rural-wash-management-information-system-a-reflection-note (accessed 29 Jul 2020).

xi. Please see learning note for full details available on WASHMatters. Available at: washmatters.wateraid.org/publications/strengthening-government-led-review-and-development-of-national-and-provincial-action (accessed 29 Jul 2020).

We recognised the NIS as experts in data collection and monitoring and paid for its support with data cleaning and analysis.

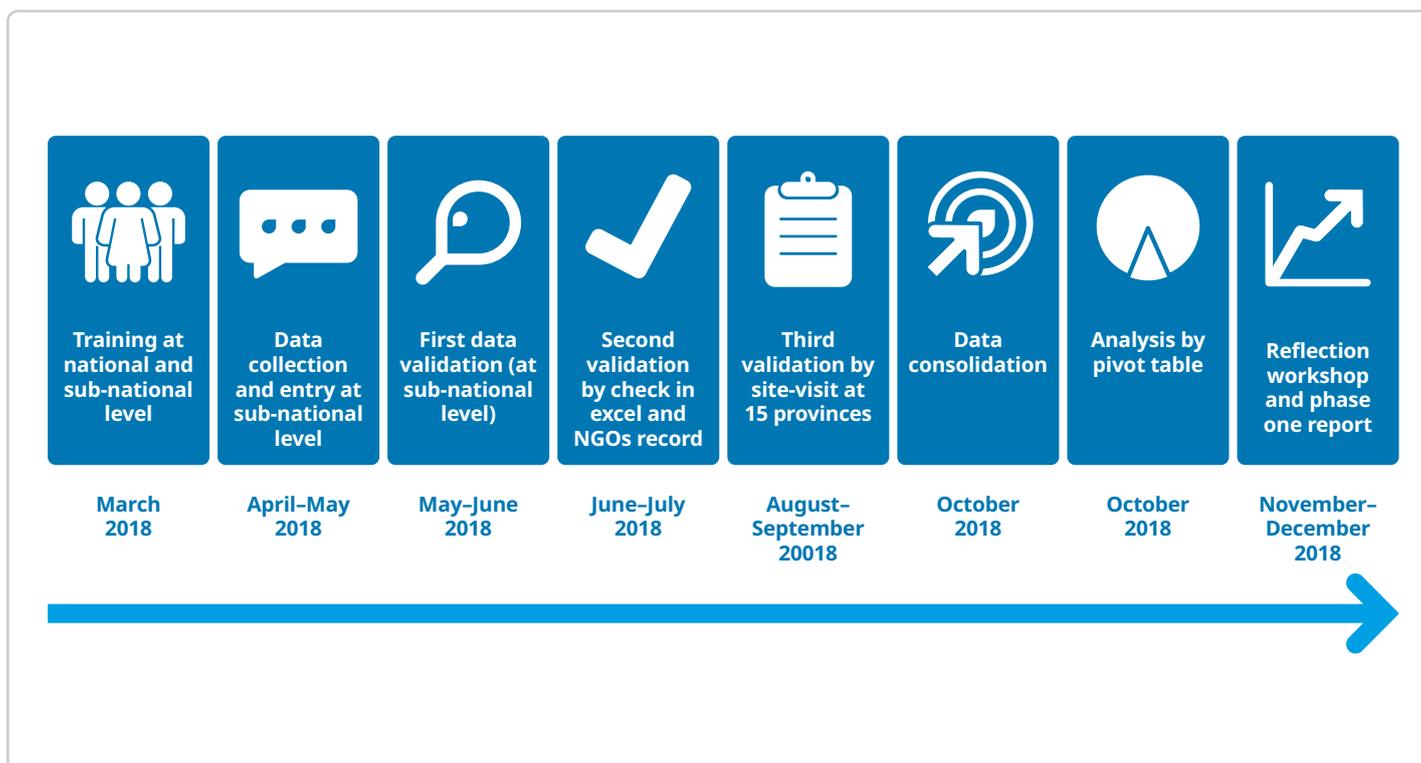
Finance to maintain the MIS and act on the data remains a challenge. The MRD has strong ownership of the MIS and leads the annual process. However, the MRD still relies on external partner budgets for training and data verification. Now a member of SWA (see case study 3.1.5), the Government of Cambodia is committed to developing a clearer national financing strategy for WASH which would include government financing for the MIS.

We continue to work with MRD to ensure it has the capacity and allocates sufficient budget for ongoing data collection and analysis in the future.

Evidence of change

Improved planning, monitoring, financing and coordination:

- The results of the province-wide WASH service level survey were used as the baseline for the four-year PAP2 for Kampong Chhnang. Furthermore, the JMP indicators have since been integrated into the national census survey, thereby helping to track progress towards SDG 6 on a national scale long after SusWASH ends.
- Supporting the development of the national MIS for rural WASH has resulted in data on six indicators being gathered and used to inform the review of the NAP1. Having seen value in the data collected, the MRD increased the number of indicators to review the NAP2 from six to 32 indicators (51% of the indicators in the NAP).
- The data and final report are being used to inform and better coordinate national government and development partner investment in WASH.



● Figure 10: Key activities and milestones in development of MIS phase one.



Box 3: Practical lessons learned during province-wide service level baseline data collection

- **Ensure enumerators receive adequate training:** language barriers and misunderstanding of technical terms and processes among enumerators led to instances of 'insufficient data' and data error.
- **Set formal government agreements with enumerators:** no formal commitment for enumerators to collect data once trained led to instances of enumerator drop-out.
- **Factor in time for bureaucracy:** enumerators required formal letters from local authorities slowing data collection.
- **Factor study limitations into the results:** distance to remote communities (particularly floating communities) was a challenge in rainy season, selected households were sometimes unavailable or unwilling to take part, leading to potential data bias.

- **Sokhun Pon, 39, is a private sector water supply businessman who connects piped water to people living in Ra Village. Tbaeng Khpos Commune, Sammaki Meanchey District, Kampong Chhnang Province, December 2018.**

Lessons learned

- Assigning focal points in each institution helped to maintain momentum and ensured participation throughout the process.
- Data was useful when it was 'good enough'. With several people reviewing the data submitted, there could have been endless revisions of the data and the report. MRD made a judgement call to finalise and disseminate the results on the principle that it is better to share good data for timely decision making than to share perfect data after decisions are made.
- It was important to identify the incentives of stakeholders involved in collective action to ensure a successful outcome. Bringing together individuals from the NIS and the MRD revealed divergent political incentives for monitoring and reporting. The PDRD needed data quickly to develop a PAP to meet a nationally-set deadline. For the NIS, the service level baseline was an opportunity to develop WASH indicators that align to the JMP.
- We identified our strengths, weaknesses and role early on. Throughout the process, we played a convening role, supporting the clear division of roles and responsibilities, coordinating logistics and supporting with development of and training on the survey. Our role has already reduced as MRD has become more confident in all parts of the process.

Outcome 3: Active, empowered people and strong accountability mechanisms

3.1.3 Strengthening accountability of private water service providers

In 2015, the Government of Cambodia launched the Implementation of the Social Accountability Framework (ISAF) in an effort to improve public services through community empowerment and strengthened accountability mechanisms. Community Accountability Facilitators (CAFs) play a principal role in empowering community members to engage in social accountability processes. We delivered training to the CAFs working in Rolea Bier district to raise their awareness of the importance of WASH and good sanitation and hygiene behaviours.

In collaboration with the Cambodian Water Association (CWA), we delivered training on the roles and responsibilities of private water operators, users and the sub-national authorities to strengthen accountability and increase consumer satisfaction. The training included issues of equity, inclusion and affordability, and exposed the issue of the high initial connection cost preventing poorer households from connecting to piped schemes. We also supported the CWA to conduct exposure visits to a water treatment plant for sub-national authority staff and private water operators to learn about the process of water treatment to ensure safe water quality. Participants had a chance to learn how to do water quality testing, which is a responsibility of the local authorities.

Private water operators receive a licence from MISTI that clearly outlines the roles and responsibilities of the operator, community, local authorities and MISTI, but it was not well understood or enforced by MISTI prior to this work. We initiated accountability and community feedback forums between operators, community members and local service authorities.



- CAFs raise awareness of the importance of good sanitation and hygiene practices to community members.

Evidence of change

Clear institutional arrangements:

- Following the training, sub-national authorities, community members and private water operators reported better understanding of their roles and responsibilities in the provision of water supply.

Inclusive and sustainable WASH delivery models:

- Some private operators used their own revenues to discount the connection fee for poorer families, as well as for some schools, health centres and commune offices. However, to our knowledge there is no official policy for reducing the connection fee for poor and vulnerable households; as such these instances were more a gesture of good will/charity on the part of operators. Furthermore, a recent evaluation found that one of the biggest needs is subsidy for network expansion, as the poorest households live a long distance away from existing networks.
- Overall, there were 5,915 new connections from November 2019 to March 2020 to private piped networks. This was an increase of 1,861 connections over the same period in the previous year (2018–19).

Lessons learned

- Facilitating meetings between different parties (sub-national authorities, community representatives and private operators) provided opportunities to discuss concerns and identify solutions.
- Opportunities to practically learn about issues raised (e.g. by visiting a water treatment plant) can help build shared understanding and identify mutually-beneficial solutions. More work is needed to ensure coordination and accountability mechanisms remain functional in the long term.

● **Navy, 29, Kro Lanh Village, Orussey Commune, Kampong Tralach District, Kampong Chhnang Province, Cambodia, April 2019.**

3.1.4 Empowering marginalised people to demand their human rights to water and sanitation

In an effort to strengthen government accountability towards marginalised people and ensure WASH is inclusive of everyone, we initiated a participatory barrier analysis to better understand the WASH experiences of marginalised people. In collaboration with a local CSO, we identified representatives from marginalised groups in 11 communities. We first supported them to understand their human rights to water and sanitation and coached them on power dynamic analysis and concepts. This helped to overcome some of their reluctance to participate and increased their confidence to exercise their rights, raise their voices and orientate their communities on the same concepts.

Group representatives were also trained to use pictures to facilitate focus group discussions about the attitudinal, environmental, communication and institutional barriers affecting their WASH access. Community focus



WaterAid/Sokmeng You



● Prek Thhort River, Takmao Town, Kampong Chhnang Province, Cambodia, March 2019.

groups also drew pictures to demonstrate their WASH experiences and vision for future WASH services. Following the discussions, we held a workshop in which these community representatives shared their experiences with local and national leaders.³⁰ We also supported sub-national leaders to visit the communities to see and hear first-hand their WASH situation and discuss how decision makers and communities can work together to improve WASH services. For some local leaders with limited resources it was the first time they had visited the communities.

In addition, we trained District WASH Committee members in Rolea Bier district to apply MRD's inclusive WASH guidelines, to mainstream equity and inclusion (E&I) into their work, and to undertake accessibility and safety assessments³¹ of existing WASH facilities. Through the training, the committee realised the different needs and barriers marginalised groups face by imagining themselves in their situation.

We also worked with Rolea Bier District to set up an inclusive WASH learning hub. Through the learning hub, the District WASH Committee have raised awareness of inclusive WASH among other local leaders, including monks. With their large following and influence in communities, monks can be role models of best practice and deliver WASH messages to their congregations.

For information about how we sought to increase the leadership, participation and influence of women in WASH decision making, see case study 3.1.5.

Evidence of change

Inclusive and sustainable WASH delivery models:

- Since receiving E&I training, we have observed that district and commune councillors now mainstream inclusive WASH concepts into hygiene behaviour change activities. The District WASH Committee has also trained and worked with local monks to build accessible toilets at pagodas. One commune council has also upgraded the WASH facilities in their community meeting hall to be more accessible for people with disabilities (PWD). They have observed an increase in the number of PWD using the facilities as a result.
- The understanding of WASH inclusion issues in the Rolea Bier district has increased, so they now feel confident to train others. Some other NGOs and districts have held exchange visits to Rolea Bier district to learn about inclusive toilet standards.

Lessons learned

- Initially some marginalised people did not consider themselves to be marginalised and were reluctant to engage in the process. We also found that some marginalised people did not want to draw attention to themselves and were concerned that participation might put them in a difficult position with authorities. We were able to overcome this by first sensitising them about their rights to water and sanitation and power dynamic concepts.

Outcome 4: Clear institutional arrangements and strong government leadership

3.1.5 Strengthening women's voice in WASH decision making and government leadership at multiple levels

Seeking to strengthen government leadership, institutional arrangements, and women's participation in WASH at sub-national levels, we partnered with WaterSHED^{xii} to deliver a leadership development programme called Civic Champions. The Civic Champions programme focuses on building leadership skills and motivating individuals to become leaders in their communities.³² Civic Champions directly engages sub-national government staff at all levels (commune, district and province) as facilitators, advisers and advocates.

With support from WaterSHED, we provided a training of trainers for provincial and district staff, of which 58% were women. Training focused on building skills such as goal-setting, public speaking, planning, creating a shared vision for a community and measuring progress. These trainers then facilitated training workshops which allowed participants to learn and exchange ideas about how to design a strategy that achieves WASH goals in their area. District and commune councillors were supported to set sanitation coverage targets for their respective areas and develop action plans for how they would achieve them. Provincial trainers provided coaching and mentoring support to district staff, and district staff provided the same to participating commune staff. Rewards were given to the communes who had made most progress in terms of number of latrines constructed. Incentives and motivations for achieving sanitation targets included the opportunity to compete for a leadership award and cash prize, along with public recognition of good performance.

Our gender scoping assessments and gender power analysis (involving discussions with both men and women) revealed that while some women hold high positions in sub-national government, they continue to face constraints and are hesitant to lead action. Through discussions with them, women expressed concerns about the attitude of men in not trusting their capacity and skills. To address these issues, efforts were specifically targeted at strengthening the leadership and participation of women government leaders in WASH decision making. WaterAid collaborated with a local NGO, Center for Sustainable Water, to design a leadership training curriculum for female government staff from districts and provincial departments. The training aimed to equip women with knowledge and skills to unlock their leadership potential. Training covered topics of leadership, facilitation, communication, advocacy, coaching and power dynamic analysis.

We also sought to strengthen government commitment and leadership for WASH at senior provincial and national levels. To do this, we undertook a PEA to understand the motivations and incentives of key government stakeholders. Through this, we identified the Provincial Director of PDRD as a keen cyclist and devised a 'Cycle for Sanitation' event. We also worked in collaboration with other INGOs (UNICEF, Plan International, WSSCC) to lobby and influence national level government to become a member of SWA.

Evidence of change

Inclusive and sustainable WASH delivery models:

- The Civic Champions programme contributed towards the two focus SusWASH districts (Rolea Bier and Samakki Meanchey) reporting the greatest increase in sanitation coverage of all 15 districts which have received decentralised responsibilities across the country.^{xiii} Of the households who have gained access to improved sanitation, about 10% are considered to be marginalised.

xii. WaterShed is a Cambodian-based NGO specialised in WASH system approaches. WaterSHED Ventures is a social enterprise specialising in WASH products. More information about the Civic Champions programme is available online at: watershedasia.org/civic-champions (accessed 29 Jul 2020).

xiii. A review by SNV revealed that the average sanitation increase between June 2018 and May 2019 in Kampong Chhnang Province was the highest of the three provinces receiving decentralised functions. Samakki Meanchey district reported an increase of 13% in household sanitation access in one year, the highest of the 15 districts. Rolea Bier district reported a 12% increase, the second highest of the 15 districts. In both districts at the start of SusWASH, open defecation was reportedly just above 30%.

Clear institutional arrangements and strong government leadership:

- In late 2019, the Provincial Governor and the Director of PDRD made a public commitment to achieve province-wide ODF status by 2023.
- The MRD and Ministry of Interior have committed to institutionalise the Civic Champions programme into the nationwide training programme for sub-national government staff. PDRD have committed to support its roll out to all districts in Kampong Chhnang. We are supporting PDRD in this roll-out – helping to set-up five more district WASH committees and highlighting the need for women in senior and decision making roles.
- The Government of Cambodia (MRD) has become a partner in SWA.^{xiv} As part of this, the Government of Cambodia has agreed to develop a national financing strategy for WASH and to continue to enhance the national WASH MIS.
- Female government staff at district level have transferred their new knowledge and skills to other women in their communities. They are playing an active role in district WASH committees and report an increased sense of confidence in sharing their perspectives and challenging their male leaders to allocate the administration's budget towards improving marginalised people's access to WASH. However, a lack of female government staff working in some districts remains a challenge.



● **Sopharoath, 12, Sopharin, 15 months, Sothy Loth, 23, Limonika, 5, Sokhom So, 56, Sim Kong, 63, stand in front of their family toilet. Torb Tbeng Village, Bongro Commune, Rolea B'ier District, Kampong Chhnang Province, December 2018.**

xiv. SWA is a global platform for technical and finance ministers to share learning and advocacy between countries towards achievement of SDG 6. SWA is a global mechanism which helps hold national governments to account for their public WASH commitments.

Lessons learned

- Media engagement motivated and inspired local leaders to act. When commune and district leaders were interviewed by national media about their role in improving sanitation through the Civic Champions programme, they said they felt more motivated by becoming 'famous' in their provinces. Other leaders contacted the featured leaders to ask how they too could become even stronger leaders. This lesson supports our initial baseline finding that public recognition is a key motivation of local stakeholders to do their job.
- Learning about the incentives that motivate local leaders to fulfil their roles, sparked us to launch a similar Family Champions initiative. Applying a similar model to Civic Champions, Family Champions seeks to identify and reward 'model' families who practise and uphold good hygiene behaviours.
- Having clearly-defined joint district WASH plans stimulated coordinated and collective action. Notably, this has strengthened relationships between districts and communes.
- High-level commitment and support of the district governors and commune leaders was a success factor for implementing the Civic Champions programme.
- Providing technical training on WASH issues to complement leadership skills made commune councillors more confident to promote WASH services and reach their targets.
- Learning exchanges and ongoing coaching was an effective approach to ensure district trainers clearly understood their roles and knew how to provide technical and leadership support to commune councillors.
- Limited capacity of commune and village focal points in data collection, monitoring and quality assurance, and a lack of harmonised, simplified village, commune and district data management systems were challenges that require ongoing attention.
- Demonstrating success of the Civic Champions programme in extending sanitation coverage in two districts, and analysing the motivations of the provincial governor, helped to secure national buy-in

for the institutionalisation of the Civic Champions programme into the nationwide government training programme for sub-national authorities.

- Adaptive planning and management gave us, the local government and our partners space for flexibility and collective decision making within the Civic Champions programme.
- Facilitating separate discussions with men and women about their roles and capabilities in WASH decision making helped build a safe and open dialogue around issues of gender equality and inclusion among district staff. Conversations about gender, equity and social inclusion need to go beyond the district as many decisions are made at higher levels. This could restrict the involvement of women and PWD as responsibilities are delegated to sub-national levels
- Treasury involvement in technical working group discussions may help to leverage more WASH finance and we are working to encourage their participation.

Conclusion

In line with our theory of change, we have observed stronger government leadership on WASH issues, greater understanding among government staff of their WASH roles and responsibilities, and stronger monitoring and planning processes.

These changes have helped to attract investment in water supply services in Kampong Chhnang and contributed towards improvements in WASH service levels and WASH inclusion in Rolea Bier and Samakki Meanchey districts. Interactions and interdependencies between WASH system components and our efforts to strengthen them are clear.

Strengthening national and provincial monitoring processes had knock-on effects for improved planning and attracting sector finance. Understanding the incentives and motivations of key government staff at provincial and local levels built government leadership for improved planning, coordination and more inclusive and sustainable service delivery.

3.2 Uganda

Background

SusWASH is being implemented across the five divisions of Kampala and two neighbouring peri-urban municipalities of Nansana and Makindye Ssabagabo in Wakiso district. Within this area, direct service delivery and local accountability initiatives are targeted towards two parishes, 12 schools and two healthcare facilities (HCFs). The target communities are generally low-income, densely-populated, informal settlements with individual rented households. They have poor drainage and solid waste management. WaterAid has a long history of working in Kampala and had a strong pre-existing relationship with KCCA. Kampala has a crowded WASH sector with many CSOs and INGOs operating.

WASH system analysis

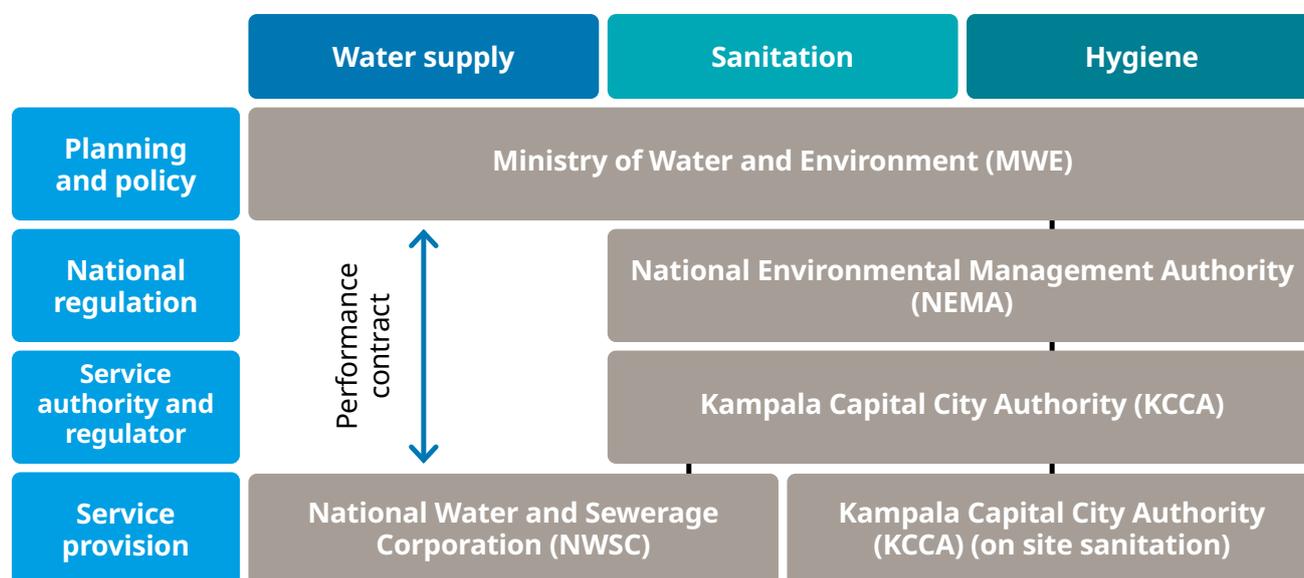
Uganda did not meet the Millennium Development Goal (MDG) target for water and sanitation due to the limited improvement in urban service delivery. Indeed, evidence suggests a regression, with access to improved water in urban areas falling from 90% to 87% over the MDG period (2000–2015), reflecting in part the sprawling of large towns. According to the JMP (2019), 49% of the total population has access to at least a basic water service, while 18% of the population has access to basic sanitation and 21% to basic hygiene facilities.



● **Figure 11: SusWASH is being implemented in the Greater Kampala Metropolitan Area.**



● **Figure 12: Overview of institutional arrangements showing who is responsible for WASH in GKMA.**



The legal and policy framework for WASH is well established. The human rights to water and sanitation are enshrined in Uganda’s 1995 Constitution and legal and policy frameworks have been developed to enforce it, including the National Water Policy revised in April 2018. See Figure 12 for an overview of the institutions involved in WASH delivery in Kampala.

Key blockages to inclusive WASH provision and sustainability in Kampala:

- **Finance:** Financing gap to achieve sector targets specifically for O&M of WASH services at all levels.
- **Government leadership:** Low political commitment towards improving WASH services; weak coordination between political and technical wings of KCCA.
- **Coordination and integration:** Weak cross-sector coordination between the line ministries of water and environment, education and health – affecting planning, monitoring and investment.
- **Monitoring:** KCCA lacks an effective onsite

sanitation and hygiene MIS with indicators aligned to the different sectoral ministries to synchronise reporting, harmonise planning and investment priorities. For example, the water and environment annual sector performance report does not consistently capture KCCA data.

- **Institutional arrangements:** Absence of national standards and guidelines to inform design and management of WASH in HCFs.

Our CP strategy features a PEA setting out who has power to influence WASH, and possible leverage points and pathways to change. We ensured that the right stakeholders were invited to a workshop to undertake an analysis of the strength of the WASH system in and around Kampala, including the NWSC, national government officials, KCCA, NGOs and civil society groups.

During the participatory context analysis and project design workshop, local stakeholders ranked the strength of WASH system building blocks (see Figure 13). The water sector (blue dots) was considered stronger across all building

blocks compared to the sanitation and hygiene sector (brown dots). Note that gender and social inclusion, government leadership, and active and empowered people were added to the tool after the initial assessment in November 2017, so were not ranked in the workshop.^{xv}

Service levels in the SusWASH project areas have been analysed through a baseline study and are characterised by the following:

- **Water supply:** The majority of households use piped water supplied by NWSC through a combination of public taps into the yard/plot or home. Overall, 85% of households have access to at least a basic level of water service.

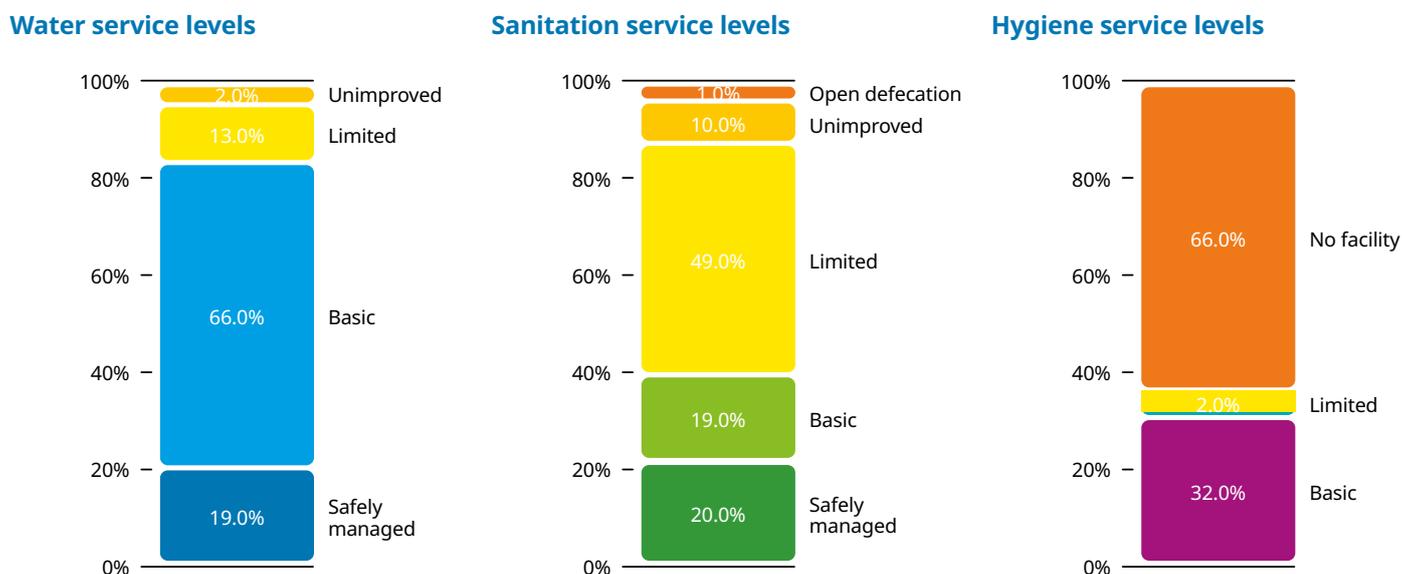
- **Sanitation and hygiene:** Almost all households have access to a form of sanitation facility, with only 1% practising open defecation – however, levels of service vary across communities. 39% of households have access to at least a basic level of service, but 49% have limited service and 11% have an unimproved service.
- Only 35% of households have access to a handwashing facility inside or near their toilet of which the majority (97%) have both soap and water present. The remaining 66% do not have access to any handwashing facilities.

● **Figure 13: Results of the participatory building block assessment showing the status of water (blue dots) and sanitation/hygiene (brown dots) sectors in GKMA.**



xv. In 2019, WaterAid Uganda undertook a CP-wide gender assessment to understand internal and external barriers to gender equality. This has been used to inform partnerships with women's groups and DPOs in SusWASH and the recruitment process of WaterAid staff.

● **Figure 14: Overview of WASH service levels in Kampala.**



- **WASH in schools:** 66% of schools have access to piped water supply and the rest use protected springs and wells. Water is available throughout the year for 67% of all surveyed schools. With regards to sanitation, the pupil:stance (latrine) ratio varies from 7 to 158 across the project area,^{xvi} with a third of the toilets found unclean and only a third of toilets equipped with handwashing facilities. For details about the accessibility and safety of school WASH facilities, particularly for girls and children with disabilities, see case study 3.2.2.
- **WASH in HCFs:** weaknesses in WASH service levels suspected, but limited information and data available.

Following the participatory context analysis/ programme design workshop, and extensive conversations with KCCA, we decided to focus the programme on strengthening local government leadership, accountability and coordination; KCCA's planning and monitoring processes; community empowerment for

improved sanitation; and WASH delivery models in schools and HCFs – emphasising our focus on improving WASH for women and girls.

Outcome 1: Inclusive and sustainable WASH delivery models

3.2.1 Assessing WASH in HCFs to inform national guidelines

Without national standards or guidelines for WASH in HCFs and no comprehensive dataset on the status of WASH in HCFs in Kampala, we collaborated with the Ministry of Health (MoH); the Ministry of Gender, Labour and Social Development; the Ministry of Water and Environment (MWE); KCCA; Makerere and Emory Universities (among others), and used the WASH Conditions (WASHCon)^{xvii} tool to undertake an assessment of the status of WASH in HCFs in the GKMA.

xvi. Note that the national standards for pupil: stance (latrine) ratio is 1:40, as set out in the National Physical Planning Standards and Guidelines (2011). Available at: mlhud.go.ug/wp-content/uploads/2015/10/National-Physical-Planning-Standards-and-Guidelines_-2011.pdf (accessed 29 Jul 2020).

xvii. Visit WASHCon WASH in Healthcare Facilities Initiative. Available at: washconhcf.org/research-tools/washcon/ to find out more. (accessed 29 Jul 2020).

The assessment also gathered information about the factors that affect the sustainability and accessibility of the WASH facilities. Specific objectives of the study were to:

- 1) Establish the status of WASH in HCFs (including waste management and cleaning routines).
- 2) Assess the WASH practices and behaviours of health practitioners.
- 3) Assess the management of WASH in HCFs (e.g. policies, guidelines, budgets/finance gaps, HR/responsibilities, structures, plans).
- 4) Make recommendations for improving the sustainability and accessibility of WASH in HCFs.

63 of a total 105 HCFs were included in the assessment which covered Kampala, Wakiso and Mukono districts.

The assessment revealed gaps in service levels and highlighted weaknesses in management and financing of WASH facilities. Following the assessment we have started working with twelve HCFs to strengthen management and maintenance of their WASH facilities using the

WHO's WASHFit tool.³³ We have plans to support the HCFs through a life-cycle costing exercise to understand how best to allocate existing budget and leverage additional finance to adequately cover O&M costs. Additionally, we have supported two HCFs with the provision of demonstration inclusive sanitation facilities, specifically designed for maternal and newborn health. A solid waste management facility for effective handling of medical waste and safe disposal of maternity placenta waste has also been demonstrated in one HCF.

Evidence of change

Clearer institutional arrangements and strong government leadership:

- The findings from the WASH in HCFs assessment have informed discussions with the MoH, UNICEF and other WASH development partners about the development of national guidelines for WASH in HCFs. A National Task Team has been set up comprising state and non-state actors including WASH line ministries of health and water, WaterAid, UNICEF and USAID to spearhead the development of the guidelines. The guidelines will help to set a standard for WASH in HCFs and make provisions for ensuring their adequate management and O&M.

Inclusive and sustainable WASH delivery models:

- While it is too early to observe any evidence that the inclusive sanitation and solid waste management facility has been scaled elsewhere, the Head of the HCF reported that, "[It] is now acting as a learning centre for other health centres in the district on how to safely handle medical waste". WaterAid intends to document the design of the facilities for advocacy purposes and to support their replication by government and other development partners.

- **Bunya Fred, 51, hospital cleaner, standing outside the new women's sanitation block, getting ready to clean it, Ndejje Health Centre IV, Makindye Ssabagabo Municipality, Wakiso district, Uganda.**



Lessons learned

- It is well known that early buy-in from relevant government departments can help to scale results. In our case, involvement of the MOH, the Ministry of Gender, Labour and Social Development; the MWE; and KCCA, for the WASH in HCF assessment helped to ensure results informed development of national guidelines.
- Collaborating with Emory and Makerere universities increased the validity and respectability of the results and helped to secure their uptake by Ministries and other sector stakeholders involved. Generating evidence about the current status of WASH in HCFs was critical to informing discussions about the development of national guidelines for WASH in HCFs.

● **Namukasa Margret, 37, nursing officer, running the tap to check if the water connection in the maternity wing is working, Ndejje Health Centre IV, Makindye Ssabagabo Municipality, Wakiso district, Uganda, November 2019.**



3.2.2 Assessing WASH in schools to inform design of inclusive and sustainable school WASH delivery models

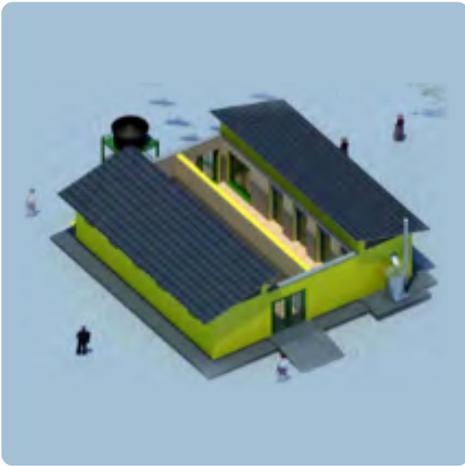
In collaboration with KCCA, the National Council for Disability and ADD Uganda, we undertook a detailed accessibility and safety audit of existing school WASH facilities in 49 schools (40 primary and 9 secondary) across the capital to build the understanding of KCCA, school management and local engineers about the physical barriers facing learners and teachers with impairments in accessing school WASH facilities.

The audit assessed the availability, accessibility and safety of: school paths and WASH facilities (including entrances, doors, toilet interiors, MHM facilities, handwashing facilities and drinking water points). Each indicator was weighted and scored (see Table 1 for score range and results).

In some instances, accessible toilet facilities were found locked. Some schools indicated that they lock the accessible toilets because they have no enrolled pupils with physical disabilities,

Range	Status	Results – % of schools (n = 49)
>80%	Accessible and safe	4%
50–79%	Moderately accessible and safe	43%
1–49%	Inaccessible and unsafe	53%

● **Table 1: Results of schools' accessibility and safety audit.**



● **Design of inclusive, low-water-use latrines and handwashing facilities for schools.**



● **Inclusive, low-water-use latrines and handwashing facilities. installed in installed in Natete Muslim High School, Kampala, Uganda.**

while others reallocate the toilets for staff use only. Furthermore, teachers with disabilities often had to use the accessible facilities used by students, while non-disabled teachers had their own separate facilities.

The high price of water led teachers to lock flush-based toilets. In 84% of schools, MHM facilities were considered ‘inaccessible and unsafe’ – again, high water tariffs meant MHM facilities were sometimes put out of action.

The audit findings informed the design of new, inclusive low-water use toilets in five schools. The latrines were co-designed with KCCA. The design aims to demonstrate a WASH service delivery model that improves privacy, MHM, handwashing, accessibility, reduces water usage and completes the sanitation chain. WaterAid, in close collaboration with KCCA, have produced an O&M manual for these facilities. We are working with KCCA to review the model with the aim that it be scaled to more schools.

The designs informed our sector-wide advocacy messages to highlight the importance of inclusive WASH for achieving the Ministry of Education’s (MoE) ambitions of Universal Primary Education. We highlighted the weak enforcement of planning and building control legislation.^{34,35} This legislation stipulates that all public and social service buildings must be accessible and take into account the needs of PWD.

WaterAid and other NGOs are lobbying NWSC and the MWE for a pro-poor water tariff for public schools in low-income areas of Kampala. This would be similar to the pro-poor domestic tariff. We anticipate that this will better enable public schools in low-income areas to pay their water bills.

Teachers and school WASH clubs (which include girls and boys) have also been trained on MHM in 12 schools with the aim of them promoting consideration of MHM among female and male students and teachers.

For details of how we worked with KCCA, CSOs and school administrations to improve the management and financing of school WASH, see case study 3.2.4.

Evidence of change

Inclusive and sustainable WASH delivery models:

- Schools demonstrating the new low-water-use toilet design have reported a significant reduction in the cost of their water bills, leading to lower disconnection rates and greater water availability for handwashing and MHM. KCCA are now supporting other schools, beyond SusWASH, to implement the accessible, low-water-use toilet design. The O&M manual is being promoted in these schools.
- Girls are now able to undertake MHM with dignity and privacy as school facilities are fitted with a bathroom that has facilities to wash reusable pads and dispose of used disposable pads with connection to an incinerator.
- Despite a reported increase in student attendance and enrolment, new WASH facilities in the five target schools have reduced the average pupil: stance (latrine) ratio from 98:1 in 2017 to 45:1 in 2020. This has significantly reduced queuing, commonly seen in most schools, especially during peak hours.

Improved school attendance and increased enrolment:

- Schools with improved WASH facilities have anecdotally reported an increase in enrolment among girls and boys, while some schools have reported an increase in attendance, particularly among adolescent girls. Headteachers have partly attributed this to improved WASH as more parents bring their children to schools with access to improved sanitation and hygiene facilities.

Lessons learned

- Partnering with the National Council for Disability and ADD strengthened the credibility of the school WASH Accessibility and Safety Audit findings. We continue to use the audit findings and work with the National Council for Disability, ADD and other DPOs to strengthen our calls for national policy reform and enforcement of inclusive guidelines and standards.
- Pit waste-emptying services must be adequate to cope with increased school

enrolment rates. KCCA have been able to undertake more regular pit waste emptying to respond to greater latrine use.

- Flood prone areas require additional design and service considerations to ensure the continued safe use of facilities. One school is located in a flood prone area necessitating the timely emptying of pits before and during the rainy seasons and after flood waters have receded.
- While we encouraged the participation of male teachers and boys in WASH clubs and MHM training, club membership is decided by the school administration and school management committee (SMC) who we will continue to target in future to ensure a good gender balance.

Outcome 2: Improved capacity for planning, monitoring, financing and coordination

3.2.3 Supporting development of strategic WASH plan and enhancing WASH monitoring and reporting

We supported the development of a five-year strategic plan (2020/21–2024/25) for KCCA's Directorate of Public Health and Environment (DPHE), coordinating technical inputs from different sector partners. The plan defines priority investment areas for WASH and health service delivery in Kampala.

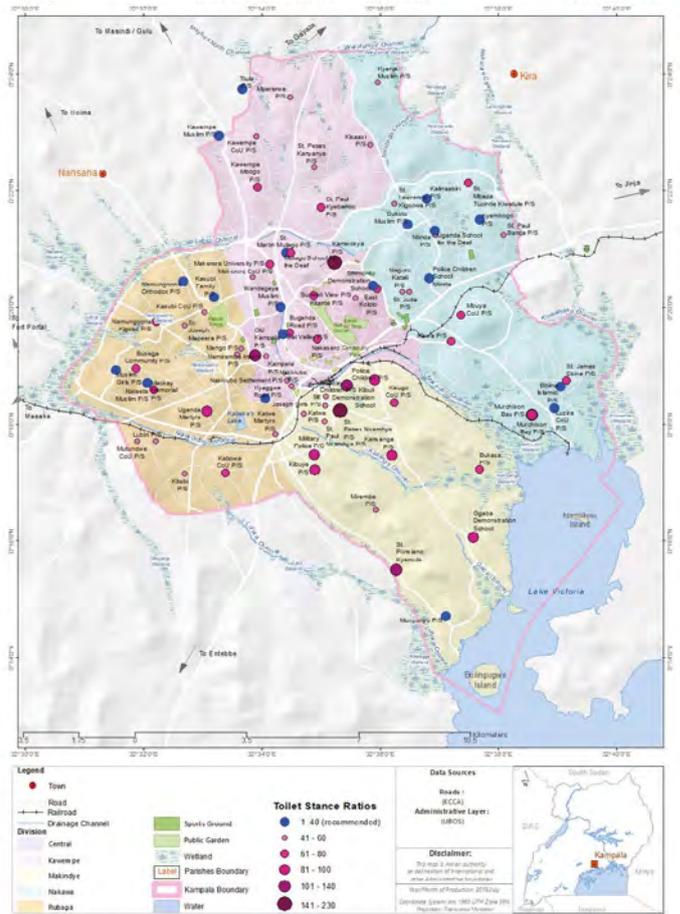
We are also supporting KCCA to streamline its various monitoring systems to ensure one system adequately captures WASH coverage and service level data. This has included support to update the city-wide WASH in schools database (see Figure 15). WaterAid also supported MoH and KCCA to update WASH in health indicators in the existing Health Management Information System (HMIS).

We facilitated dialogue between KCCA and the MWE regarding mechanisms to improve KCCA's participation and contribution to the JSR processes.

3.2.4 Life-cycle costing for more sustainable school WASH

To strengthen WASH financing, we supported 10 schools to undertake an assessment of the full life-cycle costs of their WASH facilities. The aim was to ensure schools understand and budget for their O&M to ensure services are sustained and keep pace with growing demand. We only handed over newly installed WASH facilities (see case study 3.2.1) to schools once their costed O&M plans had been produced. This helped to ensure schools had thoroughly thought through how they would maintain them.

Figure 15: Map showing status of WASH in schools in Kampala.



Headteacher of Mirembe Primary School presenting life-cycle costed WASH budget.



WaterAid/James Kiyimba

Evidence of change

Improved planning, monitoring, financing and coordination:

- KCCA DPHE strategic plan has been developed and will be used to inform WASH investments.
- The KCCA DPHE strategic plan is informing the development of the MoH's Urban Health Strategy for Uganda.
- Some JMP WASH service level indicators have been integrated into the revised MoH HMIS.
- JMP household WASH service-level indicators have been used by KCCA and the MWE in the revised sector performance measurement framework, alongside the original sector 'golden' indicators.
- KCCA have tested JMP service level indicators to assess the status of WASH service provision in schools.
- KCCA's solid waste management data is now captured in MWE's Sector Performance Report as part of the JSR.
- Target schools are demonstrating increased knowledge and appreciation of costs required to maintain WASH facilities. Some now have budgets and action plans for their O&M.
- SMCs are playing a more active role in WASH-related decision making. Some SMCs have identified innovative ways to leverage additional finance beyond the conventional government grants and are sharing ideas with other schools. This includes offering the school site/compound for car parking and public events in evenings and weekends. All resource mobilisation plans are submitted by SMCs and must be approved by KCCA to ensure they do not contravene broader government policy, e.g. free universal primary education: contributions from parents are therefore only voluntary.

Stronger government leadership:

- With clear targets and access to up-to-date data, KCCA's political wing is better able to direct WASH investment to where service levels and coverage are lowest rather than to where votes can easily be won.

Lessons learned

- More work is needed to streamline and integrate the Government's different systems for monitoring sanitation and hygiene across different mandated institutions. There is still a situation whereby different agencies responsible for sanitation and hygiene have their own systems, with indicators not aligned, making coordination and financing difficult. We will support relevant government agencies to convene these various institutions to find solutions that enable more regular and coordinated monitoring.
- Our efforts to lobby government to increase spending on WASH in schools are yet to yield results, so we need to revisit our influencing strategy. With approximately 7.5 million children enrolled in primary schools across the country, there is a need to increase the government capitation grant from UGX 10,000 (£2) per child per term to UGX 12,000 (£2.50) per child per term.

Box 4: practical lessons from facilitating life-cycle costing assessment (LCCA) in schools

- Supporting schools to undertake LCCA requires constant coaching to ensure schools and the local implementing partner fully understand and apply the methodology.
- For this first phase of SusWASH, working directly with a smaller number of schools may have been more effective, rather than working in all schools through a local partner.
- The LCCA improved schools' appreciation of the full costs of installing and rehabilitating WASH facilities. This helped to strengthen their sense of ownership and responsibility for O&M.

Outcome 3: Active, empowered people and strong accountability mechanisms

3.2.5 Strengthening accountability pathways and empowering community groups to access public budget information and improve sanitation

We partnered with the Civil Society Budget Advocacy Group (CSBAG), to mobilise community members and newly-elected^{xviii} local council chairpersons (LC1s)^{xix} to form budget monitoring structures named 'Participatory Budget Clubs' (PBCs) in Kamwokya and Kansanga parishes. The aim of the PBCs is to mobilise community members and build local government leadership to call for greater accountability in WASH public spending. PBCs,

of which the membership is ~25% female, were informed about the provisions of the Right to Information Act as well as the budget cycle process under the Public Finance Management Act 2015. They have since undertaken annual budget tracking exercises in 12 public schools and four HCFs.

While all 12 schools released their budgets, only four released details of WASH-specific budgets. WASH was financed from the school administration budgets, accounting for 10% of expenditure. WASH budgets were spent solely on paying water bills to NWSC; no funds appeared to be allocated to extending, improving or maintaining WASH facilities. Most schools split the costs of fixing breakdowns with parents as they arose. Only two of the four HCFs released information about their budgets, and of these, only one released a WASH-specific budget (for one quarter of the year). However, the Ministry of Finance, Planning and Economic Development released funds to both of these HCFs on a quarterly basis.

● WaterAid in collaboration with KCCA has supported voluntary community clean up exercises in Kamwokya, Kampala.



WaterAid/Esther Ruth Mbabazi

xviii. The Local Government Act setting out the need and role of local councils was passed in 1997 but was not implemented until 2018. Available at: ulii.org/ug/legislation/consolidated-act/243 (accessed 10 Aug 2020).

xix. LC1s or Local Council Chairpersons are the lowest administrative authority in Uganda. A LC1 must (i) be the political head; (ii) preside at meetings of the local/village council; (iii) monitor the general administration of the area under his or her jurisdiction; (iv) perform other functions that may be necessary for the better functioning of the council. The function of the Local Council is to raise matters of concern in the community to the LC1, to resolve issues raised, monitor service delivery within their area of jurisdiction, assist in the maintenance of law, order and security, and carry out functions that may be assigned to it from higher local government councils.

WASH budget lines in MoE and MoH are not ringfenced for ongoing maintenance or to effectively improve WASH in schools and HCFs. We continue to advocate with CSBAG at parliamentary level and with the Ministry of Finance and relevant line ministries to ensure adequate budget is allocated to WASH in public schools and HCFs. We are encouraging KCCA to promote the formation/scale-up of PCBs in more parishes over the next two years. We are also supporting existing PCBs to engage with accounting officers at the division level to track public budget investment in household-level WASH services.

In addition, we supported KCCA's 'Weyonje' campaign (meaning 'Clean yourself') to raise awareness about the human rights to water and sanitation and the importance of good sanitation and hygiene behaviours, including solid waste management in low-income areas of Kampala. KCCA's Weyonje volunteers mobilise communities to organise community clean-ups and facilitate dialogues between concerned households and their LC1 representative in community 'Barazas' (community discussion forums). The Weyonje campaign is closely linked to the 'Toilets 4 Tenants' campaign which we co-designed with KCCA and launched in 2018 to ensure landlords provide tenants with access to improved sanitation facilities.^{xx}

Evidence of change

Active, empowered people and strong accountability mechanisms:

- PBC members reported an increased understanding of the public budget cycle and legislation concerning access to information and public finance. This, they reported, gave them courage to seek WASH budget information from public offices. This has strengthened their confidence to engage in formal government budget consultations and push for more finance for both WASH and non-WASH-related needs.
- The number of complaints raised by tenants about landlord inaction on sanitation has increased since the Toilets 4 Tenants



Weyonje volunteers speak to community members about the importance of good sanitation and hygiene.

campaign started. It is estimated that 90% of the complaints received have been addressed by landlords as a result of the community-based monitoring and enforcement carried out by LC1s and Weyonje volunteers.

Lessons learned

- More incentives are needed to encourage schools and HCFs to respond to requests for budget information.
- PCBs and the Toilets 4 Tenants Campaign organised and amplified the voices of community members and galvanised stronger political action to address WASH issues. However, more incentives are needed to encourage participation of women in the PCBs. There are multiple demands upon their time and some women expressed difficulty prioritising engagement in voluntary activities.
- Efforts to hold landlords to account for the provision of sanitation facilities, through the Toilets 4 Tenants campaign, need to consider space constraints that exist in low-income neighbourhoods, focus on more frequent pit emptying and advocate for improved urban planning.

xx. As part of the Toilets 4 Tenants campaign, we are working with KCCA and village chairpersons to gather data on landlords and the sanitation facilities they provide to their tenants. We are working to identify and publicly recognise 'model' landlords to incentivise others to provide improved sanitation facilities for their tenants. We aim to enforce sanitation regulations and reignite the use of local courts by resolving issues of non-compliance through the local court system.

Outcome 4: Clear institutional arrangements and strong government leadership

3.2.6 Establishing a Mayors' Forum to strengthen government leadership and bridge the gap between political and technical wings of KCCA

The initial context analysis workshop and extensive follow-up conversations with KCCA revealed how KCCA's DPHE was already using a building block-based framing to address areas of their operations that needed strengthening. These engagements highlighted the challenges of coordination, planning and alignment within KCCA, and between KCCA and the surrounding municipalities. These areas were therefore considered a good entry point for our system strengthening work. We worked in collaboration with KCCA and Bill and Melinda Gates Foundation (BMGF), to set-up the WASH Mayors' Forum for the GKMA.^{xxi} The Mayors' Forum,^{xxii} brings together all five Mayors from the five divisions of Kampala, including the city's Lord Mayor, as well as those from the surrounding municipalities to discuss challenges and solutions to the city's WASH and environmental issues.

The Forum provides a formal structure for the Mayors to feed into KCCA's Technical Teams' WASH plans, to learn from each other, and to demonstrate to their respective communities their leadership and engagement on the issues that concern their constituents. Prior to the forum, there were few spaces through which the Mayors could meet and interact with their constituents. There was also weak coordination with the Technical Wing of KCCA.

We also worked with the LC1s in Kampala to sensitise them and their committee members about their new roles and responsibilities and how they relate to WASH. We are working to reignite the local courts, set out under the Local Courts Act (2006), an initiative proposed during discussions in the Mayors Forum. Strengthening the local courts will help ensure WASH-related regulations are enforced and



● Sserunjogi Charles, Kampala capital city central division Mayor, in his office, Kampala, Uganda, November 2019.

service providers, landlords and communities are held to account. Working at the local council and Mayoral levels helps to build, and demonstrate the importance of, the permanent governance structures mandated with ensuring equitable and sustainable WASH delivery.

Evidence of change

Clear institutional arrangements and strong government leadership:

- The Mayors of Kampala are demonstrating greater leadership and commitment for improving WASH. Three Mayors have used their own resources to convene 'WASH clinics/dialogues' to coordinate WASH activities and raise awareness of the importance of good WASH in their divisions.
- The Lord Mayor of Kampala publicly called out the limited funding available for sanitation to the Executive Director of KCCA. This is significant as previously only the technical leaders within KCCA had pushed the council to increase financing for sanitation in the city.
- Some LC1s have started using their own resources to mobilise their constituencies to carry out monthly voluntary clean-ups. They also use these clean-ups as opportunities to sensitise community members on the practise of good sanitation and hygiene.

xxi. There is another Mayors Forum working on other non-WASH-related issues and beyond the GKMA.

xxii. The Mayor's WASH Governance Forum video is available at: youtu.be/tpBpzCXUuwM (accessed 16 Sep 2020).

Active, empowered people and strong accountability mechanisms:

- For KCCA's technical team, the WASH Mayor's Forum is seen as an opportunity to consult, inform and secure the buy-in from the political wing about WASH plans, budgets and issues related to enforcement. WASH is arguably the first example of the political and technical teams coming together to achieve change. For example, Kampala's Sewerage and Faecal Sludge Management Ordinance was drafted by KCCA's technical team, but required buy-in, formal approval and enforcement from the Mayors. The Ordinance was passed in March 2019 and sets out how to address sustainability issues related to faecal sludge management, including the professionalisation and regulation of private sector actors working in informal settlements. It also sets out how sanitation must be inclusive of all people including PWDs, pregnant women and elderly people.
- The WASH clinics have proven a useful mechanism for communities to raise concerns with the Mayors, most notably in relation to solid waste management and toilet availability. We are confident that these WASH clinics/dialogues will continue after SusWASH, as Mayors are using their own resources to finance them and KCCA's DPHE Technical Wing is providing them with technical support independently of WaterAid.

Lessons learned

- As the incentives of KCCA's political and technical wings are different, the Mayor's Forum is a space in which both can benefit from their participation – to secure political buy-in (for the technical wing) and to demonstrate their commitment to WASH to their constituents (for the political wing).
- Further efforts are needed to strengthen WASH policy and legislation, including increasing resource allocation in Kampala. We are exploring ways to do this through the existing Parliamentarian WASH Forum, which is a useful mechanism to push various advocacy agendas.

- We took a two-pronged approach to strengthening government leadership for WASH at the LC1 and Mayoral levels. LC1s have a close and direct link to their communities allowing them to reach, mobilise and influence their constituencies with WASH messages. Mayors, on the other hand, have influence over higher-level budget allocations and expenditure.
- We worked with other development partners, particularly the German Development Agency (GIZ), KCCA and BMGF to develop and seek approval of the sanitation ordinance. While KCCA and GIZ mobilised a technical consultant to draft the ordinance, we mobilised political leaders, Mayors, LC1s and communities to provide input into the draft. Our support through the Mayors Forum, and in mobilising political leaders, helped to fast-track the ordinance's approval in the Council.

Conclusion

Good progress has been made in line with our theory of change with regard to strengthening government leadership, monitoring, planning and budgeting processes, empowerment of people to engage in budget advocacy, as well as demonstration of delivery models for more inclusive and sustainable school WASH.

There are still challenges with different departments within government using different monitoring systems and more work needs to be done to harmonise these. Additionally, more work must be done to scale the use of life-cycle costing in schools.

We also need to fully understand why inclusive toilet facilities constructed outside the programme get locked or repurposed to ensure the issue does not continue to arise. Convening and facilitating dialogues within government and communities, and working with government, civil society and academia to generate evidence needed to inform practice and policy, have proven valuable approaches to progress towards our outcomes in Kampala's crowded WASH sector.

3.3 Ethiopia

Background

SusWASH is being implemented in Gololcha woreda, Oromia Region. A woreda-wide approach^{xxiii} is applied, with implementation focused on Jara (a small town) and two rural kebeles (Buriya and Safogue). The area experiences occasional political tension which can affect movement around the woreda and wider zone. Poor road access and complex hydrogeology make implementation challenging. There is animosity between service users and the water utility in Jara Town where poor coverage and regular service interruptions fuel anger.

People in rural areas feel ignored and conflict can arise at water points as there are not sufficient services to meet demand. Service levels are particularly low in the rural target kebeles of Buriya and Safogue. At the start of SusWASH, 100% of the population of these two kebeles were using either surface or unimproved water sources. More than half the population of Buriya, and over 80% of Safogue, were practising open defecation. WaterAid had no pre-existing relationship with Gololcha woreda prior to SusWASH and spent considerable time building trust.



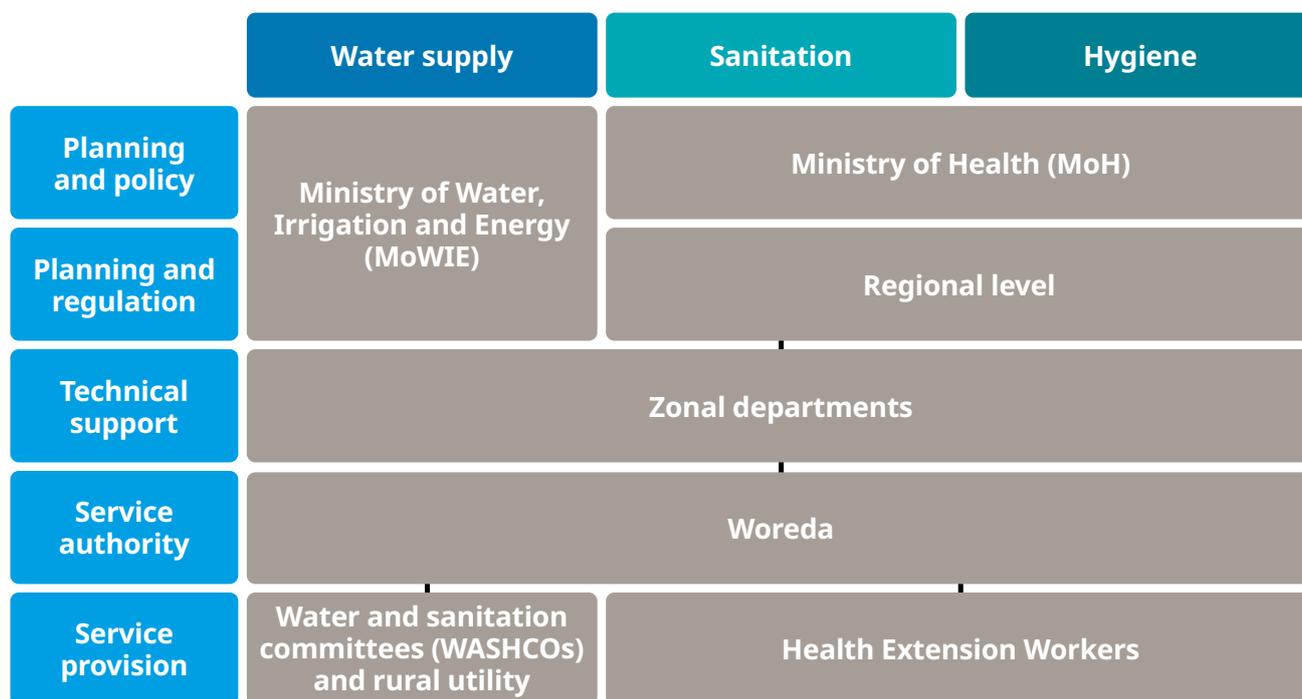
Ethiopia

● **Figure 16: Location of Jara Town and Gololcha woreda in East Bale zone in the Oromia region.**



xxiii. See 'Area-wide approach' in the *WaterAid glossary of key terms – system strengthening and empowerment*. Available at: washmatters.wateraid.org/publications/wateraid-system-strengthening-and-empowerment-glossary (accessed 16 Sep 2020).

● **Figure 17: Overview of institutional arrangements showing who is responsible for rural WASH in Ethiopia.**



WASH system analysis

Context analysis identified several blockages and challenges in Gololcha:

- **Finance:** Large financing gap for achievement of targets set out in the One WASH National Plan. Minimal budget allocations for water (an average of just 2.5% of the woreda's total spending from 2015–2018) and failure to ensure budget allocations for WASH.
- **Institutional arrangements:** Limited institutional capacity to deliver basic services at the local government level. Only 42% of the required staff are in place to support WASH services and there is a lack of required skills and knowledge.
- **Monitoring:** Infrequent monitoring, and no link with the national database.
- **WASH delivery models:** Some efforts to end open defecation, no hygiene behaviour change and unsupported water delivery.

- **Coordination and integration:** Lack of coordination among WASH stakeholders and across WASH, health and education sectors.
- **Planning:** Lack of a costed woreda-wide WASH plan, reducing potential for successful coordination of efforts to achieve the woreda's stated WASH priorities.
- **Water resources and environment:** Large-scale *E. coli* contamination of improved rural water sources (85%). High fluoride and limited groundwater potential.

During the woreda participatory context analysis, local stakeholders ranked the WASH system building blocks accordingly (see Figure 18). (N.B. faded building blocks were added to the tool after the initial assessment in 2017).

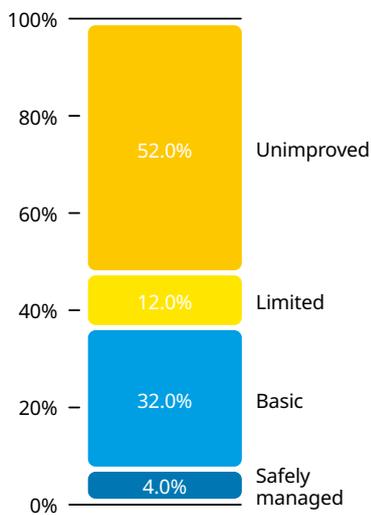
With low WASH coverage in the woreda, poor service levels and weak accountability causing hostility in Jara Town and gaps identified in woreda monitoring, planning, financing and coordination, our efforts focused on strengthening these components of the WASH system.

● **Figure 18: Results of Ethiopia's participatory building block assessment of Gololcha woreda.**

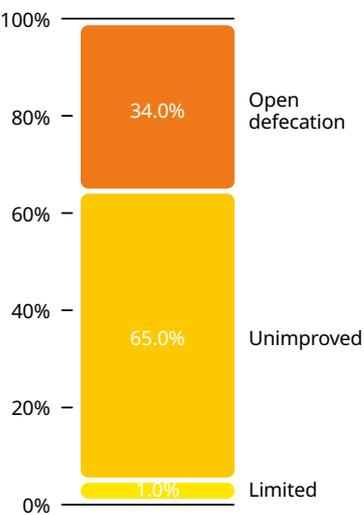


● **Figure 19: Service levels in SusWASH project areas.**

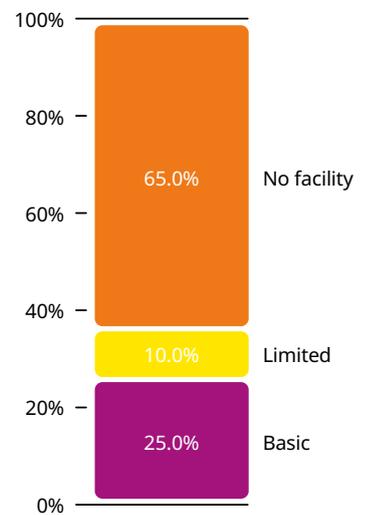
Water service levels



Sanitation service levels



Hygiene service levels

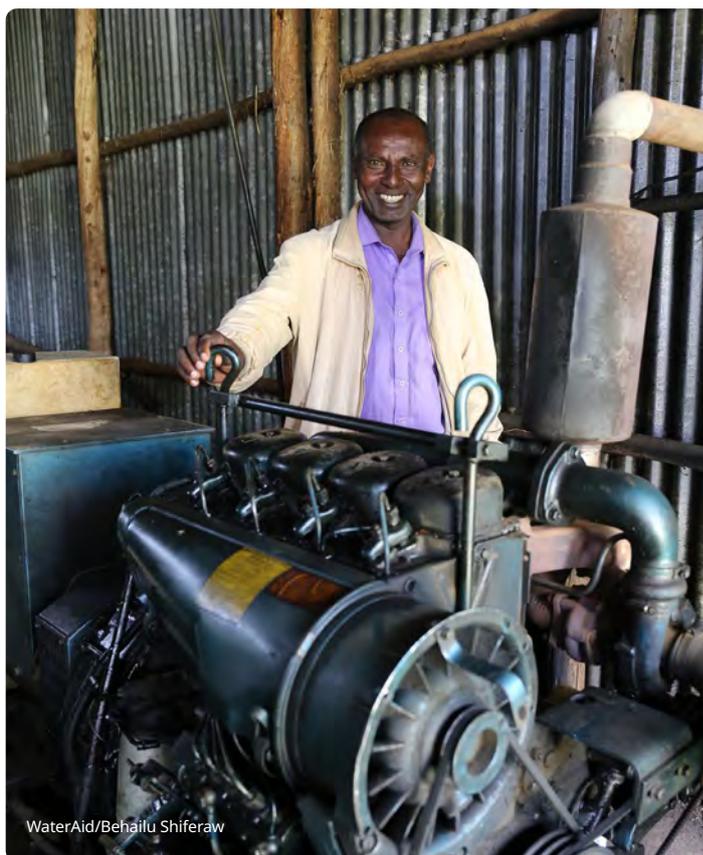


Outcome 1: Inclusive and sustainable WASH delivery models

3.3.1 Supporting the implementation of government-recognised water service delivery models

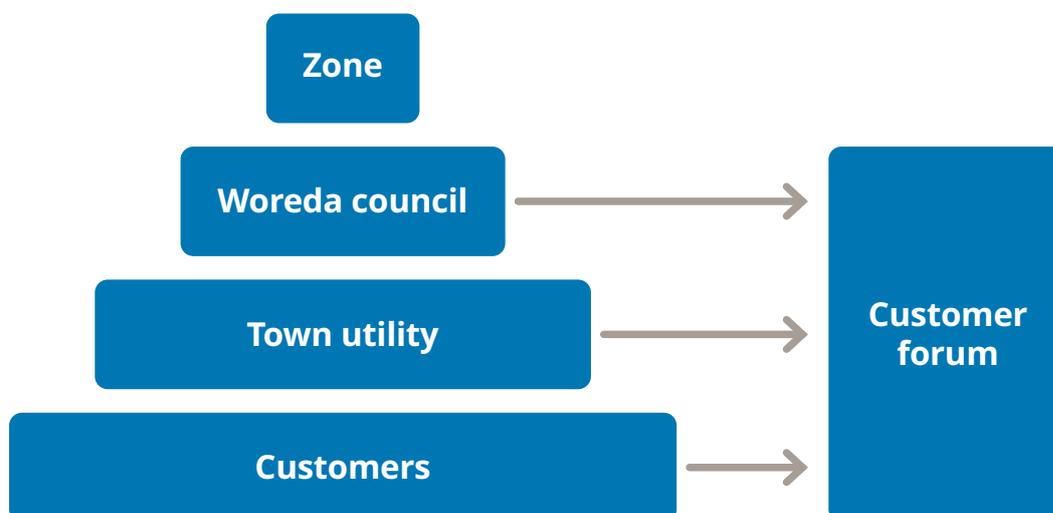
Model 1: Small town utility model in Jara Town

With intermittent electricity supplied through the grid, and no budget to repair its diesel generator, Jara Town utility could only provide water for three hours per day. The connection of unprotected springs to the network raised concerns about water quality. The 20-year-old network suffered from leakage and low pressure, and the original 100m³ reservoir was too small to serve all areas of the town, let alone meet the demand of its growing population (17,098 people in 2020). These challenges exacerbated the communities' unwillingness to pay for water and illegal connections increased. With limited finance, the utility became unable to pay staff salaries and had to reduce its staff by five people.



- Hailu Moti is the manager of Jara Town Water Utility. In front of him is the old, only operational generator. Jara, Gololcha, Bale, Oromia, Ethiopia, November 2017.

- Figure 20: Small town utility management model in Jara Town.



Our support to improve the functioning of the utility under a small town utility model had four main components:

1. Supporting the utility to meet existing and future water demand by rehabilitating the old network, extending it to unserved areas and bringing new water sources online

We drilled one borehole but fluoride levels were too high to bring it into service. We subsequently protected three more distant springs and connected these to the network. We supported the utility to connect two existing boreholes to the power grid to reduce their reliance on diesel which can be challenging and expensive to procure. A new 300m³ reservoir and 9 public waterpoints were constructed in areas previously unserved, while old and damaged pipelines were replaced with new, more durable polyethylene pipes. The network now has capacity to serve the town's current population with spare capacity to meet future demand.

2. Strengthening the management capacity of the utility

A board was set up to oversee the operation and management of the utility. Board functions include: approval and monitoring of utility budget, appointment of senior management staff, approval of tariffs, ensuring adequate financial controls and monitoring utility performance.^{xxiv} Utility capacity was built in asset management, business planning,

● Jara Town Water Utility office compound. Jara, Gololcha, East Bale, Oromia, Ethiopia, November 2017.



WaterAid/Behailu Shiferaw

customer services, financial management, O&M and E&I.

3. Supporting the utility to understand the full life-cycle costs of the operation and attract ongoing investment in service continuity

We and IRC-WASH supported the utility, woreda water office (WWO) and zone to undertake a life-cycle costing analysis (LCCA). Results were presented to the deputy head of zonal administration to increase awareness of the finance required to ensure a sustainable service. We continue to advocate for sufficient budget allocations at zone and regional levels (see case study 3.3.3 for more details).

4. Setting up a customer forum to ensure effective communication between the utility and service users

Following our support to the rehabilitation and extension of the utility network, we started working with the utility and woreda council to establish a customer forum. The customer forum aims to ensure effective communication between the utility and service users (see case study 3.3.4 for more details).

Model 2: Rural water board model for piped water supply in Buriya kebele

With a population of 7,676, Buriya is a remote rural kebele approximately 1.5 hours by unsurfaced road from Jara Town. Prior to WaterAid's intervention there was no functional improved water service in the kebele.

Groundwater potential in the area is very low and people relied on a large unprotected hand-dug well (~10m deep) for their water supply. The community reported instances of ill-health as a result of drinking the water and instances of death (from women falling into the well and drowning).

Our support to improve the water supply in Buriya focused on three areas:

xxiv. The board is composed of a chairperson (from the woreda administration), and one representative from each of the district offices including water, health, finance and economic development, education, women's affairs offices, as well as two people (one female and one male) representing the customers (from the customer forum – see case study 3.3.4), the utility manager and utility secretary.



WaterAid/Desalegn Bekele

● **75m³ Pioneer Tank supplies water to Buriya.**

1. Supporting improvements to water supply infrastructure

Low shallow groundwater potential close to the community and no high yielding springs necessitated the construction of a deep borehole (149m), a reservoir tank (75m³) and re-connection to an existing non-functional piped network^{xxv} to reach demand centres. High cost and low availability of diesel for a generator necessitated the construction of a hybrid (solar/diesel) water supply scheme. The new piped system serves the whole community and a school.



WaterAid/Desalegn Bekele

● **Water collected from an unprotected, hand-dug well in Buriya before the installation of the hybrid water supply scheme.**



WaterAid/Desalegn Bekele

● **Solar array provides electricity to operate the electric pump.**

2. Implementing a rural water board model

The remote nature of the community makes establishment of a sophisticated service delivery model difficult, but with some access to external support from the WWO, we supported the set-up of a rural water board model.³⁷ The Board or main WASHCO (water, sanitation and hygiene committee) is responsible for overseeing the management of the scheme,^{xxvi} while a paid manager and technical operator ensure the everyday O&M.

This model helps to ensure technical and financial support is available when repairs go beyond the Board's capacity. Sub-WASHCOs are elected by the community to manage each tapstand. Board members are elected sub-WASHCO representatives.

Training was provided to the WWO, the scheme manager, the scheme's technical operator, Board members and sub-WASHCOs on O&M, fee collection and conflict resolution. We continue to work with the WASHCOs, Board members, operators, WWO and zone to ensure they have the right skills and budget available to cover minor and major maintenance and asset replacement needs.

xxv. The non-functional piped scheme was previously part of a multi-village scheme. A previous extension to the network had resulted in low pressure in the Buriya section which left users with an unreliable, failing water supply.

xxvi. The scheme is overseen by a Manager while a scheme operator provides technical O&M support – both positions are paid for by user tariffs. Sub-WASHCOs, comprised of community volunteers are assigned to each tapstand and are responsible for the management, supervision and collection of fees. The sub-WASHCOs are also responsible for ensuring proper use of the water point by users, resolving conflicts and raising issues to the Board. The Board, comprised of two people from the WWO, a representative from each sub-WASHCO, the Manager and Operator, coordinates technical and financial support from the WWO for any repairs that go beyond its ability to resolve.

3. Supporting the WWO, woreda administration and zone to understand life-cycle costs for the scheme and attract finance for major maintenance and asset replacement.

Asset registry, service level data and LCCA fed into the development of a costed woreda WASH plan (see case study 3.3.3).

Model 3: WASHCO model for spring-fed gravity-flow scheme in Safogue kebele

Safogue is a remote rural community of 5,364 people, approximately 30–45 minutes drive from Jara Town. The population were using unprotected springs for their main water supply. The community now has access to a water point and wash basin for laundry. The water point and wash basin are supplied by two high-yielding protected springs which are channelled into a 26m³ capacity chamber.

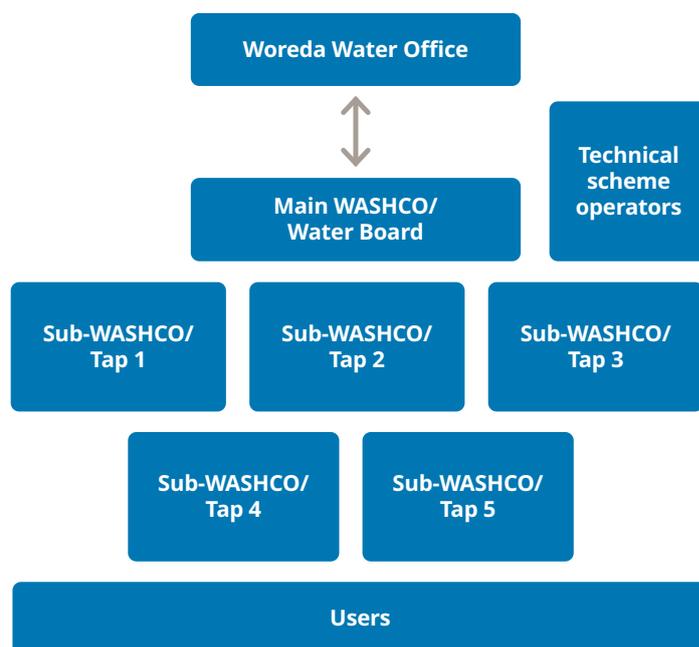
Requiring little maintenance and with low operational costs, the gravity-flow scheme is managed by a WASHCO,^{xxvii} as set out in the National Rural Water Supply Operation and Maintenance Management Strategic Framework (see Figure 22).³⁸ We continue to work with the WWO, WWT and zonal office to ensure there is sufficient budget and capacity to reform the WASHCO and repair and replace assets should it be necessary.

Evidence of change

Inclusive and sustainable service delivery models:

- Water supply services are being well-managed under the new management arrangements.
- The populations of Jara Town, Buriya and Safogue now have an improved water supply service. In all three communities, we have heard from women and girls who report spending less time collecting water per day.

● Figure 21: Rural water board model in Buriya kebele.



● Figure 22: WASHCO model in Safogue kebele.



xxvii. The WASHCO consists of nine members (four women and five men) all of whom were elected by the community. WaterAid trained the WASHCO on leakage prevention and minor maintenance. Tariffs were also set in accordance with the regional legislation and manual; users pay approximately 1Birr (USD \$0.03) per 25l jerry can. The WASHCO has a bank account to manage revenue generated.

Lessons learned

Demonstrating water supply service delivery models:

- Demonstration of service delivery models in areas of such low WASH coverage met community demands and local government priorities (to extend services). This helped to secure local government and service provider buy-in for broader efforts to strengthen management arrangements, monitoring, planning, financing, coordination and accountability. This may not have been possible without a significant service delivery component in Gololcha.

- Building flexibility into plans is necessary to accommodate unexpected challenges when working in difficult environments. Challenges included prolonged periods of political tension in nearby woredas disrupting road access. Low groundwater potential and difficult access meant that drilling contractors were unwilling to bid for work in Buriya. High fluoride in boreholes in Jara meant the project had to switch to development of distant springs. Securing permission from communities already using distant springs was extremely challenging and required identification of alternative sources. It was very difficult to secure permission from a land owner for construction of the main town service reservoir.

3.3.2 Demonstrating a behaviour-centred hygiene and sanitation delivery model

We worked with national, regional and woreda government, and local performance artists, to design a hygiene behaviour change campaign building on the government-endorsed community-led total sanitation and hygiene approach (CLTSH). The campaign was informed by formative research (see Box 5), and another study examining the factors affecting the achievement and sustainability of ODF status.^{xxviii}

The campaign delivered hygiene messages that tap into the motivations and interests of the target community. Hygiene behaviour change messages focused on: handwashing at critical times (e.g. before eating and after using the toilet), safe disposal of children's excreta, access to and use of sanitation facilities, safe water

● **People collect water from the newly-installed waterpoint in Safogue.**



xxviii. The study found that the more visible and active government and local leaders were in the triggering and post-triggering process respectively, the more likely people were to construct latrines and change their sanitation and hygiene behaviours. It highlighted that weak follow-up support from kebele leaders and health extension workers affected achievement and sustainability of ODF status. Generally, communities were willing to construct, upgrade and repair their latrines using their own resources, but suggested marginalised people should receive some extra support. Open defecation was reported to be practised among farming and pastoralist communities who did not have access to latrines while at work or for the management of children's faeces.

management in households, good food hygiene and solid waste management. Hygiene behaviour change messages were disseminated through theatre performances in markets.

Markets were selected to ensure messages reached as many segments of society as possible, particularly women and girls. We intend to expand the hygiene behaviour change campaign to schools and HCFs to ensure messages reach children, mothers and people with varying health status.

We continue to work with local leaders and the health office to ensure there are sufficient funds to follow-up with communities on the construction, use and maintenance of latrines, and practise of good hygiene behaviours.

Evidence of change

- Since the start of the campaign, 67 latrines have been constructed or rehabilitated in Safogue and Buriya. Prior to SusWASH, more than half the population of Buriya, and over 80% of Safogue, practised open defecation.
- In Buriya, community members are reportedly practising improved hygiene behaviours more frequently now that a water supply is more readily accessible.

Lessons learned

Strengthening WASH delivery models:

- Designing an evidence-based hygiene behaviour change campaign requires extensive time and resources. Undertaking formative research to understand and analyse the drivers of people's behaviours can take up to six months.
- Government stakeholders from national to woreda levels, creative agencies, health and WASH professionals must work together to turn research results into motivational messages and resources for use in the campaign. Pictures that create an emotional response were given to participants to help them devise motivational messages and move beyond traditional knowledge and educational messages of good health.



- Local theatre group perform a play to deliver hygiene behaviour change messages to community.

Box 5: Our approach to hygiene behaviour change

WaterAid applies a Behaviour Centred Design (BCD) approach to our hygiene work. Developed by the London School of Hygiene and Tropical Medicine, BCD draws on evolutionary psychology and marketing techniques to motivate individuals to change their behaviour on a long-term basis.

Undertaking formative research to understand the emotional drivers of people's behaviour is central to the BCD approach. BCD involves: changing people's behavioural motives, disturbing their settings with visual 'nudges', and changing social norms. BCD has been found to be more effective than hygiene promotion or hygiene education programmes as it taps into the deeply held values, beliefs, social norms and cultures that drive individual and community behaviours.

In doing so, it aims to achieve and sustain improved hygiene behaviours. A five-step (ABCDE) creative process is used to 'Assess, Build, Create, Deliver and Evaluate' the hygiene behaviour change campaign, which lasts a minimum of 18 months.

Embedding the hygiene campaign into existing government initiatives and processes helps to scale and sustain results.

Outcome 2: Improved capacity for planning, monitoring, financing and coordination

3.3.3 Strengthening woreda monitoring, financing and planning processes^{xxix}

We worked with the WWT to undertake a water asset inventory and a baseline of WASH service levels. We trained the WWO and zonal staff to visualise the data and update the inventory on an ongoing basis. Previously, the WWO received functionality reports from WASHCOs. However, this data was not used to maintain an asset inventory nor to systematically plan or budget for future repairs and replacements. While WASHCOs continue to send monthly reports to the woreda (either in writing or over the phone), we are supporting the woreda to upload these onto an online database to maintain the asset inventory.

With support from IRC-WASH, we then facilitated a participatory LCCA to understand the full cost of reaching and sustaining universal basic water access (as defined by the JMP) in the whole woreda by 2030. It highlighted the scale of the

finance gap and provided evidence of where investment was needed. We subsequently calculated the direct costs of supporting sanitation at household and institutional levels.

We supported the woreda to use this data to develop a costed WASH plan. The plan includes targets for extending and sustaining coverage and improving WASH service levels.

We continue to support the woreda to lobby zonal and regional levels of government to release further funding for the plan's implementation and allow for more flexibility between budget lines, particularly for capital maintenance.

We also supported the WWO to establish a data and information management system and centre. The centre enables the sharing of documents, data and resources from across different woreda offices to improve cross-sector coordination and planning.

As secretariat of the One WASH Coordination Office, which oversees the National WASH Equity and Inclusion Task Force, we also successfully lobbied government for the integration of E&I indicators into the National One WASH Monitoring Framework.



● Zinash Kefale, left, and Abubeker Kedir facilitate training on data collection using mWater app. Jara, Gololcha, East Bale, Oromia, Ethiopia, November 2017.

xxix. Read the full details of this case study available at: washmatters.wateraid.org/sites/g/files/jkxooof256/files/lessons-learned-from-wash-systems-strengthening-a-deep-dive-into-costing-and-planning-for-sustainable-and-inclusive-water-supply-services-in-gololcha-ethiopia.pdf (accessed 29 Jul 2020).

Evidence of change

Improved planning, monitoring, financing and coordination:

- The process of developing a costed woreda WASH plan helped to build understanding of different sector offices' role in the provision of inclusive and sustainable WASH.
- The LCCA highlighted the amount of revenue required to maintain existing services and increase basic access in the woreda on a phased basis, leading to revenue allocations for these functions in the plan.
- The costed WASH plan has helped to attract additional finance to the woreda from government and non-government actors. While Gololcha did not receive an increase in funding for capital maintenance, it did receive an increase in budget for capital expenditure from the zone in FY19/20. Furthermore, the NGO, SNV, referred to the woreda WASH plan when deciding the nature and location of their intervention in the woreda.
- Zonal officials intend to scale the planning, monitoring and costing methodologies used to other woredas within the zone. We will continue to support them to do this.
- The newly-established management information centre is being used by the water, health and education offices to share resources and documents. It is too early to report its use in their decision making.
- Woreda staff now have the skills needed to map assets and update the asset inventory on an ongoing basis. This is helping to ensure up-to-date data is available to inform planning and direct investment.

Lessons learned

- Despite our efforts to attract additional funding for major maintenance, through the LCCA and development of a costed woreda WASH plan, it is understandable that in a woreda with very low coverage, government priorities remain sighted on extending coverage. Building political understanding at higher levels of government about

the need to allocate sufficient budget for ongoing service delivery costs is one thing. Turning this understanding into action is another. In very low coverage contexts, this will take more than three years to translate into tangible budget increases and changes in central government's finance allocation formula. We will continue to call for increased finance for the woreda WASH plan, particularly for major maintenance.

- Frequent and prolonged power outages in remote woredas and internet shut downs during political unrest mean that data solutions should not be overly dependent upon online solutions. Results shown on online dashboards should also be printed periodically to ensure access to essential data.

Outcome 3: Active, empowered people and strong accountability mechanisms

3.3.4 Strengthening customer voice and accountability pathways in Jara Town

We worked with Jara utility, the WWT and service users to establish a customer forum.^{xxx} Early efforts to establish the forum included initiating community score carding exercises and establishing a community committee to facilitate dialogue between the public and the utility. This exposed issues of illegal connections and non-payment of bills which the committee tried to address by explaining to households that only by paying would the utility have funds to provide a continuous service. However, after a prolonged period of service interruptions the committee lost motivation and stopped meeting. We waited until significant improvements had been made to the utility's infrastructure and capacity to deliver services before revisiting plans for the customer forum.

Following our support to the utility (see case study 3.3.1), the town's population is now receiving a more reliable service, and those

xxx. The 2011 National WASH Implementation Framework makes provisions for service users and services providers in towns to interact via 'Customer Forums'.

previously unserved will soon have access. With these service improvements, plans for the Customer Forum have resurfaced. Two representatives from each of the nine zones of Jara Town make up the 18-strong membership of the Customer Forum. We worked with the district offices of women, children and youth affairs, and of labour and social affairs, to raise understanding among men and women about the added burden of water on women to encourage women to participate. The Customer Forum is relatively new, but there are promising signs that it is helping to facilitate communication between the community, utility and WWO. WaterAid continues to identify ways to increase the participation of women in the forum and encourage more regular, monthly meetings.

Evidence of change

Active, empowered people and strong accountability mechanisms

- There are early signs of a greater understanding among the community of the constraints faced by the utility, and greater understanding among utility staff of the challenges faced by marginalised members of the community. Aware of their interconnected constraints, users are now more willing to pay for water from the network, call out illegal connections, and support the utility with network maintenance and expansion. The utility also communicates information and challenges that may affect users' water supply on a more regular basis.

Lessons learned

- Prior to SusWASH, service users were angry that they were not receiving an acceptable level of service and utility staff had to hide from Jara residents to avoid abuse and possible violence, particularly during service outages. Our first attempts to establish the forum while the utility remained unable to improve service levels exacerbated tensions between service users and the underperforming utility. We therefore postponed work on the customer forum until the network had been rehabilitated/extended.



● **Woreda level context analysis workshop. Gololcha, East Bale, Oromia, Ethiopia, November 2017.**

- Accountability gains achieved in Jara Town are unlikely to be sustained unless matched with the necessary finance and capacity to deliver a quality water supply service to all. This requires further budget advocacy efforts at zonal, regional and national levels to ensure allocation, disbursement and use of sufficient WASH budgets and ongoing professional training of woreda and utility staff.^{xxxi}
- While we tried to ensure women's participation in the customer forum, engrained gender roles make this challenging. Deeply held ideas about gender norms prevent women from speaking out. Similarly, women's reproductive role in society (e.g. caring for children and elderly relatives, doing housework etc.) means they have less time to engage. There is a total of 18 people on the customer forum, only two are women. We plan to do further analysis to understand and address the barriers to their participation and to arrive at a more balanced representation of women on the forum. We also need to enlist the help of a CSO partner to support greater participation of women on an ongoing basis.

xxxi. This is consistent with findings from Governance and Transparency Fund programmes and other evaluations of accountability projects such as RTI and DFID. Available at: rti.org/rti-press-publication/governance-and-service-delivery (accessed 29 Jul 2020).

Outcome 4: Clear institutional arrangements and strong government leadership

3.4.5 Establishing clear roles and responsibilities for stronger government leadership

As set out in the National WASH Implementation Framework (2011), we supported the woreda administration to setup the WWT^{xxxii} and facilitated agreement of roles and responsibilities and application of human rights principles.^{xxxiii} Woreda staff were trained on application of the National Guidelines for inclusive WASH and we implemented a training programme to the Woreda Education Office so that female school teachers would have the skills and understanding to facilitate conversations with girls on MHM. We demonstrated application of the inclusive WASH guidelines in four schools (two in Jara Town, and one each in Safogue and Buriya), by installing accessible, gender-segregated toilet blocks with handwashing and MHM facilities. We also supported SMCs to budget and plan for O&M costs and supported the set-up of school WASH clubs (involving girls, boys and female and male teachers).

In our position as secretariat of the One WASH Coordination Office, we successfully lobbied government to hire a dedicated E&I specialist to work full-time on the Government's National One WASH Programme to help ensure that all WASH policies, guidelines and standards provide for everyone's WASH needs, and that these are applied by all actors working to improve WASH in the country.

- **WaterAid Ethiopia facilitates discussion with WWO and utility staff about their roles and responsibilities for the inclusive and sustainable provision of WASH using Making Rights Real (MRR) tools.**

Evidence of change

Clear institutional arrangements and strong government leadership:

- Before the SusWASH programme, there was no WWT in Gololcha and no formal mechanism to plan and coordinate WASH activities. The WWT is now established, has clear roles and responsibilities and meets regularly and independently of WaterAid to ensure planned activities are coordinated and remain on track.
- National WASH policies, guidelines, standards and training manuals^{xxxiv} now make provisions for targeting and inclusion of marginalised groups.
- Woreda staff understanding of the national E&I guidelines has increased and they are now factoring inclusive design into new WASH facilities.
- The WASCO manual has a stronger focus on inclusion at woreda and kebele levels.
- Developing a costed woreda WASH plan (see case study 3.3.3) is helping to ensure the woreda education office allocates sufficient resources for school WASH.



WaterAid/Serawit Atnafu

xxxii. The WWT consists of the Woreda Administrator and the Heads of the Finance and Economic Development, Water, Health, Education, Agriculture and Women's Offices, as well as NGO representatives.

xxxiii. We used the MRR materials to facilitate conversation with the district about how they could operationalise the human rights principles in their everyday work. They can be downloaded here: human-rights-to-water-and-sanitation.org/. Read more about our experiences of using the tools in this paper: *Designing Human Rights for Duty Bearers: Making the Human Rights to Water and Sanitation Part of Everyday Practice at the Local Government Level* Available at: mdpi.com/2073-4441/12/2/378 (accessed 29 Jul 2020).

xxxiv. See OpenWASH learning resources, produced in partnership between WaterAid and The Open University in the UK. Available at: open.edu/openlearncreate/course/view.php?id=2244 (accessed 29 Jul 2020).

Lessons learned

- Facilitating regular discussions with local government about their roles and responsibilities for the realisation of the human rights to water and sanitation was supported by MRR materials. The tools allowed for constructive and continuous dialogue about how to practically apply human rights principles into their everyday work, without using more divisive or confrontational language such as 'rights holders' and 'duty bearers'. Understanding the context and perceptions of government towards human rights language is central to strengthening institutional arrangements and local government accountability. This targeted engagement and support to the WWT played an important role in establishing the customer forum (in case study 3.3.4).
- While all government staff at woreda level have a personal work plan and objectives, these are very rarely monitored or reviewed at senior levels and there are limited repercussions if objectives are not met. There are limited incentives to achieve targets. This demotivates staff and delays decision making. More must be done to strengthen performance management within government structures to overcome this challenge.
- It is well known that deeply embedded cultural beliefs, social norms and taboos at community level restrict achievement of gender equality and broader system change – despite women's empowerment being a national priority in Ethiopia^{xxxv} (50% of WASHCO members should be women in decision making positions). More efforts are needed to unpick the barriers to women's participation in WASH decision making and women's empowerment more broadly at the local level. We found that working on issues of MHM, and engaging men and boys on the issue in particular, is more accepted in Jara Town than in remote rural kebeles of Buriya and Safogue. This is possibly due to the heterogeneous nature of Jara's population

with varying educational backgrounds, religions, economic status, greater access to information and easier access to urban centres. Support is required from a CSO partner who can help to further understand and tackle these issues, particularly in Buriya and Safogue.

Conclusion

Realisation of a stronger WASH system in Gololcha will require more time and effort, particularly at higher levels of government. Good progress has been made in some areas set out in our theory of change, namely in relation to strengthening models of WASH delivery, improving capacity for monitoring, planning and budgeting and facilitation of clear roles and responsibilities.

Significant improvements have been made to service levels, the performance of Jara utility and adoption of improved hygiene behaviours. We will continue to lobby and work with national, regional and zonal governments to strengthen their understanding of the need for increased funds to be made available for major maintenance and extension of coverage. More work is needed to ensure stronger participation of women in decision making processes.

We also need to continue to strengthen the customer forum. A lack of CSO partners in the woreda means we have had to implement directly. We will need to work towards a situation where support for women's empowerment and ongoing behaviour change is available from local authorities, community groups and CSOs operating in the woreda.

In an area with low WASH coverage and service levels, demonstration of service delivery models allowed us to simultaneously meet the demands of communities, the priorities of local government (to extend services) and secure government and service provider buy-in for broader system strengthening efforts.

xxxv. Demonstrated in a recent cabinet reshuffle which resulted in 50% female representation. Available at: apnews.com/93bc411f2c68438db25b31b3d68943ef and the *National Gender Mainstreaming Guidelines* (2010). Available at: mowca.gov.et/documents/20181/21953/NATIONAL+GENDER+MAINSTREAMING+GUIDELINES/961b3007-bd34-4b84-a865-bbfc0094eec3 (accessed 29 Jul 2020).

3.4 Pakistan

Background

Pakistan has a federal governance system with power decentralised to its four provinces (Sindh, Punjab, Balochistan and Khyber Pakhtunkhwa). Provinces are divided into divisions which are sub-divided into districts. Districts are made up of tehsils/talukas that are further sub-divided into union councils (UCs). Thatta is a large district (roughly five times the size of London) with a population of almost one million people. We apply a district-wide approach (DWA) with service delivery in the seven (out of 40) UCs informing efforts to strengthen the WASH system at district and provincial levels. We had a pre-existing relationship with Thatta District, however our engagement at provincial level was less well-established. Our implementing partner

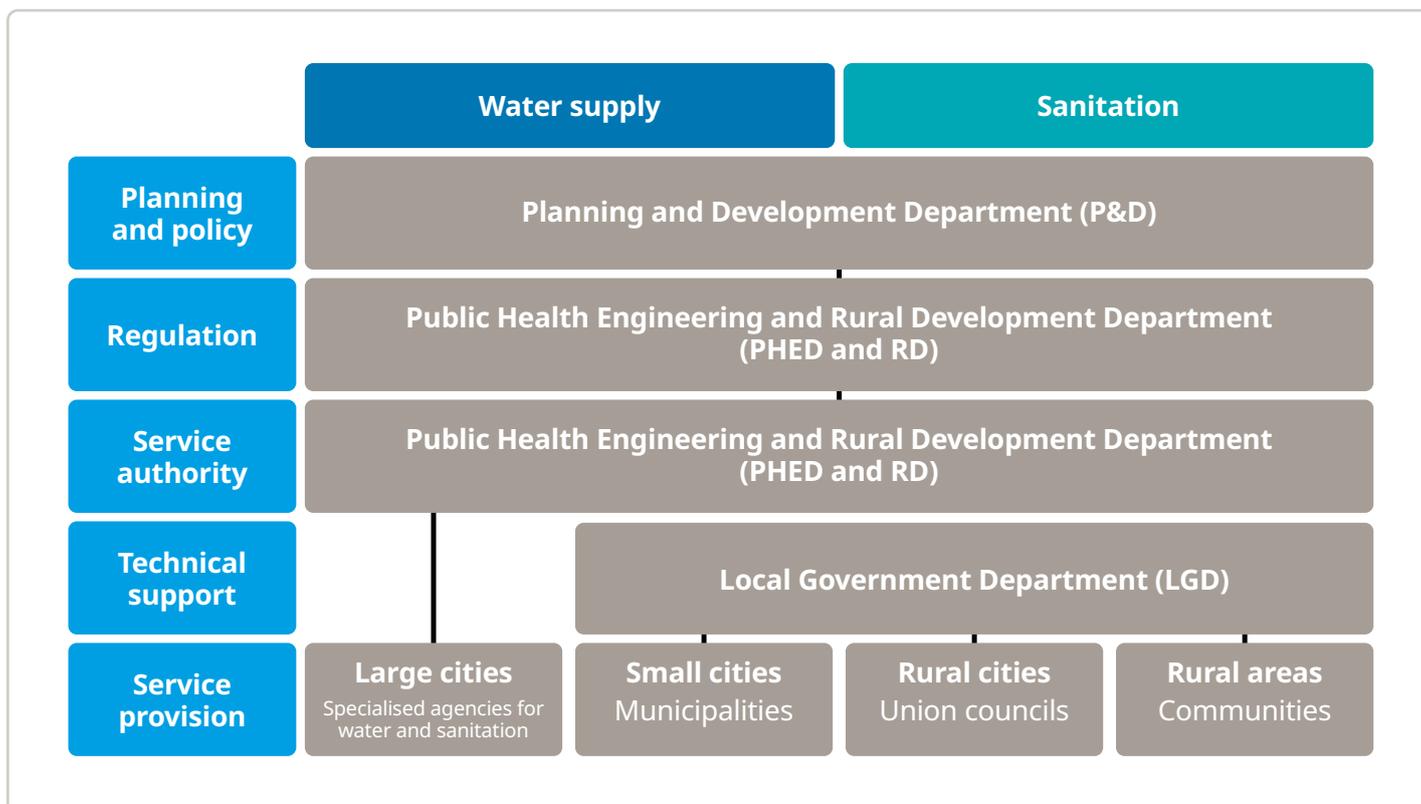
is the National Rural Support Programme (NRSP). The programme has a rural focus with the majority of efforts targeted at rural sanitation.

The operating environment has a number of features that must be considered when undertaking system strengthening. We have a constructive working relationship with government and strong partnerships with many national institutions, but sensitivity is required. The relationship between INGOs and government has always been strained. There can be mistrust because INGOs are handling foreign funds and sometimes operating without government involvement or coordination.³⁹ In 2017, all INGOs working in Pakistan were requested to reapply for permission to operate in the country.

● **Figure 23: SusWASH implementation location in Pakistan. SusWASH is focused in Thatta District and Sindh Province.**



● **Figure 24: Overview of institutional arrangements showing who is responsible for water and sanitation in Sindh Province.**



Shortly afterwards, a number of INGOs had their permission to work in Pakistan withdrawn. A Memorandum of Understanding requires all INGOs to refrain from engaging in political activity, such as campaigning and advocacy, as well as distribution of materials deemed to negatively affect social, cultural and religious sentiments.⁴⁰

Thatta district is located in a security-sensitive area meaning additional permissions and logistics are necessary for programme implementation. Government permission is required for surveys and collection of georeferenced data is illegal. Water and sanitation are not enshrined as human rights in Pakistan's constitution and use of human rights terminology (for example 'rights holder', 'duty bearer', 'accountability' and 'women's empowerment') can be viewed as confrontational and subversive.

WASH system analysis

Key blockages to inclusive WASH provision and sustainability:⁴¹

- **Institutional arrangements and accountability:** Institutions have overlapping roles, leading to a competition for resources, a lack of accountability, and poor service delivery.
- **Coordination and integration:** No formal mechanism is in place to coordinate the planning of WASH sector investments.
- **Planning:** At the provincial level, sector planning frameworks are weak, and lack a sector-wide approach.
- **Finance:** District WASH budgets are not responsive to WASH access and needs.
- **WASH delivery models:** Resources are geared towards new WASH projects, with only a small proportion allocated to O&M, which falls under communities' responsibilities. Government does not take any direct responsibility for the maintenance of hand pumps, which are mostly implemented on a self-supply basis

at household level or by INGOs at communal level. Overall, very poor water supply service levels persist.⁴² The policy focus for sanitation has been on eliminating open defecation, with insufficient investment in sustaining latrine use or in the safe management of faecal waste, resulting in an unprecedented concentration of untreated faecal waste near human settlements.

- **Monitoring:** There is no national, provincial or district WASH MIS and no mechanism to verify if ODF is sustained. There is a system in place to monitor the status of school WASH.

Water supply:

- National policies are not available in local languages limiting their application in the province.
- Communal hand pumps are sometimes over-

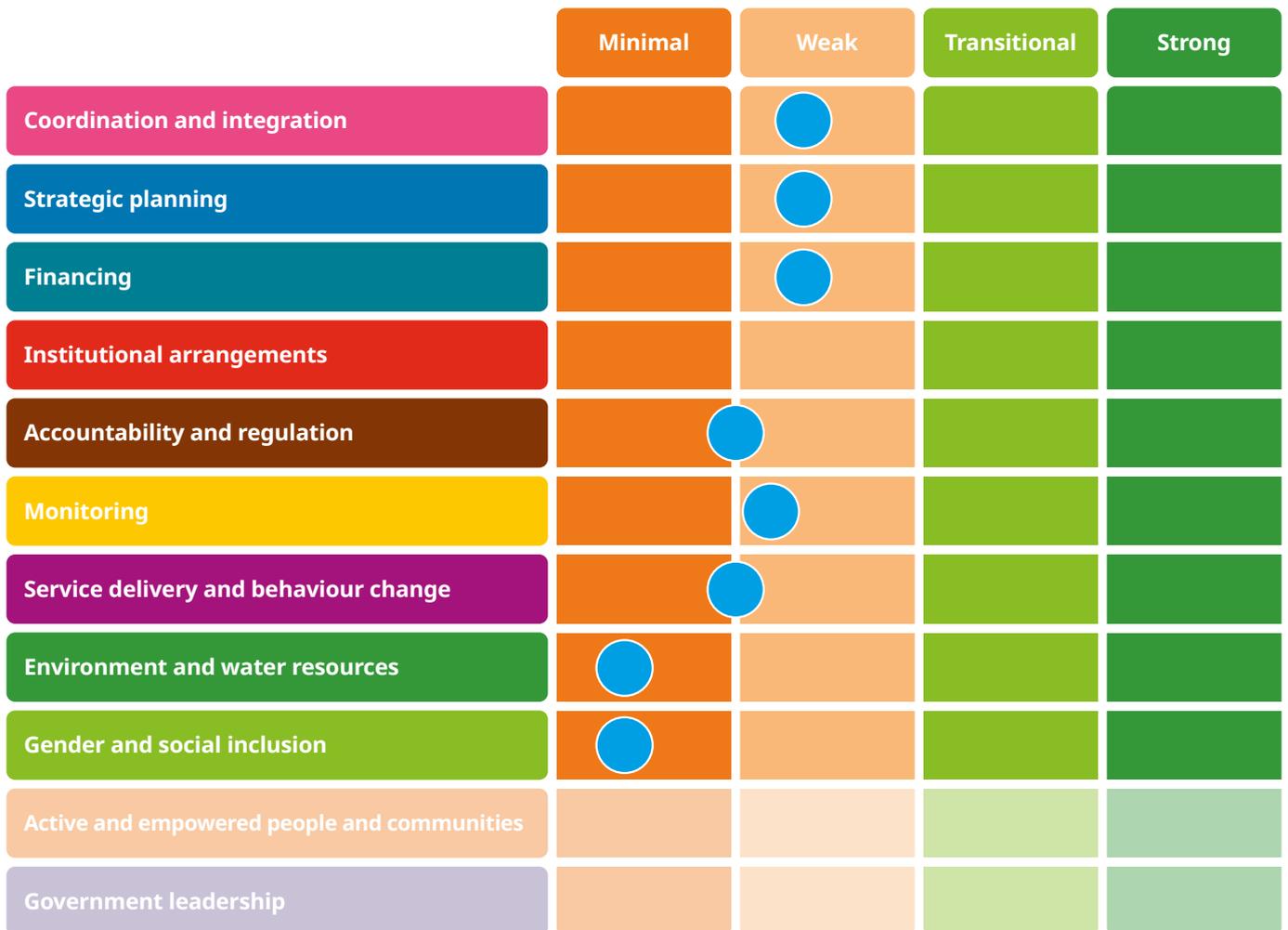
used compared to the national threshold of 35 households per hand pump (on average, these are used by 60 households) resulting in long queuing times.

- There are no established district or community-level practices to ensure safe water treatment, resulting in overall poor treatment at all levels (84% of households do not undertake any form of water treatment).
- Groundwater salinity is a major problem in the district, leading to abandonment of hand pumps.

Sanitation and hygiene:

- The absence of sewerage and drainage systems result in the presence of stagnant water, which combined with the high level of open defecation (61% of households), causes environmental risks.

● **Figure 25: Results of building block assessment focused on Sindh Province.**



- Only 14% of households have functional latrines and the distance between sanitation facilities and the water sources is usually less than 50 metres, thus increasing the risks of contamination.

WASH in schools:

- The majority of the schools are not equipped with water facilities (71%) or sanitation facilities (73%).
- Those that are have poorly functional services: only 25% have access to functional latrines, whilst most water facilities are badly damaged, broken down or contaminated.
- School children report their water source having bad taste, smell and colour.

The WASH system analysis helped to identify weaknesses in monitoring, financing, coordination, WASH delivery and water resources. Our efforts therefore targeted these components of the WASH system.

Outcome 1: Inclusive and sustainable WASH delivery models

3.4.1 Strengthening sanitation and hygiene behaviour change delivery models

In line with the Government of Sindh's ambition to achieve ODF status by 2025, we have spent almost 10 years applying the government-approved Pakistan Approach to Total Sanitation (PATS).⁴³ We undertook a review to identify strengths and weaknesses of the PATS approach.

The review showed that progress towards ODF status had been made where facilitators were permanent residents in communities, where sanitary entrepreneurs were operating, where masons had been trained and where communities were linked to local support organisations (LSOs). Similarly, the integration of a hygiene behaviour change component helped to motivate people to change and sustain their

hygiene and sanitation practices. Furthermore, an extended implementation timeframe of up to four years helped to ensure local structures are well-established and able to provide dedicated follow-up support to communities post-ODF.

However, a number of weaknesses remain. High staff turnover and a lack of clear roles set out in policy results in many local government staff being unaware of their responsibilities regarding PATS implementation, especially after communities have achieved ODF status. No efforts have been made to establish a government-led, post-ODF monitoring mechanism. Government-led coordination is weak and the timeframe of some interventions is too short to result in achievement of ODF status or to ensure sustainability. These areas will be our focus in the next phase of the SusWASH programme (see Box 6).

We worked through the District WASH Forum to help build government understanding of the PATS process and improve coordination of sanitation interventions. We facilitated exposure visits of elected representatives, government officials, members of the district WASH forum and community representatives to various communities, schools and HCFs to help strengthen their understanding of and sense of responsibility for improving sanitation in their respective communities.

We worked with NRSP to deliver PATS in 245 villages; this resulted in the construction of 7,244 household latrines on a self-help basis. Recognising that one latrine per compound may be insufficient in terms of service quality, a cap of 14 people per toilet was introduced.^{xxxvi} To be certified ODF, communities must fulfil the following Public Health and Engineering Department's (PHED) criteria: 'excreta free' open spaces, 'excreta free' open drains, 'excreta free' hands and 'sustaining ODF status'. These criteria are assessed through observation and random questioning by the district ODF committee.

We are working in Muzaffargarh District in Punjab (which was recently declared the first ODF district in Pakistan)⁴⁴ to support the government to develop a post-ODF monitoring mechanism.^{xxxvii}

xxxvi. This cap was first introduced during the DFID-funded South Asia WASH Results Programme 2014–2018.

xxxvii. See community-led total sanitation (CLTS) Knowledge Hub Learning Paper 2017 Keeping Track: CLTS Monitoring, Certification and Verification. Available at: pseau.org/outils/ouvrages/ids_sida_keeping_track_clts_monitoring_certification_and_verification_2017.pdf (accessed 29 Jul 2020).

We plan to build interest among the Government of Sindh for a similar mechanism by sharing insights from this work once it is more established.

At provincial level, we advocated for the integration of our hygiene behaviour change information, education and communication (IEC) materials to be used in the government-led, World Bank-funded, Saaf Suthro Sindh programme (SSSP). The programme seeks to achieve ODF status in 13 districts in Sindh.

Evidence of change

Inclusive and sustainable WASH delivery models

- Our hygiene behaviour change IEC materials have been successfully integrated into the SSSP.
- 7,244 latrines have been built and 245 villages have achieved ODF status in Thatta District.

Lessons learned

- We deepened our understanding of the factors driving poor sanitation service delivery and sustainability and will place greater emphasis on strengthening these areas in the next phase of SusWASH.



- **Shumail Bhatti, 28, interacting with the community in the village of Nooh Bhatti, Union Council Chatto Chand, District Thatta, Province Sindh, Pakistan. November 2017.**

Box 6: Recommendations for accelerating progress towards sustained universal sanitation in Sindh

Strengthen government-led coordination and clarify roles and responsibilities

While the National PATS Guidelines mention the importance of local government participation in delivery, there is currently no document clearly setting out the role of provincial and local government or government departments, civil society, communities and others. There is also weak government coordination of sanitation interventions and the actors involved. These weaknesses affect the availability of follow-up support to communities and the accountability of all stakeholders involved.

Move beyond one-off projects

Across Pakistan, PATS is being implemented as part of grant-funded projects. There needs to be a greater focus on integrating PATS into existing processes and building the local support institutions necessary to ensure hygiene messages are reinforced and sanitation materials and skills are available on an ongoing basis.

Develop a post-ODF monitoring mechanism

The National PATS Guidelines state that a monitoring mechanism 'to monitor the ODF status at any point in time' is needed to ensure communities maintain their ODF status. As communities become certified ODF, more effort needs to turn towards supporting government to develop this monitoring mechanism.

Research and compile context-specific technology options

The National PATS Guidelines do not specify sanitation technology options. A resource that compiles different technology options for different contexts (e.g. high water table areas, water-scarce areas and low-cost options), would support implementers in the selection of appropriate technologies.

3.4.2 Strengthening delivery of WASH messages in schools through development of WASH teacher training manuals and curricula

We were invited to input into the development of a province-wide school strategy. We met the Director of Curricula Development (CD), (a WASH/MHM champion), and proposed working with the Sindh Education and Literacy Department, Sindh Teacher Education Development Authority (STEDA) and NRSP to develop a province-wide WASH and MHM teacher training manual. This would disseminate information about improved hygiene, sanitation and water behaviours, and MHM, to teachers and school children on an ongoing basis, thus helping to sustain the ongoing behaviour change necessary to achieve lasting outcomes.

We also supported the installation and rehabilitation of WASH facilities in 70 government model schools in Thatta District. We supported SMCs to understand and budget for the ongoing O&M of facilities and set up school WASH clubs to help ensure the sustained delivery of good sanitation and hygiene messages.

At the federal level, we continue to work with the Ministry of Education to integrate WASH messaging into the school curriculum as part of our ongoing advocacy efforts.

Evidence of change

Inclusive and sustainable WASH delivery models:

- The WASH teacher training manuals were formally approved by the Curriculum Wing of the Education and Literacy Department. They will now be embedded into the standard teacher training programme and used in all public schools in Sindh. We have since used the manuals to provide training to 140 teachers across 70 model schools in Thatta district.
- 70 model schools in Thatta have improved WASH facilities and established management arrangements to help ensure their ongoing O&M.

Lessons learned

- Identifying the Provincial Director of CD as a natural WASH champion, and using her influence within the Education Department, helped us to secure buy-in for the development of the WASH and MHM teacher training manual.
- Identifying the interests of the Provincial Secretary of Education in increasing school girl enrolment and explaining how the WASH and MHM teacher training manual could accelerate progress, helped secure his buy-in for its development.
- Government bureaucracy can significantly slow down progress; it took seven months to secure Provincial Government permission to operate in schools in Sindh. Donor flexibility and adaptive management gave us time to adjust to government timeframes.



● A view of Government Primary School Allah Sajan Khaskheli, Union Council Doomani Taluka, District Thatta, Province Sindh, Pakistan, August 2017.

3.4.3 Addressing salinity issues in communal water supplies

We investigated the main causes of hand pump non-functionality and abandonment in 54 communities in Thatta district. Changing levels of groundwater salinity over time were found to be a major reason for abandonment between six months and one year after hand pump installation. Groundwater salinity has been linked to seawater intrusion, over abstraction and natural geochemistry.^{45,46}

To mitigate the risk of further hand pump abandonment, NRSP drilled relatively shallow boreholes alongside irrigation channels (where groundwater is found to be less saline) and installed 'connector pipes' to link the borehole to simple suction hand pumps positioned in the centre of communities. WaterAid is working with the Pakistan Council of Research in Water Resources (PCRWR) to undertake water quality testing on a six-monthly basis to track fluctuations in salinity levels in these boreholes.

Initial findings reveal that salinity concentrations fluctuate seasonally but remain within the national limits of <1000 mg/litre. This delivery model is being promoted as a means of combating groundwater salinity in drinking water and reducing the levels of hand pump abandonment.

● **A view of the irrigation canal used for collecting drinking water and washing clothes in the village of Noor Muhammad Thaheem, Thatta, Sindh, Pakistan, August 2017.**



● **Sughra, 20, with a WaterAid installed water pump in the village of Muhammad Urs Sehejo, Chatto Chand Union Council, Thatta District, Sindh Province, Pakistan, September 2018.**

Evidence of change

Inclusive and sustainable WASH delivery models

- Communities have access to water supply services that conform with national water quality standards with regards to salinity.
- The study into the causes of hand pump abandonment justified the use of an alternative delivery model using 'connector pipes' which is being applied by other development partners in Thatta and other districts. The study also sparked discussion and debate about how best to improve hand pump sustainability from a management perspective within the district WASH forum. However, little progress has been made due to the lack of government responsibility for O&M of communal handpumps in rural areas. We will continue to lobby PHED at provincial level and through the Parliamentarian Forum to take responsibility for ensuring their sustainability.

Lessons learned

- Increasing government commitment and responsibility for the safe and sustainable provision of rural water supply is extremely challenging in Thatta District and Sindh Province. Local government at district and UC levels take no responsibility for the O&M of small rural community water supplies, despite their clear mandates.⁴⁷ We are working through the District WASH Forum, and with the Provincial Secretary of PHED and Local Government, to increase awareness of and responsibility for the realisation of rural communities' right to sustainable and safe water.
- Salinity challenges mean a treatment solution is required, but more needs to be done to understand the sustainability of different treatment options.

Outcome 2: Improved capacity for planning, monitoring, financing and coordination

3.4.4 Supporting government asset mapping, life-cycle costing and province-wide school WASH monitoring

We worked with PHED, PCRWR and local government of Thatta District to undertake asset mapping of 375 government-owned water supply facilities in seven out of 40 UCs. The aim was to demonstrate the value of having such data to inform budgeting, planning and decision making with the expectation that the pilot would be scaled by the government to the whole district. It is not permitted to use georeferencing tools in Pakistan, so the location of water points was recorded by matching them up with a school, community or health care unit by name.

We trained junior local government and PHED staff to collect the data. Staff from the PCRWR collected and tested water samples.

The majority of water points (358) were located within public schools, nine were in HCFs, and eight were rural water supply schemes. The mapping revealed that 54% of the 375 water points were non-functional, of which the majority were hand pumps in schools.^{xxxviii} The most frequently reported symptom of non-functionality and abandonment was mechanical breakdown, with a lack of knowledge of where to source replacement parts cited as the main reason why pumps were not fixed. There are eight PHED-installed water supply schemes serving the seven UCs. Of these eight schemes, six (75%) were non-functional. In the majority of cases, no payment system was in place for the O&M of these schemes.

Building on the asset mapping pilot, WaterAid calculated the life-cycle costs of three different-sized capacity reverse osmosis (RO) plants. RO plants or 'ultrafiltration plants' are installed by PHED and local government to combat salinity issues. A high proportion of these plants in Sindh/Thatta are non-functional due to poor management and inadequate finance.

Following our work with the Education Department on WASH data collection in schools, we worked with members of the Sindh's WASH technical working group to propose new indicators for the existing SEMIS^{xxxix} covering the functionality of water and sanitation facilities, and the presence of handwashing facilities, gender-separated toilets, and facilities for MHM in schools.

We helped to train enumerators hired by the government to collect data from schools across the province. Unfortunately, some trained enumerators passed data collection responsibilities on to untrained teachers. We raised concerns about the potential for erroneous data with the district level support unit, but most of the data had already been collected. The report is being compiled and is expected to be shared this year (2020).

xxxviii. In schools with non-functional water points, students reportedly bring water from their homes for drinking purposes. For other purposes (e.g. handwashing), water is collected from nearby sources by students or the school caretaker.

xxxix. Since the mid-1990s, Pakistan has had an Education MIS to track the status of schools with regards to pupil enrolment, staff availability and access to basic materials and equipment.



● Enumerators receive data collection training to undertake asset mapping in seven unions councils in Thatta district, Sindh Province, Pakistan.

Evidence of change

Improved planning, monitoring, financing and coordination:

- The asset-mapping generated great interest from PHED to scale the exercise beyond seven UCs to the whole district. We are now working with Thatta District to obtain provincial-level buy-in for the district-wide asset mapping.
- The Provincial SEMIS now includes six indicators that track the status of WASH in schools. This data is expected to inform investments in new and existing school WASH facilities.
- Findings from the LCCA of three RO plants were shared with PHED at the district level and helped to build greater understanding of the finance required to sustain RO-based services.

Lessons learned

- Embedding WASH indicators into the existing SEMIS helps to ensure data is collected about the status of school WASH on an annual basis. However, further advocacy efforts are needed to ensure findings are available, transparent and used to inform decision making.
- The SEMIS data collection exercise highlighted that while government buy-in and participation in data collection is necessary for ownership of findings, it is highly challenging to get reliable data when government contracted enumerators are not adequately supervised. Agreeing clear roles and responsibilities and providing adequate supervision, could help to mitigate the risk of enumerators outsourcing data collection tasks to untrained community members.
- Supporting data collection in Pakistan is particularly challenging as an INGO; all data collection requires a No Objection Certificate (NOC) from government, which can take over a year to obtain. It took almost

1.5 years to get permission to undertake the asset mapping. Donor flexibility and adaptive management allowed us to adjust to government timeframes.

- The District WASH Forum, comprised of local government sector offices and other NGOs, was a good channel through which to build interest and buy-in from district government to undertake the asset mapping survey.
- Initially, PHED expressed great interest in using mobile-based technology for the asset-mapping. However, with limited resources and capacity to acquire and ensure sustained use of mobile-based solutions, a paper-based approach was selected as the most sustainable and manageable option at this time.
- Our work with the Sindh Education and Literacy Department on the SEMIS opened up an opportunity to embed MHM into the province-wide WASH teacher training manual (see case study 3.4.2 for details).

Outcome 3: Active, empowered people and strong accountability mechanisms

3.4.5 Empowering communities and campaigning and advocating for human rights can be viewed as confrontational and subversive in Pakistan

INGOs tend to avoid such activities in order to maintain a positive working relationship with government. Conscious of these constraints, we sought to progress towards outcome 3 by focusing our efforts on strengthening the function of the District WASH Forum (see outcome 4), the availability of WASH monitoring data to better inform government decision making (see outcome 2), the integration of WASH messages, into the provincial school curricula and the endorsement of MHM teacher training manuals. We continue to explore other

ways to empower communities and strengthen accountability in WASH in Sindh.

Outcome 4: Clear institutional arrangements and strong government leadership

3.4.6 Strengthening the District WASH Forum for improved decision making

We worked with Thatta's District WASH Forum, providing minimal financial support^{xxxx} to convene meetings and undertook research studies to inform evidence-based decisions. These included a sanitation and ODF gap analysis to identify areas in the district which had already achieved ODF status, areas which were already receiving a sanitation intervention, and areas which would soon receive a sanitation intervention. This analysis also included details of the budget required to reach 100% ODF status in the district.

Results were shared at provincial level to ensure interventions were coordinated and avoided duplication. We also lobbied for and encouraged the inclusion of women representatives from government and CSO partners in the forum.

Evidence of change

Clear institutional arrangements and strong government leadership:

- The District Administration has shown willingness to integrate the District WASH Forum (formed by WaterAid pre-SusWASH) into a government-led District Coordination Committee (DCC). The Deputy Commissioner (DC) has started to hold some of the meetings in a government building and is starting to fund meetings through government initiatives, such as the SSSP. This growing ownership of the forum demonstrates the DC's support for its function in ensuring the coordination of WASH activities in the district.
- Following persistent encouragement from

xxxx. WaterAid provided around 25,000 Pakistani rupees/approximately GBP £125 per meeting to cover room hire, travel and refreshments. WaterAid is gradually reducing our financial contribution to catalyse government contributions.

WaterAid and our implementing partner (NRSP), two women representatives from two CSOs are members of the forum. However, more targeted efforts are needed to ensure women feel confident to speak and actively participate in this male-dominated platform.

Improved planning, monitoring, financing and coordination:

- Results of the ODF gap analysis revealed areas of overlap and areas which would remain unexposed to a sanitation intervention. This helped provincial government and district forum to take the lead on directing where more recently-developed sanitation initiatives should be targeted in order to reach the whole district. WaterAid continues to work with the district to ensure sufficient funds are allocated to implement the district-wide ODF plan and sustain ODF status.

Lessons learned

- Undertaking small research studies, and sharing results through government-recognised forums, can help district government and other WASH actors to coordinate and direct WASH interventions. Similarly, studies into the causes of poor WASH sustainability (e.g. hand pump abandonment study) can help enhance service delivery models for improved sustainability.
- In Pakistan, the coordination, financing and planning of WASH interventions is largely influenced by decisions taken at the provincial level. In phase two of SusWASH, we intend to shift our focus to the provincial level working with parliamentarians and media fellows to better influence these decision making processes and elevate the profile of WASH issues.



Conclusion

Sindh Province is a complex operating environment where INGOs are under intense government scrutiny. It can take a long time to gain government buy-in and trust. Some quarters of government view INGOs simply as service providers.

Activities such as empowerment of women and girls, sensitisation on rights and accountability must be carefully framed to mitigate perceived subversion of cultural and religious norms. While government responsibilities for WASH are clearly set out in the Local Government Act, this is not widely understood or upheld in practice. Tactful efforts to facilitate greater ownership and leadership among government for WASH are required.

Despite these challenges, noticeable progress has been made particularly with regard to the adoption of the WASH teacher training manual, the integration of WASH indicators into the SEMIS, development of non-saline water sources and improved district level coordination.

In phase two of SusWASH, our efforts will shift to the provincial level where decision making power is held. We will use our lessons and data generated at the district level to strengthen our provincial advocacy.

● **Officials from local government departments and civil society meet to coordinate, plan and discuss WASH progress in the Thatta District WASH Forum.**



Section 4.0: Conclusion

This concluding section consolidates what we have learnt so far about:

- Characteristics of the WASH system in SusWASH focus countries: barriers, linkages, dependencies, interactions and leverage points for change
- Measuring changes in the system
- Lessons for system strengthening programmes
- Skills and resources for system strengthening
- The value of system strengthening versus more conventional WASH approaches
- Recommendations for donors
- Next steps

The COVID-19 pandemic has exposed multiple weaknesses in WASH systems around the world; not just in low- and middle-income countries but high-income countries too.^{2,3} These weaknesses result in poorer and more marginalised people going without adequate WASH access, exposing them to greater risk of disease transmission and the impacts of a changing climate.

It is necessary to allocate sufficient time to understand the shape and function of the WASH system as well as barriers to WASH sustainability, inclusion and scalability before implementation starts. It is not necessary to over-analyse the system as there is always a practical trade-off between the time that can be spent on analysis versus the time that must be spent implementing. Experienced staff often have a good understanding of barriers and linkages between different component parts of the system as well as influential actors to target for advocacy. The aim of the analysis phase is to arrive at a consensus over which areas to tackle and who might be most influential in bringing about change in the system. Adaptive management allows for our understanding of the WASH system to be updated as the programme progresses.

This section outlines our understanding of the WASH system in the four SusWASH countries and leverage points identified (or created by the programme) that could be used to bring about change.

Characteristics of the WASH system in SusWASH focus countries: barriers, linkages, dependencies, interactions and leverage points for change

The WASH system is characterised by multiple linkages, dependencies and interactions between different actors and factors. While it is useful to break the system down into building blocks for the purposes of participatory barrier analysis, maintaining a separation between different building blocks in this conclusion would lead to a high level of repetition and overlook how our efforts to strengthen one part of the system has influenced another.

Although each WASH system was different, some common barriers, linkages, dependencies and interactions between different actors and factors were observed in all four focus countries. For example, monitoring was a weak area, accentuating deficiencies in planning and financing. Other factors contributed to undermining planning and financing, such as weak coordination between different actors, unclear institutional arrangements, insufficient resource allocation and a lack of prioritisation afforded to reaching the most marginalised.

These led to weaknesses in service delivery and behaviour change, insufficient targeting of poor and marginalised people and low sustainability of WASH gains.

In Pakistan, unclear institutional arrangements at the district level drove weaknesses in government accountability. For example, although the Sindh Local Government Act stipulates that district staff are responsible for ensuring people receive water services, local government staff were not aware of this Act, so water quality and O&M challenges persisted where government assistance was clearly needed. Likewise, weak accountability drove unclear institutional arrangements as provincial authorities did not enforce the requirement for local government staff to undertake their role in supporting water supply either from a maintenance or water quality perspective.

The lack of any formal mechanism for service users to express concerns about WASH service levels meant Jara utility in Ethiopia was not formally accountable to service users. When users did express concerns to the utility through informal means, insufficient financing weakened the capacity of the utility to respond to service user concerns. The utility were also facing complex hydrogeological challenges which impacted on their ability to provide reasonable levels of service.

● **Hailu Moti is the manager of Jara Town Water Utility. He inspects the journal that records the amount of water produced at the borehole daily. Jara, Gololcha, Bale, Oromia, Ethiopia, November 2017.**



The relationships and interactions between different actors impacted on how the WASH system functioned in all four countries. Social barriers drove a lack of inclusion of women in decision making in Cambodia, Pakistan and Ethiopia, meaning their participation was low in key coordination forums, particularly in Ethiopia and Pakistan. In Pakistan, the government largely regards INGOs/NGOs as service providers rather than agents of change, particularly at provincial and district levels. There is considerable suspicion of INGO activities and limited scope for INGOs/NGOs to push for modification of government practice and social, cultural, religious sentiments in wider society. This relationship significantly constrains the role of INGOs/NGOs in strengthening WASH systems in Sindh.

Divergence between the political and operational arms of government in Kampala led to weak coordination and delays in approval of the sanitation ordinance designed to set standards for sanitation in low-income areas. In Gololcha woreda, pre-existing hostility between communities, government and service providers obstructed constructive interaction for WASH improvements. This hostility has its origins in political tensions as well as a feeling within communities that they are being left out of wider development initiatives due to their remote location. The Governor of Kampong Chhnang Province in Cambodia was initially disinterested in improving sanitation until incentives could be found to gain his support.

Strong government leadership and an active civil society were clearly needed to drive change in all parts of the WASH system in the four countries. Where this has been limited or absent, progress towards system change has been hampered. Insufficient finance was clearly a major barrier in all four countries, constraining improvements in other areas of the WASH system as well as WASH access and sustainability. It is still possible to strengthen other areas of the WASH system to bring about significant improvements, but ultimately more money has to be leveraged and allocated to WASH for significant change to be realised.

Leverage points that could bring about change were identified as part of system analysis and also created by undertaking activities in the programme that we could then capitalise on.

Improved monitoring was identified as an area that could drive system change in all four countries with impacts on planning, financing, coordination and accountability. The extent to which efforts to improve monitoring gained traction was largely dependent upon the timing of the intervention and the level of government commitment assigned to MIS development at the national level. For example, progress has been good in Cambodia as a government-led drive to improve the national MIS coincided with implementation of the SusWASH programme, enabling WaterAid to feed into MIS development and piloting at national and provincial levels. This was linked to a government priority to update national and provincial WASH action plans.

The existence of a well-functioning JSR process in Uganda provided a platform for integration of KCCA WASH data and greater scrutiny of KCCA's performance. Knock-on impacts have been observed with improvements in KCCA's WASH planning (with the five-year strategic plan based on more harmonised WASH data from different departments within KCCA). Progress on monitoring has been limited to district level in Ethiopia due to the national MIS being under review for some time, but has led to knock-on improvements in district planning and budgeting. Pakistan does not have a WASH MIS at national, provincial or district levels and restrictions placed on data collection make strengthening this aspect a longer-term goal. There is also no monitoring system to verify if sanitation gains have been sustained beyond initial ODF certification. It was possible to integrate WASH indicators (including MHM) into the existing Sindh Education MIS however, using the Sindh WASH technical working group. An asset inventory and hand pump abandonment study highlighted significant sustainability concerns regarding community and school water services prompting PHED to consider the matter at district level. However, there are yet to be any knock-on impacts of these interventions on planning and budgeting at the district or provincial level to improve WASH sustainability in Sindh.

Capacity development in monitoring, planning and life-cycle costing led to production of a costed district WASH plan in Golocha, Ethiopia. This costed WASH plan was a leverage point for attracting investment to the district from other development partners, but investment from the zone was not significant as central government allocate finance based on a formula. This is an important lesson as development of a costed district WASH plan may not trigger greater government investment without sustained WASH budget advocacy at the national level. Costed plans can help to make the case for increased national WASH funding allocations but sufficient funds are yet to be made available at the national level. Forming and building the capacity of Participatory Budget Advocacy Clubs through our partner CSBAG has increased confidence and ability of local council chairpersons and community representatives to scrutinise public budgets in Kampala. Training of SMCs on life-cycle costing triggered improved financing for maintenance of water and sanitation facilities in schools.

Securing early government buy-in for WASH research has helped to leverage finance and inform government decision making. The Towards Safely Managed Water study undertaken in Kampong Chhnang succeeded in attracting significant development partner finance to help scale safely managed water supply. However, the Government of Cambodia is yet to make decisions on financing for rural WASH.

We saw an opportunity to strengthen government WASH leadership and coordination in all four countries by convening WASH actors and facilitating better interaction between political and operational wings of government. These efforts have made progress in Cambodia through the Civic Champions programme for improved sanitation and hygiene led by WaterSHED, in Uganda through the WASH Mayor's Forum, in Ethiopia through use of MRR materials and in Pakistan through the District WASH Forum. Efforts have led to increased confidence of female WASH leaders in Cambodia. Women already play a key role in WASH leadership in Kampala, perhaps because it is a metropolitan area with fewer barriers to women's participation. Progress is yet to be made on greater participation of female leaders

in the rural districts in Ethiopia and Pakistan, where there are fewer women working in local government.

In Pakistan, interactions with the Director of CD led to the development and roll-out of a WASH teacher training manual featuring MHM and good sanitation and hygiene behaviours. The manual will be used in all schools in Sindh scaling the dissemination of behaviour change messaging.

Service delivery and demonstration of WASH delivery models provided an entry point to engage with local government in Pakistan, Ethiopia and Uganda. Demonstrating WASH delivery models simultaneously met the demands of communities as well as the priorities of local government (to extend services). This in turn helped to secure local government and service provider buy-in for broader efforts to strengthen management arrangements, monitoring, planning, financing, coordination and accountability. We think it unlikely this would have been possible without a significant service delivery component in Gololcha or Thatta.

The potential for collective action had an impact on the level of change that could be achieved. For example, in Cambodia, multi-stakeholder inputs into MIS development meant all WASH actors were aligned behind the indicators used. In Pakistan, linking with the World Bank-funded SSSP meant WaterAid's sanitation and hygiene IEC materials could be applied in 13 districts in Sindh.



● Washing clothes at a water channel in the village of Muhammad Urs Sehejo, Chatto Chand Union Council, Thatta District, Sindh Province, Pakistan, September 2018.

Measuring changes in the system

System strengthening programmes require a measurement framework that can capture changes in the system and provide insight into the impact of interventions. With many actors working on WASH in a given area, attribution of change to one particular programme, actor or event is challenging or impossible. Monitoring must therefore take account of what different actors are doing and where collaborative efforts are being made.

Our measurement framework is evolving based on learning we are capturing as part of the SusWASH programme. Currently, we report against outcomes defined in our theory of change. These outcomes relate to groupings of different components of the WASH system.

The pilot measurement framework breaks the WASH system down into component parts and evidence of change can be captured on a periodic basis. We define evidence of change as

positive or negative results that are indicative of progress towards outcomes. The framework allows for capture of qualitative information related to interactions or events that brought about change. It is possible to track transitions from one building block state to another, but we have found that such transitions can take a great deal of time, so information regarding smaller changes that are indicative of general progress or regression are captured.

Ultimately, system strengthening programmes have to result in improved service levels and it is important not to lose sight of this. It is therefore necessary to combine lead indicators, such as evidence of change, with measurement of lag service level indicators, such as those captured by our post-implementation monitoring surveys that look back at least 10 years and JSRs. At the point of writing, this framework is being piloted in the four SusWASH countries with the aim that it is refined and ultimately applied as part of WaterAid's organisational programme monitoring processes.

Lessons for system strengthening programmes

We have learned the following during implementation of the SusWASH programme so far:

- **It can take time to build trust and set up the necessary agreements** with government and partners to work on system strengthening. It is more straightforward to implement system strengthening in areas where we already have agreements and strong working relationships in place at district and provincial/regional levels, but this is not to say it should not be done as part of all programmes. System strengthening involves heavy interaction with governments and is most effective when aligned with government timelines.
- **System strengthening requires a clear theory of change with fixed outcomes**, but flexible activities and outputs. Outcomes need to be problem-focused and sighted on areas of the system where change is required.
- **System strengthening necessitates a long-term commitment to working with a district** until the WASH system is 'good enough' to ensure inclusive, lasting WASH will reach everyone. Moving around between multiple districts and leaving districts when the WASH system is still weak will not result in lasting outcomes. WASH programmes therefore necessitate a strong funding pipeline behind them of 10 years plus to allow for system strengthening.
- **It is unrealistic to expect all activities and outputs envisaged at the start of a programme to still be relevant or impactful** once unforeseen blockages arise and understanding of the WASH system progressively deepens. Flexibility to change approaches that are not working or no longer relevant is essential. Organisational management processes and donor reporting requirements have to enable adaptive management of programmes.
- **Adaptive management requires a culture of regular learning, reflection and course correction** to be embodied within organisational processes. Whole teams need to be built and sufficiently resourced around learning. Learning is most impactful when country teams have an existing culture of regular review, reflection and adaptation built into management procedures, as well as an environment in which it is ok to fail and learn.
- **A global learning function that facilitates reflection and learning across teams and countries is essential** for strengthening organisational understanding about how to bring about system change. The same function enables consolidation and dissemination of lessons for future programming and influencing wider sector practice. Furthermore, this resource, with sufficient budget, can mobilise and coordinate technical expertise from inside and outside the organisation to enhance programme effectiveness.
- **It is necessary to allocate sufficient resources and time to understanding problems, power relationships, causal factors and leverage points** that might drive change in the WASH system in a given context. At the same time, it is important not to get bogged down in over-analysing the system. Analysis should aim to build a common understanding of barriers, power dynamics, leverage points and consensus on which aspects to prioritise. Proposals must factor in sufficient time for this analysis.
- **Close collaboration between practice and policy staff is essential.** When practice and policy teams do not work towards the same outcomes, relevance of work is low and progress is slow. Performance tends to be highest when programme and policy teams work well together and when staff have the latitude to engage in both practice and policy arenas. This ensures engagement at multiple levels – encouraging use of evidence from practice to influence policy decisions, and alignment between practice priorities with emerging policy topics.
- **System strengthening efforts must be complemented by demonstration or strengthening of service delivery models** and in some cases, direct service delivery, especially in low-coverage areas. If services are non-existent or woefully inadequate, neither government institutions nor communities will have the motivation to go through a slow, step-by-step process that may only yield results in terms of adequate

services in years to come. Service delivery also helps to learn from what works and what does not in different contexts.

- **Costed district WASH plans do not always result in increased government investment in a district** as funding allocation formulas higher up in the system may be based on a wide range of criteria. Sustained national level WASH budget advocacy is therefore essential to unlock funds for district plans.
- **Districts are not always willing to engage.** In contexts where responsibilities are being rapidly decentralised, districts may be overwhelmed and under-resourced to lead WASH and a plethora of other services. Political and social motivations may also reduce willingness to engage on WASH. Strategies must be devised to identify WASH champions and stimulate stronger engagement.
- **People defined as marginalised may not necessarily consider themselves to be so or may be reluctant to engage in empowerment activities.** They may fear they will draw attention to themselves and put themselves in a difficult position with authorities, particularly if they have unofficial immigration status, for example. Partnering with experienced CSOs can help to overcome some of these concerns.
- **Use of MRR materials can help unpack rights issues** in a non-confrontational way and help government staff to better understand their roles and responsibilities.
- **Gender equality and social inclusion must be continuously mainstreamed** through all system strengthening activities. In order to change systems, we need to be persistent in bringing in the principles and standards of the human rights to water and sanitation. This can be challenging as these concepts may be unfamiliar to more traditional WASH professionals and be controversial or culturally sensitive in some contexts.
- **Continuous government participation and buy-in for research can ensure greater uptake of findings** and translation into practise.

Skills and resources for system strengthening

From our experience, WASH system strengthening requires a diverse team of individuals with the latitude to work across practice and policy-related issues simultaneously. More specifically, teams and partnerships should bring the following skills, experience and attributes:

- **Facilitators and collaborators:** To bring together a diverse range of local and national stakeholders to reach consensus around common challenges, identify solutions, and encourage continuous reflection, learning and adaptation.
- **Critical thinking and analysis:** To ensure approaches remain relevant and opportunities to accelerate progress are identified.
- **Advocacy and influencing skills:** To act upon analysis, identify key stakeholders and influence government decision making.
- **Interpersonal and communication skills:** To build strong partnerships and collaborations with a wide range of people and institutions, particularly government.
- **Understanding of government processes and ways of working:** At local or national levels to understand how decisions are made and who and which institutions have the influence and power to bring about change.
- **'Traditional' WASH skills:** In hydrogeology, water supply and sanitation engineering, behaviour change, sanitation approaches, service delivery management models, small and medium-sized enterprises/business development.
- **Understanding of gender and social inclusion issues:** To ensure the most marginalised people excluded from WASH are identified, targeted and benefit from system strengthening efforts.
- **Understanding of public finance:** To understand financial mechanisms and processes, including how budgets are developed and finance is leveraged and allocated.
- **Data analysts:** To support indicator harmonisation, data collection and analysis, and development of MIS.
- **Strong programme and adaptive management:** To enable learning and course correction.

The value of system strengthening

While this report is not a formal evaluation or a rigorous cost-benefit analysis, we believe that system strengthening, as described in this report, can lead to better, lasting and more inclusive outcomes when compared to more conventional WASH approaches. Like any way of working, if system strengthening is poorly implemented, it is unlikely to have a positive impact. However, if it is done well, it provides a means of acknowledging that systemic barriers exist, tackling these barriers and dealing with complexity.

Conventional WASH approaches do not typically involve a detailed analysis of the systemic barriers to inclusion or sustainability. Conventional programmes have a typical timeframe of one to three years. They are generally structured around four standard components: construction of WASH facilities, setting up management committees, community training on improved WASH behaviours and capacity development of local government. These approaches, implemented without broader efforts to strengthen the wider environment into which WASH is introduced, fall short when it comes to ensuring WASH is sustained and inclusive.^{48,49,50}

WASH failure rates make the case for joined-up efforts that also strengthen public voice, leadership, coordination, planning, financing, monitoring, accountability and demand for WASH, and also break down social barriers that exclude certain people. Whilst none of these elements are new to WASH, system strengthening provides a means of understanding where and when such efforts are relevant and strategic for maximum impact. These efforts are likely to be cost-effective as they aim to prolong the life of services and improved behaviours as well as ensuring they are accessible to all.

● **Bunya Fred, 51, hospital cleaner, closing the gate of the medical waste disposal site that houses the incinerator, placenta and ash pit, Ndejje Health Centre IV, Makindye Ssabagabo Municipality, Wakiso district, Uganda, November 2019.**

Recommendations for donors

● Flexible budgets and outlook

Strict log frames and budgets can limit the ability to adapt and remain relevant as contexts change or barriers become better understood. The H&M Foundation allowed budget flexibility which enabled us to adapt our approaches as we understood the context better and as changes and opportunities arose.

● Extended timeframes

System strengthening aims to achieve changes in behaviours, policies, processes, resource allocations, interactions and institutions – all of which takes time. WASH system strengthening therefore requires long-term funding commitments.

● Greater cost-effectiveness of WASH

Investing in system strengthening means investing in the set-up of internal programme management structures that facilitate relationship building, reflection, learning and course correction. The benefits of such activities may not be immediately visible but are crucial for establishing the partnerships and understanding of the WASH system required to bring about lasting change.



WaterAid/James Kiyimba

Next steps

In December 2019, the H&M Foundation granted a two-year extension to the SusWASH programme; it will now run until March 2022.

The four implementing countries will continue their efforts to strengthen the WASH system in the same target areas as the first phase.

As next steps, we will continue to:

- Embed system strengthening into all of our work areas from practice and policy, to funding and communications.
- Document and share our lessons and experiences from our WASH system strengthening efforts with other practitioners and donors.
- Review our theory of change to see if the assumptions hold true.
- Continue to learn how best to monitor and measure WASH system change.
- Collaborate with others to advocate for increased and longer-term funding for WASH system strengthening through platforms such as Agenda for Change.⁵¹
- Generate more evidence on the cost-effectiveness of system strengthening.

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“The H&M Foundation has a long-standing partnership with WaterAid and we are joined in our deep conviction that water, sanitation and hygiene is a human right that underpins so many aspects of development, such as health, gender equality, education and livelihoods.

WaterAid is innovative and ambitious in their aim to create sustainable systemic change. This goes hand in hand with our vision to be a catalyst for change, and we are thrilled to be able to support sustainable and inclusive programmes that really make a lasting difference for people.”

Maria Bystedt

Global Programme Manager, H&M Foundation

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“Access to water, sanitation and hygiene are basic human rights and not a privilege. But still, hundreds of millions of people around world are denied these basic rights. This has to change. Together, the H&M Foundation and WaterAid have been bold in our efforts to find innovative approaches to do so.

We are immensely proud of the initial steps towards real systemic, long-lasting change that have been taken in the SusWASH programme. We are equally proud to, in this report, share what we have learned, in the hope that others will join us in making lasting access to water, sanitation and hygiene a reality for everyone, everywhere.”

Anna Johansen

Global Programme Manager SusWASH, WaterAid

 @WaterAid

September 2020

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: 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). US: WaterAid America is a 501(c) (3) non-profit organization.



WaterAid/James Kiyimba

● **Kyomuhangi Mariam, 16, washing her hands after using toilet while Abigaba Rehema, 18, is entering the toilet room in the newly constructed girl's sanitation block, Natete Muslim High School, Kampala, Uganda, November 2019.**

