

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

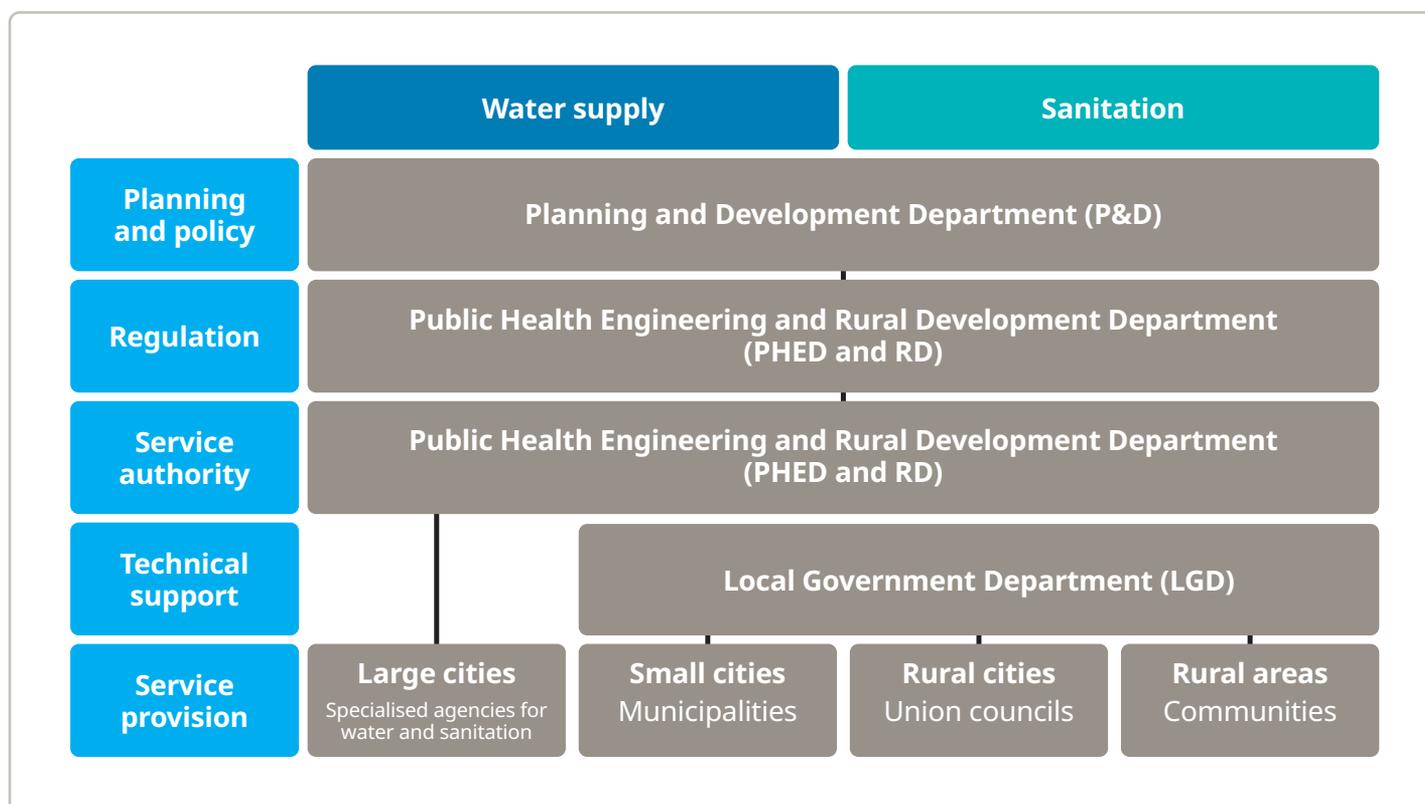
is the National Rural Support Programme (NRSP). The programme has a rural focus with the majority of efforts targeted at rural sanitation.

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Shortly afterwards, a number of INGOs had their permission to work in Pakistan withdrawn.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-

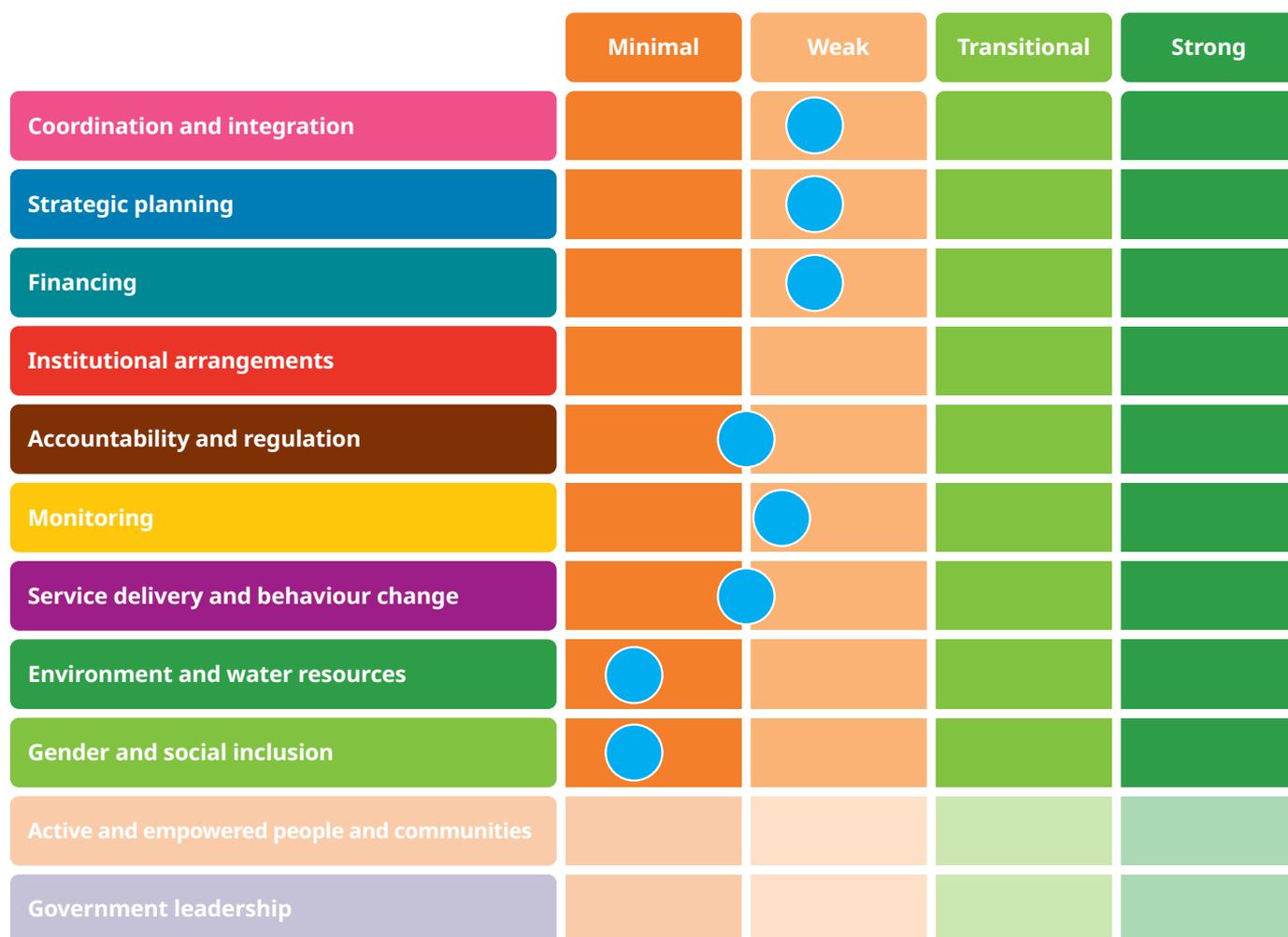
used compared to the national threshold of 35 households per hand pump (on average, these are used by 60 households) resulting in long queuing times.

- 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.**

