

Gap Analysis  
2021:  
summary and  
discussion

# Gaps in WASH in Humanitarian Response: 2021 Update

Addendum: Summary and  
discussion of key gaps



By Oxfam, the Global WASH  
Cluster and Elrha, 2021

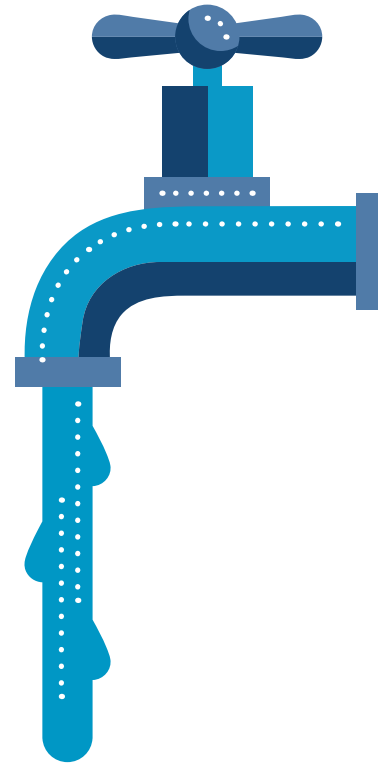


# Introduction

# Introduction

This cover note is an addendum to the **Gaps in WASH in Humanitarian Response: 2021 Update ('the 2021 Gap Analysis')**<sup>1</sup> report produced by Tufts University with support from Elrha, Oxfam, the Global WASH Cluster (GWC), Cranfield University and University of Leeds.

In this note, Oxfam<sup>2</sup>, GWC<sup>3</sup> and Elrha<sup>4</sup> summarise the key findings of the 2021 Gap Analysis and offer an initial discussion of the most important questions that remain, how the WASH sector can collectively explore these, and how key actors might work together to address the report's findings.



The cover note specifically discusses implications for:

- Research needs
- Coordination
- Humanitarian responders and donors
- Innovation

The cover note can be read as a standalone document, but we encourage the reader to consult the full gap analysis for a complete breakdown of findings.

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Ministry of Foreign Affairs

<sup>1</sup> [Gaps in WASH in Humanitarian Response: 2021 Update](#)

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## The cover note includes:

1 Brief reflections on the **methods** used in the 2021 Gap Analysis

2 A presentation of the high-level **findings**

3 **Discussion** of the four most frequently mentioned gap areas, including recommendations for potential next steps for the WASH sector in addressing the gaps identified

4 **Conclusion** and summary of how Elrha, GWC and Oxfam will act on the findings



## Extent of data collection

The 2021 Gap Analysis collected data across 35 countries, through 154 focus group discussions (FGDs) with people affected by crises and 66 with in-country WASH practitioners, involving in total over 2,400 people. In addition to this, a survey was conducted with 246 global WASH practitioners and a review of 614 academic articles and grey literature publications was carried out.

This was the most comprehensive global data collection of its kind, and significantly exceeded the scope of the previous WASH Gap Analysis<sup>5</sup> conducted in 2013 ('the 2013 Gap Analysis'), where FGDs with affected populations were only carried out in six countries and with a total of 452 people.

**As well as its increased breadth, the 2021 Gap Analysis is also considerably more influenced by the perceptions of people affected by crises.** Its findings are informed by 1,738 people affected by crises, providing a strong evidence base for where the WASH sector might focus attention to increase its impact and address the problems that matter most to the people and communities we serve.



5 Elrha, [Gap Analysis in Emergency Water, Sanitation and Hygiene Promotion](#)

## Defining a WASH Gap

The 2021 Gap Analysis provides a specific definition of a WASH gap (see definition on the right). This definition was introduced to all participants during data collection.

Data collection for the 2013 Gap Analysis focused on issues that had some possible solution or innovation that could address the gap. The 2021 Gap Analysis, conversely, focused instead on identifying gaps rather than possible solutions. In advance of conducting FGDs for the 2021 Gap Analysis, facilitators were instructed that a gap could not be defined as the absence of a particular solution; they should focus on the gap only. While some gaps are still articulated around an 'absence of solution', most gaps identified in 2021 are broader in scope than the ones that emerged in 2013.

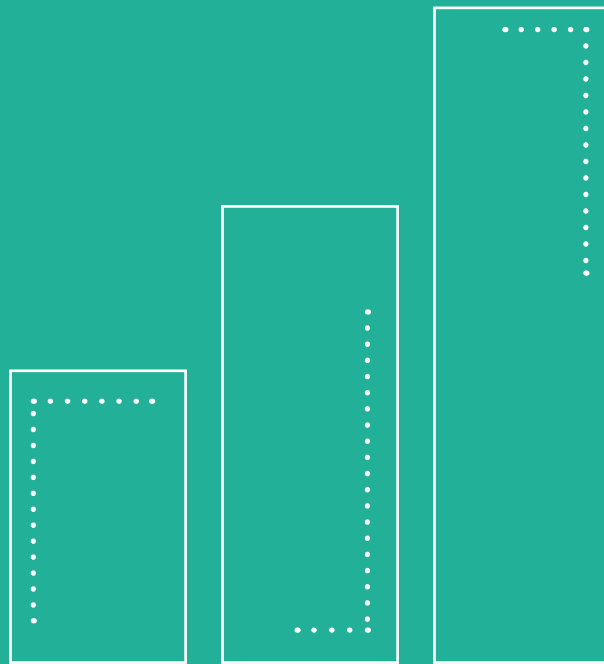
This method used in the 2021 Gap Analysis has resulted in the identification of gaps that are at a higher level and less specific, or less easily 'actionable', than those in the 2013 Gap Analysis. While this approach therefore leaves us with broad problem areas, rather than discrete, defined opportunities for innovation and research, it also challenges us to understand the gaps and root causes more fully before rushing to propose a solution.

### 2021 Gap definition As given to the FGD facilitators

- Any issue/gap/challenge that affects the community's ability to have access to safe, adequate, appropriate and dignified water, excreta disposal (toilets), hygiene knowledge, hygiene items, solid waste management, vector control
- Any issue/gap/challenge that affects the community's ability to participate in WASH programme decision-making
- Any issue/gap/challenge that affects the community's ability to get information on WASH programmes, or to give feedback on WASH programmes and access
- Any issue/gap/challenge that affects an individual's dignity in accessing WASH services
- Any issue/gap/challenge that affects the environment in providing WASH services
- Any issue/gap/challenge that affects the community's ability to sustain access to WASH (the community can also refer to government or local authorities)

(Each is a recognised gap in its own right.)

# Results of the 2021 WASH Gap Analysis





## Top 10 gaps

**Table 1** below shows the **ten most frequently mentioned gaps by each data stream**. The gaps are listed in descending order based on how frequently they were mentioned. In this cover note, we will refer to this order as how a gap area is ‘ranked’. The [Gap Analysis database](#) offers details of what each gap area includes.



Gap Rank	FGDs with People Affected by Crises	FGDs with Practitioners	Online Survey	Literature Reviews
1	Need for water supply and provision	Need for water supply and provision	Need for collaboration and coordination (including governance)	Weak hygiene practices and knowledge
2	Need for sanitation access and coverage	Improper solid waste disposal	Need for WASH staff capacity/training/expertise	Need for water supply and provision
3	Improper solid waste disposal	Weak hygiene practices and knowledge	Need for community engagement	Research WASH
4	Lack of access to hygiene tools, kits, and products	Need to repair/improve current water supply	Need for water supply and provision	Need to link with other sectors
5	Need to repair/improve current water supply	Need for sanitation access and coverage	Need for sustainability and ownership	Need for collaboration and coordination (including governance)
6	Lack of containers, and poor storage practices	Need for Faecal Sludge Management (FSM)	Need for WASH funding	Need for sanitation access and coverage
7	Poor quality sanitation services	Poor source water quality	Improper solid waste disposal	Need for WASH staff capacity/training/expertise
8	Weak hygiene practices and knowledge	Need for collaboration and coordination (including governance)	Need for sanitation access and coverage	Poor quality sanitation services
9	Lack of Menstrual Hygiene Management (MHM) materials	Need for water supply planning	Need to link with other sectors	Need for Faecal Sludge Management (FSM)
10	Need for water supply planning	Poor quality sanitation services	Need for data sharing, tools, and documents	Need for WASH funding



Discussion of the most  
frequently mentioned  
WASH gaps

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## Discussion of the most frequently mentioned WASH gaps

This discussion **focuses on four key gaps that are frequently identified across all data streams** when considering overlapping or closely linked themes. As there was significant variation in sample sizes and type of data across the streams, the four gap areas discussed here should not be seen as the only important gaps.

Rather, the discussion of these four highly pressing problems provides a starting point. These examples serve as a 'key' to help readers engage with the rest of the findings and to interrogate the complexity and nuances of how each issue is ranked across the four different data streams.



1.

Need for water supply  
and provision



2.

Need for sanitation  
access and coverage



3.

Weak hygiene practices  
and knowledge



4.

Improper solid waste  
disposal



# 1. Need for water supply and provision

The gap ranked by how frequently it was mentioned in each data stream



People affected by crises

1

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In-country practitioners

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WASH sector globally

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Literature review

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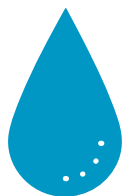
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## Discussion

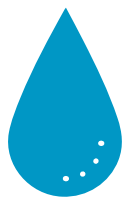
'Need for water supply and provision' ranks highest or highly in all groups. In addition, two other closely-related subjects, namely 'Need to repair/improve current water supply' and 'Need for water supply planning' also scored highly in both FGD data streams. This unequivocally demonstrates that insufficient water for emergency-affected populations is the biggest issue emerging from the 2021 Gap Analysis.

The Yemen case study (page 55 of the 2021 Gap Analysis) reveals that the causes of this gap are multi-faceted. In the particular setting of Yemen, they include both the high and frequently changing numbers and locations of internally displaced persons (IDPs); tensions with host communities; the physical availability of water due to seasonal variations; poor management of infrastructure; and a lack of water resource management.

Even in countries where basic levels of water supply are available initially, the ability to sustain service levels is a well-known challenge in the sector. Part of this problem may be the low levels of functionality and reliability of water supply, resulting in breakdowns and extended periods of downtime.

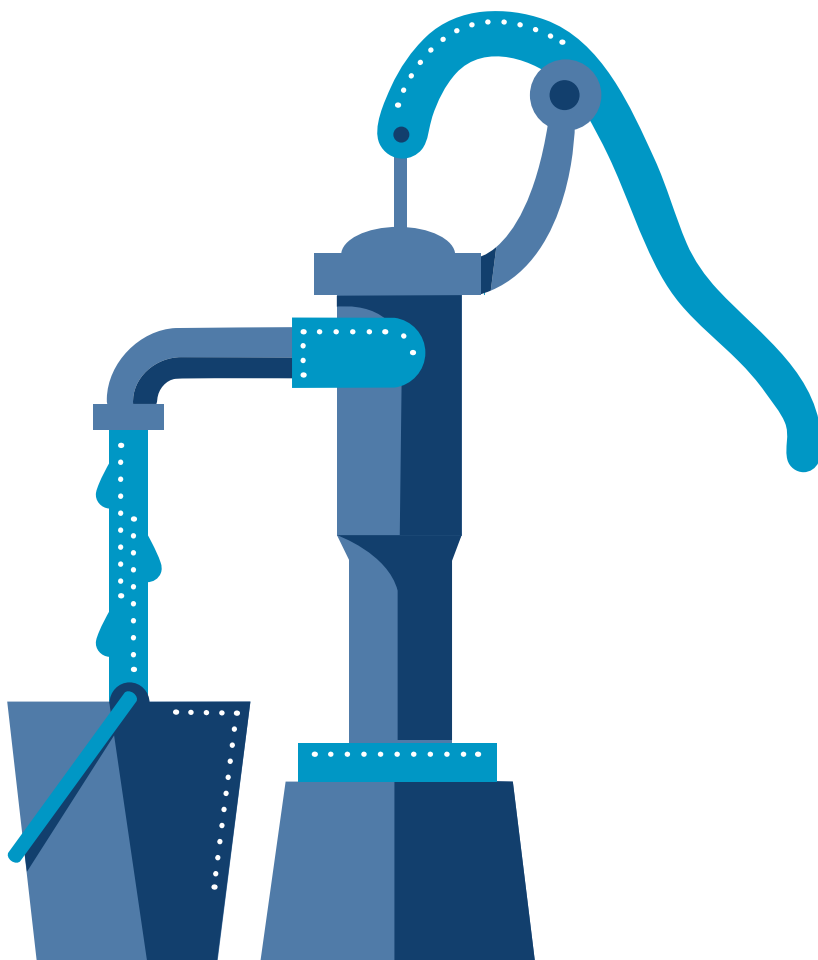
In formal camp settings, studies<sup>6</sup> have shown that the amount of water people use is directly related to how close they are to the water point. This gap could indicate that the quantity or location of the water points are not well planned, or alternatively that agencies are not able to supply sufficient quantity at these water points due to other factors, such as water resource availability. In some contexts, limited access to water supply persists even where water sources are not fully utilised, with the volumes supplied being less than the amount that could be sustainably withdrawn. Inefficient design that limits reaching scale may be one of the causes in such contexts. Other less frequently identified gaps covered issues such as water contamination, increasing salinity of water resources, a lack of effective management of water supply provision, as well as gaps in water supply technologies. These gaps, mentioned in the practitioners FGDs and the online survey, are all factors which contribute to insufficient water being available.

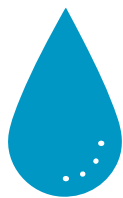
<sup>6</sup> Cairncross, S.; Feachem, R., *Environmental Health Engineering in the Tropics; an Introductory Text*. 2nd edition. Chichester: John Wiley & Son **1993**.  
and; Pickering, A.; Davis, J., [Freshwater Availability and Water Fetching Distance Affect Child Health in Sub-Saharan Africa](#). *Environmental Science and Technology*



Gaps related to water quality were not frequently raised in FGDs with affected populations. It is generally rare to receive feedback from the affected population on water quality unless there is highly turbid or saline water.

This could suggest, on the one hand, that this is a context-specific issue only or, on the other hand, that WASH practitioners are not regularly discussing water quality with communities. In either case, more attention is required to understand water quality gaps in addition to issues of water quantity.





## Conclusions and remaining questions

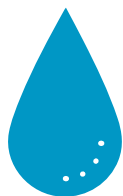
While each context is different, even within a single country, the fact that water supply was ranked very highly across all data streams suggests that it is a major concern both for communities and WASH practitioners across many humanitarian settings.

These findings indicate that more regular and consistent water quantity monitoring is needed. This should include water use and satisfaction surveys based on house-to-house surveys, providing a much better picture of household water use than estimates (which often do not consider leakage, spillage, and other uses of water).

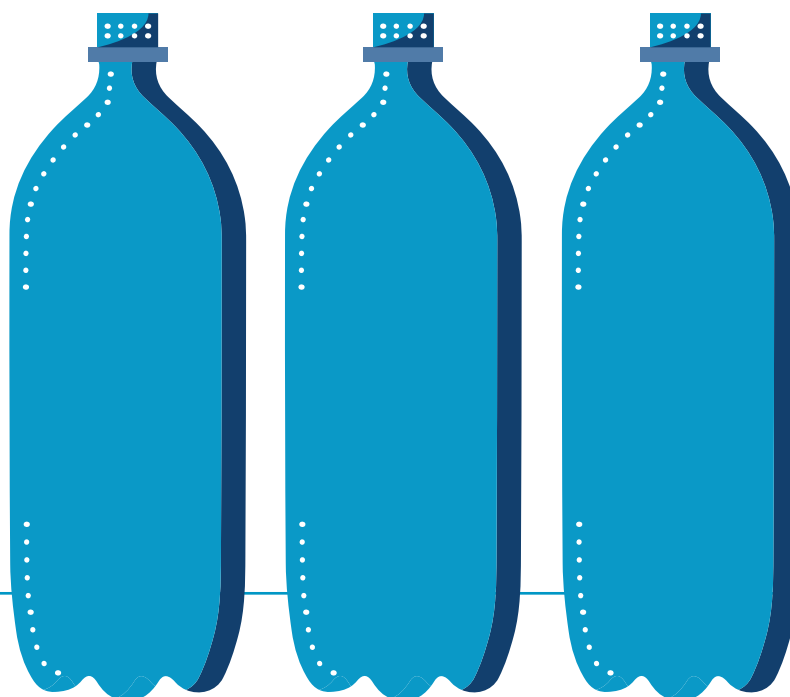
Agencies<sup>7</sup> need to monitor against Sphere indicators (see Infographic 1 on page 17) to ascertain whether the problem stems from an inability to meet the indicators, or indicators being set too low. The current minimums in Sphere are for all water use, not just drinking water. Do some humanitarian responders reach the minimum requirement without subsequently aiming to increase the quantity as the population grows over time in protracted emergencies? On the other hand, if responders often struggle even to provide 15L/p/d, what would it mean to raise the target above that?

The Yemen case study demonstrates the well-known fact that challenges in the provision of water are multi-dimensional. There are technical, financial, institutional and social determinants, influenced by weak governance and regulatory frameworks, under-development, poor access to basic services, and environmental components that impact the delivery of services. The factors that are most limiting the ability of the humanitarian WASH sector to support the delivery of water services may therefore be context-specific, and there is a need for country and local-level analysis of underlying causes. In some countries it may be a problem of water scarcity, whereas the issue in other contexts may be one of supply and reliable operations.

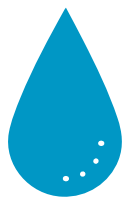
<sup>7</sup> The term 'Agencies' in this document represents all organisations that respond to emergencies and are involved in service delivery in humanitarian settings, such as NGOs, INGOs, ICRC and IFRC, UN organisations, private companies, and government/local authority organisations



At a global level, further analysis could examine the relationship between the reporting of gaps in water supply by WASH practitioners as well as the affected population, and top-line data on per capita water supplied. This could identify whether the gap is persistent even where top-line data suggests that basic needs are being met (as defined by Sphere standards). Additionally, if common trends are identified in multiple contexts, with similar underlying causes or potential solutions, these factors should be highlighted at a global level, so that guidance can direct all responses to address the key factors limiting the provision of water supply.



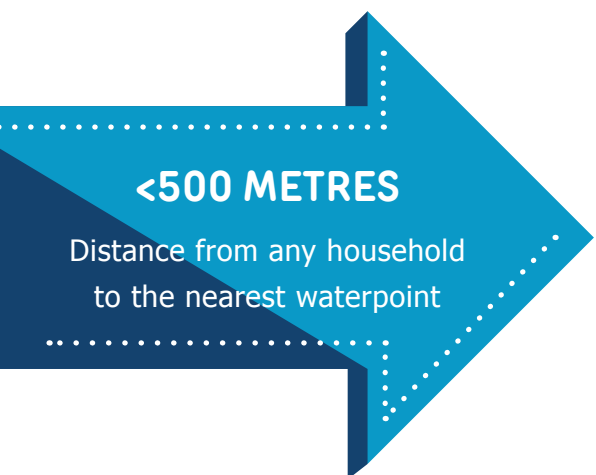
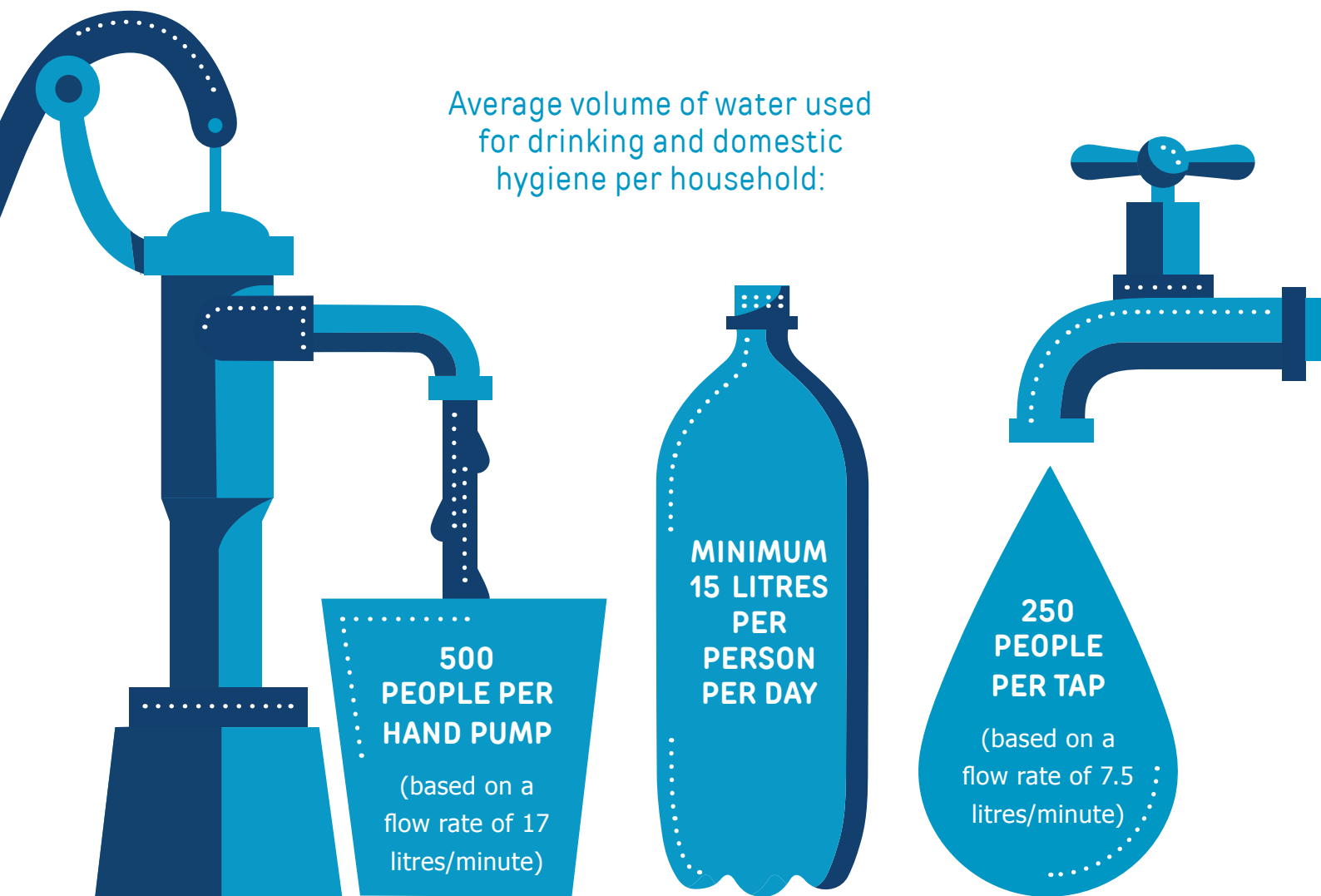




### Infographic 1:

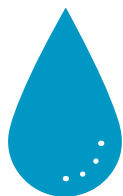
Selected Sphere standards for water supply.

Average volume of water used for drinking and domestic hygiene per household:



#### KEY INDICATORS:

- Percentage of communal water distribution points free of standing water
- Percentage of water systems/facilities that have functional and accountable management system in place



## Recommendations:

### Key questions for further research

- Are agencies meeting national standards and Sphere indicators for monitoring both quantity and quality? Are these standards being treated as 'enough' rather than an absolute minimum that should ideally be significantly exceeded? If so, is there a need to increase these targets?
- Is there a strong correlation between the amount of water supplied, as measured through both per capita supply and household surveys, and the reporting of gaps by practitioner and affected people? Does this indicate the need to address the volume of water supplied only in contexts where supply is low, or is there a need to address it in all contexts?

### Key questions for coordination

- How might global and national coordination bodies collaborate with partners to conduct water quantity and quality assessment as part of the annual Humanitarian Needs Overview (HNO) process and set up a system to make this a standard regular activity as part a Strategic Operational Framework (SOF)?
- Could national coordination platforms set up Water Technical Working Groups (Water TWiGs) or another type of 'task force' body to address the issues around lack of water?
- What is the role of national and global coordination platforms in supporting all agencies to plan and budget for Operation and Maintenance (O&M) based on user engagement before facilities are finalised?

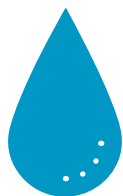


- How might the WASH Sector Road Map<sup>8</sup> leads/partner organisations ensure that these findings are addressed under the relevant working groups?
- How might existing global initiatives to improve accountability, such as the Accountability and Quality Assurance (AQA) Framework, be more consistently applied to support the monitoring of water use and satisfaction with water facilities in addition to quantity?

### Key questions for humanitarian responders and donors

- Findings suggest a global gap in distribution of water across a large range of emergency settings. How might each agency more consistently plan for regular water use and satisfaction monitoring based on house-to-house surveys, and how might they use global tools that allow for alignment with other agencies? How could donors facilitate this?
- How might agencies ensure that systems are in place to immediately address these gaps?
- To what extent are agencies already budgeting and resourcing operation and maintenance of water facilities? Could donors incentivise and better support this?

<sup>8</sup> Global WASH Cluster, [Delivering Humanitarian WASH at Scale, Anywhere and Any Time, Road Map 2020–2025](#), UNICEF, Geneva, **2020**.



## Key questions for innovation

- It is not clear that new ways of providing water supply are needed to adequately address this gap. While there may be opportunities in desalination, rainwater harvesting, and treatment in certain contexts, the most effective solutions may instead be more systemic ones. These could include better management of water supply resources, oversight of service providers, and stronger accountability mechanisms to ensure that affected populations' water needs are being met.
- Based on further exploration of this problem, how might innovation efforts be shifted from new products to a systems approach to the water supply problem? How might innovation approaches help build new service delivery models for increasing quantity and quality of water supply? This could include new models for the operation, maintenance, and monitoring of water supply.
- How might such alternatives to community-based management of water supply sustain levels of service that users are satisfied with? And how might international humanitarian responders enable the local private sector and local institutions, such as water utilities and government agencies, to support effective management of these systems? For instance, could these institutions be engaged at earlier stages of the response cycle to ease the process of integrating service provision for affected populations within their existing services?



## 2. Need for sanitation access and coverage

The gap ranked by how frequently it was mentioned in each data stream



People affected by crises



In-country practitioners



WASH sector globally



Literature review

1	1	1	1
<b>2</b>	2	2	2
3	3	3	3
4	4	4	4
5	<b>5</b>	5	5
6	6	6	<b>6</b>
7	7	7	7
8	8	<b>8</b>	8
9	9	9	9
10	10	10	10

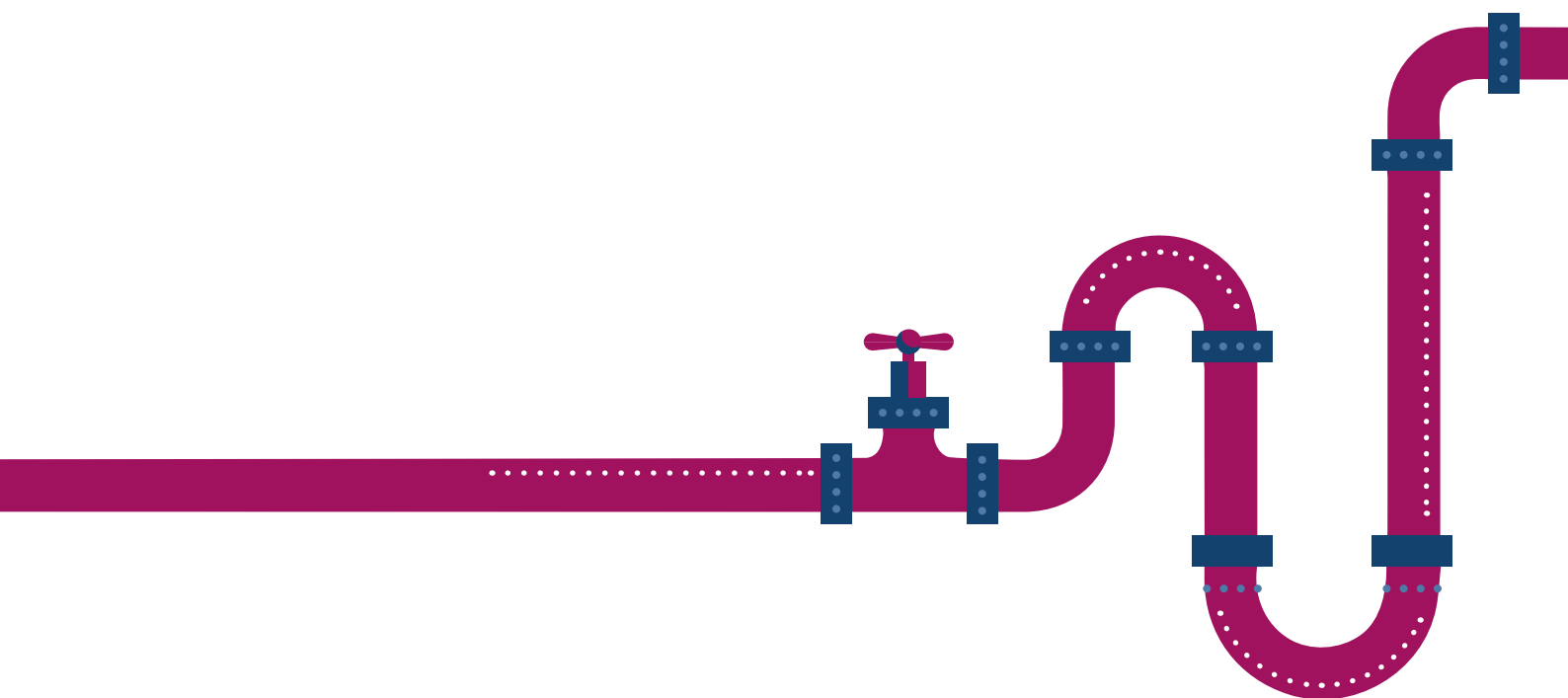


## Discussion

**'Need for sanitation access and coverage'** not only ranks second for people affected by crises, but is also consistently ranked highly across the other three data streams.

Direct feedback data suggests that 'sanitation access' mostly refers to latrines, and 'poor quality sanitation' is also about latrines, but often includes management of those latrines, including desludging. 'Faecal sludge management' as a technical term typically covers the whole excreta disposal chain, but the data suggests that, in the feedback, people have used the term primarily as applying to the treatment or disposal of faecal waste from latrines.

In the 2013 Gap Analysis, 'sanitation' topped the rankings table. The 2021 findings indicate that WASH services around the excreta disposal chain, from safe and dignified access and use of latrines to final disposal of faecal sludge, are still not meeting demand. It is a gap that needs considerably more work in order to be fully addressed.





### Infographic 2:

Selected Sphere standards for sanitation.

A stylized illustration of a toilet structure, shown in a 3D perspective. The main body is dark blue, and the roof is a lighter blue. The front door is open, revealing a white interior. The text is placed on the white interior wall.

**RATIO OF SHARED TOILETS**

Minimum 1 per 20 people (1:20) + in the guidance notes - During the first phases of a rapid-onset crisis, communal toilets are an immediate solution with a minimum ratio of 1 per 50 people (1:50)

A large, stylized arrow pointing to the right, rendered in a dark blue color. The arrow is filled with a lighter blue color and has a white outline. The text is placed inside the arrow.

**MAXIMUM 50 METRES**

Distance between dwelling and shared toilet

#### KEY INDICATORS:

- Percentage of toilets that have internal locks and adequate lighting
- Percentage of toilets reported as safe by women and girls
- Percentage of women and girls satisfied with the menstrual hygiene management options at toilets they regularly use



As there are for the discussion around water supply, there are clear indicators in place to guide minimum standards on sanitation (see Infographic 2 on the previous page). How are these standards impacting service provision (or not)? Are Sphere indicators often not met or are they set too low?

**This prompts a series of questions:**

- 1) Are communities typically not satisfied with the Sphere indicators of 1:50 or 1:20, or with latrines that are located more than the minimum distance of 50m from the shelter? If so, can Sphere standards realistically be raised?
- 2) Do the Sphere standards offer a false reassurance for agencies that once the minimum number of latrines has been met, no further latrine construction is necessary? To what extent is Sphere guidance used to address quantity only, rather than user satisfaction and/or local standards?
- 3) Research suggests that emergency latrines often fall into a poor state of functionality and cleanliness after two to four weeks, and that this is a major factor in dissatisfaction with latrines.<sup>9</sup> How significant is the problem of latrines becoming unusable after a while due to lack of maintenance and how might it be addressed?
- 4) How quickly do agencies transition from communal latrines to shared family latrines to individual family latrines? How does this align with communities' needs and expectations? Some evidence<sup>10</sup> points to this issue as a key factor in latrine dissatisfaction.
- 5) Is ongoing service provision for the entire sanitation chain adequately planned and resourced for, or do some components get deprioritised over time?

Several recent research projects<sup>9</sup> have demonstrated that there is wide dissatisfaction with latrines in camp settings, especially from women, who often feel unsafe using the latrines. While more research is needed to establish whether the same is the case for other types of humanitarian settings, concerningly the data collected for the 2021 Gap Analysis suggest similar patterns for non-camp settings.

9 Oxfam Wash, [Sani Tweaks: Best Practices in Sanitation](#)

Elrha, [We're Listening: An Evaluation of User-Centred Community Engagement in Emergency Sanitation](#)

Oxfam, [Shining a Light: How lighting in or around sanitation facilities affects the risk of gender-based violence in camps](#)

10 Oxfam Wash, [Sani Tweaks: Best Practices in Sanitation](#)



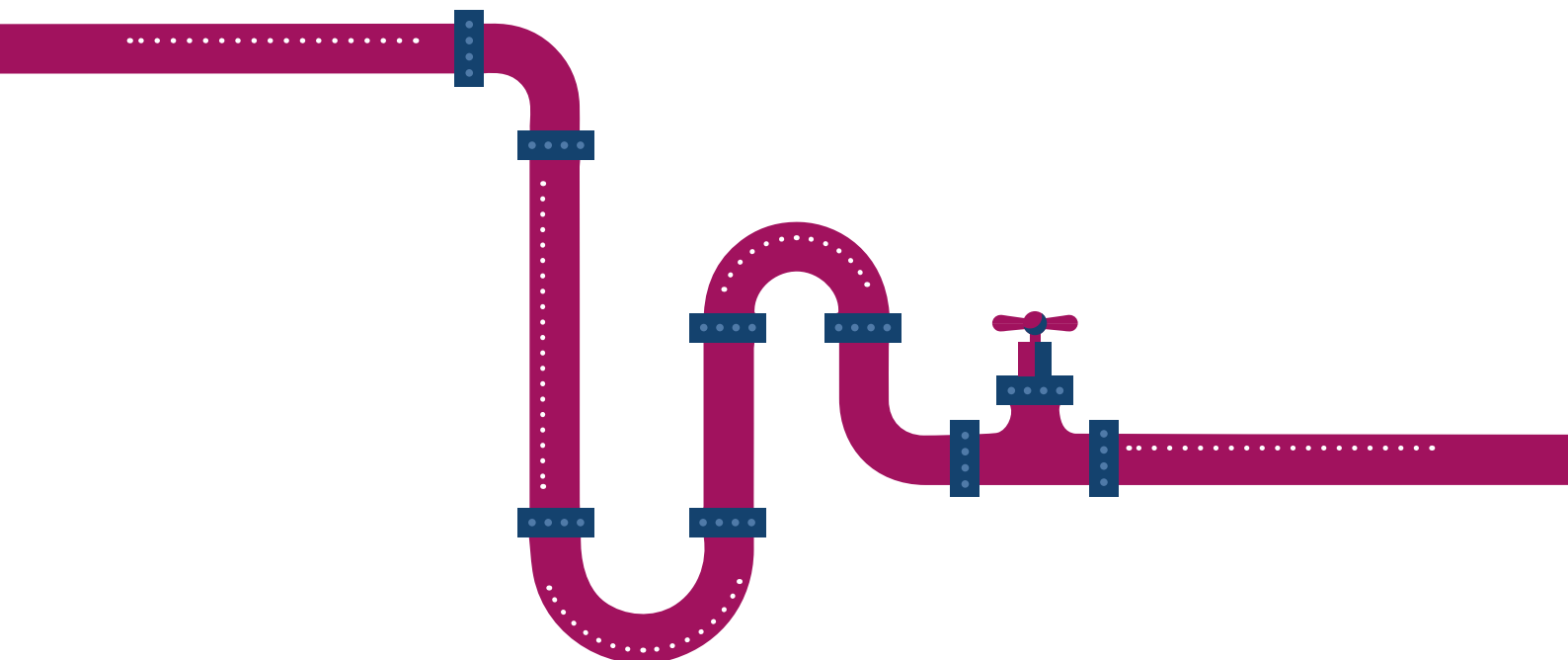


## Conclusions

It is no surprise that people affected by crises have ranked ‘access to latrines’ as one of the most pressing gaps.

This finding is supported by evidence from several other research projects, all highlighting that ‘**provision of latrines**’ is not the same as **safe sanitation access and practice**. Increasingly, there is recognition that it is not sufficient for humanitarian WASH agencies to measure sanitation coverage in terms of the numbers of toilets that they construct. This quantitative data must be triangulated with qualitative data on use of, and satisfaction with, these facilities.

In addition to this, the findings suggest that there are gaps in planning and resourcing for latrine access beyond the initial construction of communal latrines. All emergency latrine superstructures will ultimately need repair, as well as a system for keeping them clean during the first two to three months of their use. Similarly, there will be additional costs of building more latrines in the transition from communal to family latrines and of desludging and final treatment or disposal. The data suggests that these stages and costs are not always adequately considered and prioritised.





## Recommendations

### Key questions for further research

- Are Sphere minimum indicators on latrine ratios at different stages of an emergency set too low or are they not met, and how does this vary between contexts? Are indicators on safety and comfort (eg, locks, lighting, and MHM provisions) being measured systematically, and if there are gaps, is corrective action taken?
- How may both latrine infrastructure and satisfaction rates be monitored and balanced against the finite resources available to agencies and settings/phases of emergencies where family latrines are not an option?

### Key questions for coordination

- How might global and national coordination bodies and partners support agencies to update and align standards and use appropriate monitoring and assessment frameworks as part of the HNO, the Humanitarian Response Plan (HRP) and the SOF to prioritise quality and satisfaction with latrines alongside quantity?
- What role could the WASH Sector Road Map initiatives play in enabling the sanitation gap to be addressed?
- What role might the GWC FSM TWiG and other global, technical coordination bodies play in supporting national coordination platforms to plan, resource and deliver longer-term sanitation strategies that include quality monitoring, maintenance and emptying, treatment and disposal?

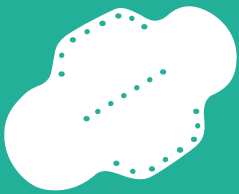


### Key questions for humanitarian responders and donors

- This gap may be similar in some respects to the first gap on water supply. Humanitarian WASH actors may be using top-line information, such as bulk water supplied or latrines constructed, but affected people perceive their needs as not being met. Therefore, how might agencies build better systems of monitoring and accountability around the provision of these services?
- How might agencies consistently budget for: i) repair of latrines; and ii) moving from communal latrines to shared family/or family latrines and treat sanitation provision as a service rather than a one-off installation? How can donors enable and incentivise this?

### Key questions for innovation

- How might innovation actors develop, adapt or scale sustainable models of user consultation that support increased attention to quality of latrines and user satisfaction?
- Are there other ways in which innovation can help make latrines safer and more dignified to use?
- How might innovative approaches support the development of more sustainable latrines, as well as better processes for monitoring their use longer-term maintenance?



### 3. Weak hygiene practices and knowledge

The gap ranked by how frequently it was mentioned in each data stream



People affected by crises

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In-country practitioners

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WASH sector globally

(Not ranked in the top 10)



Literature review

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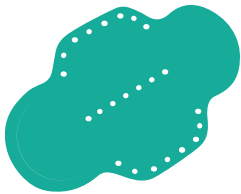
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## Discussion

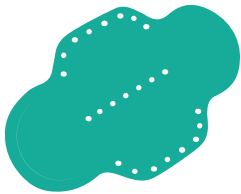
‘Weak hygiene practices and knowledge’ is the most frequently cited gap in the literature, and it is ranked in the top 10 both for affected populations and practitioners.

If we look at this gap as closely interlinked with ‘**Lack of access to hygiene tools, kits and products**’ (which is ranked highly by people affected by crises), dissatisfaction with hygiene infrastructure, materials and practice emerges as a key theme of the 2021 Gap Analysis findings. It is not a surprise that affected populations are vocal about needing more hygiene items. People affected by crises may have lost all personal belongings, and products such as water containers, soap, or menstrual products can make a noticeable difference to people’s safety, dignity and wellbeing.

There are also other overlapping themes in the rankings for the hygiene promotion sector as a whole, such as ‘**Lack of containers and poor storage practices**’ and ‘**Lack of MHM (menstrual hygiene management) materials**’, all of which are typically part of a comprehensive hygiene promotion programme.<sup>11</sup> We will therefore consider them briefly in this section.



<sup>11</sup> Several of these gaps are also relevant not only to the hygiene sub-sector, but to water and sanitation as well.

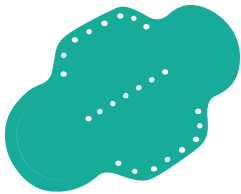


**‘Weak hygiene practices and knowledge’** (including in relation to handwashing and sanitation) is very frequently mentioned by the affected population. This could be viewed as an indicator of success for the hygiene promotion sector, suggesting that many recognise the importance of hygiene to prevent diseases. There is perhaps also a contextual factor at play in this, with the 2021 Gap Analysis data having been collected during the Covid-19 pandemic (September-November 2020) and cholera outbreaks in some countries (eg, Yemen). However, the data shows very few direct mentions of these diseases, and with hygiene practice and knowledge also ranked so highly by practitioners, there is clearly a general need and a desire for more and better hygiene behaviour interventions even in contexts not currently suffering major disease outbreaks.

Hygiene behaviour cannot be considered in isolation, as it is completely dependent on access to appropriate hygiene materials. The 2021 Gap Analysis findings suggest that people affected by crises are unhappy with the materials, and more research and monitoring is needed to explore whether this is because they are not provided at the right quantity (eg, not enough soap for household needs) or if there is a quality element, too. Hygiene behaviour is highly cultural and contextual, and while there has been a systematic review on the appropriateness of hygiene kits<sup>12</sup>, these findings prompt the question of whether levels of satisfaction with hygiene materials are being systematically reviewed and addressed in each individual response.

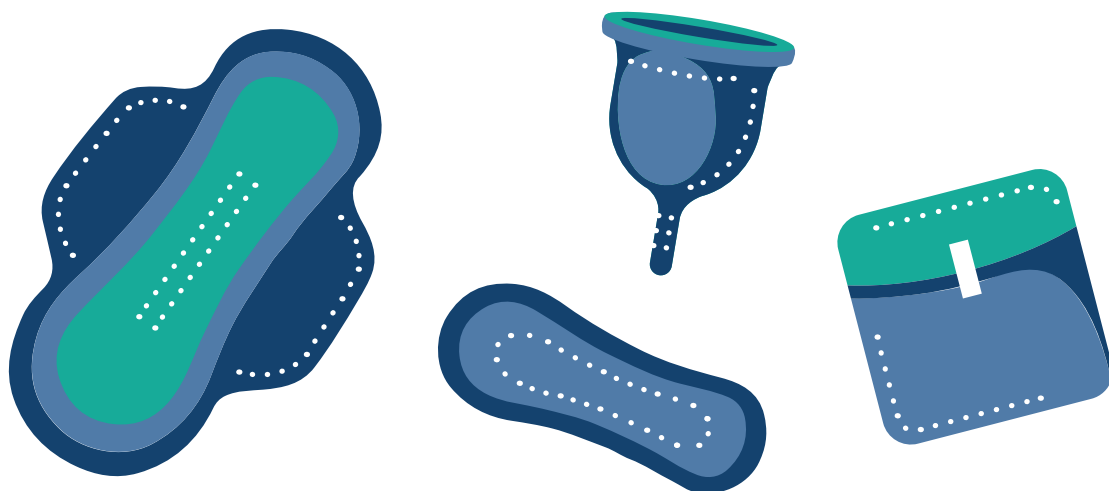


<sup>12</sup> Yates, T.; Domini, M.; Vander Burg, J.; Lantagne, D.; Hygiene kit distribution and use in humanitarian response: Summary of information from a systematic review and key informant interviews. Waterlines (forthcoming).

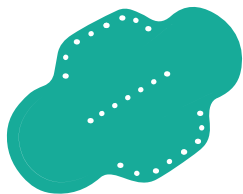


When considering the hygiene-interconnected gaps of need for **'Lack of containers and poor storage practices'** and **'Lack of MHM materials'**, both of which are in affected people's top 10, it is surprising that neither of these are frequently mentioned in any of the other three data sources. The lack of attention in the literature, global survey and practitioners' FGDs to MHM particularly stands out. It is reasonable to assume that a sensitive subject such as MHM, on top of affecting less than 50% of the population, might have been more difficult for people affected by crises to bring up in the FGDs, especially where the groups were mixed gender. That it has even made the top 10 suggests it is indeed a high priority for many. If that is the case, why is this not reflected in practitioners' priorities, or in those of the global WASH community? A significant amount of recent work has gone into MHM globally<sup>13</sup>, both by coordination groups, agencies and innovators, and promising new tools and guidance have been developed.

However, still it seems – as evidenced by the stark discrepancy between data streams in the 2021 Gap Analysis – there is a profound lack of effective mechanisms to listen to and translate people's MHM needs into appropriate services.



<sup>13</sup> Menstrual Hygiene Management in Emergencies group (MHMiE) by UNFPA, GWC Hygiene Promotion TWiG



## Conclusions

The data from the 2021 Gap Analysis suggest an important problem to be addressed around the way that hygiene promotion activities and materials are resourced and delivered.

Neither practitioners nor affected populations are satisfied with the extent of hygiene kits, tools, and products available or the quality of hygiene behaviour across humanitarian settings. In the 2013 Gap Analysis, hygiene promotion issues were ranked fourth and community engagement ranked second. The 2021 data highlight that both topics, which can be seen as separate or overlapping, still need much more attention. Additionally, the discrepancy between the high priority given by people affected by crises to MHM and lack of hygiene materials, versus the lack of priority assigned to these issues by the three other data streams, is concerning and suggests an urgent need for better accountability practices and feedback loops directing programming and research priorities.





**Infographic 3:**

Selected Sphere standards for hygiene items.

All affected households have access to the minimum quantity of essential hygiene items:



**250 GRAMS OF SOAP**

for bathing per person per month



**200 GRAMS OF SOAP**

for laundry per person per month



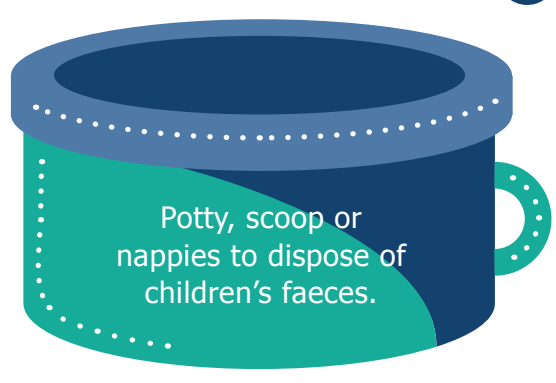
**SOAP AND WATER AT A HANDWASHING STATION**

one station per shared toilet or one per household

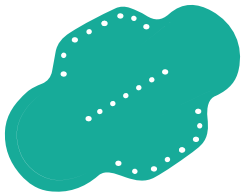


**2 WATER CONTAINERS**

per household (10–20 litres; one for collection, one for storage)



Potty, scoop or nappies to dispose of children's faeces.



### Key indicators

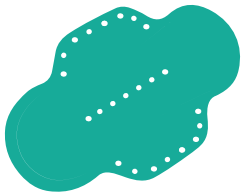
Selected Sphere standards for hygiene items.

#### **HYGIENE ITEMS INDICATORS:**

- Percentage of affected people who report/are observed using hygiene items regularly after distribution
- Percentage of household income used to purchase hygiene items for identified priority needs

#### **MHM AND INCONTINENCE INDICATORS:**

- Percentage of women and girls of menstruating age provided with access to appropriate materials for MHM
- Percentage of recipients who are satisfied with MHM materials and facilities
- Percentage of people with incontinence that use appropriate incontinence materials and facilities
- Percentage of recipients that are satisfied with incontinence management materials and facilities



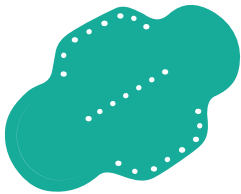
## Recommendations

### Key questions for further research

- Given the importance of hygiene practice, how might the 2021 Gap Analysis be complemented by national and local-level practical research that identifies the limiting factors for improved hygiene practice?
- How might further research explore the extent to which the availability of hygiene items is affecting hygiene practice versus gaps in approaches to changing behaviours?
- How can further work be done to test the impact on access and satisfaction when providing cash or vouchers (CVA) in place of in-kind distribution of hygiene items?
- Why is MHM provision considered so inadequate by people affected by crises? How might the WASH sector improve its contextual understanding of how to deliver both the right quantity and quality of MHM products?

### Key questions for coordination

- How can the WASH Sector Road Map (specifically initiative 1.5 on Research and Innovation) lead on identifying the research required to unpack this issue?
- What role might the GWC Hygiene Promotion TWiG and other global, technical coordination bodies play in contributing to research and supporting national coordination platforms to plan, resource and deliver hygiene interventions that meet the needs of people affected by crises?



### Key questions for humanitarian responders and donors

- How can agencies more actively solicit feedback from field practitioners and affected populations, identify specific gaps in hygiene practice, and understand the contextual root causes behind these?
- How might agencies ensure that systems are in place to immediately address these gaps, which can significantly and rapidly negatively impact population health, safety and wellbeing?
- Building on contextually relevant data, how can agencies increasingly consider the supply modalities for hygiene items, especially in the area of MHM, to support greater personal choice and satisfaction with products?
- How might agencies facilitate the uptake of proven hygiene behaviour change approaches and incentivise use of contextually relevant evidence<sup>14</sup> in the design of new hygiene programming?

### Key questions for innovation

- Might opportunities for innovation be found not necessarily in new hygiene tools, kits and products, but in how to increase access to those that already exist?
- Can innovation play a role in strengthening the hygiene promotion sector and support adoption of evidence-based, effective approaches for sustained behaviour change?
- Could innovation help take a systems approach to hygiene item provision, for example by considering livelihood opportunities linked to local manufacturing of items?

<sup>14</sup> Such as that available on the free, online platform [Wash'Em](#)



## 4. Improper solid waste disposal

The gap ranked by how frequently it was mentioned in each data stream



People affected by crises



In-country practitioners

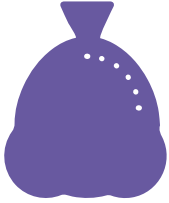


WASH sector globally



Literature review

1	1	1	(Not ranked in the top 10)
2	2	2	
3	3	3	
4	4	4	
5	5	5	
6	6	6	
7	7	7	
8	8	8	
9	9	9	
10	10	10	



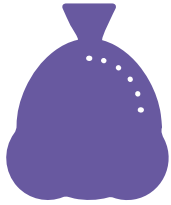
## Discussion

The management of solid waste is one of the highest priority WASH gaps, according to people affected by crises, practitioners, and the global survey respondents.

The only outlier is the literature, which doesn't mention solid waste disposal frequently enough for the issue to make it to the top 10. The FGD data point to people affected by crises experiencing this gap as a lack of bins in public and private spaces, bin collection, and rubbish disposal sites. Practitioners also point to these causes, as well as a lack of clear policies for collection and disposal of waste.

This indicates that solid waste is not being managed well in the majority of humanitarian responses, suggesting that it often takes lower priority than water, sanitation and hygiene - although it intersects with all three areas. This aligns with Oxfam's experience that it is rare to find a camp (formal or informal) where there is no solid waste littering the environment. Most displaced person settlements have some form of solid waste collection system, but the quality of it varies radically from camp to camp. In non-camp situations there is more variability in provision, depending on each specific context.

An important feature of storage and collection systems for solid waste is the participation required from individual householders. An additional driver behind the solid waste gap could be that there is insufficient focus on consulting affected communities on how it could be made easier for them in collaboration with the solid waste service provider. While in some contexts, the fundamental infrastructure (bins, disposal sites etc.) might be available, clearly in many settings it is not perceived by communities as adequate and providing what they need to keep their physical environment clean and safe. The findings from the 2021 Gap Analysis shed light on just how high a priority it is to urgently address this problem across all types of humanitarian settings.



**Infographic 4:**

Selected Sphere standards for solid waste management.

A large purple trash bag graphic with a tied top, containing text for standard 5.1.

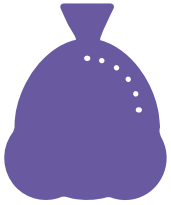
**Solid waste management standard 5.1:**  
Environment free from solid waste

Solid waste is safely contained to avoid pollution of the natural, living, learning, working and communal environments.

A purple waste bin graphic with a lid and wheels, containing text for standard 5.3.

**Solid waste management standard 5.3:**  
Solid waste management systems at community level

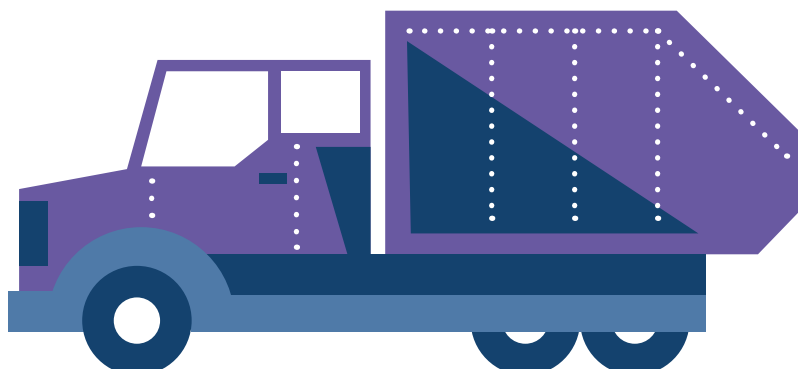
Designated public collection points do not overflow with waste, and final treatment or disposal of waste is safe and secure.



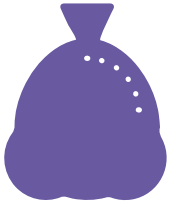
## Conclusion

The main conclusion from the high rankings across all three direct feedback data streams is that solid waste management in many humanitarian settings is at best inadequate, at worst non-existent, and there is reason to believe that Sphere standards are often not being met. One reason for this might be that it is prioritised lower than water and excreta disposal in the major WASH activities.

More specific and contextual reasons emerge when looking at the legal framework and different actors' roles in ensuring that the environment is free from rubbish. In many countries it is the responsibility of the local authorities, which often do not have the capacity to expand to collecting camp waste. Some authorities have barely enough resources to collect the permanent population's waste, and disposal sites are often unregulated. There are also possible difficulties around the cross-sectoral nature - and therefore allocation of responsibility and accountability - of waste management and recycling. However, these more bureaucratic challenges are solvable if given due attention and resources.







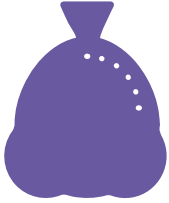
## Recommendations

### Key questions for further research

- What are the challenges and opportunities for setting up the right technical/policy/management systems to facilitate effective solid waste management in emergency responses?
- To what extent (if at all) is household behaviour linked to the problem, and if it is, what are effective ways to change this?

### Key questions for coordination

- What is the role for global and national coordination bodies in monitoring and promoting adherence to the Sphere standards on solid waste management as part of the HNO, the Humanitarian Response Plan and the SOF?
- How might this be supported by regular monitoring of affected populations' perception of and satisfaction with their physical environment?
- Might the GWC and its partners consider setting up a global Solid Waste Management TWiG to raise the salience of and attention to this problem?
- How does this align with the existing WASH Sector Road Map activities, and how can the Road Map initiatives support the research, innovation and programming changes needed on this issue?



### Key questions for humanitarian responders and donors

- How could agencies ensure that they always budget, plan and resource for sustained solid waste management as an integral part of their WASH response?
- How might donors support this, ensuring that Sphere standards are met within solid waste management and that affected communities' desire to live in a clean environment is respected?

### Key questions for innovation

- Along with results from further research into the root causes of this gap, innovation actors might explore existing technical and systemic solutions, why they are not being used, and where opportunities to develop better ones exist.
- Opportunities for innovation in this area might be both around products (such as incinerators) and systems approaches or services, such as waste collection and recycling services and other ways of engaging and supporting the community and the local private sector to address the problem.



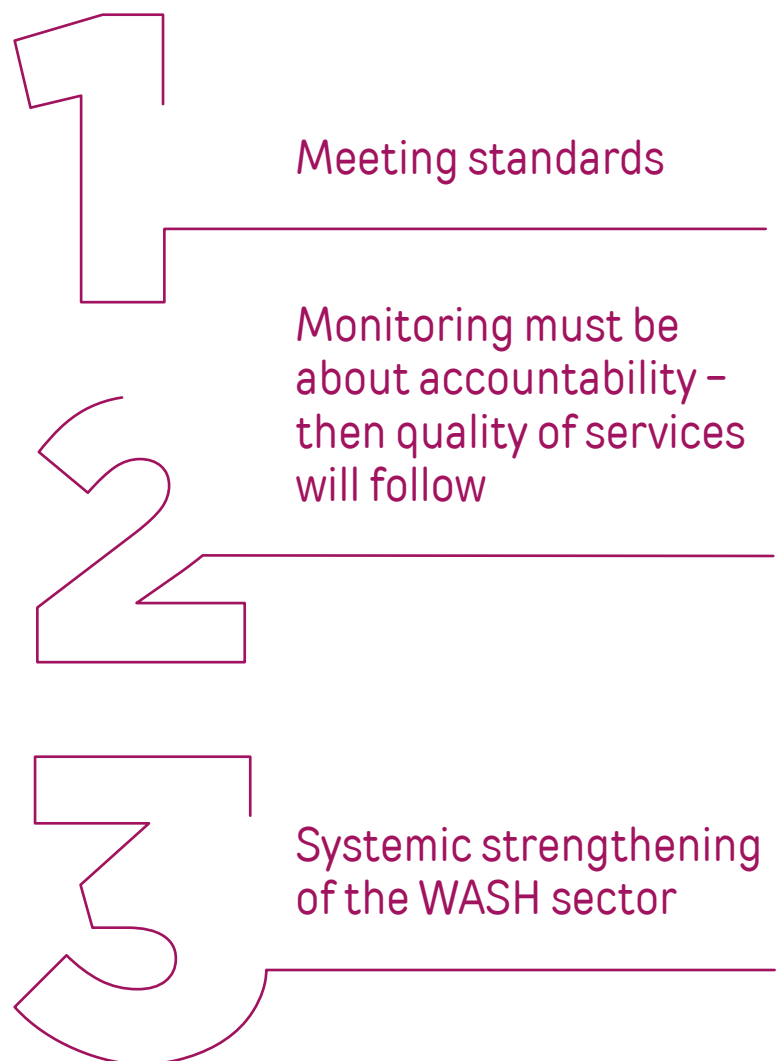
Overall conclusion



## Overall conclusion

The cardinal, and cross-cutting, conclusion from the 2021 Gap Analysis is that people affected by crises demand stronger delivery of services so they can have greater access to adequate quality water, sanitation, hygiene, and solid waste management. This is no surprise, as the humanitarian sector is constantly struggling with increasing need against a backdrop of inadequate funding.

However, there are **three key areas** in which improvements can be made immediately, as well as specific opportunities for impactful research and innovation that could help address the problems that are most important to people affected by crises.





## Meeting Standards

To unpack the root causes of the key gaps, we need a deeper understanding of whether responses are meeting Sphere indicators, and if national standards are being observed.

Secondly, we need to interrogate whether meeting the Sphere standards is always sufficient. Recent research<sup>15</sup> across refugee/IDP camps in five countries found that 40% of women and young girls were not using the emergency latrines. This illustrates that while Sphere standards for number of latrines might be met, the actual safety and usage of those facilities tell a very different story, which had not been picked up by traditional monitoring and evaluation of service provision in relation to standards. Finally, we need to understand adherence to standards over time. The average humanitarian crisis in which there is a UN-coordinated response lasts more than nine years<sup>16</sup> and we know that WASH infrastructure often decays in mere months. More research is needed to expand the evidence base informing the standards and their shorter- and longer-term implementation in different contexts. This, in turn, will support agencies and donors to set up management systems right at the outset of a response to ensure sustainability of the services.

<sup>15</sup> Oxfam, [Shining a Light: How lighting in or around sanitation facilities affects the risk of gender-based violence in camps](#)

<sup>16</sup> OCHA, [US\\$21.9 billion needed in 2019 as average length of humanitarian crises climbs](#)



## Monitoring must be about accountability – then quality of services will follow

Whether the gaps identified exist because of scarcity (for instance, in the case of water supply), general underfunding of WASH, or poor planning, management or prioritisation, the complex causes need to be explored in each humanitarian setting.

Unpacking the data behind the four major service provision gaps discussed in this paper, a consistent conclusion is that WASH agencies must shift towards new ways of measuring how basic needs are being met in a sustained way. There is a need to equip WASH staff with the skills and resources to ask the right questions, listen, and understand the needs and preferences of communities in a meaningful way that allows them to put these at the heart of all service design and programming. This will enable agencies to understand and address the root causes of the gaps in each specific context.

Monitoring that incorporates the views and satisfaction levels of the affected population is likely to uncover 'disconnects' similar to those found in the 2021 Gap Analysis, and this type of evaluation and accountability<sup>17</sup> must become integral to efforts to improve WASH services. A number of innovative approaches<sup>18</sup> already offer promising solutions to this, but more work is needed to test, develop, adapt to various contexts, and scale these tools.

<sup>17</sup> Such as frameworks like the [GWC AQA](#)

<sup>18</sup> Such as Ground Truth's satisfaction monitoring, Save the Children's [digital tool for User-Centred Sanitation Design](#), or Oxfam's [Sani Tweaks](#).



## Systemic strengthening of the WASH sector

Four important gap areas featuring in the top 10 rankings have not been discussed elsewhere in this paper but underpin effective delivery of WASH services and cut across all the provision gaps.

While they are gaps in their own right, they also begin to offer solutions to the main gaps by suggesting how the WASH sector can be strengthened.

**'Need for collaboration and coordination (including governance)'** ranked in the top 10 for all but the affected population data stream. As this category covers a myriad of complex relationships during any response, more research is needed to explore exactly which parts of the process need to be improved. The category covers both intra- and intersectoral collaboration, as well as the link into cluster-wide processes such as the HNO, Humanitarian Response Plan and Cluster Coordination Performance Monitoring (CCPM). This aligns with an

increasing desire in the WASH sector to see better **'links to other sectors'** - a gap ranked in the top 10 by online survey respondents - and more holistic programming.

Finally, **'Need for WASH staff capacity/training/expertise'** ranked very highly in the online survey and also featured in the literature top 10 gaps. This links directly to many of the conclusions across the technical gap areas (water, hygiene etc.), which reflects a need for WASH staff to build stronger systems for monitoring, assessing and addressing the root causes of the specific WASH challenges in each response. Equipping WASH practitioners to address the findings of the 2021 Gap Analysis therefore requires contextually relevant training and capacity building. A linked gap, **'Need for data sharing, tools, and documents'**, also appeared in the online survey top 10. The WASH Sector Road Map is one of the strategic initiatives aiming to strengthen knowledge management and capacity building, requiring all agencies to budget for and deliver capacity-building initiatives as a systematic part of every emergency response they carry out.

## Where do we go from here?

The 2021 Gap Analysis offers a unique dataset to help the humanitarian sector understand where emergency WASH can be improved. As such, it sets a challenge for everyone involved in humanitarian WASH responses, requiring us to explore why these gaps exist and how they can be addressed. It is an important contribution to the accountability agenda, and its findings have implications for the direct delivery of aid, the coordination of responses, and for humanitarian research and innovation.

Elrha, GWC and Oxfam hope that this new Gap Analysis will help steer resources and efforts to those problems identified as most important to people affected by crises.

**Elrha** will work with experts to understand the nuances of the most pressing problems as articulated by aid recipients themselves, compare with what practitioners and literature highlight as the main gaps, and analyse the opportunities for innovation. Ultimately, Elrha will design new innovation funding calls and other support mechanisms to ensure that investment in WASH innovation is focussed on where it can be most impactful.

The **GWC** will encourage partners to use the results of the 2021 Gap Analysis at a national level, so that they can contextualise the findings, explore further gaps in data and consolidate knowledge based on the individual country and local

contexts. Furthermore, the GWC will continue to support global knowledge management efforts and to facilitate the collection and analysis of additional knowledge gaps and their root causes.

**Oxfam** will continue to strengthen its advocacy for WASH services that are built and iterated through cycles of feedback from people affected by crises. It will also focus its research and innovation agenda on the areas identified in the 2021 Gap Analysis and invites other humanitarian organisations to follow suit.

The 2021 Gap Analysis highlights a range of important themes, and collaborative effort is now required for WASH agencies and GWC to better understand why these gaps exist and to explore where more attention and investment needs to be focussed.

**We must hold ourselves accountable to the needs and expectations of the people affected by crises we are seeking to support. This Gap Analysis sets out these needs, and it is now up to the humanitarian WASH sector to meet them.**



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