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Rural Sanitation Programming in Challenging Contexts: A desk based review

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Front cover image:

Latrine and shower shelter + hand-washing facility, Jeldi, Ethiopia
Photo taken by: The Sanitation Learning Hub/Maria Gerth-Niculescu.

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Key to boxes in document

Study questions have a light blue background:

1. What datasets and studies are used by key sector practitioners to help

Summary boxes have a bright yellow background:

Summary Box: Box title
- While disaggregated information is collected and at times presented...

Reflection boxes have a light peach background

Reflection Box: Box title
- There are limited resources seeking to provide guidance ...

Glossary & Acronyms

ACF	Action Contre la Faim
AMCOW	African Ministers Council on Water
BMGF	Bill & Melinda Gates Foundation
CATS	Community Approach to Total Sanitation
CBI	Cash-based interventions
CHC	Community health club
CLTS	Community-Led Total Sanitation
CSO	Civil society organisation
DHS	Demographic health surveys
ENDI	Equality, non-discrimination and inclusion
EQND	Equality and non-discrimination
GBV	Gender-based violence
GSF	Global Sanitation Fund
GWC	Global WASH cluster
HIES	Household expenditure and income surveys
iDE	International Development Enterprises
IDP	Internally displaced people
IDS	Institute of Development Studies
JMP	Joint Monitoring Programme
KAP	Knowledge, attitudes and practices
KII	Key informant interview
MICS	Multiple indicator cluster survey
MFI	Micro-finance institution
MoRES	Monitoring results for equity systems
NGO	Non-governmental organisation
OBA	Output-based aid
ODF	Open defecation free
PHAST	Participatory Hygiene and Sanitation Transformation
PhATS	Philippines Approach to Total Sanitation
QR	Quick response
RWSSI	Rural Water Supply and Sanitation Initiative
SBM-G	Swachh Bharat Mission-Gramin
SDG	Sustainable Development Goals
SHARE	Sanitation and Hygiene Applied Research for Equity
SSH4A	Sustainable Sanitation and Hygiene for All
UCD	User centred design
WASHPaLS	Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability
WSSCC	Water Supply and Sanitation Collaborative Council

Executive summary

Background, scope and methodology

Of the two billion people worldwide lacking access to at least basic sanitation, seven out of ten live in rural areas (JMP 2019). Progress has been made on increasing rural sanitation and access levels are rising, but challenges remain in reaching the 'last mile' or some 10 to 20 per cent of the population (Apanga et al. 2020; UNICEF 2015).

The factors affecting the ability of households to construct and use toilets, as well as the challenges sanitation programmes face in reaching specific groups, are highly diverse. Applying one-size fits all approaches has been proven not to work; therefore, we need more nuanced, adapted, and targeted approaches to capture the universality element of the Sustainable Development Goals (SDGs) and ensure that no one is left behind (Cavill et al. 2016). However, we recognise that challenges can be persistent and there are limited documented examples of how to overcome these challenges at scale.

The Sanitation Learning Hub (SLH), UNICEF, and WaterAid commissioned this study to map rural sanitation approaches in challenging contexts and the guidance currently being used, drawing out emerging experiences and lessons. This initial landscaping study identifies gaps and provides recommendations on how to address some of them. All three commissioning organisations aim to work with the wider sector to explore the gaps and opportunities in more detail in a second phase of this work.

This rapid desk review collated preliminary findings across five broad 'categories' of challenges: (i) poverty and social marginalisation, (ii) entrenched social norms and beliefs, (iii) tough physical environments, (iv) lifestyles and livelihoods and (v) fragile contexts.[1] It involved key informant interviews (KIIs) with 44 interviewees, and consulting over 180 documented resources.

Key findings

Information sources and monitoring systems

Section 4.1 documents findings relating to data and information sources, and also processes that organisations use to identify potentially disadvantaged persons or areas. Key findings include:

- The WASH sector relies on national censuses and surveys such as demographic health surveys (DHS) and multiple indicator cluster surveys (MICS) for its secondary data. While other datasets are available, for example from other sectors (social protection and agriculture), they are not commonly used by WASH professionals. While disaggregated information is collected and at times presented, the level of disaggregation and the geographical resolution of such disaggregation is limited. Efforts to spatially analyse and disaggregate WASH sector monitoring data in order to map inequalities are limited, with some notable exceptions.[2]

- There is no single method used to identify potentially disadvantaged groups or challenging contexts. Formative research, user-centred design (UCD) and barrier analysis help WASH organisations better identify and understand potentially disadvantaged groups and obstacles to inclusion. Community-Led Total Sanitation (CLTS) includes a process of community vulnerability self-identification, but this is less formalised for other rural sanitation approaches. Monitoring systems are often geared towards tracking progress, not to tracking or analysing metrics such as slippage among different groups or the impact the different challenges have on sustained toilet use.

1 See Section 3 for the detail of aspects that have been grouped within these five categories of challenges.

2 Pullan et al. (2014) used monitoring data to undertake a spatial analysis of inequalities in WASH across Africa.

- Targeting for external subsidies often follows government social-welfare-related poverty identification and systems where available; in the absence of such systems, or where they are perceived to be unreliable, organisations define their own project or organisational criteria. Identification of those in need of support, the engagement of those people, and delivering the support mechanism, is often resource-intensive.

- There is interest in tools or online resources that could help to access and collate a wider range of data sources to enrich the existing sector analysis, support targeting, and help in programme design in country.

Section 4.2 lists the findings relating to the ability of organisational and sector monitoring systems to identify and track progress in reaching potentially disadvantaged groups. Key findings include:

- National surveys risk missing certain groups, such as displaced persons, minority groups, and migrant workers. Few national surveys include intra-household data disaggregation.

- Numerous WASH sector organisations (NGOs, CSOs, UN) have their own equity-focused monitoring systems, although they are often not routinely applied beyond specific 'projects' and may focus only on certain groups. There is often scope for improvement in the utilisation of monitoring data for decision making.[3] Most monitoring systems look at inclusion only at the community level, while some also look at aspects higher within the WASH 'system' (such as SNV's 2019 Performance Monitoring Framework).

Existing guidance and documentation about the challenges

Section 4.3 provides examples of research, guidance, and knowledge products[4] that help organisations better understand and address the five categories of challenges.

Overall, we found that the balance of documentation and guidance varies considerably across the five challenge categories. WASH practitioners recognise that multiple challenges and barriers impact on households' ability to access sanitation services, but the relationship between these challenges has not been systematically explored or documented. In-depth analysis of the awareness and usage of the various toolkits and studies by sector actors at national and sub-national level is beyond the scope of this study. However, we can use proxies of how appropriate the documents might be to their readership; for example, their length, and whether or not they have helpful summaries. Of the documents reviewed with page numbers listed, the (mean) average length was 30 pages (many >60), and 18 per cent of these had summaries. Guidance materials are not always translated to local languages (or beyond English).

3 Organisational and project monitoring data is not routinely shared with the wider sector or used for sector analysis and learning processes.

4 Where relevant, we also provide hyperlinks to these resources, and a repository of documents identified through this study is also available.

Findings and analysis on existing documented resources

AREA	'FINDINGS AND ANALYSIS
Poverty and Social Marginalisation	• There is a large volume of guidance on this topic, with some dimensions (e.g. gender, physical disability, and age), better documented than others (e.g. HIV and mental health). While some guidance materials are 'narrower', focussing only on one or two dimensions, others are broader. • There are many useful recommendations for good practice in inclusive programming, but the volume of recommended actions and considerations (particularly in the guidance looking only at certain potential disadvantages – e.g. only gender or only disability), may be beyond the means of many WASH programmes. • Most guidance covers the need for considerations on infrastructural designs, while there is an increasing trend to also emphasise the aspects of inclusion through the intervention process. Most inclusion-related guidance documents focus on community-level actions, with fewer looking at actions that can be taken at higher levels of the WASH 'system', or at addressing issues of exclusion from more of a political economy, systems, or rights-based perspective. • There is guidance on wider support mechanisms, specifically regarding subsidies, however the limited documentation that exists is more related to study findings (some with recommendations), than on providing practical evidence-based guidance on the design of subsidy mechanisms.
Entrenched Social Norms and Beliefs	• There are limited specific documents on this challenge category, although there is a growing body of guidance and tools regarding user-centred design (UCD), including the emergence of resources specific to sanitation and those that can be used for humanitarian contexts. • As most social norms and beliefs are context specific, practitioners need flexible tools to identify social norms and beliefs within communities, and also skills to adapt programme approaches and technologies to address the issues identified. This is not an area where rigid guidelines are useful. • Some of the resources covering social norms theory are overly theoretical and challenging to apply in practice.
Tough Physical Environments	• Issues relating to tough physical environments are often dealt with locally, finding localised solutions, and these solutions are not generally documented and shared. • There are limited tools to support practitioners assessing the physical environment of targeted areas as part of their design process, however UCD tools and processes are being increasingly used to adapt technical options for different terrains and contexts (see section 4.4). • Available guidance resources focus primarily on technological adaptations, with more limited guidance as to how to integrate such measures into wider service delivery models (beyond local construction skills and supply chains) and wider financing implications.
Lifestyles and Livelihoods	• There is a clear gap in documented sector knowledge and guidance on this challenge, although there are some upcoming efforts to address this. • The limited amount of documentation regarding sanitation in pastoralist and fishing communities is largely restricted to Eastern Africa, although there may be francophone resources that were not reviewed. • There is very limited robust evidence-based guidance on these topics, but rather most documentation is based on context description and suggestions on what may work.
Fragile Contexts	• There are limited resources providing guidance on strengthening the connectedness between humanitarian and development programmatic approaches. • There is increasing focus and documentation on cash and markets approaches in the humanitarian sector, with limited examples to date on its application on rural, out of camp sanitation, other than in rapid-onset emergencies. • Documentation on applying more 'developmental' approaches in fragile contexts is limited, and largely based on limited experiences rather than guidance based on successes at scale.

Efforts and experiences in addressing the challenges

Section 4.4 provides examples of how organisations and programmes have sought to overcome the challenges in various programmes and countries. A brief analysis of experiences is provided below:

Table 1: Guidance and documentation on the five challenge categories

CHALLENGE CATEGORY	FINDINGS AND ANALYSIS ON EXISTING DOCUMENTED RESOURCES
Poverty and Social Marginalisation	• We identified common experiences relating to efforts towards inclusive programmes: there are tendencies to address issues such as disabilities primarily from a technological perspective; efforts can tend to be narrow in focus and siloed on specific issues rather than integrated; orientation of staff and stakeholders should not be a one-off exercise; and deliberate inclusion efforts throughout the intervention cycle is expensive. • Examples of the application of inclusive approaches are often localised and focus on a small number of specific potential disadvantages. There are limited examples of significant upscaling of inclusive approaches across multiple potential disadvantage dimensions. • Addressing social exclusion requires efforts to address beliefs and stigmas, both within implementation teams and within communities. • Certain barriers cannot be solved by the community alone (e.g. lack of land) and require multi-stakeholder efforts to address them.
Entrenched Social Norms and Beliefs	• There is a gap in documented experiences in encouraging toilet use where raw excreta use is linked to livelihoods or where terrains make existing open defecation practices a perceived better option. • Tools and methods to customise behaviour-change approaches are increasingly more user friendly and cheaper to apply, even for humanitarian contexts, meaning there is increasing scope for practitioners to apply more nuanced and less blanket approaches. • Social norms vary spatially, posing challenges for applying common adaptations to other contexts.
Tough Physical Environments	• Responses to challenging terrains have primarily been technological. But alternative or adapted technical options are often more expensive. And, as those living in such environments may be poor and marginalised, they can be a low priority for government assistance. • Many examples highlight the importance of developing local skills and providing guidance and technical support to households to overcome terrain challenges. • Efforts to address challenges are often highly localised, and not well documented, which may be one reason why there are limited examples of overcoming the challenges of terrain issues at scale. • Where there are examples of efforts to address such challenges at scale, these are where support has been provided to develop specific sector strategies (based on mapping and articulating the 'challenge') and developing sector guidance.
Lifestyles and Livelihoods	• This category represents a strong example of intersectionality between challenging contexts. • There are common themes across the different livelihood groups: the potential relevance of linking sanitation approaches to livelihoods and value chains; taking a more 'urban' approach for mobile heterogeneous populations; considering timing and who is involved (and are decision-makers) at the community level; and in the case of pastoralist contexts being realistic when expecting that all populations should use permanent toilets, all of the time. • Considering the prevalence of these types of socio-economic groups worldwide, there are limited documented experiences covering how to effectively work with them at scale.

CHALLENGE CATEGORY	FINDINGS AND ANALYSIS ON EXISTING DOCUMENTED RESOURCES
Fragile Contexts	• Humanitarian and development actors and interventions are strongly siloed. There is limited cross-learning between the silos and challenges in ensuring 'connectedness' between actions during humanitarian and development phases. • Opportunities for greater complementarity and introduction of longer-term approaches for rural sanitation seem to exist in the 'protracted' phase of crises; for example, once immediate humanitarian needs are met to a basic level, there is more time to consider increasing service levels (e.g. to domestic toilets) and to take a market-sensitive approach. • Documented experiences of out-of-camp approaches to rural sanitation are limited, relatively constrained to Community-Led Total Sanitation (CLTS), and somewhat anecdotal. As 'fragility' manifests itself differently in different countries, it might be difficult to extrapolate best practice between areas.

Common barriers to addressing the challenges

Section 4.5 provides an overview of the diverse challenges that organisations and programmes face in ensuring inclusion in rural sanitation programmes, working with the challenge categories. In summary:

- Organisational incentives are driven by a number of internal and external factors, including donor priorities, cost, risk, and the organisational and staff awareness of challenges faced by households.
- National strategies often focus on easy targets and reaching large numbers, rather than tackling challenging contexts systematically. Restrictive policies prevent pragmatic use of support mechanisms.
- It is difficult to build and maintain sufficient capacity and knowledge among frontline workers on how to address the many potential challenges.
- The sector lacks different strategies to identify and address challenges that affect the majority of the target population versus those that impact a ***minority*** or very small number of those targeted.[5]
- Resource constraints (skills, budget, and time) impact the ability of organisations to reach minority groups or adapt approaches to address challenges faced by fewer households or communities.

Addressing the challenges at scale, and through rights-based and systems approaches

Section 4.6.1 provides an analysis of how rights-based approaches have been used. In summary:

- Rights-based concepts and language can be challenging to grasp; however, there are increasing efforts to address this and make rights-based approaches more 'tangible' for practitioners.
- Partnerships with specialised rights-holder groups (such as disability or elderly representative organisations) can help in rights-based efforts at both the local and sector level.

Section 4.6.2 gives examples of initiatives that address challenges at scale. In summary:

5 For example, in a national programme strategies are often not developed for contexts that affect a relatively small proportion of the population, e.g. minority ethnic groups with specific beliefs, or specific geographical or livelihood contexts.

- There are a number of commonalities between government programmes that are addressing inclusivity and overcoming challenges at scale, including: area-wide targets and strong political will to achieve these; policy-sanctioned pragmatism on support mechanisms and the role of local government in discretion on and/or financing of these; the need to ensure that the model for scaling up includes local-level structures for review, learning and adaptation, and experience sharing on 'local solutions' between local governments; and where specific challenges are widespread, developing specific strategies to explicitly address these.

- 'Pilot' programmes are not always designed with scaling pathways (and costs) in mind from the outset, and hence suffer from the challenges of 'handing over' or institutionalising projectised processes or approaches.

- There is a distinction between scaling a specific solution or approach to a challenge, and ensuring that the institutional model for upscaling of rural sanitation provides the space and incentives for the local identification, adaptation, learning, and sharing of approaches to overcome these challenges.

- We observed four distinct pathways for non-governmental organisations (NGOs) achieving scale in overcoming challenges, including:

  - testing and demonstrating approaches locally, then sharing this nationally to stimulate replication;

  - delivering activities with and through government, aiming to inform the implementation of the nationwide rural sanitation programme;

  - integrating inclusion within the wider business and service delivery model (e.g. in market-based approaches), and;

  - working at the sector level, undertaking formative research to inform strategy and developing guidelines on specific issues.

- To date, enabling environment and systems approaches are not clearly linked with objectives of ***inclusion*** at scale. Section 4.6.2 provides examples of strengthening inclusion 'across the building blocks'.

Section 4.6.3 analyses sector learning practices, and their influence on inclusion at scale. In summary:

- Effective learning processes are essential in upscaling local solutions. We need to decentralise learning processes and provide examples of efforts to strengthen learning flows, both horizontal and vertical. There are also global initiatives that generate learning on certain challenges.

- There are also key gaps, such as: learning and exchange between humanitarian and development siloes and between WASH and other sectors (such as social protection); sector knowledge products, guidance, and research may not always be customised for local audiences; global learning processes may be biased to anglophone audiences; learning processes and events are often one-off; and there are clear gaps in learning within and between countries on certain challenges, such as pastoralists.

Recommendations

This study has identified a range of opportunities for strengthening the foundations of the rural sanitation sector to make inclusive progress and to overcome the various programmatic challenges, at scale. Recommendations are summarised below, and presented in detail in Section 5.2:

1. Address the key knowledge gaps identified in this study and strengthen sector learning processes.

a. Undertake research and collate experiences on the identified gaps in evidence and guidance, including:

- The design of targeted support mechanisms to reach disadvantaged households; the wider systems strengthening required for these to work cost effectively at scale; the means to overcome persistent social norms and to address common terrain challenges; and the need to move beyond infrastructural solutions to including adapted technologies within wider models of service delivery.

- Effective, evidence-based approaches for specific livelihood groups, such as fishing and mining communities, and for pastoralist settings; appropriate approaches for supporting sanitation for out-of-camp displaced persons; adaptations to conventional approaches to rural sanitation to maximise effectiveness in chronically fragile settings.

- Means to increase connectedness of humanitarian and development actions. Means to institutionalise and scale up approaches to address a range of potential disadvantages/challenges facing large programmes, and to use systems approaches; and how rights- and market-based approaches are linked.

b. From this, develop customised means to share this learning and guidance at different levels of the sector, and across different regions, mindful of study findings on the effectiveness of guidance documents.

c. Strengthen global and country-level processes of learning and adaptation; ensure learning processes are decentralised, have rapid, frequent feedback loops, and ensure that knowledge flows effectively both vertically and horizontally.

d. Strengthen dialogue and learning across siloes (Humanitarian ⟷ Development; WASH ⟷ Social Protection).

2. Build the evidence base to identify who the 'last mile' represents, quantify these groups, and understand the barriers they face. Increase access to such information to help with sector targeting.

a. Identify, define, quantify, and map areas and groups that are potentially disadvantaged. This may include detailed analysis of existing data, in addition to formative research.

b. Enrich sector efforts on tools and information platforms, where relevant information is gathered to enable evidence-based targeting and programme design. Promote widespread sector usage of such tools.

3. **Develop approaches, models and products that are inclusive and can address challenges at scale.**

a. Undertake formative research to understand barriers for potentially disadvantaged groups and develop evidence-based, customised approaches and means of support to overcome such barriers.

b. Undertake sanitation market assessments in challenging contexts and engage market-based actors to develop incentive structures, service delivery models, and products that could address challenges at scale.

4. **Build in-country capacities to effectively address challenging contexts and build the business case and commitment of stakeholders to prioritise – or at least include – last mile groups.**

a. Strengthen awareness and capacity at different levels to identify and include different disadvantaged groups. Strengthen capacities of civil society organisations (CSOs) and media to track and advocate for inclusive progress.

b. Develop policy positions, including economic and value for money cases, for prioritising last mile groups.

5. **Harmonise definitions and help governments to develop specific targets and strategies for challenging contexts and to strengthen their monitoring and review processes to track progress.**

a. At the global and country levels, work on harmonising definitions and indicators of challenging contexts and disadvantaged groups and define priority groups to be captured in disaggregated monitoring and analysis.

b. Support the development of country targets and strategies for challenging contexts and specific groups.

c. Strengthen country monitoring systems to better include and identify potentially disadvantaged groups and strengthen capacities for data analysis and feedback loops so that monitoring data triggers barrier analysis and potentially support mechanisms. Review inclusiveness of progress during joint sector reviews.

1. Background and rationale for the study

Of the two billion people worldwide lacking access to at least basic sanitation, seven out of ten live in rural areas, accounting for over 90 per cent of those still practicing open defecation (JMP 2019). Major progress has been made on increasing rural sanitation access worldwide, yet of the 62 countries with substantial levels of open defecation, only 18 are on track to become open-defecation free (ODF) by 2030 (World Bank et al. 2019). The Joint Monitoring Program (JMP) (2019) found that countries that have already reduced open defecation rates below 25 per cent tend to subsequently progress slower – showing the challenges associated with reaching the 'last mile'. Indeed, many reviews and evaluations of large-scale sanitation programmes detail the challenges of reaching the last 10–20 per cent (Apanga et al. 2020; UNICEF 2015), and the World Bank et al., (2019) note that 'even the most successful rural sanitation programmes have struggled to respond to the needs of the poorest and specific vulnerable groups'. Such vulnerable groups are also those most at risk of slipping back down the sanitation ladder (Cavill et al. 2015; USAID 2018).

The factors affecting the ability of people and households to construct and use toilets, as well as the challenges sanitation programmes face in reaching specific communities and groups, are highly diverse. Challenges can be linked to issues of poverty, social marginalisation, persistent social norms, remote and tough physical environments, mobile populations, and those living in insecure and fragile contexts. This is not an exhaustive list, and communities often suffer multiple potential disadvantages.

The sector acknowledges that 'applying a blueprint of single approaches across large areas, or even countries, does not work everywhere, all the time, and is simply not enough to reach everyone' (World Bank et al. 2019). We need more nuanced, adapted rural sanitation approaches, which make specific efforts to ensure progress in increasing sanitation access focusses on the *universality* element of the SDGs, leaves no one behind, and realises the human right to water and sanitation (ISF-UTS and SNV 2018; Cavill et al. 2016). However, challenges can be persistent and there are limited documented examples suggesting how to overcome such barriers, particularly at scale.

In 2019, WaterAid, Plan International, and UNICEF collaborated on the development of Guidance on Programming for Rural Sanitation. A wider group (also including the World Bank, WSSCC, and SNV) released a Call for Action for rural sanitation programmes to meet the SDG ambition of leaving no one behind. Both called on actors to develop context-specific, evidence-based approaches to ensure interventions are delivered at scale, with sustainability and equity. They point to the need for 'inclusive solutions', identify those at risk of being left behind, and monitor progress to this goal. While these documents provide valuable recommendations and guidance on inclusive rural sanitation at scale, they do not go into detail on the issue of challenging contexts. In addition, the Sanitation Learning Hub (SLH) (formerly the CLTS Knowledge Hub) has spent ten years building knowledge and documentation on rural sanitation approaches (initially CLTS), including on 'challenging contexts'.

Building on this earlier work, the SLH, UNICEF, and WaterAid commissioned a rapid desk study, to map rural sanitation approaches and guidance currently being used in the sector to target such 'hardest to reach' and 'last mile' populations, drawing out any emerging experiences and lessons. This initial landscaping study provides recommendations for the sector on gaps and opportunities to address some of them. All three commissioning organisations will be exploring the gaps and opportunities in a second phase of this work; they hope, in collaboration with others.

2. Study scope and methodology

This study is relatively broad, aiming to collect initial findings over a wide range of 'challenging contexts', and across ten study questions (presented below). We expect that the answers to these questions will inform practitioners of the availability of resources, provide insights from examples of approaches used to address challenges, and highlight some emerging best practice, to guide thinking and planning for 'last mile' service delivery. Due to the broad scope and number of issues addressed in this report, detailed guidance on how to address specific challenges is not included.

STUDY QUESTIONS

1. **What datasets and studies are used by key sector practitioners to help identify the hard-to-reach populations, and where do such practitioners perceive there are gaps? (see Section 4.1)**
2. **How, and to what extent, do agencies (e.g. NGOs, UN) and governments identify individuals/households/groups affected by these challenges in their rural sanitation activities? (Section 4.1)**
3. **To what extent do monitoring frameworks help identify such groups and assess whether we are reaching them? (Section 4.2)**
4. **What practical guidance exists to inform implementation of approaches in these challenging contexts – including policies, guidelines, and approaches (of implementing agencies6 and governments)? (Section 4.3)**
5. **What modifications have been made to existing approaches to address these challenges, and what have been some of the experiences with these adaptations? (Section 4.4)**
6. **What persistent challenges remain to sanitation interventions reaching those in challenging contexts?**
   (i.e. budgets, implementation) (Section 4.5)
7. **In what ways/to what extent have rights-based approaches been used to overcome some of these challenges, and what are some key examples of this in practice? (Section 4.6.1)**
8. **In what ways/to what extent have wider enabling environment-/systems- strengthening approaches been applied to help overcome challenges at scale? (Section 4.6.2)**
9. **How does sector learning link with addressing the challenges, at scale? (Section 4.6.3)**
10. **What are the priorities for guidance, learning, and research activities? (Section 5)**

6 Here referring to non-state actors such as NGOs and UN agencies, which implement rural sanitation interventions.

Challenge categories[7]

Poverty and social marginalisation

Entrenched attitudes and beliefs

Fragile contexts

Tough physical environments

Lifestyle/livelihoods

7 This list is elaborated in the next section.

Given the broad nature of the questions and challenges, it is essential to define this study's boundaries. This study focuses on *rural* contexts (while employing a pragmatic and flexible definition of *rural*, the study does not look at overtly urban contexts or large camp settings); and *household* level *sanitation* facilities (it does not look at institutional contexts such as schools and health care facilities but at users' primary household facility[8]). It concentrates largely on toilet usage, not wider hygiene facilities and issues; *achieving* access to sanitation facilities with less focus on sustaining access;[9] and achieving open-defecation free (ODF) status and basic levels of service. There is an emphasis, although pragmatically flexible, on documents released over the last five years.[10]

In undertaking this desk review, we adopted the following methodology:

- Document review: Consulting over 190 documents and information sources, ranging from toolkits and guidance notes, web portals, policy documents, research papers, and knowledge briefs. These are presented in the repository. The review and sampling processes were purposive and qualitative, not systematic. We identified and reviewed documents based on how relevant they seemed to the topic. The consultants' knowledge of relevant resources drove the primary identification of source documents, alongside those provided by representatives (known as 'focal persons') from WaterAid, UNICEF, and SLH,[11] and by key informant interviewees. This was complemented by targeted internet searches where needed.

- Key informant interviews (KIIs): 44 interviewees were consulted,[12] through 25 semi-structured interviews, each lasting 60–90 minutes. Interviewees were selected based on a list of initial suggestions provided by the consultants, which was evolved with suggestions from the three focal persons. We then used snowball sampling to identify further interviewees.

With its broad scope and limited resources for information collection and analysis, this landscaping study faced inherent limitations. Firstly, the sampling approach was primarily based on what (and whom) the consultants and focal persons were already aware of, thereby somewhat biasing the examples and regions that they were familiar with. Secondly, to be resource-efficient, we largely (but certainly not exclusively) selected interviewees based on their knowledge of a broad range of countries and examples. This tended to bias interviewee selection towards global/headquarter-level respondents. Thirdly, the documentation reviewed (and internet searches undertaken) was largely in English.[13] Finally, there are inevitably relevant documents and organisational examples that have been missed. Nevertheless, this study succeeds in identifying common (preliminary) themes and emerging learnings across all study questions, and in providing recommendations for further research.

8 This excludes facilities used by people while at work, traveling or in public spaces.

9 While noting the importance of slippage, and how it is often the vulnerable who may slip (Cavill et al. 2015).

10 So as to highlight the change in sector focus since the introduction of the SDGs.

11 Over 300 documents and resources were identified from the consultants' own files, internet searches, and those provided by the focal persons and KIIs. A sub-set of these were prioritised by the focal persons and consultants.

12 Annex 1 lists the interviewees consulted.

13 Although many documents covered francophone and lusophone contexts, and KIIs raised examples across a wide range of countries.

3. Defining the challenges

This section elaborates on the 'challenging contexts' under review and defines key terms.

Before detailing the individual challenges, we acknowledge that marginalisation and exclusion from sanitation services and systems in rural areas is complex, dynamic, and most often connected to marginalisation and exclusion in other aspects of life.[14] Given the reality of how inequalities and exclusion present, it is not surprising that there are many different terms used in the literature regarding those who are 'disadvantaged' or 'left behind' in rural sanitation initiatives. Terms include 'poor', 'vulnerable', 'least able', 'disadvantaged', 'marginalised', 'excluded', or those who form the 'last mile'. Indeed, WaterShed and Simavi (2018) highlights how nine key sector funding and implementation organisations have different definitions of the 'excluded' target group. This raises broader issues of how different approaches to defining the 'challenge' or 'disadvantaged' groups subsequently sets different monitoring metrics and approaches to 'include' them. For example, some organisations' definitions may look purely at 'the ultra-poor', while others also cover aspects of disability, gender, and so on. This issue of different definitions, and some of the broader impacts of this, is discussed later in this report (See sections 4.2, 4.3.3, 5). House et al. (2017) build on Albuquerque's (2014) definition in the *Handbook on Human Rights for WASH*, which looks at 'people who may be disadvantaged' or 'potentially disadvantaged'. People who are 'potentially disadvantaged' or who 'may be disadvantaged' includes individuals and groups who may be vulnerable, marginalised, excluded, or actively discriminated against, or experiencing inequities, inequalities, or stigma (adapted from De Albuquerque [2014], in House et al. [2017]). In this report we use the term 'potentially disadvantaged' in its broadest sense, to reflect that many who fall within this definition may not actually be disadvantaged in their ability to construct or use a toilet, or to participate in rural sanitation programming more broadly. The term 'inclusive' as used in this report refers to initiatives or approaches that seek to specifically ensure such potentially disadvantaged groups (not limited to any specific disadvantage), are not left behind.[15]

The definition of 'challenging contexts' is also somewhat problematic, as the list of categories of 'challenges' under review mixes issues of individual and demographic group 'potential disadvantages', with more geographic and contextual issues, such as fragile contexts and tough physical environments. We suggest the term '*challenging environments*' to refer to geographical challenges (e.g. terrain), and location specific operating environments (e.g. fragile contexts). Both of these pose challenges for households and communities in affected areas to construct and sustainable use toilets, and also pose challenges for organisations implementing rural sanitation interventions in such contexts. It is clear that rigid definitions and categorisations of 'challenges' and 'disadvantage' are difficult, given that many challenges are interlinked and confounding (termed in some literature as 'intersectionality') (WaterAid 2018).

Within the broader development narrative there is a recognition of the dynamics of multi-dimensional poverty or deprivation, and the challenge of understanding the interaction between different dimensions. WASH practitioners recognise that multiple challenges and barriers impact households' ability to access sanitation services, yet the relationship between these challenges has not been symmetrically explored and documented.

There have been various attempts to classify and categorise different potential disadvantages and challenges, without a sector-wide adopted framework.[16] Examples include the 'marginalisation

14 While an individual or family may experience exclusion from sanitation services and initiatives from birth, others will become excluded or marginalised at certain phases of life or due to certain events. For example losing a job can result in homelessness and that affects access to services; divorce or widowhood can affect legal status and access to resources (e.g. land) and opportunities (e.g. education).

15 See House et al. (2017) for definitions on key terms used commonly in equality and inclusion-related issues.

16 This may be due to the varied contextual realities of what contributes to and sustains marginalisation, and the compounding nature of marginalisation.

framework' of WaterAid, which classifies by macro-level and micro-level factors (see WaterAid 2018: 24), and the 'clusters of disadvantage' that House et al. (2017a: 10) adapted from Chambers (1983).[17] The consultants used (and elaborated on) the list and groupings of challenges shown in Table 3, which are similar yet distinct from the 'clusters of disadvantage' groupings. This report discusses each of these challenges in more detail and presents the findings relating to the study questions according to these categories.[18]

One further definition and distinction that is important to mention here is that of 'support mechanisms' and 'subsidies'. 'Support mechanisms' is a broad term capturing internal (e.g. within community[19]) and external support.[20] The term 'subsidies', as used in this report, refers to external targeted support to households and communities that may consist of hardware, finance, or labour.[21] We acknowledge that sanitation interventions can include a range of software provisions by external actors, including community mobilisation, capacity building, and behaviour change activities, which do not count as subsidies for the purposes of this report.

17 This groups clusters on issues of poverty and lack of resources; physical or mental health related challenges; limited social capital and social norm aspects; geographical challenges; and social marginalisation.

18 This report does not propose that the sector adopts this set of groupings; however, it highlights the need for work to be undertaken on definitions and frameworks/processes for identification and prioritisation.

19 Such support could include free manual labour; technical support from skilled workers; collection and provision of locally available materials; provision of purchased materials; loans or grants from communal savings, savings groups, or wealthier individuals; mobilisation of cash or material donations; and negotiating permission to use space.

20 The term 'subsidies' has been a contentious issue, particularly among practitioners of CLTS; however, given that this study covers a broader range of demand- and supply-side focused approaches, and that

21 Further information and definitions on this issue can be found in Myers and Gnilo (2017).

Table 2: Categories and sub-categories of challenges reviewed in this report

BROAD CATEGORY OF CHALLENGE	SUB-CATEGORY OF CHALLENGE	SPECIFIC EXAMPLES OF THE CHALLENGE (NON-EXHAUSTIVE)
Poverty and social marginalisation	Challenges of communities, institutions (i.e. decision makers or power holders) deliberately excluding others	Exclusion based on gender, age, sexuality, ethnicity, caste/social status, religious, political and cultural beliefs, social norms Structural or policy barriers deliberately marginalising particular groups (religious, ethnic, sexuality, caste, displaced persons)
	Physical challenges of individuals to construct and use	Behaviour change communication BCC materials/resources which depict men as primary carers
	Challenges of individuals' economic status and resource availability	Land tenure, homelessness, affordability and household resources, conflicting priorities, access to finance
Entrenched attitudes and social beliefs	Challenges of personal and societal beliefs and attitudes	Persistent beliefs and social norms making potential new users reluctant to construct or use toilet facilities
Tough physical environments	Challenges to build and operate	Challenging ground conditions for construction (e.g. geology, soils, hydrology, topography) Lack of local natural materials for construction Lack of water / water scarcity and rapid environmental changes (including climate change)
	Natural hazards risk destruction	Exposure to natural hazards (e.g. flood, cyclone, drought, earthquake, etc.)
	Remoteness and challenges to access target population	Poor road infrastructure, weak supply chains, limited access to communications, and lack of priority due to common bias in development towards urban/peri-urban areas
Lifestyle/ livelihoods	Challenges for groups based on temporary, transient, or informal status	Temporary workers and seasonal migrants, migrant settlements such as temporary/seasonal fishing and mining settlements, and those practising pastoralism and nomadic/semi-nomadic communities

BROAD CATEGORY OF CHALLENGE	SUB-CATEGORY OF CHALLENGE	SPECIFIC EXAMPLES OF THE CHALLENGE (NON-EXHAUSTIVE)
Fragile contexts	Challenges to implementing approach in fragile contexts	Security/risk hampers field access for implementation and/or follow-up Presence/effectiveness of government institutions for sanitation activities Presence/effectiveness of private sector/market actors Presence/effectiveness of financing institutions Fragmentation and 'supply-driven' focus of sector Financing/programming constraints (e.g. humanitarian-only funding and short-term, risk-averse projects)
	Challenges for communities to construct and use latrines	Destruction of assets such as toilets (due to conflict and natural hazards) Willingness/ability to pay and construct due to supply-driven context Social cohesion Criminality and rule of law Adherence to/consideration for human rights Economic fragility/instability
	Displaced persons	The needs of refugees/IDPs (in camps and host communities)

Source: Authors own

4. Key findings

This section presents and discusses findings, broadly sequenced according to the study questions. Text box summaries and analysis of the key findings are presented at the end of each section.

4.1. Information sources and processes used to identify 'last mile' populations and define interventions

1. **What datasets and studies are used by key sector practitioners to help identify the hard-to-reach populations, and where do such practitioners perceive there are gaps?**
2. **How, and to what extent do agencies (e.g. NGOs, UN) and governments identify individuals/households/groups affected by these challenges in their rural sanitation activities?**

This sub-section outlines the methods and information sources that organisations, particularly implementation organisations,[22] use to help customise solutions to challenges when designing their rural sanitation programmes. It also outlines the methods used to help to identify and target potentially disadvantaged groups. Here we make a distinction between secondary data sources[23] that are often used during programme design, and primary data collection, which is typically conducted once programmes have started.

4.1.1. Secondary information sources

Secondary information used to influence the design of interventions can broadly be divided into data and analytical information. The WASH sector relies on national censuses and surveys, such as demographic and health surveys (DHS) and multiple indicator cluster surveys (MICS), for its secondary data, and the analytics from these datasets (and others) by the Joint Monitoring Program (JMP).

Disaggregated information is collected and at times presented,[24] but the level of disaggregation and its geographical resolution is limited (discussed in Section 4.2). Where present, we also use national WASH sector monitoring data, although some interviewees pointed to challenges of accuracy and sometimes the 'politicisation' of data, particularly in contexts where there are large-scale national sanitation campaigns.[25] Within more fragile contexts, UNHCR's monitoring datasets of refugees and internally displaced people (IDPs) provide useful data on WASH access for such groups (see Section 4.2). National surveys such as MICS and DHS in fragile contexts can be more erratic due to security issues, but there are also ad-hoc humanitarian needs assessments that provide information on WASH access.

Beyond the WASH sector, there are information sources such as the World Bank's country level household expenditure and income surveys (HIES),[26] the Living Standards Measurement Study, country social analysis on social inclusion, and data from food security and social welfare sector

22 Here we refer to non-state actors such as NGOs/CSOs and UN agencies who undertake sanitation interventions.

23 Which is at times linked with sector monitoring systems, described in the next section.

24 Notably, analysis provided in the JMP's country reports and global report on inequalities.

25 One interviewee remarked how data from/engagement with statistics bureaus can sometimes be less politicalised and more accurate than from line ministries.

26 HIES collected information at the household level on: education, health, employment, water and sanitary practices, household resources, grants, crime, conflicts, and recent shocks to household wealth.

surveys. However, as one interviewee stated, despite the work of the JMP, ***'we [the WASH sector] are not making use of the broad data sources available to us'***.

There have been efforts to analyse and disaggregate WASH sector monitoring data spatially to get a better idea of inequalities within countries.[27,28] These robust further analyses of sector data appear to have largely been one-off efforts, although more basic analysis of geographic inequalities is undertaken routinely by some, for example UNICEF does this during their periodic country programme design process. There are also wider analyses that review existing data sources to identify relationships and correlations between key sector indicators and datasets to provide valuable, nuanced information for decision making. The World Bank's WASH Poverty Diagnostics country reports are a key example of this: undertaken in 18 countries, their analysis and reports aim to identify the poorest households in a given country, where they live, and their level of access to quality WASH services. This analysis draws on multi-disciplinary research teams and multi-sector datasets and sheds light on the major disparities in the sectors.[29] The studies have influenced the design of a number of World Bank investments, including the inclusion of sanitation in the government of Nigeria's new rural WASH programme supported by the World Bank.

There are also examples where UNICEF is supporting the production of maps that overlay national spatial ODF data with other indicators, such as poverty and malnutrition rates (Sudan), and neglected tropical diseases (Ethiopia). Country Humanitarian Needs Overviews also commonly overlay multiple sector indicators to produce aggregated humanitarian severity indices.

Relating to some of the specific 'challenge' categories, several organisations utilise datasets from specialist organisations, such as those focussing on disabilities. Others seek to access data on poverty from national social welfare datasets (such as those in Cambodia and Bangladesh), and others consult spatial data sources such as geological and flood-risk or climate hazard maps to understand potential terrain challenges.[30] However, examples of organisations using these datasets systematically are limited, and often related to whether they have a specific focus on a particular group or challenge.

Interviewees also mentioned how they might consult past programme evaluations, thematic studies, and knowledge products, and talk with other local sector actors for information when designing an intervention. Again, this is often ad-hoc, and constrained by the time available during programme design or early implementation.

Many interviewees noted their appetite for an online resource, which could overlay multiple relevant indicators spatially, together with demographic and geographical information. This would aid identification, targeting, and intervention design. One interviewee remarked how it would be useful for such ***'country-level information sources'*** to also host relevant qualitative information such as knowledge briefs, study reports, and past evaluations. USAID, WaterAid, and UNICEF are collaborating with WASHPaLS (Water, Sanitation, and Hygiene Partnership and Learning for Sustainability) to develop a tool that brings together spatial data that can, in turn, help to typologize communities and identify potential success factors (and challenges). This would help to inform

27 For example, the DHS programme has developed a spatial data repository that aims to automate the production of sub-national maps; however, this does not appear to include WASH indicators at this stage. WASH data within the DHS is still restricted to only rural and urban analysis.

28 Pullan et al. (2014) used sector monitoring data to undertake a spatial analysis of inequalities in WASH across sub-Saharan Africa.

29 While the World Bank currently don't have a plan to expand this analysis into more countries or re-visit countries already assessed, the methodology they used in these studies is well documented. This could enable wider use of this approach and the updating of analysis based on new datasets.

30 In Bangladesh, the World Bank's former Water and Sanitation Program and others supported the government to develop spatial mapping of 'hard to reach areas' using multiple indicators, which was then included in the national strategy on this topic.

decisions on the 'programming mix' in terms of potentially appropriate combinations of and/or adaptations to rural sanitation approaches.[31] However, the extent to which this tool will provide data across all of the challenge categories is unclear. The Guidance on Programming for Rural Sanitation (WaterAid, Plan International, and UNICEF 2019) also provides suggestions on improving the situational analysis process and links to potential information sources; this helps to inform and customise programme design and select appropriate implementation approaches.

In terms of information sources on the strength of the enabling environment and WASH system generally, there is related information in WASH BAT, GLAAS, and from ad-hoc country WASH sector analyses. However, these often do not specifically look at inclusivity or challenging environments *per se*.[32]

4.1.2. Primary information sources

Primary information collection, if done at all, tends to be undertaken during the early phases of an intervention or through the programme delivery process, with the latter often linked to actions taken in response to monitoring data. A distinction can also be made between macro-level information, collected for example through large-scale baseline surveys and from secondary sources, and 'micro' intra-community-level information, often collected once programmes have started. The timing of data gathering and its analysis – and also how and when the analysis is communicated to decision makers (for example to overall programme managers) – can impact the effectiveness of its use during programme design and implementation. Early collection and analysis of data means it can be used in the selection and targeting of specific communities and households, whereas data gathered after implementation areas have been chosen restrict its use to the selection of approaches relevant to the context to reach all in an already selected community. When data collection is for monitoring purposes and collected after the selection of the programme area and approaches, there is very limited opportunity to use it for targeting and tailoring approaches.

Many interviewees mentioned the use of baseline surveys (such as knowledge, attitudes and practices, or KAP surveys) as means to collect initial information (albeit often not disaggregated, as discussed below), and there is an increasing trend of implementing organisations, both in stable and fragile contexts, using methods such as formative research, UCD, or barrier analysis to help define and customise their interventions. Such processes often help organisations better identify and understand potentially disadvantaged groups and potential barriers to their inclusion. Some organisations (e.g. WaterAid) include equity and inclusion issues as part of their WASH diagnosis process, while others include specific initiatives to analyse and identify specific potentially disadvantaged groups. Examples of this are Plan International's approach to gender monitoring and WaterAid's work on disability and age in its 'undoing inequalities' work (WaterAid 2014). In some cases, implementation organisations such as SNV and WaterAid have partnered with specialist representative groups, such as disability- or older people-focussed organisations, to help identify potentially disadvantaged groups. Tearfund uses local faith-based groups for similar purposes.

At the community level, the implementation of approaches such as CLTS often includes a process of community self-identification of potentially disadvantaged groups, and there are several sector resources to guide such identification processes.[33]

Programme and sector monitoring data is also used during implementation,[34] to identify those being 'left behind' and inform subsequent follow-up at the community level to identify potentially disadvantaged groups and their challenges. For example, iDE in Cambodia identifies triggered

31 This builds on work of WASHPaLS 'performance envelope' success factors and barriers for CLTS, and the rural context typology (e.g. rural remote, rural on road, rural mixed, etc.) presented in the Rural Sanitation Guidance.

32 Both in terms of the system's ability to deliver inclusive services, or prioritisation within the system on inclusivity.

33 For example the WSSCC's EQND handbook for CLTS facilitators and WaterAid's ENDI toolkit.

34 For example, after initial large scale 'sweeps' of CLTS and sanitation marketing (iDE 2018).

communities that are nearing ODF status, to specifically identify 'laggard' households and understand and address the barriers they face (iDE Cambodia 2019b). In Mali, UNICEF supported the analysis of monitoring datasets to identify the communities that have been triggered but not reached ODF status to prioritise for follow-up and barrier analysis (UNICEF 2017).

Overall, there is no single method used to identify potentially disadvantaged groups or challenging environments. For example, experience in SNV's SS4HA programme suggests that it was a combination of programme monitoring (and analysis of this disaggregated data), community follow-ups, and specific targeted research and consultation that enabled the identification of groups and barriers (Apanga et al. 2020, ISF-UTS and SNV 2018).

4.1.3. Mechanisms and processes of programme targeting

The basis for selecting a particular location for implementing a rural sanitation programme also influences its potential focus on, or ability to tackle, inclusion or 'last mile' issues. The basis for selection varies by organisation (and between organisations' country programmes), with interviewees mentioning that it is often not specifically rural sanitation indicators (and equity of access thereof) that drives the targeting. This is particularly evident where the intervention is part of a wider WASH or multi-sectoral initiative.[35] However, there are examples where integrated programming has led to a more explicit focus and targeting of the potentially disadvantaged.[36]

Where 'blanket' single approaches (such as CLTS or sanitation marketing) are being tested, demonstrated, and initially rolled out, there can be a tendency to focus efforts, at least initially, on areas where there is the best chance of success. This may lead to organisations avoiding 'challenging context' areas. This is openly reflected in the CLTS Handbook (Kar and Chambers 2008), and there are documented examples in Haiti and Mali (UNICEF 2017).

Within the literature, there appears to a be a lack of discussion concerning different strategies and approaches for targeting challenges that affect the relative *majority* of the target population versus those that impact a relative *minority* or very small number of those targeted. Here it is important to point out the nuances in what this report refers to as 'minority' and 'majority'. We do not define 'minority' by what WaterAid (2018) refers to as 'universal markers' for marginalisation – e.g. markers likely to be present in every community worldwide, such as gender, age, health status, and disability.[37] Rather, there are factors and contexts that may potentially disadvantage individuals and households that are not prevalent in all communities, and such contexts or groups may represent only a small proportion of households and communities relative to the overall population in an area or country. It is in this latter context that we refer to challenges that affect a 'minority' of the population. The percentage of the population impacted by a challenge varies based on the context, with some challenges more likely to impact whole target groups (physical environment/location and fragility) and others more likely to impact a smaller group of households (e.g. socially excluded groups) or individuals (e.g. with specific health and disability needs relating to their condition and ability). Targeting multiple challenges within a programme area, especially when they impact only smaller groups within the wider population, poses greater complexity and higher upfront per capita cost for programmes.[38] This issue is often a barrier to large programmes implementing at scale from effectively reaching smaller groups facing specific challenges, as discussed further in Section 4.6.2.

35 Multi-sectoral organisations such as UNICEF use situational analysis processes that aggregate multiple sectoral indicators to rank priority regions for programming within a country.

36 Such as with UNICEF in Haiti, which implemented CLTS as part of an integrated WASH-health and social protection programme

37 Although the authors of this report suggest that given the diversity of possible 'health' and 'disability' issues, these two groups are highly heterogeneous and therefore could also be defined as 'minority' if one were to look at specific individual health problems or disabilities.

38 Here we refer to the short-term costs of delivering a particular project, and not the wider cost effectiveness.

4.1.4. Specific mechanisms to identify and target households for support mechanisms

Building on the above sub-section, this sub-section focusses on mechanisms and experiences of identifying and targeting households for support mechanisms, particularly external subsidies.[39]

In certain countries, targeting for external subsidies follows government social-welfare-related poverty identification and targeting systems, such as Cambodia's ID Poor, Ethiopia's PSNP programme, Philippines 4Ps system (UNICEF 2013), Rwanda's Ubudehe classification system (Tsinda et al. 2018), and India's 'poverty line' (Government of India 2017). However, few countries have robust identification systems[40] and those that do still have people falling through the cracks. Moreover, as these identification systems and 'poverty classification definitions' are often not sanitation-specific, they can be useful in identifying the 'potentially disadvantaged' households but many of those may not need external support for sanitation (ISF-UTS and SNV 2018).

In the absence of clear national sector guidelines around the targeting of subsidies, implementation organisations commonly define their own project or organisational criteria and definitions as to who may be eligible for external support. They may use either their programme staff, local government extension workers, or the communities themselves to help identify eligible households. Here, organisations such as Plan International have used participatory wellbeing ranking processes to identify those eligible for support (WaterAid, Plan International and UNICEF 2019), and NEWAH in Nepal has used a gender and poverty approach for a similar purpose (Pandey and Shahi 2004).

Local governments may use similar processes where the decision on whether and who to support is devolved, as is the case in Nepal (UNICEF 2017). There are also examples of identification being conducted as part of post-implementation monitoring, following initial 'sweeps' of community triggering or sanitation marketing.[41] Other means of identification include mechanisms of 'self-selection', where it is assumed that only disadvantaged households would apply for certain loans or choose the lowest 'un-aspirational' product from a sanitation marketing range (Kohiltz et al. 2019).

Examples and experiences relating to support mechanisms are provided later in this report. However, it is important to note the reported 'trade-offs' between the accuracy of targeting and appropriateness of support provided, and the costs and scalability of identification and targeting mechanisms (ISF-UTS and SNV 2018). Here we make a distinction between mechanisms to identify potentially disadvantaged households, and mechanisms to identify barriers, which helps to define what type of programmatic adaptations and support[42] may be required. This latter aspect is generally catered for through undertaking formative research, barrier analysis, user/human-centred design,[43] and dialogue with communities and specific households.

39 A useful summary of support mechanisms and means of identifying households for these are provided in Kohlitz et al. (2019) and Myers and Gnilo (2017).

40 Indeed, some systems can have poorly defined criteria; definitions may exclude certain potentially disadvantaged groups, and, in some cases, may exclude certain marginalised groups.

41 Such as by UNICEF in Mali (UNICEF 2017), or iDE in Cambodia (iDE 2019).

42 See Section 4.4 for examples of such adaptations of types of support.

43 Examples here include SNV Bhutan's 'last mile' formative research, which helped to advise national strategies on support mechanisms (ISF-UTS and SNV 2018), and iDE's UCD in Bangladesh's flood prone areas (iDE 2019).

Summary Box: Information sources and methods for identification

The following points summarise findings on information sources and methodologies for identification: The WASH sector relies on national censuses and surveys for its secondary data. Other nationally representative datasets are available but not commonly used by WASH professionals.

- While disaggregated information is collected and at times presented, the level of disaggregation and its geographical resolution is limited. Efforts to spatially analyse and disaggregate WASH sector monitoring data and to map inequalities are limited, with some notable exceptions such as the World Bank's WASH Poverty Diagnostics.
- The timing of the data collection and analysis for identifying and understanding potential last mile individuals and populations is important, as is whether this data effectively informs programmatic decision making.
- Overall, there is no single method used to identify potentially disadvantaged groups or challenging environments. Formative research, UCD, and barrier analysis help WASH organisations better identify and understand potentially disadvantaged groups and barriers to inclusion. CLTS often includes a process of community self-identification of potentially disadvantaged groups, but this is less formalised than for other approaches to rural sanitation.
- Targeting for external subsidies often follows government social-welfare-related poverty identification and targeting systems where available; where not available, organisations commonly define their own project or organisational criteria.
- The sector lacks different strategies to identify challenges that affect the *majority* of the target population versus those that impact a *minority* or very small number of those targeted.

4.2. Monitoring systems

3. To what extent do monitoring frameworks help to identify such groups and assess whether we are reaching them?

4.2.1. National and global monitoring processes

Effective monitoring of inequalities and whether specific groups and geographical areas and contexts are being 'left behind' requires disaggregated and spatially referenced data. This often poses a challenge for national or project monitoring processes, given that it typically entails higher costs, larger sample sizes, and more complex survey design.[44] There is also the challenge of defining which aspects of potential disadvantage (e.g. gender, disability, certain geographical zones, etc.) are priorities to be tracked and disaggregated in such monitoring processes.

At the global level, JMP provides information disaggregated by wealth quintile, by sub-national level, by rural/urban location,[45] and by WASH service level ladder. However, JMP largely relies on data from household surveys that do not capture intra-household variability.

44 One interviewee also raised the potential issues associated with disaggregation of data, such as the risk of stigmatising individuals and groups, and risks relating to legal issues and data privacy.

45 Although it is currently not possible to get sub-national, rural wealth-quintile data.

Additionally, national surveys such as MICS and DHS (which feed JMP) may risk missing certain groups, such as displaced persons, minority and marginalised groups, and migrant workers. Additionally, definitions of access are focused on the safe management of excreta but do not effectively account for whether the facility meets the needs of certain users (e.g. children, older people, or disabled people).

Many governments have WASH-sector-specific monitoring systems to track progress on sanitation indicators, particularly in large-scale ODF campaigns, such as in Ethiopia, India, Nepal, and Zambia. The level of detail of such sector-monitoring systems varies, with India's monitoring processes reaching down to the sub-village level. However, national government monitoring systems tend to be geared to track cumulative ODF progress and are often less focussed on understanding issues related to marginalisation or lack of inclusion, particularly at the sub-national level (IDS 2018). Such monitoring systems are also often more focused on attaining ODF status, and sometimes neglect tracking its sustainability. This is important, given that evidence suggests the most vulnerable are at highest risk of slippage (Cavil et al. 2015). There are also the aforementioned potential challenges of accuracy and politicisation of such datasets.[46] Indeed, the robustness of the ODF-status verification processes strongly influences the reliability of sector data (USAID 2018), and while JMP's definitions across the sanitation ladder are broadly accepted, ODF definitions and monitoring/verification systems vary significantly across (and even within) countries.

UNHCR maintains an open-source WASH monitoring database, which includes data on refugees (and to a lesser extent IDPs). Some of this data is disaggregated by age and gender. It is based on robust and routine data collection for populations of camps managed by UNHCR, but datasets are arguably less robust, and data collected less frequently, for populations living in camps not managed by UNHCR, or populations living outside of camp and settlement contexts (e.g. in host communities).[47] UNICEF and UNHCR have recently agreed on a blueprint for deepening collaboration on certain matters relating to refugees. This includes collaboration on better inclusion of IDPs and refugees within country and sector monitoring processes (UNICEF and UNHCR 2020).

4.2.2. Organisational and programmatic monitoring

Here a distinction is made between organisation-wide monitoring frameworks and metrics and project-specific frameworks and metrics. Examples of the former include UNICEF's 'Monitoring Results for Equity Systems' (MoRES), and WaterAid's reportedly increasingly post-implementation monitoring work, including disaggregated data, which is used as a tool for programmatic course-correction.

There are numerous examples of project-specific monitoring initiatives that seek to track progress on issues related to marginalisation and exclusion from WASH. Some examples include the Accelerated Sanitation and Water for All (ASWA II) programme that includes result monitoring on use of toilets disaggregated by sex, disability, age, and wealth ranking; Plan International Tanzania's field-visit monitoring processes that collect data on age, gender, pregnancy, and number of children (IDS 2018b); Plan International Vietnam's Gender and WASH monitoring process (Plan International 2014); and WaterAid's monitoring processes on age and disability in its work in Cambodia or its Undoing Inequities project in Zambia and Uganda (Wilbur 2014). Some interviewed organisations mentioned how they apply the Equity Tool[48] and/or Washington Group[49] indicators to better disaggregate their monitoring data. However, other organisations referred to the lack of resources and 'bandwidth' to undertake such disaggregated monitoring. Indeed, a meta-evaluation of 67 UNICEF WASH programme evaluations found that only three evaluations mentioned data

46 One interviewee talked of how in certain countries there are risks to challenging government data.

47 One interviewee remarked how forcibly displaced persons living out of camps are 'invisible' in data.

48 PSI uses this tool to help to disaggregate their sales per wealth quintile.

49 iDE Cambodia has used this to present disaggregated information on one of its programmes.

sensitivity to equity parameters such as wealth, age, disability, belonging to a minority group, and HIV status (Toubkiss and Bickell 2016).

A notable example of a relatively comprehensive, multi-country programmatic approach to monitoring inclusion is SNV's Sustainable Sanitation and Hygiene for All (SSH4A) programme. As detailed in their Performance Monitoring Framework, this multi-country programme used both quantitative and qualitative means to track and analyse the inclusiveness of programme progress. Quantitative data is disaggregated by wealth quintile, gender, and disability. Moreover, qualitative monitoring looks at inclusion issues at the community level (e.g. their inclusion in processes) as well as the availability of pro-poor technology options locally, the appropriateness and accessibility of products within the supply chain, local government's capacity to mainstream inclusion issues, and the potential influence of disadvantaged groups on rural sanitation programmes. The programme also includes periodic reviews where data is analysed, experiences of reaching the 'last mile' are shared between SS4HA countries, and adapted strategies developed.

Linked with this latter point around analysis, in a systematic review of rural sanitation experiences, UNC (2017) remarks how there is a 'significant area for improvement in using monitoring and evaluation data for programme improvement'.[50] While this relates more to internal use of data, it also relates to the limitation in practice of project or implementing agencies' monitoring data being shared with other sector actors, and the aggregation and analysis of this data across agencies. Additionally, such project-level monitoring frameworks can be focussed on specific issues (e.g. only looking at one aspect of potential disadvantage, such as disability), and WaterShed and Simavi's (2018) review of multiple organisations' inclusion-focussed monitoring efforts found that integrating inclusion indicators into governmental systems was a consistent challenge.

Summary Box: Sector, organisational and programmatic monitoring

The following points summarise findings on sector, organisational, and programmatic monitoring:

- National surveys risk missing certain groups, such as displaced persons, homeless and transient populations, minority and marginalised groups,[51] and migrant workers, and few national surveys include intra-household data disaggregation (which would help to identify potential inequalities within the households identified 'having access').
- Numerous WASH-sector external support organisations (NGOs, CSOs, UN) have their own equity-focused monitoring systems and frameworks, although these may not be routinely or systematically applied beyond specific 'projects', and may focus only on certain specific groups (e.g. gender, disability, etc). There is often scope for improvement in the utilisation of monitoring data for decision making, and common challenges in post-project continuity of disaggregated monitoring (e.g. by governments).
- Most monitoring systems look at inclusion at the community level, while some (e.g. SNV's Performance Monitoring Framework [2019]) also look at higher-level aspects higher such as local government plans and capacities, locally available products, and national strategies.

50 One interviewee further remarked on the common shortfalls of feeding monitoring and evaluation data back to programme decision makers.

51 Such as ethnic or lifestyle groups that are relatively small and thus may not be represented in survey sampling.

4.3. Resources and guidance on dealing with the various challenging contexts

4. What practical guidance exists to inform implementation of approaches in these challenging contexts – including policies, guidelines, and approaches (of implementing agencies and governments)?

This landscaping study collected a range of examples of research, guidance, and knowledge products that seek to help organisations better understand, consider, and address the five categories of challenges. While by no means an exhaustive list, we collected useful examples, and noted several gaps. This sub-section provides examples of guidance and resources, and the following section presents examples and experiences of initiatives to overcome the various challenges.[52] Where possible, hyperlinks are provided. Where they are missing, full references can be found in the reference list and repository.

4.3.1. Typologies of resources

The document collection process (described in Section 2) led to over 300 documents being identified. This not an exhaustive list of what is available in the sector, and we only consulted a sub-set (around 180) of these resources during this study. However, all 300+ documents were catalogued, and basic attributes identified. This allowed quantification of various attributes of the resources, presented in Figure 1 and 2.

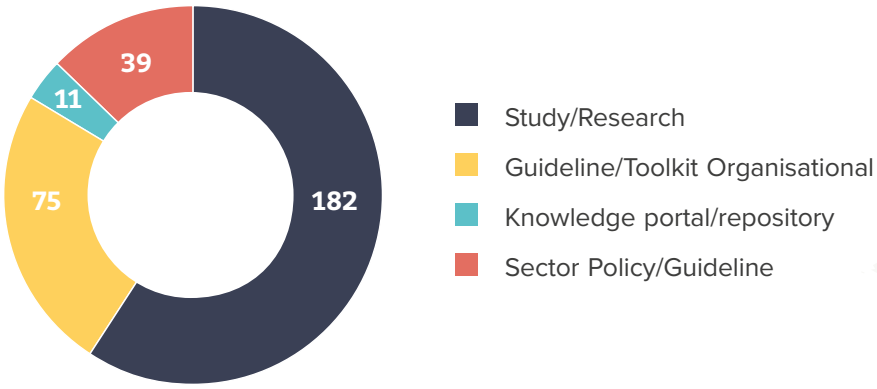

Figure 1: Typology of the resources identified in this study *Source:* Authors own

4.3.2. Relevant resources that are not specific to individual challenge categories

Table 3 highlights key sector resources that provide guidance on different elements of this study (e.g. on rural sanitation problem analysis, monitoring, and broader guidance on rural sanitation programming best practice).

52 The challenges (and guidance seeking to address them) are often interlinked, and resources described below have been 'categorised', however they may in fact apply to multiple challenges.

Table 3: An overview of relevant sector resources and guidance documents

THEME	EXAMPLES AND NOTES
Broad sector programming resources, and knowledge repositories	• Relevant broad programming guidance: Guidance for Programming for Rural Sanitation; USAID's (2020) Technical Brief on Rural Sanitation • Sector knowledge repositories:[53] WEDC; SHARE; IRC WASH; the CLTS Knowledge Hub and Sanitation Learning Hub; SuSanA; FSN Network (Pro-WASH); Global Waters; Global WASH Cluster • Organisation-specific repositories: WaterAid (n.d.(a) and SNV
Problem identification and intervention design	• The Guidance for Programming for Rural Sanitation including a specific chapter on this. Also see resources listed in Section 4.3.3 for identification of households/individuals that are excluded or need support • Interviewees remarked on using human/user/behaviour centred design, barrier analysis, and formative research to understand the challenges and design approaches. Example resources: Kittle (2017); ACF (2019); LSHTM (2017); Oxfam (2020); Devine (2009); Bill and Melinda Gates Foundations (BMGF) (2017) website on User Centred Design in Sanitation; Save the Children's User Centred Community Engagement tools for sanitation facilities in humanitarian contexts; Oxfam's EMMA tool to help analyse markets in fragile contexts
Sector/programme monitoring	• UNICEF (2014a)'s Sanitation Monitoring Toolkit; the SNV Performance Monitoring Framework (2019) • Numerous examples of tools and guidance materials (that include intervention monitoring) regarding inclusiveness,[54] particularly on topics such as disability and gender. Examples include: Plan International's (2014) Gender and WASH Monitoring Tool; WaterAid's ENDI Toolbox and monitoring tools on the 'undoing inequalities' web page; WSSCC's EQND CLTS Facilitator's Handbook • Various gender-, age-, and disability-related audit monitoring tools and checklists: in the Violence, Gender and WASH Toolbox, and WaterAid and WEDC's accessibility and safety audit of WASH facilities • Tools/resources to assist disaggregation of data: the Equity Tool (wealth quintiles) and Washington Group (disability)
Understanding and strengthening the enabling environment/ WASH 'System'	• African Ministers Council on Water (AMCOW) is currently developing Sanitation Policy Guidelines with support from BMGF, which are expected to be released in 2021.[55] • The World Bank's 2006–2014 Scaling Up Rural Sanitation Program's website includes numerous studies (including recommendations) on enabling environments;[56] WHO's (2018) Guidelines on Sanitation and Health also provides relevant recommendations. • UNICEF's Strengthening the Enabling Environment in WASH Guidance Note (2016) provides some (limited) examples of sanitation. Gensch and Tillett (2019)) Strengthening Sanitation and Hygiene in WASH Systems paper provides guidance on systems approach in rural sanitation programming • Overall, there is relatively limited guidance on how to strengthen systems and the enabling environment to ensure inclusiveness, or specifically relating to overcoming the five categories of challenges

Source: Authors own

53 Many of these have filters on issues such as 'equity', 'gender', 'inclusion', etc.

54 Yet fewer covering other categories of challenge.

55 It is understood that the guidelines will have a considerable focus on ensuring inclusivity and will factor in issues of resilience and operating in humanitarian contexts, however it is unclear the extent to which they will cover rural areas.

56 The World Bank also collaborated with WEDC to develop an online training module on the topic.

4.3.3. Specific resources per challenge category

Of the 300+ documents and resources obtained in this study and catalogued in the repository, **Figure 2** shows the relative amount of resources per challenge group. While it may be slightly misleading in terms of the total balance of available resources in the sector, [57] it clearly reflects the level of documentation relating to poverty and social marginalisation issues relative to the other categories.

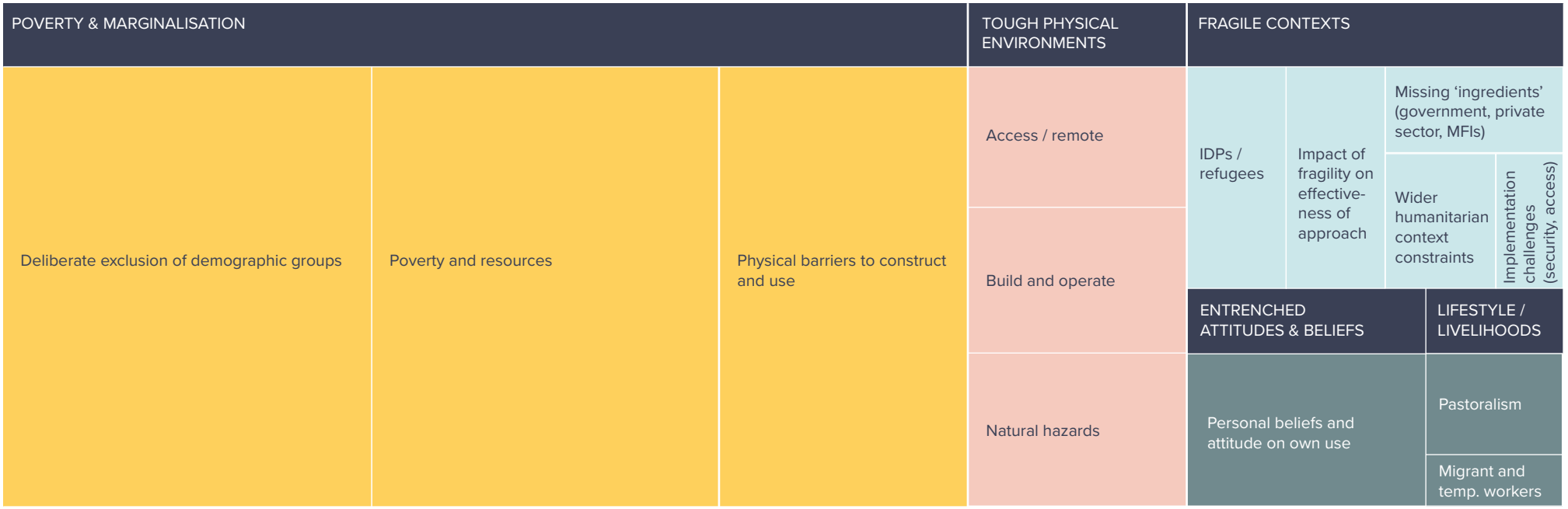

Figure 2: Documents and information sources identified in this review, by challenge category and sub-category *Source:* Authors own

The following sub-sections present examples of resources for each of the five challenge categories. It is also worth noting that the SLH's website has a specific theme of 'challenging contexts', with selected resources collated in sub-themes that broadly align to this study's five challenge categories.

57 For example, we made deliberate efforts to search for documents relating to neglected aspects, such as fragile contexts and pastoralism. More generally, this set of documents is not based on a systematic scan of available resources in the sector. Also, some documents represented in the graphic cover multiple challenges.

Poverty and social marginalisation

These two challenges are interrelated but each manifest in different ways, meaning that this grouping covers a broad range of issues.[58] There are a substantial number of resources relating to inclusion, particularly gender, disability, and age, and to a lesser extent, health (e.g. HIV and mental health). Sector knowledge portals often have specific themes on issues such as 'gender' and 'equity and inclusion', and repositories listed in this footnote[59] were found to each have 25–90 documents tagged for such topics. Additionally, there are various resources that provide selected references on the themes of gender, age, disability, health, and inclusion.[60]

Numerous organisations have been active in producing resources on this topic, including WEDC, WaterAid, WSSCC, SHARE, SNV, Plan International, SLH, and UNHCR, as well as individual consultants. Key sector guidance materials, which cover a range of themes within this challenge category, include House et al. (2017), WaterAid (2017), WaterAid's ENDI Toolbox and WSSCC's EQND CLTS Facilitator's Handbook.

Regarding resources for specific potential disadvantages, there are a significant number of resources covering gender, age, and disability[61] Jones and Wilbur's (2014) *Compendium of Accessible Sanitation Technologies*; gender- and disability-related accessibility and safety audits (e.g. WEDC and WaterAid); Guidance on female friendly toilets by WaterAid, WSUP and UNICEF (2018); Wilbur and Jones's (2014) paper on CLTS and disability; resources related to WaterAid's undoing inequalities work; the University of Leeds's (2020) web resource on incontinence; Plan International's guidance on Dialogue Circles for Social Inclusion (n.d.) and its (2014) Gender and WASH monitoring tool; SHARE's toolbox violence, gender and WASH (n.d.); Cavil et al.'s (2018) paper on mental health and CLTS; and with a focus on fragile contexts, UNHCR's (2017) briefing paper on WASH, protection and accountability and resources in Richard and Kiani's (2019) rapid review of disability and older age inclusion in humanitarian WASH interventions.

There are also numerous resources relating to support mechanisms for those facing poverty barriers:

- Various studies and papers have reviewed and collated experiences relating to support mechanisms (including subsidies), most of which provide practical recommendations. Those looking at support mechanisms more broadly include Kohlitz et al. (2019), Halcrow et al. (2014), and Myers and Gnilo (2017).
- Many of the more general EQND/ENDI guidance resources provide guidance on support mechanisms.

58 Poverty relates to a household's available resources to invest in a latrine, which requires approaches that carefully consider the equitable and targeted distribution of available programmatic resources. Social marginalisation relates to a household/group's ability to have a voice, influence decisions, and access resources that are available from within the community or from outside. This requires approaches that better understand power dynamics within communities and put mechanisms in place to balance the voices of those excluded.

59 Including: Inclusive WASH (WaterAid n.d.(b)); WEDC's portal on Equity and Inclusion in WASH; SHARE's website themes of 'equity' and 'gender'; FSN Network's resources on themes of gender, HIV and marginalised populations; the Global WASH Cluster website's resource centre themes of 'gender and vulnerable populations'; SuSanA (n.d.)'s resources listed under the themes 'Sustainable WASH in Institutions', and 'Gender Equality'; and Global Water's library theme on gender.

60 Such as Tearfund (2018), UNHCR (2018), and earlier efforts to collate and provide a summary of existing literature on the topic such as Jones (2010) and WaterAid (2013)

61 These resources listed are all global, as there was limited scope in this study, given the breadth of resources on this topic, to also source resources country-by-country. However, some country-level examples include Nepal's guidance on accessible toilet designs; Ethiopia's 'Count me In' inclusive WASH online training course; and Cambodia's national guidelines on WASH for persons with disabilities and older people.

- Documents focussed more explicitly on subsidies include the World Bank's report on Smarter Subsidies for Water Supply and Sanitation (Andres et al. 2019)[62], papers from iDE on subsidies in Cambodia and Bangladesh, from Cameron et al., forthcoming 2020 in Laos, and WASHPaLS (2019)'s ongoing study on targeted subsidies in Ghana.[63]

At the country level, there are a small number of examples of sector guidelines for support and subsidy mechanisms for rural sanitation, such as those from Ghana, Bangladesh, and Cambodia.

Reflection Box: Poverty and social marginalisation resources

We can make the following reflections on the guidance resources reviewed in this challenge category:

- There is a large volume of guidance on this topic, with some dimensions (e.g. gender, disability, and age), better documented than others (e.g. HIV and mental health). Some guidance materials are narrower, focussing only on one or two dimensions; others are broader.
- While there are many useful recommendations for good practice in inclusive programming, the sheer volume of recommended actions and considerations (particularly in the narrower-focussed guidance materials, such as those specially looking at disability, for example), may be beyond the means of many WASH programmes (see Section 4.5 for more discussion on this). Related to this, numerous KIIs mentioned that practitioners seeking more broadly 'inclusive' WASH programmes may feel overwhelmed by the proposed actions that need to be incorporated into a programme's design to address the range of challenges that a targeted population faces.
- Most guidance covers the need for considerations on infrastructural designs, while there seems to be an increasing trend to also emphasise the aspects of inclusion through the intervention process. Most inclusion-related guidance documents focus on community-level actions, with fewer looking at actions that can be taken at higher levels of the WASH 'system', or addressing issues of exclusion from more of a political economy, systems, or rights-based perspective (see Section 4.6).
- The limited documentation that exists on subsidies is more related to study findings (some with recommendations), than on providing practical guidance on the design of subsidy mechanisms for rural sanitation interventions.

Entrenched social norms and beliefs

Beliefs held by individuals or wider society, whether defined as customs or different types of norms, such as social or moral norms, can impact the sanitation behaviour of individuals or a wider society, or result in groups being excluded from access to services or decision making. Understanding these beliefs and the factors that influence them is critical to tackling them.

There are various resources available to practitioners on dealing with entrenched social norms and beliefs. Mackie et al.'s (2015) report (commission by UNICEF) defines social norms and sets out ways to measure them. In addition to these, Bicchieri and Noah (2017) provide specific guidance on applying social norms

62 Which arguably has more focus on urban and water than rural and sanitation.

63 Further information and guidance on selection criteria for subsidies in WASH can be found in Trémolet et al. 2010; Oti 2012.

theory[64] in rural sanitation programming, and Chambers and Myers (2016) provide a useful overview of experiences from numerous countries – particularly India – on social norms. Various studies and knowledge products have applied social norms theory to rural sanitation and provided useful recommendations, such as in Ethiopia, India, and Madagascar. See sub-section 4.3.3 for examples of resources for user-centred design[65] and formative research, which seek to enable programmes to understand beliefs and norms, and adapt programmatic approaches, products, and messages accordingly. While UCD is mostly commonly focused on product development, the process has been used as an effective mechanism to identify social norms and beliefs within communities and households, and in some instances has also been used to influence behaviour change communication.

Reflection Box: Entrenched social norms and beliefs resources

We can make the following reflections on the guidance resources reviewed in this challenge category:

- Relative to other challenge categories, there are limited stand-alone documents on this challenge category, although there is a growing body of guidance and tools, including some specific to sanitation,[66] which can rapidly increase the applicability of the tools to humanitarian contexts.
- Some of the resources covering social norms theory can (according to several interviewees) be perceived as overly theoretical and challenging to understand how to apply in practice.
- Practitioners need context-specific tools to identify norms and beliefs within communities, and also skills to adapt programme approaches and technologies to address the issues identified. This is not an area where ridged guidelines are useful.

Tough physical environments

There are numerous resources focussing on challenging terrain for construction; however, these generally focus on the technology challenges.[67] There are a number of countries that have developed national sector guidelines for technology selection in challenging contexts.[68] Interviewees also referred to using UCD in such contexts (see Sub-section 4.3.2 for resources on this).

64 Social norm theory provides the groundwork for a theory of social behaviour and social change. By using measurable concepts, social norms theory allows researchers and practitioners to identify the causes and drivers of behaviour, and to distinguish between patterns of behaviours, whether they be customs, moral norms, descriptive norms, or social norms.

65 UCD is an iterative design process focused on the users and their needs, social norms, customs, and beliefs in each phase of the design process. In UCD, design teams involve users throughout the design process to create products or approaches that respond to the users' specific requirements.

66 Such as BMGF's (2017) UCD for Sanitation website.

67 Such as WEDC's (2014) technical guidance on pit latrines for 'special circumstances'; EWAG's Compendium of Sanitation Systems and Technologies; and the humanitarian equivalent.

68 Such as SBM-G's decision flow chart for technology selection; Cambodia's guidance on sanitation in challenging environments; Kiribati's guidance relating to options to prevent groundwater contamination; Bangladesh's National Strategy for Hard to Reach Areas; and Nepal's sanitation technology options for the Terai.

There is relatively limited guidance for sanitation programming in the context of natural hazards[69] or for areas experiencing shocks and stresses caused by climate change (Kohlitz and Iyer forthcoming). However, some of the generic, cross-category examples in Section 4.3.2 do touch on contexts of flood-prone areas, particularly in Cambodia and Bangladesh. Similarly, there was relatively limited specific guidance addressing challenges for remote areas. Nevertheless, there are some suggestions for programming approaches to 'rural remote' contexts in the WaterAid, Plan International and UNICEF (2019)'s Guidance for Programming for Rural Sanitation.

Reflection Box: Tough physical environments resources

We can make the following reflections on the guidance resources reviewed in this challenge category:

- Issues emanating from tough physical environments are often dealt with locally, finding localised solutions, and the limited documentation of these solutions do not find themselves into externally shared reports (see Section 4.6.3 for discussion on the implications of this);
- While we identified limited tools (e.g. maps or risk assessments) to support practitioners in assessing the physical environment of targeted areas as part of their design process, UCD tools and processes are being increasingly used to develop adapted technical options for different terrains and contexts (see Section 4.4).
- The guidance resources available focus primarily on technological adaptations, with more limited guidance as to how to integrate technological adaptations into wider service delivery models (beyond local construction skills and supply chains) and wider financing implications.

Lifestyles and livelihoods

Overall, we were unable to uncover significant amounts of guidance materials relating to this topic. No specific guidance was identified for sanitation for rural-to-rural migrant workers or contexts such as artisanal mining communities. There are various studies relating to fishing communities,[70] and a number of documents relating to pastoralist contexts.[71] While these publications provide useful insights into common challenges and ideas on how such issues could potentially be addressed, there was limited evidence-based guidance arising from approaches that have been demonstrated to work in such contexts. One example is that of Ethiopia's (unpublished, draft) guidelines on CLTS in pastoralist areas. It is understood that USAID is financing a study on approaches for sanitation for pastoralist communities in Kenya, which will feed into the ongoing process of designing Kenya's CLTS strategy. This will potentially provide the sector with more guidance on pastoralist contexts. Additionally, studies in fishing and mining communities highlighted the issue of socially incohesive communities, which pose potential challenges for collective action approaches such as CLTS. However, there were limited examples of guidance on how to deal with socially incohesive communities in rural sanitation approaches, although such documentation may exist in guidance aimed at urban contexts.

69 Although Section 4.4.3 provides documentation of experiences of sanitation programming in such contexts.

70 Such as Mensah (2019), Kyangwa and Odongkara (2005), Bevan (2011), Women for Water Partnership (2016), and Abaliwano and Kiyimba (2011).

71 Such as: Axweso (2011), WaterAid (n.d.), Whitley et al. (2019), Fostvedt-Mills et al. (2018), IFRC (n.d.), and Nyanza et al. (2018).

Reflection Box: Lifestyles and livelihoods resources

We can make the following reflections on the guidance resources reviewed in this challenge category:

- There is a clear gap in documented sector knowledge and guidance on this challenge, although there are upcoming efforts to address this (to an extent).
- The (limited) documentation that we obtained regarding sanitation within pastoralist and fishing communities[72] is largely restricted to Eastern Africa, although there may be francophone resources that we did not review.
- There is very limited robust evidence-based guidance on these topics; rather most documentation is based on contextual commentary, and suggestions on what may work.

Fragile contexts

Here, a distinction is made in terms of resources and documentation relating to 1) responding to humanitarian needs, and 2) implementing rural sanitation approaches in chronically fragile contexts.

For humanitarian-oriented resources, UNHCR's website contains a series of relevant WASH resources, albeit largely focussed on camp settings. The Global WASH Cluster (GWC) and it's country-level equivalents[73] have websites and shared document folders with guidance on technical approaches and designs for sanitation in humanitarian contexts. Elrha also has relevant resources on their sanitation webpage. There is a growing body of guidance on cash- and market-based approaches to WASH in humanitarian contexts.[74] Bevan (2018) provides a brief overview of approaches to responding to the sanitation needs of refugees and IDPs in East and Southern Africa. There are also numerous resources relating to sanitation for displaced persons within camp settings (which are largely out of scope of this study), but very limited documentation on approaches for out-of-camp settings. The GWC and Elrha (2020) are currently undertaking a systematic WASH gap analysis for the humanitarian sector, which is due to release findings in 2021, and is likely to identify further gaps in guidance, skills, and knowledge. Much of the guidance on humanitarian sanitation interventions focus on addressing short-term needs, often with temporary solutions, but global trends show that humanitarian events are becoming increasingly protracted (UNICEF 2019a), and there is limited guidance on the longer-term approaches that these crises call for.

For guidance and documentation on rural sanitation interventions in challenging, chronically fragile contexts, there are a small number of papers written on experiences of implementing CLTS interventions in various fragile contexts,[75] and a useful synthesis paper by Greaves (2016).

72 There is some documentation around sanitation within fishing communities related to Tonle Sap in Cambodia. This is covered in the write-up on the 'tough physical environments' challenge category.

73 Links to the country cluster web resources are provided at https://washcluster.net/.

74 Such as: UNHCR (2016), GWC (2019), and a forthcoming paper from GWC looking at examples of applying cash-based interventions (CBI) for sanitation

75 Such as in South Sudan (Balfour et al. 2014, Otieno 2012), Chad (Bauby and Flachenberg 2014), DRC (and Tearfund 2012), Somalia (Gitau and Flachenberg 2016, Balfour et al. 2014),

Reflection Box: Fragile contexts resources

We can make the following reflections on the guidance resources reviewed in this challenge category:

- There are limited resources seeking to provide guidance on 'bridging the gap' and increasing connectedness between humanitarian and development programmatic approaches in fragile contexts.[76]
- There is increasing focus and documentation on cash and markets approaches in the humanitarian sector, although with limited examples to date on their application in rural areas and out-of-camp sanitation, outside of rapid-onset emergencies.
- Documentation on applying more developmental approaches in fragile contexts is limited, and based on limited experiences rather than guidance derived from successes at scale.

4.3.4. Overarching observations on available guidance resources on inclusion and challenging contexts

The balance of documentation and guidance varies considerably across the challenge categories. However, as one interviewee stated, ***'having a guideline or strategy does not necessarily mean that change occurs on the ground'***. An analysis of the awareness and usage of the various toolkits and studies by sector actors at national and sub-national level is beyond the scope of this study. However, we can make one observation about the nature of the documents sourced during this study: of the 267 documents with page numbers listed, the mean average length was 30 pages,[77] and only 18 per cent of these had executive summaries. Some resources aiming to be references for facilitators, may not actually be suitable (in terms of length or language), for field-level facilitators, and guidance materials are not always translated to local languages (or beyond English). It is also apparent from interviews that experiences in overcoming challenges in rural sanitation programmes are often held at the local (e.g. facilitator) level, and experiences are often not collected, documented, and shared in the wider sector. These barriers to making use of recommended best practice, and to broader sector learning, are further discussed in Sub-sections 4.5 and 4.6.3.

76 An upcoming paper by Tillett et al. (2020) on applying WASH systems approaches in fragile contexts seeks to provide some guidance on this, however it is not rural sanitation specific.

77 With many handbooks and toolkits exceeding 60 pages, and often including links to even more tools.

4.4. Efforts to address these challenges, and associated learnings

5. What modifications have been made to existing approaches to address these challenges, and what have been some of the experiences with these adaptations?

This section draws on information from the literature and KIIs for examples of how countries, organisations, and programmes have experienced and sought to overcome some of the categories of challenges and ensure inclusive outcomes in their rural sanitation efforts.

4.4.1. Poverty and social marginalisation

In this challenge category we present examples of efforts to ensure inclusivity for socially marginalised groups, and also of providing specific support mechanisms for those who would otherwise struggle to construct sanitation facilities, due to poverty and other related factors.

Regarding support mechanisms: Table 3 looks at examples of how the application of different approaches (e.g. CLTS, sanitation marketing, etc.) has included mechanisms to support households to construct toilets.[78]

78 Some examples are 'pure' approaches, whereas others are more 'blended'.

Table 3: Examples of support and inclusion mechanisms by broad approach

BROAD APPROACH	EXAMPLES OF SUPPORT AND INCLUSION MECHANISMS	ANALYSIS AND COMPLEMENTARY INFORMATION
Demand-based (such as CLTS)	• CLTS inherently promotes inclusion and emphasises community solutions to community problems in achieving community-wide sanitation access (Wilbur and Jones, 2014). Examples include the CLTS process's emphasis on identifying potentially disadvantaged households, taking specific measures to ensure they are included throughout the process, ensuring facilitators emphasise intra-community support in the process, and where necessary highlighting and addressing issues of potential stigmatisation and marginalisation within the community (WaterAid's work in undoing inequalities is a good example of this). • There are examples where CLTS approaches have adapted messaging to encourage customary or religious practices of communal work or support to the vulnerable, such as using the concept of 'Danveer' in Nepal (UNICEF 2017), 'Nafeer' in Sudan (ZOA interview) and Umuganda and Ubudehe in Rwanda (Tsinda et al. 2018). • There are also widespread examples of engaging local community leadership to take an active role in the ODF process, engaging them on what barriers certain households may face, and how they can offer support (UNICEF Zambia's CLTS programme in which local chiefs had a leading role in implementation and monitoring, and Plan International's work on dialogue circles are good examples of this). • There are also many examples of where local government is engaged in (or already leading) the CLTS process, and has discretion to use its funds to provide targeted subsidies to households (e.g. in the SEHATI programme in Indonesia, and as defined in Nepal's Sanitation and Hygiene Masterplan (UNICEF 2017). • There are examples of 'phasing' CLTS interventions, whereby targeted support is provided after an initial 'sweep', or to households to achieve basic levels of access once community level ODF status is achieved (e.g. Philippines Approach to Total Sanitation [PhATS]) • There are numerous examples of using CLTS, often combined with some aspects of Participatory Hygiene and Sanitation Transformation (PHAST), to build demand and willingness to construct and use toilets, with implementing organisations then stepping in to provide hardware or cash-based intervention (CBI) subsidies. Interviewees noted that this can be common in fragile and humanitarian contexts and also applied in some remote or tough physical environment settings (e.g. IFRC, n.d.).	Intra-community support is often reliant on the skills and awareness of the facilitator, the strength of local leadership, social cohesiveness and social capital within the community, and the extent of social marginalisation of certain community members and groups. While subsidies to vulnerable households can be pragmatic and effective, they can also contribute to disharmony of subsidy/non-subsidy approaches in the area and wider sector, which can undermine progress, and potentially distort markets

BROAD APPROACH	EXAMPLES OF SUPPORT AND INCLUSION MECHANISMS	ANALYSIS AND COMPLEMENTARY INFORMATION
Financing (e.g. customer financing and OBA)[79]	• There are numerous examples of stimulating local community-based financing mechanisms to provide loans (and in some cases targeted grants) to help poorer households construct toilets. These are often integrated into CLTS and/or sanitation marketing initiatives. Examples include Village Savings and Loans Schemes in Uganda and Malawi (Singeling 2016), revolving funds in Nepal (Sharma 2008), and the Solidarity Fund in Senegal (Myers 2015). Tearfund reports linking such initiatives to wider livelihood interventions. • There are also many examples of using MFIs to provide loans to households, often at subsidised rates, and commonly as part of a programme linked with developing the local market to promote and supply sanitation products. There are a wide range of examples in Asia (e.g. Water.Org in Indonesia, Association for Social Advancement and BRAC in Bangladesh, Guardian MFI in India), and also elsewhere (e.g. social and economic development initiatives and support from WSSCC and Plan International in Tanzania). There are examples of building targeted subsidies within the loan mechanism (e.g. iDE Cambodia). • There are examples of initiatives to make MFI loans more accessible to disadvantaged groups, such as the Self Help Groups in India[80] (World Bank 2017), and with iDE Ghana testing alternative methods for creditworthiness. • There are also emerging examples of using innovative financing and output-based aid (OBA) to incentivise and support the efforts of implementers and governments to reach (inclusive) ODF status. For example the Development Impact Bond in Cambodia, the East Meets West CHOBA programme in Vietnam (Kohiltz et al. 2019), and Global Partnership on Results Based Approaches (GPRBA) projects in Bangladesh (GPRBA 2018), Honduras (GPRBA 2009), Kenya (GPRBA 2015), and Senegal (GPRBA 2013). • CBIs are becoming increasingly common in humanitarian activities. UNHCR commonly provides cash transfers including for sanitation (as part of wider multi-purpose cash grant) to people of concern living outside camp settings (UNHCR interview). NRC in Iraq used cash-for-work in combination with builder training to support sanitation for returnee communities (GWC forthcoming).	The poorest and most vulnerable are often not eligible (Myers and Gnilo 2017) or marginalised from community and micro-finance institution (MFI) loan processes. It can also promote further indebtedness of the poor. Relative service coverage of MFIs in remote rural areas, and transaction costs. In some cases, MFI services for sanitation are reportedly decreasing (iDE Cambodia 2019c). CBIs are not always undertaken with other 'ingredients' (e.g. demand building), and there are challenges to ensure the achievement of desired outcomes and quality (GWC forthcoming). Also, there are limitations to pure CBI, where the market may not be able to respond adequately (and in remote rural areas, where the supply chains are limited).

79 Specific examples of subsidies are provided in the narrative following this table.

80 These groups act as an interface between larger MFIs and banks (who loan to the group), and individual household borrowers, some of whom would not otherwise be eligible to access loans directly from the MFIs.

BROAD APPROACH	EXAMPLES OF SUPPORT AND INCLUSION MECHANISMS	ANALYSIS AND COMPLEMENTARY INFORMATION
Supply-side interventions	• There are examples of efforts to ensure the appropriateness of sanitation products to the needs of specific challenging environments (e.g. iDE Bangladesh) or for the needs of specific users, such as disability accessibility, and of efforts to ensure that product ranges include low-cost options for the poor (e.g. SNV Tanzania). • Examples exist of efforts to support supply chains in remote areas, such as by aggregating orders and facilitating transport to remote islands in Indonesia (Robinson and Gnilo, 2016), or undertaking market and supply chain assessments in remote areas (e.g. SNV Nepal). PSI collaborates with World Vision in Mali to help extend the reach of sanitation marketing initiatives into more remote rural locations (PSI interview) • There are examples of mixed approaches to financing (e.g. loans and targeted subsidies) being integrated within the wider sanitation-marketing business model, such as that commonly used by iDE in Cambodia and Bangladesh.[81] • In fragile and humanitarian contexts, mixed approaches have been used. For example, combining the provision of vouchers (e.g. for hardware products) with cash-for-work for pit digging for vulnerable households and training local masons (sometimes within refugee/IDP communities) in construction and installation (examples provided in UNHCR 2016, GWC forthcoming).	Often there are challenges to the viability of market-based approaches in more remote areas,[82] and market-based actors need specific mechanisms to incentivise and support them to serve challenging environments and disadvantaged groups. Direct 'bulk procure and supply' hardware subsidy approaches are still common in many humanitarian and fragile contexts, which distort markets

81 This includes the application of a 'sweep' methodology whereby the investigator segments the market for those who can and do purchase products directly, those who need loans, and those who may need targeted subsidies.

82 The Guidance on Programming for Rural Sanitation provides suggestions as to contexts where market-based approaches may not be recommended for this reason.

Emerging themes relating to support mechanisms (with a focus on external subsidies): Literature on CLTS support mechanisms suggests that efforts should prioritise internal (e.g. within community) support arrangements, and that the community themselves are likely to best placed to define 'who and what' support is needed (Myers and Gnilo 2017). Where external subsidies are to be provided, they need to be undertaken based on a clear understanding of the barriers (ISF-UTS and SNV 2018). For example, it can often be simplistically assumed that poverty or affordability is the primary barrier for uptake, yet experiences83 and research into 'laggard' customers found that often this is not the case.

The criteria for and definitions of eligibility are also challenges, as is inadequate understanding or poorly communicated subsidies, or opaque procurement and processing for subsidies, which can give rise to perceptions or actual incidences of favouritism and corruption and undermine community solidarity (Myers and Gnilo 2017). For example iDE in Bangladesh found that the broad definition used by the government meant that up to 75 per cent of the rural population were potentially eligible, and this impeded market development and sanitation progress generally (iDE Bangladesh 2016).

While market segmentation is one possible solution to this issue,[84] the process of identification and targeting can be highly time- and cost-intensive if undertaken pro-actively at the community level. So in some contexts broader eligibility criteria are defined, for example based on government poverty definitions or, in more exceptional contexts, on existing government classifications and datasets, such as Cambodia's ID Poor and India 'below poverty line'. In other contexts, programmes have utilised social welfare programmes to help identify eligible households (e.g. the 4Ps programme in the Philippines; Productive Safety Net Programme (PSNP) in Ethiopia).[85] However, there is a clear trade-off between accuracy, costs, and scalability (Kohiltz et al. 2019). As such, Myers and Gnilo (2017) suggest that 'mixed methods'[86] approaches to targeting may be appropriate.

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83 SNV in Bhutan (ISF-UTS & SNV 2018) and iDE in Cambodia (iDE Cambodia 2019).

84 This sentiment is echoed by ISF-UTS and SNV (2018).

85 The extent that such governmental vulnerability datasets are accurate or frequently updated can also be a challenge, particularly considering that people can move between categories of vulnerability through time.

86 For example using both community-based processes and governmental poverty classification schemes.

There are numerous examples of ways that subsidies have been delivered, for example as upfront materials, vouchers, cash, or discounts, either prior to or on condition of household action, or as rebates to households or service providers on completion and verification of a constructed toilet. Likewise, there are examples of both household- and community-level subsidies, with examples of grants provided to communities once they achieve ODF status, meant to then provide support to disadvantaged households to achieve basic levels of access (e.g. PhATS in Philippines). The timing of subsidies is widely regarded in the literature as important, to guard against market distortion and maintain the momentum of sanitation progress; however, there are different experiences and suggestions as to the optimal timing (Cameron et al. forthcoming 2020, Kohiltz et al. 2019).[87,88]

Another key aspect facing the cost-effectiveness and scalability of subsidy approaches is that of the mechanism used to deliver the subsidy. iDE Cambodia integrates the identification of laggard households and the delivery of the subsidy mechanism within its wider business model (see iDE Cambodia 2019b), using vouchers with quick response (QR) codes and the governments IDPoor database to enable a relatively cost-effective means of identification, delivery, and verification of subsidies (see iDE Cambodia 2019).

Literature points to issues on how subsidies are provided, such as whether they are adequately coupled with demand-building activities,[89] and notes that making subsidy mechanisms available doesn't necessarily mean disadvantaged groups know about them or would be able to use them without specific support.[90,91]

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87 Kohlitz and Willetts (2019) provides a useful overview of advantages and disadvantages of the timing of subsidies.

88 While subsidies are often provided after an initial 'sweep', iDE in Cambodia found that it was more cost effective to provide subsidies from the outset, experiencing increased cost effectiveness of the intervention overall, without a significant distortionary effect on the market (iDE 2019). Similar findings were made in a recent study in Laos (Cameron et al. 2020).

89 Where upfront subsidies have been provided – for example for hardware subsidies, or toilets that are constructed on households' behalf – there are examples of these either not being used, or being sold (O'Reilly et al. 2017), or the beneficiary household not having been adequately consulted about the process of construction (ISF-UTS and SNV 2018). This highlights the need for support mechanisms to be integrated within wider demand-building activities; however, it seems this is not always the case in CBI in humanitarian contexts (GWC forthcoming).

90 One interviewee also remarked how subsidies alone are not enough, citing an example of WaterAid in the Pacific where the uptake of subsidies was very limited, with certain vulnerable households either not aware of the opportunity, or requiring specific encouragement and support to be able to take it.

91 Other interviewees elaborated on this, stating that subsidies can be subject to misuse or a gap between policies on who is entitled to subsidies and who receives them, due to misinterpretation or lack of knowledge about them at local level. For example, there might be subsidies available to people living with disabilities that they never know about or cannot access due to lack of information at local levels. People may also use this money for other things because of the lack of power people with disabilities generally have, or the low social status of those being taken advantage of.

In summary, there are evolving experiences in support mechanisms, and particularly subsidies, for rural sanitation approaches. Most examples are from Asia; however, WASHPaLS and UNICEF are embarking on a study in Ghana (USAID 2019).[92] One interviewee remarked how subsidies are a ***'loaded and emotive'*** term, while Andres et al. (2019) explains that subsidies that are poorly conceived or delivered can be pervasive, disruptive, opaque, poorly targeted, and encourage rent-seeking behaviours.[93] However, there are also positive examples of subsidies helping to improve the cost effectiveness of rural sanitation interventions generally,[94] and further research is needed to refine and evolve approaches for support mechanisms and subsidies that can effectively work at scale.

Wider efforts to ensure equity and social inclusion

Related to support mechanisms, but with a focus on inclusion of potentially disadvantaged groups, there are a large range of examples on efforts to address aspects of this challenge category, given that it is a broad topic, and given the widespread nature of the potential disadvantages in most communities.[95] Many examples focus more locally, at the community level, and sometimes also at the local government level, using dialogue, awareness raising, and rural sanitation intervention processes to ensure inclusion of potentially disadvantaged groups. SNV's work in Nepal and Bhutan is a notable exception, whereby they undertook specific inclusion-related activities at the national sector level,[96] and Bangladesh and Ghana have developed national guidance for pro-poor support mechanisms, as described in Section 4.6.2. While some examples are specific to an individual or narrow range of potential disadvantages, (such as gender or disability), others are broader. Below we aim to provide some brief, specific examples across the various sub-challenges of this category:[97]

- Gender, age, disability, health: There are a large range of examples of guidance or materials focused on understanding and implementing gender-, age-, disability-, and health-status-inclusive practices in rural sanitation work.[98] Initiatives often sought to partner with local or international technical partners with a specific focus (e.g. on older people or disability), and took time to train staff, community facilitators, and local government on inclusion issues, often through participatory exercises to give them the perspective of being faced with a particular potential disadvantage, or to raise self-awareness on issues such as gender inequalities. Deliberate efforts were often made throughout the implementation (e.g. through the CLTS process) to identify those potentially disadvantaged from the outset,[99] ensure they were invited and involved in community meetings, and where needed, adapting delivery of such events to their needs. In such processes, efforts (for example in WaterAid's undoing inequalities work) were made to build community solidarity to support such groups (House et al. 2017),

92 See WASHPaLS (n.d.)

93 While many of these findings were based on water utility subsidies, many bear relevance to rural sanitation.

94 For example in Cambodia: see iDE Cambodia (2019c)

95 Age, gender, health status, and disability are 'universal markers' present in all communities (WaterAid 2018)

96 For example, in Bhutan, they undertook formative research to inform the nationwide strategy for reaching the last mile, and in Nepal they supported the development of nationwide technology guidance for inclusion issues.

97 While noting that support mechanism initiatives to address affordability issues are largely captured earlier in this paper.

98 Key examples include WaterAid's work on undoing inequalities, and on disability and gender in Timor Leste; Plan International's inclusion work in the SWARP, in Southern Africa, and its work on the Gender Monitoring Tool that they developed in Vietnam; and efforts to ensure inclusion in SNV's SSH4A programme.

99 Plan International in South Asia facilitated communities to undertake wellbeing rankings to identify those needing support.

and to raise community understanding of the potential barriers faced, for example by people with disabilities.[100] They also worked to reduce potential stigma against certain groups (such as those with HIV) and highlight issues of gender inequalities. In many cases, they made adaptations to 'standard' product and technology ranges, and developed technical guidance for inclusive designs.

- Gender and protection: There are numerous examples of applying safety and gender audits in humanitarian camp and settlement contexts, often related to a lack of use of communal sanitation facilities by women due to the facilities' inappropriateness or concerns of gender-based violence (GBV).[101] There are also examples from non-fragile contexts, such as WaterAid, WSUP and UNICEF's work on female-friendly toilets, and the examples provided in House et al. (2015) Violence, Gender and WASH Toolkit.

- Social exclusion: UNC (2017) notes how certain households can be excluded from certain rural sanitation approaches, such as community health clubs (CHCs), and how CLTS triggering processes can risk reinforcing existing discrimination within communities, or the process can fail to fully include marginalised households or groups.[102] This latter concern is also echoed relating to the risk of community processes of identification and disaggregated monitoring (Myers and Gnilo 2017; House et al. 2017). There are interesting examples of efforts to address caste-based exclusion issues in South Asia, such as ODI and WaterAid's analysis on unequal access to sanitation in rural Nepal (ODI and WaterAid 2017), and efforts within India's Swatch Bharat Mission' to focus on universal access and the human right to sanitation and the passing of the Manual Scavenging Act (2013). WaterAid has supported local CSOs to produce annual sector equity reports (e.g. in Tanzania), and produced briefing notes and lobbied the sector on neglected areas such as fishing communities in Uganda. In Bhutan SNV has engaged rights-based groups in sector strategy development (ISF-UTS and SNV 2018).

- Poverty and landlessness: Table 3 and the text box above on support mechanisms provide examples of how individuals who do not have the resources (e.g. labour or finances) to construct toilets have been supported to do so. In addition, a lack of land space or tenure can also be a barrier in certain contexts. To address this, there are examples in both the Philippines for typhoon-displaced households (UNICEF 2015) and in Nepal for landless households, of using local government ODF-focussed, multi-stakeholder forums to highlight such barriers and develop solutions, such as provision of land for public or private facilities. Nepal's ODF campaign had specific processes to formally commend acts of support (UNICEF 2017).

100 Such as undertaking accessibility audits in a participatory manner, or through Plan International's dialogue circles.

101 Examples include by ACF in Nigeria and South Sudan, the application of SaniTweeks by Oxfam, and House (2019)'s gender, GBV and inclusion audit in the Rohingya refugee response. An NGO named PPSSP integrated a CLTS and slab subsidy initiative within a wider health and GBV programme in DRC. UNHCR's WASH, Protection and Accountability Briefing Paper (2016) also provides relevant examples on this topic.

102 An example of this is documented in Robinson 2009 relating to the exclusion of Fulani households in a CLTS project in Nigeria

Reflection Box: Poverty and social marginalisation examples and experiences

From the review of these examples and experiences, we make the following broad reflections:

- The literature and interviews raise certain common experiences of efforts towards inclusive programmes: that there can be a tendency to address issues such as disabilities primarily from a technological perspective (Wapling 2014); that efforts can tend to be somewhat narrowly focussed and siloed on specific issues (House et al. 2017; Richard and Kiani 2019); that orientation of staff and stakeholders is not a one-off exercise; and that deliberate inclusion efforts throughout the intervention cycle are time and resource intensive[103] (Wapling 2014).

- The application of inclusive approaches is often localised and focussed on a small number of specific potential disadvantages. House et al. (2017) note that there are limited examples of significant upscaling of such inclusive approaches across multiple (potential disadvantage) dimensions.

- Addressing social exclusion requires efforts to deal with beliefs and stigmas, both within implementation teams and within communities. Also, certain barriers cannot be solved within the community alone (e.g. lack of land) and require multi-stakeholder efforts.

4.4.2. Entrenched attitudes and social norms

Here we focus on examples where cultural beliefs and social norms have posed particular challenges to the construction or usage of toilets, and how initiatives have addressed these.

There seem to be two broad, inter-related barriers to the adoption of toilet use:

- There are those who are reluctant to construct or use a toilet, who consider that their current practice is better than a latrine. For example, where defecation is linked to livelihoods (e.g. faeces is used in aquaculture or to feed pigs [UNICEF 2013]); where people live near a body of water that will convey the faeces away (UNICEF 2013); and pastoralist societies where people are mobile and defecate in remote, arid places.[104]

- There are also those whose beliefs and social norms create challenges to the construction or usage of toilets. For example, beliefs relating to usage between males and females and family members, about digging pits in earth perceived to be sacred, or beliefs that evil spirits will live in the pits.

This section focusses on the latter example. Examples relating to communities residing near bodies of water and pastoralist communities are covered later in the *lifestyles and livelihoods* section.

There are examples of how large-scale ODF campaigns (for example in India, Ethiopia, and Nepal) can lead to rushed demand-building work, early introduction of subsidies, and early imposition of punitive measures for those who don't own latrines. This in turn can lead to limited usage or the endurance of social norms against OD (UNICEF 2017; Chambers and Myers 2016). In such contexts, time and resources are not properly allocated to fully understanding social norms. Knowledge,

103 Although a counter argument to this is presented in Wilbur et al. (2015), which states that '*discussing barriers related the additional cost of inclusive WASH programmes perpetuates the perception that inclusion is optional. The debate on cost must shift to recognising that access to water and sanitation for everyone can lead to more inclusive societies, where discrimination and stigmatization are addressed for all aspects of an individual's life*'.

104 While this issue is at the interface between tough physical terrain and lifestyles and livelihoods, it is captured here from a social norms perspective.

Attitude and Practice (KAP) studies have been used widely across the sector to gain better insights into social norms.

The literature and interviewees highlighted various examples of how they overcame specific social norms:

- In contexts where pastoralist communities have strong beliefs and social norms relating to toilet use, ZOA Sudan used Islamic faith as an entry point to CLTS, engaging religious leaders and realigning messaging around Islamic beliefs of being clean in front of god (ZOA interview). In Ethiopia, Kirimi and UNICEF (forthcoming) explain how they adapted CLTS triggering and messaging to relate more closely to pastoralist beliefs.

- Where working in minority Muslim communities in Nepal's Terai, SNV hired staff from target communities to better understand local issues, and re-align approaches (ISF-UTS and SNV 2018).

- In Southern Madagascar, UNICEF experienced strong social norms and power structures that made the 'conventional' CLTS approach ineffective. Here, they adopted a social norms approach, undertaking an analysis of barriers to changing the social norm and defining approaches to establishing a new social norm for adopting toilet use. From this, they developed adaptations that aligned more closely with traditional power structures and beliefs, changing terminology, and integrating with customary bylaws. See UNICEF (2015b).

More broadly, interviewees talked about where subtle adaptations were made to CLTS where behavioural drivers such as shame and disgust needed to be augmented with more positive messaging.[105] As mentioned, the practice of users applying formative research and UCD has led to many examples of more locally adapted messaging and approaches for rural sanitation. An example here is where PSI used human centred design to adapt approaches and marketing strategies in certain areas of rural Ethiopia (Mebrate n.d.).

Reflection Box: Entrenched social norms and beliefs examples and experiences

From the review of these examples and experiences, we make the following broad reflections:

- There is a gap in documented experiences addressing reluctance of toilet use when raw excreta use is directly linked to livelihoods, or where terrains make existing OD practices seem a better option.

- Tools and methods to adapt and customise behaviour-change approaches (e.g. human centred design [HCD], barrier analysis, etc.) are getting increasingly more user friendly and cheaper to apply, even for humanitarian contexts, meaning there is an increasing scope for practitioners to apply a more nuanced (and less blanket) approach.

- Social norms by definition vary spatially, posing challenges for extrapolating common adaptations to other contexts. However, common elements of good practice include: fully understanding the issues from a norms and beliefs perspective; utilising local knowledge from local staff and partners; adaptation of messaging and aligning to values; engaging with opinion leaders who have more resonance in the local context than 'standard' CLTS messaging and stakeholders; ensuring adequate time for behaviour change; and using caution in introducing punitive sanctions for non-toilet ownership or supply-led support too early in the process.

105 And indeed to combine CLTS with more educational approaches such as CHCs or PHAST to provide a stronger foundation for sustained behaviour change, mentioned by IFRC (n.d.) and Concern (interview).

4.4.3. Tough physical environments

This category of challenge presents a relatively diverse set of issues, including remoteness, challenging ground conditions for construction, lack of materials for construction, flooding and natural hazards, riverine, island, and coastal contexts. As with all of the challenge categories, there are clear links and intersections with other challenges, for example those living in remote locations may well be relatively poor and marginalised (O'Reilly et al. 2017); displaced and marginalised persons may live with challenging ground conditions that are prone to hazards (UNHCR 2016), etc.

- Remote areas: There are different perspectives in the literature as to whether remoteness is favourable or not for rural sanitation outcomes – particularly for CLTS (Kar and Chambers 2008; O'Reilly et al. 2017; USAID 2018); however, it certainly presents challenges for supply chains and the cost of external materials. There are various examples of projects helping to support the aggregation of orders from hardware suppliers and in some case subsidising transport costs.[106] In other contexts, hardware subsidies have been provided following pit digging given the lack of market viability in supply.[107] Some have made attempts to develop supply chain for sanitation products and materials in remote locations through establishing reverse logistics to capitalise on existing supply chains of product exported from these communities, such as crops and vegetables or aggregates, like sand and rock.[108] Remoteness also poses a challenge for cost-effective and frequent external follow-up and monitoring. There are examples of training local facilitators to implement and follow-up activities, and telephone-based monitoring and mentoring (e.g. in Somalia, see UNICEF 2015 and Kiribati and UNICEF 2015). In Indonesia and Philippines where small isolated islands make it harder for local governments to learn from each other, UNICEF is supporting the development of horizontal learning processes (UNICEF 2017).

- Tough ground conditions: There are many examples of approaches to address collapsing soils, such as: Malawi, where UNICEF used a Participatory Design approach to combine local indigenous knowledge and external expertise to develop appropriate options for collapsing soils in the form of a corbelled pit (Cole 2013); Kiribati, where pit lining was woven from local materials (UNICEF 2013); and in arid regions of Kenya where Practical Action provided subsidies for concrete pit lining and slabs, for households who experienced pit collapse (Karanja and Gathu 2018). In contexts where groundwater or bedrock is high, ecosan-related raised pit technology options have often been introduced.[109] In rocky areas of Afghanistan, Tearfund promotes raised pit toilets (Tearfund 2011). In Kiribati, where communities in atolls rely on small freshwater lenses in groundwater, there were risks of groundwater contamination from pit latrines. Here, CLTS was integrated with aspects of water safety planning, and technical assistance was provided on technology options and the siting of toilets, to minimise contamination risks (UNICEF 2015).

- Flood-prone/seasonally flooded: A significant amount of work has been done on this in Cambodia and Bangladesh, for example through efforts in Cambodia on 'challenging environments'[110] around the Tonle Sap lake, and work in Bangladesh's Haor and Char riverine and wetland areas.[111] In flood-prone areas of Vietnam, World Vision has focussed on providing subsidised sealed pour-flush pit toilets that are more resilient to inundation (UNICEF 2013).

- Beach/island/riverine communities: Communities near bodies of water are commonly lagging in ODF campaigns (UNICEF 2013, USAID 2018). In the Gambia, most of the remaining OD

106 Remote islands in Philippines (Robinson and Gnilo 2016); remote mountain communities in Nepal (SNV 2019).

107 For example by IFRC (n.d) in remote pastoralist communities in Kenya.

108 The World Bank's supply chain assessments in Ethiopia developed strategies for this and local manufacturers and distributors were supported to harness such opportunities, with varying success.

109 However, often with limited uptake at scale – see discussion on this at the end of this challenge category.

110 Engineers without Borders has supported the government of Cambodia to develop technical options for such areas, and is collaborating with iDE to integrate these into a wider sanitation approach.

111 iDE has undertaken UCD processes to develop options for such areas (iDE Cambodia 2019).

communities were generally those living on the riverside. Here, UNICEF adapted the CLTS process to integrate joint triggering and dialogue sessions, bringing together multiple neighbouring upstream and downstream communities. In India, the Swachh Bharat Mission-Gramin (SBM-G) campaign reportedly prioritised districts along the Ganges river.

- Natural hazards: Hazards such as flooding, typhoons, and earthquakes pose considerable challenges for sanitation progress, as after such large-scale disasters households can lack the means to rebuild toilets in a timely manner. In areas that are particularly exposed to recurrent hazards, some interviewees asked whether it is more cost effective to use 'heavy', engineered resilience, or lower-cost replaceable units. In the event of rapid-onset disasters in countries with ongoing 'developmental' non-subsidy programmes, tension can arise with humanitarian 'supply driven' responses to support household reconstruction. Tearfund experienced this following the 2015 earthquake in Nepal (Greaves 2016), and in the Philippines following Typhoon Haiyan (UNICEF 2015). In these examples, a pragmatic and diplomatically introduced approach to subsidies 'for reconstruction' was important. In the Philippines, the CLTS process was adapted for post-emergency contexts,[112] market-based approaches were used for reconstruction (UNHCR 2016), and disaster resilience was integrated within the wider national PhATS approach and strategy (UNICEF 2015).

112 For example to shorten training sessions; advocating sharing toilets as a pragmatic step; and modifying messaging to be more pragmatic in the post-disaster context.

Reflection Box: Tough physical environments examples and experiences

From the review of these examples and experiences, we make the following broad reflections:

- Interviewees mentioned that the same challenges had persisted for decades. This may point to a lack of any solution, poor knowledge about solutions that had been identified, or limited upscaling of such solutions (discussed further in Section 4.6.2 and 4.6.3).
- Responses to challenging terrains have primarily been technological, and alternative/adapted technical options are often more expensive, in contexts where the users are often poorer/ have lower willingness and ability to pay and may be a marginalised group that is low in the government's priorities for subsidising. There are limited examples of technological solutions being integrated within wider financing solutions and service delivery models.
- Many examples highlight the importance of developing local skills and providing guidance materials to increase the technical support available to households to overcome terrain challenges.
- There are limited documented experiences that specifically look at the issue of rapid environmental and climate change.
- Approaches such as UCD are increasingly common and local knowledge is constantly being built upon to aim for innovation, yet efforts to address challenges are often highly localised. This may account for the limited examples of overcoming the challenges of terrain issues at scale (UNICEF 2015), including through looking at larger-scale manufacture of products.
- Where there are some examples of efforts to address such challenges at scale (such as in Bangladesh and Cambodia[113]), these are where support has been provided to develop specific sector strategies (based on mapping and articulating the challenge) and developing sector guidance, as discussed in Section 4.6.2.

4.4.4. Lifestyles and livelihoods

This category presents a mix of different contexts, livelihoods, and groups, broadly banded together around the theme of mobility for livelihood purposes.[114] This includes pastoralists, fishing and artisanal mining communities, and seasonal migrant workers. Challenges reaching such groups centre not only around their migratory practices, but also, in many cases, their existence in remote, tough physical environments. They also tend to be heterogeneous communities with low social cohesion or willingness to invest in permanent facilities (Abaliwano and Kiyimba 2011). They may belong to marginalised groups and have relatively limited political capital (Axweso 2011), and they often have specific cultural and social norms.[115]

- Pastoralists: There are an estimated 200 million pastoralists worldwide (Whitley et al. 2019), and they are often lagging behind in terms of nationwide ODF campaigns (Fostvedt-Mills et al. 2018). They often have strong social norms relating to sanitation practices, and exist (at least periodically) in remote, often relatively arid contexts. A small proportion of pastoralists are fully

113 In Cambodia, Engineers Without Borders (and others) have supported the government to develop a working group looking at 'Sanitation in Challenging Environments', which over time has led to specific sector guidelines being produced on the topic. In Bangladesh, the government developed a strategy on 'Hard to Reach Areas'.

114 Although IDPs/refugees are categorised in the fragile contexts category.

115 For example, one interviewee remarked on how some fishing communities' belief and worship systems can be linked with the water, influencing the relative ease (or otherwise) of convincing households to have and use toilets.

nomadic, but the majority practice a form of transhumanism,[116] and, with the impact of climate change, many are moving to communities and small towns (Hazard et al. 2012). Numerous interviewees questioned whether it was appropriate or cost-effective to aim for those who are fully nomadic to have toilet facilities, and rather suggested that sanitation efforts should primarily focus on where there are settlements.[117] We were able to identify only a small number of examples working on pastoralist sanitation.[118] Overall, the examples we identified are primarily in East and Southern Africa.[119] Different initiatives tested or proposed different adaptations to rural sanitation approaches (primarily CLTS), including: focussing on settled communities during seasons when all household members are present, or focussing on the children (through schools) and women heads of households (including female–female support groups to assist construction); using mobile caravan roadshows to reach dispersed groups; adapting triggering methods and messaging to be more relevant to pastoralist beliefs, livelihoods, and to the locally available materials; using animal health as an entry point, and veterinary officers as facilitators; integrating CLTS activities within broader WASH or integrated programmes to be more relevant to priorities of the target population; providing community ODF prizes (like a water supply – tested in Angola); ensuring an active and inclusive role for all traditional leaders throughout the process; providing tools and technical support for construction; and complementing CLTS with PHAST and, at times, hardware subsidies.

- Fishing communities: Some interviewees felt that, in contrast to remote nomadic pastoralists, this group may have higher exposure to public health risk related to poor sanitation (citing recurrent cholera cases in parts of East and West Africa emanating from such communities). Here, there are often challenges of heterogeneous communities with low social cohesion, seasonal migration and surges of populations during fish migrations, and often challenging terrain for toilet construction. There seems to be very limited documentation on approaches to addressing these communities, with the majority of those identified being from countries surrounding Lake Victoria,[120] and one example from Ghana (Mensah 2019). From these, we identified examples of adapting rural sanitation approaches, such as: focussing on the settled communities and empowering women's groups to take action; working with adapted local leadership structures, such as beach management committees; considering the risks and solutions from a livelihoods and fish value-chain perspective;[121] engaging and triggering landlords; spatial planning around fish landing sites, communal toilets, and ODF bylaws for visitors; and potentially adopting a more 'urban' oriented approach to CLTS/collective action in such contexts, in light of the social dynamics.[122]

- Mining communities: These communities often face similar challenges to fishing communities, with the additional issue that such artisanal mining sites are at times dangerous and politically sensitive areas to engage in. We were not able to identify specific literature on rural sanitation in these contexts, beyond anecdotal information from ZOA in Sudan, who reportedly provided communal latrines in an artisanal gold mining community. It may be that many examples exist, but they are not widely documented. Recommendations made for fishing communities

116 Whereby for some parts of the year they are settled, and some or all household members migrate seasonally.

117 While potentially working on promoting broader hygiene and 'safe sanitation on the move' in other areas.

118 Fostvedt-Mills (2018) and Kirimi and UNICEF (forthcoming) provide multiple, anecdotal examples across Eastern and Southern Africa, and country-specific examples from Kenya (IFRC n.d.; Hazard et al. 2012; Karanja and Gathu 2018), Uganda (Cummings et al. 2011), Ethiopia (UNICEF Ethiopia 2019, Whitley et al. 2019), and Tanzania (Axweso 2011; Nyanza et al. 2018).

119 However, there are brief examples from Mauritania and Angola in Kirimi and UNICEF (forthcoming) and IDS (2018), and in Niger where WaterAid piloted a low-cost mobile technology option for pastoralist communities (WaterAid n.d. (c)).

120 Abaliwano and Kiyimba 2011; Women for Water Partnership 2016; Bevan (2018); Kyangwa and Odongkara (2005).

121 For example, how contamination of fish can be an issue for buyers and the wider value chain.

122 As noted earlier, there was limited information and guidance on dealing with heterogeneous communities in the rural sanitation guidance documents that were reviewed.

may potentially also be relevant here, such as: taking a more 'urban' approach; focusing on convincing women and children; and engaging wider mining value-chain actors for potential investment in sanitation facilities.

- Migrant workers:[123] Such contexts may present challenges not only in the locations that migrant populations travel to, but also in their households and communities of origin. For example, in Cambodia iDE Cambodia 2019b found that 19 per cent of non-latrine owning households were those with short-term seasonal workers, who tended to be the financial 'decision makers' in the households, and were often not present during community sales events.[124] In Bangladesh, the national strategy for hard to reach areas (Government of Bangladesh 2011) includes in its definition *'people who do not have any fixed place for living, e.g., gypsies, sex workers'*; however, it does not propose specific measures to address such groups. Advocating for a more targeted, market-segmented approach to subsidies in Bangladesh, iDE Bangladesh (2016) recommends a focus on migrant agricultural labourers as a specific priority for support. Efforts to address the sanitation needs of mobile labourer groups in Tanzania and India have tended to focus on the construction of communal sanitation facilities (ISF-UTS and SNV 2018; CLTS Knowledge Hub 2012), although not always with success.[125]

Reflection Box: Lifestyles and livelihoods examples and experiences

From the review of these examples and experiences, we make the following broad reflections:

- This challenge category represents a strong example of intersectionality between most – if not all – challenging contexts: e.g. poverty, social marginalisation, tough physical environments, and strong social norms.
- There are common themes across the different livelihood groups: the potential to link sanitation approaches to livelihoods and their livelihood value chains; taking a more 'urban' approach for heterogeneous mobile populations; considering timing, and who is involved (and are decision makers) at the community level; and (in the case of pastoralist contexts), being pragmatic when expecting all populations to use permanent toilets, all of the time.
- Considering the prevalence of these socio-economic groups worldwide, there is a notable dearth of documented experiences relating to them, and how to effectively work with them at scale.

4.4.5. Fragile contexts

While the other challenge categories refer to specific challenges, 'fragile contexts' is arguably more of a theme or operating context. We acknowledge that 'fragile contexts' is a broad term, and that fragility manifests itself in different ways at different times. Examples here focus primarily on countries that are experiencing protracted crises and/or are somewhat chronically fragile, ranked 95–112 (of 113) on Fund for Peace's 2019 Fragile States Index. Such contexts face a myriad of challenges, which are broadly grouped between those that affect the ability to undertake 'conventional' rural sanitation approaches (e.g. security, sector context etc.), and those that hamper meeting specific needs present in fragile contexts (such as refugees and IDPs, responding to humanitarian crises, and increased safety risks for children, women and girls).

123 Migrant workers can include both fishing and mining communities.

124 To address this issue, iDE reportedly gave specific training (through role plays) to community facilitators on how to reach households with decision makers who are working abroad or far away from home (iDE Cambodia 2019b).

125 CLTS Knowledge Hub (2012) mentions: *'Also serious is the failure of ODF communities, as in Himachal Pradesh in India, to provide adequate latrines for very temporary migrant workers, and persuading them to use them'.*

- Implementing CLTS/behaviour change programmes in fragile contexts (non-humanitarian response/displaced person focussed): There are various documented examples of implementing CLTS (and adapted versions) in rural communities in various fragile states.[126] In these examples, some organisations adapted CLTS processes to be more effective in the context, for example: ensuring a strong role for local traditional leaders (particularly in contexts where government leadership or presence is limited); triggering easier-to-access communities, in the expectation of self-replication to surrounding inaccessible areas; the use of locally based facilitators and partners to implement project activities while security measures preclude external visits, and using remote (telephone-based) monitoring and SMS behaviour-change messaging; adapting ODF verification protocols in areas where movements or local government presence is restricted; and conducting house-to-house visits when community gatherings are not allowed for fear of civil unrest. Some interviewees suggested the benefit of integrating sanitation within a wider-scope, integrated (and ideally livelihood-focussed) intervention (such as income generation activities), to be more relevant in the eyes of the recipients, and potentially to increase their ability to pay for more durable sanitation products. Tearfund provides 'tools banks' to help displaced people access equipment for construction. Others discussed using CLTS plus subsidies (see Section 4.4.1), and talked about how disharmony between subsidy and non-subsidy approaches and high levels of needs and subsidy expectations pose challenges for non-subsidy approaches in fragile contexts.[127] While in some contexts there are concerns over how 'conflict sensitive' approaches such as CLTS are (Greaves 2016, UNICEF 2014b), in Somalia it was found that the greater challenge was in fact the readiness of programme staff to implement CLTS and non-subsidy approaches, and the need for considerable convincing, and facilitation skill development, to deliver CLTS effectively.

- Implementing market-based interventions outside of humanitarian responses: There are relatively limited documented examples of cash- and market-based approaches being used in fragile contexts outside of humanitarian responses[128] for rural sanitation outside of camp settings (see examples in Section 4.4.1). In rural contexts, ACF reported trying sanitaiton marketing in DRC and Chad but with limited success, and PSI is also reportedly working in Mali, South Sudan, and Niger. UNICEF's recent initiatives on regional sanitation markets assessments did not focus on fragile contexts or on humanitarian sector needs.

- Addressing the needs of IDPs and refugees: Most documented examples derive from large-scale camp settings, which are broadly out of scope of this review. However, there are examples of adapted CLTS processes that have been applied in camp settings in Cox's Bazar (UNICEF 2019b), and numerous examples where actors have used CLTS plus either vouchers or hardware subsidies to assist households in camps and settlements transition from communal to individual household levels of service[129] (see Section 4.4.1). Regarding reaching refugees and IDPs outside of camp settings, there is very limited documentation or examples.[130] A common approach to accessing this hard-to-reach, out of camp population is with cash transfers, often built within

126 Including: Afghanistan (Greaves 2016); DRC (Tearfund 2012; PPSSP (n.d.); Somalia (Gitau and Flachenberg 2016; Balfour et al. 2014); South Sudan (Balfour et al. 2014; Oiteno 2012); Chad (Bauby and Flachenberg 2014); Haiti (ACF interview, UNICEF 2017); Nigeria (ACF interview); Sudan (ZOA interview); and Mali (UNICEF 2017). Some of these examples are also aggregated in Greaves (2016).

127 In South Sudan, GTO and Malteser supported the government and wider sector to increase sector coordination and dialogue on rural sanitation approaches, and developed national implementation guidelines.

128 These are being widely used for rapid onset crises (such as for reconstruction), and for other WASH services and products.

129 UNHCR (interview) noted that while demand and market-based approaches may not be suitable for the acute response phase of rapid onset crises (when there is a focus on rapid construction of communal toilets to meet Sphere minimal standards), there are considerable opportunities for evolved approaches in the protracted phase, as efforts shift from communal to household levels of service.

130 iDE is collaborating with UNICEF in Cox's Bazaar to look at market-based approaches for Rohingya refugees living in out-of-camp settings (iDE interview).

a wider multi-purpose cash grant, of which a portion of the shelter budget is assigned for sanitation (UNHCR interview). However, we acknowledge that there are challenges with this modality in ensuring the funds are used for the desired outcomes, or to construct adequate quality facilities (GWC forthcoming). 'Out of camp' sanitation is relatively poorly documented, yet it should be noted that UNHCR statistics suggest that the majority of displaced people living out of camps reside in urban, rather than rural areas,[131] suggesting that although this topic is highly important, it may be more of an urban rather than rural challenge.

Reflection Box: Fragile contexts examples and experiences

From the review of these examples and experiences, we make the following broad reflections:

- There is strong intersectionality between fragility contexts and the other categories of challenges. In humanitarian WASH guidance and documented examples, there are examples of efforts for inclusion (e.g. of women and people with disabilities), and also documentation around humanitarian sanitation in tough physical environments – largely from an engineering perspective. However, these largely relate to humanitarian response activities rather than undertakings in more protracted phases of the crises.
- Strong siloes exist in the WASH sector between humanitarian and development actors and actions (Mason and Mosello 2016). This is highlighted by the limited cross-learning between the two streams, and challenges in ensuring 'connectedness' between actions during humanitarian and development phases in fragile contexts.
- Interviewees highlighted how opportunities for greater complementarity and introduction of longer-term approaches for rural sanitation seem to exist in the protracted phase of crises, for example once immediate humanitarian needs are met to a basic level (e.g. communal facilities), and there is more time to consider increasing service levels (e.g. to domestic toilets) and taking a market-sensitive approach.
- Documented experiences of out-of-camp approaches to rural sanitation are limited, relatively constrained to CLTS, and somewhat anecdotal. As 'fragility' manifests differently across the world, it is not easy to extrapolate best practice and apply it globally.

4.5. Commonly mentioned barriers in efforts to overcome challenges and ensure inclusivity

6. What persistent challenges remain to sanitation interventions reaching those in challenging contexts? (i.e. budgets, implementation)

This section summarises some of the challenges and recurring themes, commonly mentioned in the literature and by interviewees, regarding the ability of organisations (primarily implementing organisations) in delivering inclusive rural sanitation interventions, or in overcoming the various challenges. Overall, these cover a diverse set of issues across themes such as: incentives and disincentives to focus on hard to reach groups and areas; the ability to focus on such areas and

131 In data shared with the consultants by UNHCR (derived from data accessible here), it shows that overall 'people of concern' marked as 'out of camp' were 43 per cent urban and only 10 per cent rural, with 'unknown' accounting for the remaining 47%.

groups, and apply 'best practice' within the common confines of programmes; constraints within the wider enabling environment and operational context; and challenges in terms of sector learning and adaptiveness.

In terms of **incentives, disincentives, and commitment**, research highlighted the following issues:

- Metrics of success: The success metrics of a donor, programme, organisation, or national campaign can be an important influence on setting the incentives and focus of sector actors in addressing challenging contexts. For example, unless area-wide targets for achieving ODF status are prioritised, there can be a tendency to focus on communities that represent 'low-hanging fruit'. Some interviewees complained of ***'an acceptance of reaching only 70–80%'***, or an organisational or political appetite to report ***'big numbers'***. Few organisations are required to report disaggregated results or held accountable for specific targets for inclusivity. Indeed, how progress is counted considerably influences organisational focus. For example, it makes a difference whether one measures numbers of individual household toilets constructed, community-wide ODF status, or the total sales of toilets.

- Cost: The increased cost of working in such contexts and ensuring inclusivity is also a factor. Toubkiss and Bickel (2016) talk of the relative trade-off between equity and efficiency, and Wapling (2014) reflects that fully inclusive programmes tend to come at a higher cost. As such, in contexts where interpretations of 'value for money' place a stronger emphasis on economy and efficiency than effectiveness, sustainability, and equity, and where cost per capita benchmarking is common, there can be disincentives or constraints to targeting specific areas, or in applying organisational 'best practice' in inclusive programming.

- Risk: The increased risk of working in challenging contexts is also a disincentive. These may be areas where there is limited market intelligence, or limited perceived willingness to pay, dissuading market-based actors from entry. One interviewee remarked how adding complexity into the product range, messaging, or pricing structure, to cater for the nuanced needs of potentially disadvantaged individuals or areas of challenging terrain, increases the potential for failure. The risk is linked to the 'low-hanging fruit' issue, whereby organisations may be incentivised to work in communities or parts of the country where it is easier and cheaper to deliver the results for which they are accountable.

- Relative prioritisation and commitment: Numerous interviewees made remarks such as ***'we aren't even passing the first mile, so how can we focus on the last mile?'***[132] At a programmatic level, a lack of awareness of programming staff on inclusion issues can limit how they prioritise this (discussed later), and as issues such as gender, equity, and inclusion are often cross cutting and tend not to manifest concrete results, they can sometimes be subject to either low prioritisation or tokenistic efforts, or be 'the first to go' in budget reductions.[133]

Regarding the **wider enabling environment and operating context:**

- Restrictive or vague national policies: National sanitation policies and strategies increasingly do include inclusivity implicitly as part of their alignment to the SDGs, yet few clearly identify 'challenging groups' that are lacking access to sanitation. Even where these are identified, policies often poorly articulate strategies and approaches to reach these groups and mechanisms to create incentives to reach these groups are not always in place. Many countries have strict 'no hardware subsidy' policies, which can either challenge effectiveness in reaching

132 One interviewee remarked that some sector actors perceive that addressing 'last mile' issues in sanitation could be done at the last hour (e.g. in 2029), rather than seeing it as something to address concurrently with the 'first mile' from the outset of sector initiatives.

133 One interviewee mentioned the relative expertise of the sector to address these issues, which results in them being avoided.

those who realistically require external support, or push subsidising activities underground[134] In contrast, some countries provide a vague reference to allowing subsidies, for example 'at the discretion of local authorities', with ambiguities posing a potential challenge for sector harmonisation.

- Government prioritisation and political economy: Those who are potentially disadvantaged or residing in challenging environments may be subject to stigmatisation and social marginalisation and have limited political capital. The relative size of those populations in such challenging contexts or in such groups also affects the relative prioritisation and political capital. All governments have finite public financial resources, and rural sanitation for such marginalised or perceived 'expensive to reach' groups may well not be prioritised. Some interviewees also remarked how large-scale sanitation campaigns can be accompanied with the politicisation of data, and mentioned a constrained 'space' to talk about failures.

- The lack of contextual 'ingredients for success': For example, there are challenges in replicating the market- and finance-based success stories and approaches to inclusive rural sanitation from Asian contexts into African contexts, or where success factors critical in one context are lacking elsewhere (an example here is the ID Poor system in Cambodia that has been used for targeted subsidies).

Regarding **programmatic and implementation** challenges:

- Awareness, perspectives and skills: It can be time consuming and expensive to ensure that all relevant programmatic staff, implementation partners, and the large number of front-line staff and volunteers have the awareness, commitment, and skills on issues of equity and inclusion.[135] This is particularly challenging given the diversity of potential disadvantages that may be encountered (e.g. mental health, HIV, gender, disabilities, age, etc.). Changing the mindset and commitment of implementation staff can be a challenge and is not achieved through one-off training alone. There can also be challenges in introducing 'new approaches', in terms of the skills and readiness of implementation teams to take them on; for example, non-subsidy approaches in fragile and humanitarian contexts, or where people are dogmatic about certain approaches, such as CLTS. The degree that rights-based approaches are often understood, is discussed in Section 4.6.1.

- Resource constraints: There are the aforementioned issues of budget 'squeezes' and prioritisation, or issues of short implementation timeframes, which may restrict organisations from applying more inclusive approaches.[136] This can be particularly common in fragile contexts, where programming cycles are often one year or less in duration. Linked with the issue of cost-per-capita benchmarks, one interviewee remarked '***this is a CLTS programme – we don't have those kinds of resources'***, referring to the highly restrictive budgets that hamper formative research or a more inclusive approach. Another interviewee remarked that ***'we just don't have that kind of bandwidth'***, referring to why they generally do not disaggregate and analyse monitoring data. One interviewee remarked that finding time for undertaking initial analysis and formative research can also be challenging, with pressures ***'to get started'*** being common in programming.

- Restrictive definitions: In reviewing approaches to social inclusion across a number of key sector actors, WaterShed and Simavi (2018) notes how differing and often narrowly defined

134 One interviewee remarked that this was like the prohibition of drugs – drug use still happens, but in a less officially supported, coordinated, or strategic manner, and those taking part do not share experiences.

135 While also recognising that the need to ensure awareness, skills, and commitment in such areas is equally necessary at all levels, not only at the front-line level.

136 WaterShed and Simavi (2018) notes that there is often 'a gap between organisational strategies and programmatic approaches and toolkits and the opportunities to implement them'.

definitions of 'excluded' and prescribed inclusion targets from donor agencies can limit local adaptability and flexibility.

- Knowledge, learning, and adaptability: One interviewee remarked that ***'the entry point is the approach, rather than context analysis'***, complaining of ***'blanket approaches'*** (e.g. CLTS) being applied without consideration of the need for more blended, nuanced approaches. Other interviewees talked about the limited utilisation of knowledge on addressing the issues '***beyond the sector siloes'***, for example between WASH and social protection actors, and humanitarian and development actors. Also, interviewees mentioned the trade-off between ***'local solutions to local problems'*** and scalability. This is discussed further in the next chapter.

Reflection Box: Challenges to ensuring inclusion

We make the following reflections about the challenges to ensuring inclusion:

- Organisational incentives are driven by a number of internal and external factors, including donor priorities, cost, risk, and organisational and staff awareness of challenges faced by households.
- National strategies have been weak in setting out the range of challenges the sector faces, and have often focused on low hanging fruit and/or reaching large numbers, rather than on challenging contexts. Restrictive policies can prevent pragmatic application of support mechanisms such as subsidies.
- Expertise and confidence on how to address different challenges is lacking, and due to the vast range of challenges faced, it is difficult to build and maintain sufficient capacity and knowledge. In this, there are challenges of both unintentional exclusion (through lack of awareness, for example) and intentional exclusion, for example in both government policy and potentially through the actions of government and implementing agencies' staff.
- Resource constraints such as project budgets and timing, in addition to skills, all impact the ability of organisations to reach minority groups or adapt approaches to address challenges faced by fewer households or communities.

4.6. Application of rights- and systems-based approaches

7. **In what ways/to what extent have rights-based approaches been used to overcome some of these challenges, and what are some key examples are there of this in practice?**
8. **In what ways/to what extent have wider enabling environment/systems strengthening approaches been applied to help overcome such challenges at scale?**

This section describes findings and experiences of taking rights- and systems-based approaches, in an attempt to increase the inclusiveness and equality of rural sanitation services, and/or to ensure inclusivity and overcome the challenge categories at scale.

4.6.1. Examples, experiences, and guidance in applying rights-based approaches

In terms of available guidance on rights-based approaches, some interviewees remarked that they often ***'speak a different language'*** and are somewhat vague in how they can apply specifically for

rural sanitation. However, the EQND Handbook for CLTS Facilitators (WSSCC 2018) does provide introductory text on rights-based approaches.[137] In applying rights-based approaches in Uganda and Zambia under the undoing inequalities work, Wapling (2014) found that the concept of rights and rights-based approaches were often relatively abstract and hard for implementing organisations and local governments to fully comprehend.[138] This was also the finding of Keatman et al. (2016) in their research on local government perceptions of rights-based approaches in WASH. However, recently a consortium of organisations have collaborated on the development of a toolkit named 'Making Rights Real', aiming to support organisations to engage local governments on WASH-related rights issues.

Overall, many interviewees mentioned that rights-based approaches are often indirectly implicit in many equity- and inclusion-oriented rural sanitation interventions (and also explicit in humanitarian activities), yet few interviewees could name specific examples of programmes or organisations applying an explicitly rights-based approach in their rural sanitation programming.

A recent paper by Carrard et al. (2020) provides a number of examples of how organisations have taken a rights-based approach to WASH, with a focus on the local government level. The paper looks specifically at how the application of the 'making rights real' approach helped to 'demystify' rights-based concepts and lead to specific action by local government, with examples relating to rural sanitation from Bhutan, Bangladesh, and India. Arickal et al. (2014) provides another key example of applying rights-based approaches, describing how WaterAid and Save the Children collaborated on a child rights-focussed initiative in three countries in South Asia. ISF-UTS and SNV (2018) give examples of how SNV collaborated with specific representative organisations (such as disability or older persons rights-based organisations) and led such organisations to actively participate in sector coordination and policy development issues.

At the sector level, South Africa's National Sanitation Policy is an example of a policy that explicitly takes a rights-based approach, articulating institutional and financing arrangements to operationalise these rights. This policy is potentially being used as a model example in the African Ministries Council on Water (AMCOW's) upcoming sanitation policy guidance. Further policy examples are presented in the next section.

137 However, while both this and WaterAid's ENDI Toolkit include introductory orientation on rights-based approaches, subsequent sections seem to be almost solely focussed on equality and inclusion activities that can (and should) be done at the community level, with less in the way of examples at higher levels of the system.

138 Even if there were specific individual or organisational guidance on the topic

Reflection Box: Applying rights-based approaches

Overall, we make the following reflections on applying rights-based approaches:

- To move from national recognition to local realisation of the human rights sanitation, we need to focus on how human rights can inform the everyday practice of service authorities and providers.
- Rights-based concepts and language can be challenging to grasp; however, there are increasing efforts to address this and make rights-based approaches more tangible for practitioners.
- Experiences of implementing rights-based approaches highlight their complementarity to systems-strengthening activities, by taking a deliberately collaborative and constructive approach to engaging governmental stakeholders.
- Partnerships with specialised rights-holder groups (such as disability or elderly representative organisations) can help in rights-based efforts at both the local and sector level.

4.6.2. Examples and experiences in strengthening the enabling environment and systems for progress at scale

This section looks at examples and experiences where initiatives have taken a systems approach to strengthen the enabling environment, either to ensure more inclusive approaches to rural sanitation at scale, or to try to overcome one or more of the challenge categories at scale.

Examples of addressing challenges at scale

There are numerous documented examples of strengthening the enabling environment for scale-up of rural sanitation initiatives.[139] However, as mentioned in Section 4.3.2, these tend to focus on scaling-up sanitation programmes generally, and do not explicitly look at inclusion or overcoming the categories of challenges at scale. Similarly, the emerging documentation on applying systems approaches in WASH tend to place a stronger focus on water than sanitation generally (WHH et al. 2020), although a paper by Gensch and Tillett (2019) seeks to address this. However, from the literature and interviews, it seems that there has been relatively limited work on integrating systems approaches and concepts with rights-based approaches,[140] and 'enabling environment and scaling up' is often presented as a discrete theme in sector reports and document repositories, distinct to that of 'equity and inclusion'.

Nevertheless, there is some emerging work being undertaken primarily by WaterAid to link aspects of inclusion (such as gender) into systems approaches. For example, WaterAid's conceptual framework of components of a WASH system includes Gender and Social Inclusion as a specific building block, and there has been some guidance on integrating gender aspects into systems (in WaterAid 2017c).

There are many countries that are taking rural sanitation initiatives to scale (such as through nationwide ODF campaigns), yet there are fewer examples where these initiatives have specifically included methods designed to be inclusive or to overcome challenge categories at scale. Notable examples are:

139 For example, the World Bank's WSP (2018) ran a programme from 2006 to 2013 on scaling up rural sanitation (SURS) in a number of countries in Africa and Southern and Eastern Asia. This led to a number of specific efforts aimed at strengthening the enabling environment to support upscaling of rural sanitation initiatives, with various publications on this theme. Overarching findings are provided in Perez et al. (2012).

140 Footnote text missing (140 in Word doc)

- India: The nationwide SBM-G programme specifically highlighted that providing access to different categories of people[141] who are not able to access and use safe sanitation facilities should be a priority for implementing agencies. The programme included specific subsidies for poor and vulnerable households, and utilised the model of community self-help groups to help as an interface for community-level targeting and support (Government of India 2017).

- Bangladesh and Cambodia: Both countries developed specific strategies on 'challenging environments' or 'hard to reach areas', developed definitions of those eligible for subsidies, and utilised government systems for identifying vulnerable households for potential support.

- Indonesia: The government fully institutionalised rural sanitation within their civil services structure, and undertook large-scale capacity development. This included a phased approach to area-wide ODF status, coupled with learning and review processes, and utilisation of local government funding for locally determined support mechanisms for specific households (see Mustafa and Baetings 2019).

- Philippines: The nationwide PhATS programme included pillars on knowledge management and enabling environment, supported horizontal cross-learning between local governments on means to address localised challenges, and mainstreamed natural disasters within the wider strategy.

- Nepal: Nepal's National Sanitation and Hygiene Masterplan's (Government of Nepal 2011) guiding principle was universal access to sanitation, and its operational strategies place significant stress on participatory processes to increase inclusion. Local governments were given discretional powers to provide support where needed, and decentralised multi-stakeholder coordination platforms identified and addressed localised barriers to ODF status;

- Ethiopia: The national sanitation strategy/programme is framed around sanitation as a right and a responsibility for all, as well as clearly setting out the challenges that poverty, gender inequality, the lack of understanding of the need of pastoralists and people with HIV, and the impact of poorly targeted subsidies can have on demand.

- South Africa and Ghana: The former based its National Sanitation Policy around human rights, and both countries give sector guidance on pro-poor subsidies.

Regarding specific organisational programmes that address challenges at scale:

- The **SNV SSH4A** multi-country programme had demonstrably inclusive results at scale (see Apanga et al. 2020). This programme had a multi-faceted approach, including: area-wide targets and a phased, adaptive approach; a strong monitoring and review framework that looked specifically at inclusion issues (see Section 4.3.4); engaging rights-based groups and undertaking formative research on 'last mile' issues to inform sector strategy; undertaking technological adaptations for inclusive designs and developing sector guidelines to replicate these; and providing specific support for (often locally identified) vulnerable groups (ISF-UTS and SNV 2018).

- The **iDE programme in Cambodia** has achieved scale in terms of total sales and geographic coverage, and has tested a variety of methods to ensure inclusive results. They have integrated their sanitation marketing within wider government-led ODF initiatives, and have developed a systemic approach to identification, targeting, and support for 'laggards', both to achieve ODF status and to boost sales. They have developed a 'grassroots Public Private Partnership'

141 The guidelines set out the following groups: women, children, people of certain castes, faiths, and ethnicities, older people, pregnant women, people with disabilities (Divyangjan), geographically marginalised populations in remote areas, and those living in areas where it is difficult to construct simple toilets due to high water tables, sandy soils, or hard rock.

approach whereby on-commission local government actors identify relevant households and discuss specific barriers they are facing, and then collaborate with local government, the community, local entrepreneurs, or iDE as necessary. iDE also utilises the government IDPoor identification system and developed iDE's relatively high-tech monitoring and tracking process for the delivery and verification of subsidies (see Lestikow 2017 and iDE Cambodia 2019b).

- The **World Ban**k implicitly looks at scale through its support of large-scale, government-led programmes. In Bangladesh, Laos, and Vietnam they are supporting governments to provide targeted support to households, and researching and strengthening processes to identify, verify, and channel such support cost-effectively. The learning[142] on the enabling environment and adaptive management approaches needed for implementing at scale, which emerged from WSP's SURS programme, have guided the design of the World Bank's rural sanitation programmes in recent years.

Challenges to upscaling non-governmental initiatives

Interviewees and the literature highlighted the challenges of integrating and institutionalising successes from programmes within (ongoing, post-project) government systems. This could, for example, relate to the adoption of the project's disaggregated, inclusion-focussed monitoring system, or programmatic approach to inclusion of specific potentially disadvantaged groups. Programmes are not systematically designed for institutionalisation or scale from the outset and may not systematically consider (and track) cost effectiveness,[143] to provide evidence-based advocacy for upscaling. Some programmes designed with a 'deep dive' focus on a specific issue, such as gender or disability, may risk being considered too 'narrow-focussed', or cost-intensive only on one or two potential disadvantages. For systemic change, it is important for actions to range across the different levels of the WASH system (Tillett et al. 2020). However, WaterShed and Simavi (2018) noted that 'many implementing organizations focus their interventions at one level only; e.g. at community level for changing local mindsets about gender roles or ODF'. SNV's SSH4A programme is a notable exception to this (see ISF-UTS and SNV 2018).

Examples of systems approaches to strengthening specific 'building blocks'

Here, we provide examples on how efforts have, and/or can strengthen different elements of the WASH system.[144] These examples are derived from the interviews, documented examples, and consultants' own perspectives, and we present them around the 'building blocks' of the system, using a conceptual framework presented in Gensch and Tillett (2019).[145]

142 Learning from SURS was documented in a manual to guide World Bank Task Team Leaders.

143 iDE is a notable exception.

144 For an introduction to definitions and concepts on WASH systems approaches, see Tillett et al. (2020).

145 There are many examples of conceptual frameworks, each with different names and numbers of building blocks (but much similarity in their core elements). This study used the framework of Gensch and Tillett (2019), which has been specifically developed from Agenda for Change's framework to better include sanitation.

Table 4: Examples of strengthening the building blocks of the WASH system

BUILDING BLOCK	EXAMPLES OF EFFORTS TO STRENGTHEN
Institutional arrangements and coordination[146]	• Strengthening multi-stakeholder (learning, coordination, and problem solving) platforms at different levels, and bringing rights-based groups into such platforms. • Strengthening the awareness of sector actors at various levels on specific inclusion issues. • Strengthening institutional will and capacities to ensure inclusion within sector activities. • Strengthening the policy frameworks (e.g. on inclusion issues, on support mechanisms). • Strengthening links between 'siloes' (e.g. WASH–social protection, and humanitarian–development actors and processes).
Inclusive planning	• Undertaking research (formative/market/mapping) to identify, quantify, and understand challenges. • Developing specific information sources and tools to help in planning and intervention design. • Using such evidence bases to develop specific targets and sector strategies to reach identified groups/overcome specific challenges. • Evolving sector planning frameworks and templates to specifically capture equity and inclusion issues. • Supporting area-wide ODF planning and data on 'laggards'.
Finance	• Strengthening guidelines and eligibility definitions for support and subsidy mechanisms. • Strengthening cost-effective processes for targeting and conveyance of subsidies. • Building the evidence base of costs and impacts of inclusive approaches. • Advocacy for fiscal decentralisation and local government funding for support mechanisms. • Extending the reach of customer credit options to rural/poor households.
Regulation and accountability	• Strengthening the capacity and involvement of CSOs in undertaking sector advocacy and budget tracking, and to ensure inclusion in government planning and budgeting processes. • Strengthening transparency/accountability of subsidy targeting and delivery processes. • Strengthening the understanding and operationalisation of rights-based approaches at local government level.

Source: Authors own

146 This building block also includes institutional capacity as a sub-theme, although the conceptual framework does not state this explicitly.

BUILDING BLOCK	EXAMPLES OF EFFORTS TO STRENGTHEN
Service delivery	• For technologies: undertaking formative research/UCD to develop adapted technical options; developing local skills to produce these; developing technical guidance materials. • For non-technical aspects: undertaking formative research and adapting sector approaches and materials based on social norms/needs of specific groups; integrating inclusion and support mechanisms within wider sanitation marketing service delivery models. • Strengthening service delivery models to be more inclusive in how they both manage and deliver rural sanitation services.
Monitoring	• Strengthening sector monitoring systems not only to track disaggregated progress, but also to track slippage and ODF conversion indicators, to identify issues (e.g. laggards), and to strengthen analysis, response, and feedback processes based on this monitoring data. • Strengthening the robustness of ODF verification protocols and subsidy verification systems. • Strengthening the inclusion of 'not counted' groups within sector monitoring processes. • Strengthening the accuracy, transparency, and accountability of sector monitoring systems.
Learning and adaptation	• Strengthening the culture of learning and sharing in sector (including between sector siloes). • Strengthening processes and platforms for sharing learning and reflecting on progress (and particularly on inclusive progress/overcoming challenges). • Decentralising learning processes and strengthening links and flows of learning both vertically and horizontally. • Adapting research findings and recommendations for local audiences.
Demand, behaviour and political will	• Undertaking studies and advocacy at different levels to get neglected issues on the agenda of stakeholders and politicians. • Supporting CSOs to deliver quality sector advocacy on specific challenges and inclusion issues. • Raising awareness of/addressing stigmas on specific marginalised groups at different levels. • Undertaking political economy analysis to understand potential levers to build political will on neglected or inclusion issues. • Developing service delivery models/financing approaches that help align incentives for communities/local governments/private sector to be inclusive and serve all.

Reflection Box: Inclusion at scale

Overall, we make the following reflections from the interviews and document review on upscaling:

- There are a number of commonalities between governmental programmes that are addressing inclusivity and overcoming challenges at scale, including: area-wide ODF targets and a strong political will to achieve these; policy-sanctioned pragmatism on support mechanisms and local government discretion on and/or financing of these mechanisms; the need to ensure that the scaling up model includes local-level structures for review, learning, and adaptation, and experience sharing on 'local solutions' between local governments (see Section 4.6.3); and where specific 'challenges' are widespread, developing specific strategies to address them.

- There is a distinction between scaling a specific solution or approach to a challenge, versus ensuring the institutional model for upscaling rural sanitation allows space and incentives for the local identification, adaptation, learning, and sharing of approaches to overcome these challenges.[147]

- We can observe four distinct (yet not mutually exclusive) pathways for non-governmental organisations achieving scale of their efforts to overcome challenges or ensure inclusivity, including: testing and demonstrating approaches locally, then sharing this in national forums to stimulate replication;[148] delivering activities with and through government, aiming to inform the implementation model for the nationwide rural sanitation programme;[149] integrating inclusion within the wider business and service delivery model (e.g. iDE Cambodia); and working at the sector level, undertaking formative research to inform strategy and developing sector guidelines on specific issues (e.g. SNV Bhutan and Nepal).

- 'Pilot' programmes are not always designed to consider scaling pathways (and costs) from the outset, and therefore suffer from challenges of 'handing over' or institutionalising projectised processes or approaches.

- Enabling environment and systems approaches have not made a clear link with objectives of inclusion at scale.

4.6.3. Arrangements for sector learning to overcome challenges and ensure inclusion at scale

9. How does sector learning link with addressing the challenges, at scale?

Effective sector learning mechanisms are a key ingredient in upscaling localised solutions and innovations (e.g. to overcome specific 'challenging contexts'), and UNICEF (2017) notes how 'Systematic learning and course correction when needed are important elements for success'. Here we provide examples of efforts to strengthen learning processes in rural sanitation initiatives and note key gaps and apparent weaknesses in common sector practices. Sector literature (House

147 Kohiltz et al. (2019) talk about the 'tension between tailoring support to local contexts while keeping support standardised enough to efficiently go to scale', and various sector documents emphasise the need for 'local solutions to local problems'. The question is around a scalable model that allows this.

148 Plan International Malawi's work on dialogue circles (IDS 2018) is an example of this.

149 Simavi's SEHATI programme in Indonesia is a good example of this.

2020; Myers 2019) points to the need to decentralise knowledge and learning processes down to the field facilitator and local government levels. WSSCC and IDS have been collaborating with the government of India to test and roll out rapid action learning workshops to help to inform and adapt the SBM-G programme (see Chambers et al. 2018). The GSF has also supported 'real time emergent learning' processes in at least six countries to encourage better sharing and communication of emerging knowledge between stakeholders and to support a move to adaptive management principles. Interestingly, in these examples organisations also sought to strengthen learning 'between levels' of actors within the system. In the Philippines and in Bangladesh, UNICEF supported horizontal learning processes to stimulate learning between local governments (UNICEF 2017). This was reportedly particularly important in more remote island contexts, where there was limited scope for cross learning.

At the wider level, Nepal's nationwide ODF campaign benefitted from periodic Joint Sector Review processes both at national and sub-national levels, where progress was analysed and experiences shared. At the regional and global levels, the SLH, UNICEF, WaterAid, and WSSCC have supported various multi-stakeholder workshops that looked at challenging contexts and 'last mile' issues, and the SLH has been active in encouraging the documentation and dissemination of learning on these topics, through its 'Learning Briefs' and 'Frontiers' publication series.

Reflection Box: Haps in learning processes

Despite these encouraging efforts, the literature and interviews identified some key common gaps in learning processes in the rural sanitation sub-sector:

- There is insufficient learning and knowledge exchange between 'siloes' (e.g. between WASH and social protection/other sectors, and between humanitarian and development actors[150]).
- Sector knowledge products, guidance and research may not always be customised for local audiences (see points in Section 4.3.8), and global learning processes may have been biased to anglophone countries (House 2020).
- Learning processes (and particularly multi-stakeholder learning events) can often be one-off rather than routine and systematic.
- There seem to be clear gaps (or opportunities) in learning, both within and between countries, on certain challenge categories (such as on pastoralist WASH).

150 Here is an example is of how it seems that the considerable knowledge and experience of development sector actors is not being fully utilised in the GWC process of developing guidance on CBI.

5. Conclusion and recommendations

10. What are the priorities for guidance, learning, and research activities?

5.1. Conclusions

This rapid review process was commissioned by the SLH, UNICEF, and WaterAid to provide an initial landscaping of existing documentation, guidance, and experiences on the theme of rural sanitation in 'challenging contexts'. The scope was very broad – both in terms of the range of challenges to review, and the array of study questions. As such, there were inherent limitations on the completeness of examples and findings, and the ability to triangulate preliminary findings.

Nevertheless, through the consultation with 44 key sector experts, and review of over 180 documented sources of information, this rapid review was able to identify broad, preliminary findings and emerging trends across the ten study questions and five categories of challenges. It has helped to gain a broad understanding both in terms of 'what is out there' in terms of knowledge, guidance, and experiences, and also where there seem to be gaps that it would be useful for sector actors to address.

Related to the study questions, the following broad conclusions can be made:

- Information sources: There are a range of information sources that sector practitioners use to inform their programme design, through the identification and targeting of challenges faced by households. There is an increasing tendency for sector actors to use tools and processes, such as barrier analysis and UCD, to better inform and customise their interventions. Many interviewees had an interest in a tool or portal that aggregates relevant country-by-country information to aid in targeting and intervention design, and some work is being done on this.

- Monitoring: There are some promising examples of good practice in project-level, organisational, and governmental monitoring systems to enable tracking of sector progress in inclusiveness. However, these are relatively limited, project-level monitoring is often not scaled, and the heterogeneity in challenges and inclusion presents challenges for cost-effective, disaggregated data collection. Country monitoring systems are often geared towards tracking overall progress, not always configured to track or analyse metrics such as slippage among different groups or the impact of different challenges on sustainability. A lack of a clear, commonly agreed definitions of the challenges or of 'potentially disadvantaged' groups hinders progress in monitoring. In contrast, numerous interviewees remarked that there is ***'a lot of data out there that we are not making full use of'***, particularly in data beyond the WASH system boundaries and in humanitarian organisations;

- Guidance and documented examples: There is considerable variability in the level of documentation and guidance in the sector, both between the five categories of challenges, and within them. There is a considerable amount of guidance on 'universal markers' such as gender, disability, and age (although not necessarily implemented), yet there is considerably less information on issues such as:

  - **Poverty and social marginalisation:** Particularly regarding the design and (affordable) evaluation of subsidies for rural sanitation; examples and guidance on subsidy mechanisms beyond Asia; means of identification and ongoing monitoring of poverty incidence to inform such mechanisms; ways to support those deliberately marginalised.

- **Entrenched attitudes and social beliefs:** How to overcome a reluctance of communities to use toilets, where existing defecation practices are directly linked to people's livelihoods, or where people believe that open defecation is more convenient or provides a better user experience in their geographical context.

- **Tough physical environments:** How to address commonly experienced terrain issues at scale, and the wider support mechanisms, service delivery models, and systems strengthening that may be needed to support this scaling process. Also, how to better address resilience to natural hazards beyond just through 'heavy' infrastructural designs, and guidance for areas experiencing pronounced environmental and climatic change.

- **Livelihoods and lifestyles:** This category has a major gap in documentation, in terms of strategies and approaches that have been researched and demonstrated to be effective in such contexts, and, again, the wider systemic factors needed to support this. This relates particularly to effective sanitation approaches for pastoralist contexts, for seasonal fishing communities, and for artisanal mining settlements, including contexts with relatively socially incohesive communities.

- **Fragile contexts:** Especially on out-of-camp approaches for displaced persons; on adaptations and approaches for inclusive rural sanitation in fragile contexts, and in the connectedness of approaches between humanitarian responses and protracted crises/ recovery phases

- **Rights- and systems-based approaches:** Although they are slowly emerging, we need practical examples of applying systems- and rights-based approaches to overcome challenges and ensure inclusivity at scale, and on how to link systems- and rights-based approaches together.

- Designing targeted programmes: There is limited analysis on different strategies and approaches for targeting challenges that affect the majority of the target population versus those that impact a minority or very small number of those targeted. The sector needs to think more innovatively around the service delivery models, implementation approaches, and responsibilities for addressing different challenges based on their scale within target communities and countries. We need more analysis to better understand when a challenge is best tackled through a large-scale intervention using government delivery mechanisms, versus when a smaller bespoke invention using more tailored delivery mechanisms is required to reach a specific group or address a certain challenge.

- Subsidies: There are still considerable knowledge gaps around how best to support potentially disadvantaged households through subsidies. It is clear such mechanisms need to be evidence-based, transparent, and cost-effective. Research is ongoing on this, and learnings must continue to be periodically consolidated and discussed in the wider sector.

- Challenges in programming: Identification and targeting of potentially disadvantaged groups and ensuring their inclusion throughout an intervention cycle is a cost and time-intensive process, and requires strong facilitation skills and personal commitment. This presents a challenge for undertaking it at scale. There are also a range of other challenges in applying inclusive approaches for rural sanitation programming and focussing on the 'last mile' communities, such as the wider organisational (dis)incentives to do so, and constraints such as budget, time, interpretations of 'value for money', and simplistic 'cost per capita' benchmarking. Restrictive or poorly defined sector strategies also present a common challenge.

- Right-based approaches: These are increasingly understood within the sector, but more importantly their practical application in programming approaches and service delivery mechanism are being seen more widely. However, considerable effort is still needed to increase

local practitioners' knowledge in this area and equip them with tools to apply this knowledge in their day to day roles.

- Upscaling and systems approaches: There are a number of notable examples of upscaling rural sanitation interventions and progress, yet examples of upscaling *inclusive* progress and overcoming challenges at scale are more limited (with most examples being in Asia). The concept of 'local solutions to local problems' may somewhat hinder progress at scale, although there are encouraging examples of systematising local learning processes, to enable the space for such local adaptation to occur at scale. Where inclusive scale has been achieved, it is often related to being fully integrated within nationwide, government led, adaptive and politically championed campaigns. Guidance and documentation regarding systems approaches to rural sanitation are relatively limited. However, this report provides practical and theoretical examples of efforts to strengthen the 'building blocks' of WASH systems to allow more inclusive sanitation service delivery, which is effective in overcoming challenges in the various challenge categories.

- Sector learning: There are certainly opportunities to strengthen gaps in sector learning, particularly at the national and sub-national levels. There is a significant amount of local adaption to context-specific challenges, which could provide useful insight to others but is still not being well documented and systematically disseminated. There is also a need to evolve the common processes and products of learning and sector guidance, to ensure such efforts translate into action on the ground. The more effective use of technologies (such as social media) and more investment in curation of knowledge from these platforms could support the exchange of knowledge at the local level. This needs a shift to adaptive management, in which emerging learning from implementation is used to refocus strategies and modify approaches. This will provide the flexibility and agility that programmes need to work effectively at scale and still address the multiple challenges communities and households face in accessing sanitation as they arise.

As mentioned earlier in this report, this piece of work is the first part of a two-part process to improve the sector's implementation of rural sanitation interventions in challenging contexts. While Phase 1 aimed to sets out a broad overview of the issues emerging from the sector's documentation of the challenges and approaches used to address these challenges, Phase 2 aims to look at specific issues and interventions in more detail. The recommendations in the final section of this report set out a range of activities that could be taken up under Phase 2. These activities range from addressing sector knowledge gaps and building capacity in relation to specific challenges, to higher level sectoral activities to support the strengthening of structures and systems to tackle challenges across the board.

5.2. Recommendations

This study has identified a range of opportunities for strengthening the foundations of the sector to make inclusive progress and to overcome the various challenges, at scale. These are presented in the table below. There are opportunities at many levels, from the skills of community facilitators, up to global level learning, monitoring, and advocacy.

OVERVIEW	DETAIL
1. Contribute to addressing gaps in knowledge and evidence	d. Development partners should undertake a process of wider information collection and dialogue on experiences and examples of addressing some of the issues identified as key knowledge gaps in this report,[151] and document and disseminate these findings widely and in appropriate formats. As mentioned in the conclusions, specific areas for additional documentation and guidance would include: – The design of targeted/smart subsidy approaches to reach the poorest households, and the wider systems strengthening required for these to work cost effectively, at scale. – Effective means to overcome persistent social norms in contexts where geographical or livelihoods factors mean people are happy with their current defecation practices. – Effective means to address common terrain challenges at scale, and moving beyond infrastructural solutions to include adapted technologies within a wider model of service delivery. – Effective, evidence-based approaches or adaptations for specific livelihood groups, such as fishing and mining communities, and for pastoralist settings. – Appropriate approaches for supporting sanitation for out-of-camp displaced persons, and adaptations for conventional approaches to rural sanitation to maximise their effectiveness for chronically fragile settings. – Analysis of the interconnectedness of challenges, including across livelihood groups and between humanitarian and development contexts. – The different approaches needed to address challenges that impact a majority or minority of those targeted. – Efforts to institutionalise and scale up approaches to a range of challenge faced by large programmes. e. Rights-based technical experts should work with governments and agencies to strongly articulate how rights-based and systems-based approaches can be applied in rural sanitation in sector strategies, policies, and guidance to achieve inclusive progress at scale. Also WASH systems experts should how rights-based approaches and market-based approaches essentially are all systems approaches (to reduce potential for a siloed approach to these issues).

151 And also input the findings of this report into, and consider the outcomes of, the upcoming global WASH Humanitarian Gap Analysis.

OVERVIEW	DETAIL
2. Strengthen learning and knowledge management processes	a. Development partners should work with government counterparts to strengthen processes for learning and review at the country level. This should include: – Means to ensure horizontal and vertical learning, through strengthening sector knowledge platforms (such as Joint Sector Review processes) and increasing focus on identified contextual challenges. – Strengthening processes to make sure such learning is documented, which may include the more innovative use of technology (including social media) to capture and share information; and investments in resources to ensure knowledge is captured and disseminated locally and in a timely manner. b. Governments, development partners, and academics should build capacity among programme managers and policy makers to create an environment of adaptive management in programmes and in policy dialogue, so emerging knowledge results in course correction and innovation. c. Development partners and regional governmental bodies should strengthen intra- and inter-country processes for learning and dialogue (such as knowledge exchanges and mentoring) on areas of key knowledge gaps and emerging learning, such as mechanisms for smart subsidies, and on topics such as approaches in fragile contexts and for livelihoods issues. d. Development and academic partners should expand learning and documentation across regions and language divides – through investment in translation and through multicounty learning studies – and across humanitarian and development siloes. e. Government, development partners, and academics should consider learnings on how to best provide sector guidance and knowledge to those at different levels.
3. Increase access to information to inform targeting and adaptation of approaches	a. Governments, large-scale implementation organisations, and academia should identify partnerships among themselves to review opportunities to use a broader range of datasets and enable wider data analysis (e.g. beyond the WASH sector and humanitarian datasets). This should include: – Influencing and/or investing in existing global surveys to add indicators and data points that provide missing data to inform about challenges and/or their relationship with each other. – Creating consistent indicators, templates, and processes to support sector programmes to gather data in a more harmonised manner and undertaking analysis that can be more widely adopted and regularly updated. b. These partnerships should further collaborate on and enrich sector efforts to map and quantify potential 'challenging contexts' and to aggregate relevant sector information for actors to make informed, evidence-based decisions on programme design on a country-by-country basis. c. Development partners, private sector bodies, and government agencies tasked with business and enterprise development should expand the reach of sanitation market and supply chain assessments to: – More consistently capture data on customers based on identified local challenges. – Gather information on suppliers and service providers' ability and interest to respond to challenges faced by customers, including through adapting technology adaptation or innovating on service delivery. – Cover areas such as fragile and humanitarian contexts.

OVERVIEW	DETAIL
4. Harmonise definitions and clarify priorities	a. Leading sector actors (potentially organised around a specific taskforce/committee) should globally and/or at country level: – Agree on the 'top priority' issues to be tracked and used for analysis., – Make clear definitions of these, seek consensus across the sector, and potentially align with other sectors (e.g. social protection). – Develop indicators and processes to support the consistent capture of survey and monitoring data. b. National governments and SDG-related taskforces should consider, at country and global level, whether SDG targets of universal access to basic sanitation services are relevant in 100 per cent of contexts. For instance, would pragmatic global and country targets, driven by public health risk, be better than blanket targets of 100 per cent access?
5. Develop the awareness and capacity of sector actors at various levels	a. Development and academic partners should socialise the issue of subsidies at different levels in the sector (recognising strong organisational perspectives and how it has been a taboo in many contexts), but in a way that balances messaging around the potential need, and around risks if it is poorly defined or executed. b. Development and academic partners should also build a body of evidence, through research and case studies, on how different support mechanisms can address challenges, and where restrictions on support mechanisms hamper progress to addressing challenges. c. Development partners, academia, and training institutions should strengthen the capacity of actors at various levels, especially on issues such as: awareness of inclusion issues; understanding social protection/welfare and support mechanisms; increasing the awareness of humanitarian actors on adapted and 'connected' approaches to rural sanitation in fragile contexts; awareness of specific challenges where applicable (e.g. pastoral communities, etc).
6. Evolve and test service delivery models and products that are inclusive and can address challenges at scale	a. Development partners should consider developing a clearer framework to guide programme design and service delivery models based on the scale of the investment and the challenge (i.e. percentage of population affected by the issue), recognising that at-scale programmes often don't have the capacity or adaptability to effectively address multiple challenges faced by small numbers of people. b. Development partners should develop and test wider service delivery models that incentivise progress on inclusive and area-wide sanitation gains (learning from examples such as iDE's PPP model in Cambodia, and other examples that align stakeholder incentives for inclusive progress such as the CHOBA programme). c. Development partners should work with private sector firms to facilitate product development (at scale) that can be widely applicable to tough physical environments (e.g. not just local fabrications). This would include working with private sector actors on product innovation and on strengthening supply chains.; d. (See also point 3.c)

OVERVIEW	DETAIL
7. Support countries to develop evidence-based strategies	a. Development and academic partners should support national and local governments to undertake formative research asking 'who', 'what', and how' in terms of reaching the last mile/hardest to reach, and to quantify and map these areas/populations. b. From this evidence base, national and local governments should develop strategies – with associated targets, means of review and adaptation, and progress monitoring – to reach these groups and challenging contexts. c. Development and academic partners should engage in, influence, and especially, once completed, enrich and help apply, national and regional policy and strategy documents – such as the AMCOW sanitation policy guidance documents – with a focus on *inclusive* rural sanitation.
8. Strengthen country monitoring systems and local analytical capacity	a. National governments, with the support of development partners, should strengthen country monitoring systems to: – Look at disaggregated monitoring data on challenges and the relationship between challenges and coverage. – Identify communities and groups where there is slow uptake of sanitation, and slippage. – Strengthen the response mechanisms on 'fault finding' and barrier analysis based on such monitoring data. b. Development partners should strengthen the capacity of local and central government to create a demand for, analyse, and use the data on challenges faced by target communities to inform decision making. This would be for decision making around design and implementation of interventions, as well as the approaches taken to support the sustainability of behaviour change and service delivery. c. Development partners should also work with the designers and implementors of national and international surveys to align definitions and processes to enable more detailed information on challenges and their relationship with household sanitation. d. (See also point 4.a. and 4.b).
9. Advocate for commitment to address the challenges /ensure inclusion	a. Development and academic partners should support the curation of evidence-based business cases for governments and donors to support and prioritise lagging areas, showcasing how this presents good value for money and is critical to sustainability. b. Development partners and training institutions should strengthen the capacity of local CSOs (and where applicable the local press) to track/analyse and report on progress in equity and inclusion, and to advocate for a focus on challenging contexts and neglected issues – including by focusing on the incentive structures that drive actors to target or ignore challenging contexts. c. National and local governments should be supported to prioritise challenges as part of sector policies and strategies, and include monitoring and learning on these topics as a fixed agenda item in Joint Sector Reviews.
10. Break down the silos, and increase cross-sectoral dialogue	a. Development and academic partners should strengthen the WASH sector's knowledge of, and ability to engage with, social protection and other relevant sub-sectors, who are also providing services to households and communities facing the same challenges. This is applicable in both humanitarian and development contexts. b. Those with dual (humanitarian and development) mandates should encourage dialogue between humanitarian and development actors, to develop approaches on the issue of rural sanitation in fragile contexts, and to develop more connected humanitarian sanitation interventions.

References

- Abaliwano, J. and Kiyimba, J. (2011) Understanding the Water, Sanitation and Hygiene Challenges on the Islands of Lake Victoria. https://washmatters.wateraid.org/publications/wash-watch-uganda-volume-2
- ACF (2019) WaSH Safety Audit Tool – South Sudan
- Andres, L.A.; Thibert, M.; Lombana Cordoba, C.; Danilenko, A. V.; Joseph, G. and Borja-Vega, C. (2019) Doing More with Less: Smarter Subsidies for Water Supply and Sanitation, Washington, DC: World Bank
- Apanga, P.; Garn, J.; Sakas, Z. and Freeman, M. (2020) 'Assessing the impact and equity of an integrated rural sanitation approach: A longitudinal evaluation in 11 sub-Saharan Africa and Asian countries', International Journal of Environmental Research and Public Health 17: 1808, doi:10.3390/ijerph17051808/ www.mdpi.com/journal/ijerph
- Arickal, B. Rahman, M. and Lambert, K. (2014) 'Child rights based water, sanitation and hygiene in practice in Bangladesh, India and Nepal, in R.J. Shaw, N.V. Anh and T.H. Dang (eds), Sustainable Water and Sanitation Services for All in a Fast Changing World: Proceedings of the 37th WEDC International Conference, Hanoi, Vietnam, 15-19 September 2014, https://repository.lboro.ac.uk/articles/Child_rights_based_water_sanitation_and_hygiene_in_practice_in_Bangladesh_India_and_Nepal/9595994/1
- Axweso, F. (2011) Understanding Pastoralists and their Water, Sanitation and Hygiene Needs, www.ircwash.org/sites/default/files/pastoralismintzdiscussion.pdf
- Balfour, N.; Otieno, P.; Mutai, C. and Thomas, A. (2014) CLTS in Fragile and Insecure Contexts: Experience from Somalia and South Sudan, UNICEF WASH Field Note, https://sanitationlearninghub.org/resource/clts-in-fragile-and-insecure-contexts-experience-from-somalia-and-south-sudan/
- Bauby, A. and Flachenberg, F. (2014) 'Achieving sustainability: Linking CLTS with other approaches – an example of a thorough WASH intervention in South Eastern Chad', in R.J. Shaw, N.V. Anh and T.H. Dang (eds), Sustainable Water and Sanitation Services for All in a Fast Changing World: Proceedings of the 37th WEDC International Conference, Hanoi, Vietnam, 15-19 September 2014, https://repository.lboro.ac.uk/articles/Achieving_sustainability_linking_CLTS_with_other_approaches_-_an_example_of_a_thorough_WASH_intervention_in_South_Eastern_Chad/9596054
- Bevan, J. (2018) Sanitation for Refugees and Internally Displaced People (IDPs): East and Southern Africa Region, Sanitation and Hygiene Hunter-Gatherer Thematic Note, Brighton: IDS, https://sanitationlearninghub.org/resource/sanitation-for-refugees-and-internally-displaced-people-idps-east-and-southern-africa-region/
- Bicchieri, C. and Noah, T. (2017) 'Applying social norms theory in CATS Programming', Penn Social Norms Group (PennSoNG), 15, https://repository.upenn.edu/pennsong/15
- BMGF (2017) 'User Centred Design in sanitation', www.ucdinsanitation.com/
- Cameron, L.; Santos, T.; and Albert, J. (forthcoming 2020) Community-Led Total Sanitation, Financial Incentives and Sanitation Herd Effects: A Cluster Randomised Trial, under submission

- Carrard, N.; Neumeyer, H.; Pati, B.K.; Siddique, S.; Choden, T.; Abraham, T.; Gosling, L.; Roaf, V.; Alvarez-Sala Torreano, J.; Bruhn, S. (2020) 'Designing human rights for duty bearers: Making the human rights to water and sanitation part of everyday practice at the local government level', Water, 12, 378
- Cavill, S., Roose, S., Stephen, S. and Wilbur, J. (2016) 'Putting the hardest to reach at the health of the Sustainable Development Goals', Chapter 15, in P. Bongartz, N. Vernon and J. Fox (eds) Sustainable Sanitation for All, Practical Action Publishing, https://sanitationlearninghub.org/resource/putting-the-hardest-to-reach-at-the-heart-of-the-sustainable-development-goals/
- Cavill, S. with Chambers, R. and Vernon, N. (2015) 'Sustainability and CLTS: Taking stock', Frontiers of CLTS: Innovations and Insights 4, Brighton: IDS, https://sanitationlearninghub.org/resource/sustainability-and-clts-taking-stock/
- Chambers, R. (1983) Rural Development: Putting the Last First, London: Routledge
- Chambers, R. and Myers, J. (2016) 'Norms, knowledge and usage', Frontiers of CLTS: Innovations and Insights, Issue 7, Brighton: IDS, https://sanitationlearninghub.org/resource/norms-knowledge-and-usage/
- Chambers, R., Mishra, V. and Myers, J. (2018) Convening and Facilitating Rapid Action Learning Workshops for the Swachh Bharat Mission-Gramin (SBM-G), Brighton: IDS and WSSCC, https://sanitationlearninghub.org/resource/convening-and-facilitating-rapid-action-learning-workshops-for-the-swachh-bharat-mission-gramin-sbm-g/
- CLTS Knowledge Hub (2012) Taking Community Led Total Sanitation to Scale with Quality Emerging Issues and Scaling Up CLTS into Different Contexts, Brighton: IDS, https://sanitationlearninghub.org/resource/842/
- Cole, B. (2013) 'Participatory design development for sanitation', Frontiers of CLTS: Innovations and Insights, Issue 01, Brighton: IDS, https://sanitationlearninghub.org/resource/participatory-design-development-for-sanitation/
- Cummings, M., Wamala, J.F., Eyura, M., Malimbo, M., Omeke, M.E., Mayer, D.and Lukwago, L. (2011) 'A cholera outbreak among semi-nomadic pastoralists in North Eastern Uganda: Epidemiology and interventions', Epidemiology & Infection 140.8: 1376 – 1385, https://doi.org/10.1017/S0950268811001956
- Devine, J. (2009) Introducing SaniFOAM: A Framework to Analyze Sanitation Behaviours to Design Effective Sanitation Programs, Washington DC: World Bank, https://www.wsp.org/sites/wsp/files/publications/GSP_sanifoam.pdf
- Elrha (2020) Largest Humanitarian WASH Gap Analysis Launched: Identifying Critical Gaps to Improve Support to People Affected by Crisis, https://reliefweb.int/report/world/largest-humanitarian-wash-gap-analysis-launched-identifying-critical-gaps-improve
- Fostvedt-Mills, C.; Gebrekidan, B.; Msuya, J.; Mwabulambo, S.; Sigareti, A. E. and Sironka, D. K. (2018) Pastoralists: East and Southern Africa Region CLTS Knowledge Hub Hunter-Gatherer Thematic Note, Brighton: IDS, https://sanitationlearninghub.org/resource/pastoralists-east-and-southern-africa-region/
- FSN Network (n.d.) Resource Library, https://www.fsnnetwork.org/resource-library?f%5B0%5D=field_fsn_network_category%3A19
- Gensch, R. and Tillett, W. (2019) Strengthening Sanitation and Hygiene in the WASH Systems Conceptual Framework, Discussion Paper, Welthungerhilfe and Sustainable Services Initiative, https://washagendaforchange.org/wp-content/uploads/2020/04/ssi_sh-discussion-paper_final_191014.pdf

- Gitau, M.J. and Flachenberg, F. (2016) 'Community-Led Total Sanitation (CLTS) in Fragile Contexts: The Somalia Case', in Shaw, R.J. (ed). Ensuring Availability and Sustainable Management of Water and Sanitation For All: Proceedings of the 39th WEDC International Conference, Kumasi, Ghana, 11–15 July, Briefing Paper 2460, https://repository.lboro.ac.uk/articles/Community-led_total_sanitation_CLTS_in_fragile_contexts_the_Somalia_case/9594653
- Global Partnership on Results Based Approaches (GPRBA) (2018) Bangladesh: Sanitation Microfinance for Rural Households, https://www.gprba.org/knowledge/publications/bangladesh-sanitation-microfinance-rural-households
- GPRBA (2015) Scaling Up Blended Financing of Water and Sanitation Investments in Kenya, https://www.gprba.org/knowledge/publications/scaling-blended-financing-water-and-sanitation-investments-kenya
- GPRBA (2013) Senegal On-site Sanitation Project, https://www.gprba.org/knowledge/publications/senegal-site-sanitation-project
- GPRBA (2009) Output-Based Aid in Honduras: An OBA Facility for the Water and Sanitation Sector, OBApproaches, 29, Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/10971
- Government of Bangladesh (2011) National Strategy for Water and Sanitation in Hard to Reach Areas of Bangladesh, https://itn.buet.ac.bd/publications/sector-documents/documents/htreng.pdf
- Government of India (2017) Guidelines for Swachh Bharat Mission (Gramin), http://swachhbharatmission.gov.in/sbmcms/writereaddata/images/pdf/Guidelines/Complete-set-guidelines.pdf
- Government of Nepal (2011) Sanitation and Hygiene Master Plan, http://washinschoolsmapping.com/wengine/wp-content/uploads/2015/10/Nepal-Government-Sanitation-and-Hygiene-Master-Plan.pdf
- Greaves, F. (2016) 'CLTS in post-emergency and fragile settings', Frontiers of CLTS: Innovations and Insights, Issue 09, Brighton: IDS, https://sanitationlearninghub.org/resource/clts-in-post-emergency-and-fragile-states-settings/
- GWC (forthcoming) Evidence Building for Cash and Markets for WASH in Emergencies: Report 3/5, MBP for Sanitation Practices, unpublished draft, July 2020
- GWC (2019) Guidance on Market Based Programming for Humanitarian WASH Practitioners, https://wrc.washcluster.net/sites/default/files/2019-09/SC_WASH%20Market%20Based%20Programming_2019.pdf
- Halcrow, G. Rautavuoma, P. and Choden, T. (2014) Tailoring Pro-Poor Support Strategies with Local Governments to Improve Sanitation Services, Practice Paper, Amsterdam: The Netherlands, https://www.ircwash.org/sites/default/files/wash_pro_poor_support_snv.pdf
- Hazard, B., Adongo, C., Wario, A. and Ledant, M. (2012) Comprehensive Study of Pastoral Livelihoods, WASH and Natural Resource Management in Northern Marsabit, IFRA, Nairobi, Kenya; IIAC, https://halshs.archives-ouvertes.fr/halshs-01790835/document
- House, S. (2020) 'Learning in the sanitation and hygiene sector' SLH Learning Paper 10, The Sanitation Learning Hub, Brighton: IDS, https://sanitationlearninghub.org/resource/learning-in-the-sanitation-and-hygiene-sector/

- House, S. (2019) Strengthening the Humanity in Humanitarian Action in the Work of the WASH Sector in the Rohingya Response: Gender, GBV and Inclusion Audit of the Work of the WASH Sector and Capacity Development Assessment, UNICEF and the WASH Sector, Cox's Bazar, https://www.humanitarianlibrary.org/resource/strengthening-humanity-humanitarianaction-work-wash-sector-rohingya-response-gender-gbv
- House, S., Ferron, S. and Cavill, S. (2017) Scoping and Diagnosis of the Global Sanitation Fund's Approach to Equality and Non-Discrimination (EQND), Geneva: Water Supply and Sanitation Collaborative Council, http://wsscc.org/wp-content/uploads/2017/08/GSF-EQND-Study-EN.pdf
- House, S. Ferron, S, Sommer, M, and Cavill, S. (2014) Violence, Gender and WASH: A Practitioner's Toolkit - Making Water, Sanitation and Hygiene Safer through Improved Programming and Services, London: WaterAid and SHARE (co-published by 27 organisations), http://violence-wash.lboro.ac.uk/
- House, S.; Cavill, S. and Ferron, S. (2017) 'Equality and non-discrimination (EQND) in sanitation programmes at scale', Part 1 of 2, Frontiers of CLTS: Innovations and Insights, Issue 10, Brighton: IDS, https://sanitationlearninghub.org/resource/equality-and-non-discrimination-eqnd-in-sanitation-programmes-at-scale-part-1-of-2/
- iDE Bangladesh (2016) Market Segmentation: A More Effective Approach to Balance Subsidies and Private Sector Engagement, iDE Insights, Dhaka: iDE, https://s3.amazonaws.com/www.ideglobal.org/files/public/iDE-TR_BD_Segmentation.pdf?mtime=20161209181508
- iDE Cambodia (2019) Sanitation in Complex Operational Environments, Final report, Phnom Penh: iDE, https://fr.fsnnetwork.org/sites/default/files/SCORE%20-%20Final%20Report.pdf
- iDE Cambodia (2019b) Reaching Open Defecation Free Status with Grassroots Partnerships, Tactic Report, Phnom Penh: iDE, https://s3.amazonaws.com/www.ideglobal.org/files/public/iDE-TR_KH_WASH_PPP_2019-08-27.pdf?mtime=20190905230746
- iDE Cambodia (2019c) Reaching the Poorest with Sanitation through Targeted Subsides, Tactic Report, Phnom Penh: iDE, https://s3.amazonaws.com/www.ideglobal.org/files/public/iDE-TR_KH_WASH_Targeted_Subsidies.pdf?mtime=20190916165119
- IDS (2018) 'West and Central Africa regional rural sanitation workshop' CLTS Knowledge Hub Learning Brief 5, Brighton: IDS, https://sanitationlearninghub.org/resource/west-and-central-africa-regional-rural-sanitation-workshop/
- IDS (2018b) 'East and Southern Africa regional rural sanitation workshop' CLTS Knowledge Hub Learning Brief 4, Brighton: IDS, https://sanitationlearninghub.org/resource/east-and-southern-africa-regional-rural-sanitation-workshop/
- IRC WASH (n.d.) Resources, https://www.ircwash.org/resources?f%5B0%5D=field_tags%3A4
- IFRC (n.d.) Integrated CLTS and PHAST in Kenya, Nairobi: Kenya Red Cross Society, https://ifrcwatsanmissionassistant.files.wordpress.com/2018/10/ifrc_clts-phast-case-study_kenya_en.pdf
- ISF-UTS and SNV (2018) Sanitation for All: A Comparative Study of Approaches to Leaving No One Behind Across Five Countries, The Hague: SNV https://sanitationlearninghub.org/resource/sanitation-for-all-a-comparative-study-of-approaches-to-leaving-no-one-behind-across-five-countries/
- JMP (2019) Progress on Household Drinking Water, Sanitation and Hygiene 2000–—2017: Special Focus on Inequalities, New York: UNICEF and WHO, https://www.washdata.org/sites/default/files/documents/reports/2019-07/jmp-2019-wash-households.pdf

- Jones, H. (2010) 'Inclusive / universal design for water supply, sanitation and hygiene (WASH) services: An annotated bibliography', DEW Point Report A0332, London: DFID, https://wedc-knowledge.lboro.ac.uk/resources/pubs/DEWPoint_enquiry_A0332_-_Inclusive_design_for_WASH_services.pdf
- Jones, H. and Wilbur, J. (2014) Compendium of Accessible WASH Technologies, WEDC, WaterAid and SHARE, https://sanitationlearninghub.org/resource/compendium-of-accessible-wash-technologies/
- Kar, K. and Chambers, R. (2008) Handbook on Community Led Total Sanitation, London: Plan and IDS, https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/872/rc314.pdf?sequence=1&isAllowed=y
- Karanja, P. and Gathu, C. (2018) 'Implementing Community Led Total Sanitation in Turkana County', in R. Shaw (ed) Transformation Towards Sustainable and Resilient WASH Services: Proceedings of the 41st WEDC International Conference, Nakuru, Kenya, 9-13 July 2018, Paper 2939, https:/repository.lboro.ac.uk/articles/Implementing_community_led_total_sanitation_in_Turkana_County/9592754/1
- Keatman, T., Gosling, L., Carrard, N., Neumeyer, H., Murta, J., Roaf, V. and Adam, A. (2016) Achieving Universal and Equitable Access to Water, Sanitation and Hygiene (WASH) For All – Practitioner Perspectives and Perceptions, https://rwsnforum7.files.wordpress.com/2016/11/full_paper_0191_submitter_0267_keatman_tracey.pdf
- Kirimi, M. and UNICEF (forthcoming) Community-Led Total Sanitation (CLTS) in Pastoral–Nomadic Contexts – What to Do Differently, UNICEF Field Note
- Kittle, B. (2017) A Practical Guide to Conducting a Barrier Analysis, https://www.fsnnetwork.org/practical-guide-conducting-barrier-analysis
- Kohlitz, J.; Carrard, N. and Willetts, J. (2019) 'Support mechanisms to strengthen equality and non-discrimination (eqnd) in rural sanitation (Part 2 of 2)', Frontiers of CLTS: Innovations and Insights, Issue 13, Brighton: IDS, https://sanitationlearninghub.org/resource/support-mechanisms-to-strengthen-equality-and-non-discrimination-eqnd-in-rural-sanitation-part-2-of-2/
- Kohlitz, J. and Iyer, R. (forthcoming) 'Rural sanitation and climate change: Putting ideas into practice', Frontiers of Sanitation: Innovations and Insights, Issue 17, Brighton: IDS
- Kyangwa, I. and Odongkara, K. (2005) Sanitation, Fish Handling, and Artisanal Fish Processing within Fishing Communities, http://aquaticcommons.org/17223/1/Report%25206%2520Sanitation%2C%2520fish%2520handling%2520and%2520processing.pdf
- Lestikow, G. (2017) Leveraging Targeted Subsidies to Increate Sanitation Coverage. Evidence from a Randomised Control Trial in Cambodia, iDE Policy Brief, https://s3.amazonaws.com/www.ideglobal.org/files/public/iDE-Smart-Subsidy-Policy-Brief.pdf?mtime=20170814175735
- LSHTM (2017) Behaviour Centred Design: A Practitioners Manual. Version 1, https://www.lshtm.ac.uk/sites/default/files/2017-03/BCD%20Manual.pdf
- Mackie, G., Moneti, F., Shakya, H. and Denny, E. (2015) What are Social Norms? How are they Measured? UNICEF / University of California, San Diego, Center on Global Justice http://globalresearchandadvocacygroup.org/wp-content/uploads/2018/06/What-are-Social-Norms.pdf
- Mason, N. and Mosello, B. (2016) Making Humanitarian and Development WASH Work Better Together, ODI Briefing Paper, London: ODI, www.odi.org/publications/10532-making-humanitarian-and-development-wash-work-better-together

- Mebrate, E. Kebede, S., Adera, S., Getachew, F., Achenbach, M. and Chea, A. (n.d.) Cracking or Disrupting? Unlocking the power of SBB using Human Centred Design (HCD), Ethiopia, PSI, https://www.psi.org/wp-content/uploads/2020/02/ASBC_Poster_Ethiopia.pdf
- Mensah, J. (2019) Implications of Environmental Sanitation Management for Sustainable Livelihoods in the Catchment Area of Benya Lagoon in Ghana, www.tandfonline.com/doi/full/10.1080/1943815X.2018.1554591
- Metrics for Management (n.d.) Equity tool: What is the Equity Tool? www.equitytool.org/the-equity-tool-2/
- Ministry of Rural Development - Cambodia (2017) National Guidelines on WASH for Persons with Disabilities and Older People
- Ministry of Sanitation and Water Resources (Ghana) (2018) Guidelines for Targeting the Poor and Vulnerable for Basic Sanitation Services in Ghana
- Mustafa, A. Y. and Baetings, E. (2019) Replication Guideline to SEHATI Programme Approach (Sustainable Sanitation and Hygiene for Indonesia), The Hague: IRC and Simavi, https://www.ircwash.org/resources/replication-guideline-sehati-programme-approach
- Myers, J. (ed.) (2019) 'Rural sanitation in Africa: Challenges, good practices and ways forward', Frontiers of CLTS: Innovations and Insights Issue 12, Brighton: IDS, https://sanitationlearninghub.org/resource/rural-sanitation-in-africa-challenges-good-practices-and-ways-forward/
- Myers, J. (2015) 'Reflections on a field visit to GSF projects in Senegal', blog, Brighton: CLTS Knowledge Hub, https://www.communityledtotalsanitation.org/blog/reflections-field-visit-gsf-projects-senegal
- Myers, J. and Gnilo, M. (eds.) (2017) Supporting the Poorest and Most Vulnerable in CLTS Programmes. CLTS Knowledge Hub Learning Paper, Brighton: IDS, https://sanitationlearninghub.org/resource/supporting-the-poorest-and-most-vulnerable-in-clts-programmes/
- Nyanza, E. Jahanpour, O., Hatfield, J., van der Meer, F. Allen-Scott, L., Orsel, K.and Bastien, S. (2018) Access and Utilization of Water and Sanitation Facilities and their Determinants among Pastoralists in the Rural Areas of Northern Tanzania, www.researchgate.net/publication/327069288_Access_and_utilization_of_water_and_sanitation_facilities_and_their_determinants_among_pastoralists_in_the_rural_areas_of_northern_Tanzania
- ODI and WaterAid (2017) How to Reduce Inequalities in Access to WASH, Rural Water and Sanitation in Nepal, www.odi.org/sites/odi.org.uk/files/resource-documents/11607.pdf
- O'Reilly, K.; Dhanju, R. and Goel, A. (2017) 'Exploring 'the remote' and 'the rural': Open defecation and latrine use in Uttarakhand, India', World Development, 93: 193-205, https://doi.org/10.1016/j.worlddev.2016.12.022
- Otieno, P. (2012) 'Challenges and hope for CLTS in South Sudan', blog, www.communityledtotalsanitation.org/blog/challenges-and-hope-clts-south-sudan
- Oti, A. (2012) Reaching the Poor: Creating Affordability within Sanitation Markets through Subsidies, Thesis, New York: Macaulay Honors College
- Oxfam (2020) Sani Tweaks: Minimum Requirements in Sanitation Programming for all PHEs and PHPs. A Checklist, https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620604/gd-sani-tweaks-checklist-sanitation-181218-en.pdf;jsessionid=9BAA8D40203497DA56955A5E317D3806?sequence=2

- Pandey, U. and Shahi, D. (2004) A Gender and Poverty Approach to Rural Water Supply, Hygiene and Sanitation Project, https://repository.lboro.ac.uk/articles/A_gender_and_poverty_approach_to_rural_water_supply_hygiene_and_sanitation_projects/9594932
- Perez, E. with Cardosi, J., Coombes, Y., Devine, J., Grossman, A., Kullmann, C., Kumar, C.A., Mukherjee, N., Prakash, M., Robiarto, A., Setiawan, D., Sing, U. and Wartono, D. (2012) What Does it Take to Scale Up Rural Sanitation? Washington DC: WSP, https://www.wsp.org/sites/wsp/files/publications/WSP-What-does-it-take-to-scale-up-rural-sanitation.pdf
- Plan International (n.d.) Dialogue Circle on Social Inclusion: Guidance Note, https://wedc-knowledge.lboro.ac.uk/resources/learning/EI_Dialogue_circle_on_social_inclusion_guidance_note.pdf
- Plan International (2014) Gender and WASH Monitoring Tool, https://sanitationlearninghub.org/resource/gender-and-wash-monitoring-tool/
- PPSSP (n.d.) Hope out of Conflict – How Sanitation Plays a Vital Role in Protecting Women and Children from Sexual Violence in DRC, https://violence-wash.lboro.ac.uk/vgw/Supporting-documents/VGW-2-Good-practice-Violence-Gender-and-WASH/PPSSP-Tearfund-briefing-WASH-protection-DRC.pdf
- Pullan, R.L., Freeman, M., Gething, P.W. and Brooker, S.J. (2014) 'Geographical Inequalities in use of improved drinking water supply and sanitation across sub-Saharan Africa: Mapping and spatial analysis of cross-sectional survey data', PLOS Medicine, https://doi.org/10.1371/journal.pmed.1001626
- Republic of South Africa (2016) National Sanitation Policy 2016, www.gov.za/sites/default/files/gcis_document/201706/national-sanitation-policy.pdf
- Richard, D. and Kiani, S. (2019) Rapid Review of Disability and Older Age Inclusion in Humanitarian WASH Interventions, www.globalwaters.org/resources/assets/elrha-rapid-review-inclusion-humanitarian-wash-interventions
- Robinson, A. and Gnilo, M. (2016) 'Beyond ODF: A Phased Approach to Rural Sanitation Development', in Bongartz, P., Vernon, N. and Fox, J. (eds), Sustainable Sanitation for All: Experiences, Challenges, and Innovations, Rugby, UK: Practical Action Publishing, doi: http://dx.doi.org/10.3362/9781780449272.009
- Sanitation Learning Hub (2020) Current Thinking, https://sanitationlearninghub.org/current-thinking/
- SHARE (n.d.) Resources, https://www.lshtm.ac.uk/research/centres-projects-groups/share
- WaterShed and Simavi (2018) Socially Inclusive WASH Programming: A Mapping Study, https://simavi.org/wp-content/uploads/2018/08/Social-inclusion-report-final-spreads.pdf
- Singeling, M. (2016) To ODF and Beyond: Sharing Experiences from the Pan African CLTS Programme, https://repository.lboro.ac.uk/articles/To_ODF_and_beyond_sharing_experiences_from_the_Pan_African_CLTS_programme/9594518
- Sharma, R. (2008) WatSan in Partnership with NGOs and Communities of Nepal, https://core.ac.uk/download/pdf/288362467.pdf
- SNV (2019) SSH4A Performance Monitoring Framework, Parts 1 & 2, The Hague: SNV, https://snv.org/cms/sites/default/files/explore/download/2019-1-impact-indicators-ssh4a-performance-monitoring-review.pdf and https://sanitationlearninghub.org/resource/ssh4a-performance-monitoring-framework-part-2-outcome-indicators/
- SuSanA (n.d.) Sanitation Library, www.susana.org/en/knowledge-hub/resources-and-publications/library?vbl_8%5B44%5D=44&test=

- Tearfund (2020) Developing a WASH Social and Behaviour Change Strategy (SBC), Guidance Note
- Tearfund (2018) Guidance on mainstreaming gender issues in WASH, Learning Note
- Tearfund (2012) Shit in Emergencies: Impact of CLTS in DR Congo, www.communityledtotalsanitation.org/resource/shit-emergencies-impact-clts-dr-congo
- Tillett, W.; Trevor, J.; Schilinger, J. and DeArmey, D. (2020) Applying WASH Systems Approaches in Fragile Contexts: A Discussion Paper, https://www.pseau.org/outils/ouvrages/aguaconsult_oxfam_uk_water_for_good_applying_wash_systems_approaches_in_fragile_contexts_a_discussion_paper_2020.pdf
- Toubkiss, J. and Bickel, S. (2016) Equity, Sustainability and Scalability in UNICEF WASH Programming: Evidence from UNICEF Evaluations 2007–2015, Evaluation Synthesis, New York: UNICEF, https://www.unicef.org/evaldatabase/files/Unicef_WinS_evaluation_synthesis_2007-2015_-_EO_12.10.17.pdf
- Trémolet, S.; Evans, B. and Schaub-Jones, D. (2010) 'Output-Based Aid for sustainable sanitation', OBA Working Paper Series, 10, Global Partnership on Output-Based Aid, World Bank: Washington DC
- Tsinda, A.; Chenoweth, J. and Abbott, P. (2018) Improving WASH in Informal Settlements of Kigali, Rwanda through Diverse Marketing Exchange Mechanisms, https://wedc-knowledge.lboro.ac.uk/resources/conference/41/Tsinda-2862.pdf
- UNC (2017) Review of Rural Sanitation Approaches, Final Report, commissioned by WaterAid, Plan International and UNICEF
- UNHCR (2019) Global Trends: Forced Displacement in 2019, www.unhcr.org/5ee200e37.pdf
- UNHCR (2017) WASH, Protection & Accountability Briefing Paper, http://wash.unhcr.org/download/wash-protection-and-accountability/
- UNHCR (2018) UNHCR WASH Manual. Practical Guidance for Refugee Settings, http://wash.unhcr.org/unhcr-wash-manual-for-refugee-settings/
- UNHCR (2016) Cash Based Interventions for WASH Programmes in Refugee Settings, UNHCR, https://www.unhcr.org/uk/protection/operations/59fc35bd7/cash-based-interventions-wash-programmes-refugee-settings.htmlUNHCR (n.d.) Cash for Latrines: Key Learning and Checklist, www.unhcr.org/protection/operations/5b476ba67/cash-for-latrines.html
- UNHCR and UNICEF (2020) Technical Guidance for WASH Staff. Ver. 1
- UNICEF (2019a) Water Under Fire, www.unicef.org/reports/water-under-fire-2019
- UNICEF (2019b) Cox's Bazar Community Action Sanitation Brochure
- UNICEF (2017) UNICEF Field Notes on Community Approaches to Total Sanitation. Learning from five Country Programmes, New York: UNICEF, https://www.unicef.org/wash/files/2017_UNICEF_CATS_Field_Notes_II.pdf
- UNICEF (2016) Strengthening the Enabling Environment for Water, Sanitation and Hygiene (WASH), Guidance Note, www.unicef.org/wash/files/WASH_guidance_note_draft_10_3_hr.pdf
- UNICEF (2015) Second Review of Community-Led Total Sanitation in the East Asia and Pacific Region, Regional Report, UNICEF East Asia and Pacific, https://www.unicef.org/eap/reports/2nd-regional-review-community-led-total-sanitation-east-asia-pacific-region

- UNICEF (2015b) Using Social Norms Theory to Strengthen CLTS in Southern Madagascar, UNICEF Field Note, https://sanitationlearninghub.org/resource/using-social-norms-theory-to-strengthen-clts-in-southern-madagascar/
- UNICEF (2014a) Sanitation Monitoring Toolkit, www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/UNICEF_SanitationMonitoring_Toolkit.pdf
- UNICEF (2014b) CLTS in Fragile and Insecure Contexts: Experience from Somalia and South Sudan, WASH Field Note, https://sanitationlearninghub.org/resource/clts-in-fragile-and-insecure-contexts-experience-from-somalia-and-south-sudan/
- UNICEF (2013) Community-Led Total Sanitation in East Asia and Pacific: Progress, Lessons and Directions, https://www.unicef.org/publications/index_74615.html
- UNICEF Ethiopia (2019) Community Led Total Sanitation and Hygiene in the Pastoralist Context, unpublished report
- UNICEF and UNHCR (2020) Blueprint for Joint Action, www.unicef.org/about/execboard/files/2020_SRS-Item_7-Oral_update_on_humanitarian_action-Background_paper-EN-2020.08.20.pdf
- University of Leeds (2020) Incontinence and WASH: Focussing on People in Humanitarian and Low- and Middle-Income Contexts, https://wash.leeds.ac.uk/incontinence-and-wash/
- USAID (2020) Technical Brief 2: Rural Sanitation, USAID Water & Development Technical Series, www.globalwaters.org/sites/default/files/usaid_rural_sanitation_tech_brief_2.pdf
- USAID (2019) CLA Case Analysis: Deep Dive. Zambia's Community Led Total Sanitation Program, https://www.globalwaters.org/sites/default/files/akros_zambia_clts_072019.pdf
- USAID (2018) An Examination of CLTS's Contributions toward Universal Sanitation, Washington, DC: USAID Water, Sanitation, and Hygiene Partnerships and Sustainability (WASHPaLS) Project, https://www.globalwaters.org/resources/assets/washpals/examination-cltss-contributions-toward-universal-sanitation
- WASHPaLS (2019) Study of Targeted Subsidies within ODF Communities in Ghana, Washington, DC: USAID Water, Sanitation, and Hygiene Partnerships and Sustainability (WASHPaLS) Project, https://www.globalwaters.org/resources/assets/washpals/study-targeted-subsidies-within-odf-communities-ghana
- WaterAid (2018) Understanding and Addressing Equality, Non-Discrimination and Inclusion in Water, Sanitation and Hygiene (WASH) Work, WaterAid Toolkit, https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/equality-non-discrimination-and-inclusion-in-wash-a-toolkit.pdf
- WaterAid (2017) Embedding and Integrating a Human Rights-Based Approach into WaterAid Programmes, WaterAid Guidelines, London: WaterAid, https://washmatters.wateraid.org/publications/embedding-and-integrating-a-human-rights-based-approach
- WaterAid (2017b) Gender Equality and Disability Inclusion within Water, Sanitation and Hygiene: Exploring Integrated Approaches to Addressing Inequality, WaterAid Australia, https://www.wateraid.org/au/sites/g/files/jkxoof231/files/2017-12/Gender%20equality%20and%20disability%20inclusion%20in%20WASH.pdf
- WaterAid (2017c) Practical Guidance to Address Gender Equality while Strengthening Water, Sanitation and Hygiene Systems, https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/practical-guidance-to-address-gender-equality-while-strengthening-water-sanitation-and-hygiene-systems.pdf

- WaterAid (2014) Undoing Inequity, research project, London: WaterAid, https://washmatters.wateraid.org/publications/undoing-inequity#:~:text='Undoing%20Inequity%3A%20programmes%20that%20deliver,Cheshire%20Disability%20and%20implementing%20NGOs
- WaterAid (2013) Mainstreaming Disability and Ageing in Water, Sanitation and Hygiene Programmes, London: WaterAid, https://wedc-knowledge.lboro.ac.uk/resources/learning/EI_WASH_ageing_disability_report.pdf
- WaterAid (n.d.(a)) WASH Matters, https://washmatters.wateraid.org/
- WaterAid (n.d.(b)) Inclusive WASH, Resource Library, www.inclusivewash.org.au/resource-library/
- WaterAid (n.d. (c)) La Nomadrine, une innovation de WaterAid Niger et de son partenaire ONG GAMA pour plus d'inclusion et un pas vers la fin de défécation à l'air libre dans les milieux nomades au Niger, https://knowledgepoint.org/upfiles/14968488768220913.pdf
- WaterAid, Plan International and UNICEF (2019) Guidance on Programming for Rural Sanitation, https://sanitationlearninghub.org/resource/guidance-on-programming-for-rural-sanitation/
- WaterAid, WSUP and UNICEF (2018) Female-Friendly Public and Community Toilets: A Guide for Planners and Decision Makers, www.wateraid.org/us/sites/g/files/jkxoof291/files/Female_friendly_toilet_guide.pdf
- Wapling, L. (2014) Undoing Inequity – Water, Sanitation and Hygiene Services that Deliver for All in Uganda and Zambia, Process Review, https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/Undoing%20inequity%20process%20review.pdf
- WEDC (2014) Pit Latrines for Special Circumstances, Guide 29, Loughborough University: WEDC, https://wedc-knowledge.lboro.ac.uk/resources/booklets/G029-Latrines-for-special-circumstances-online.pdf
- WEDC (n.d.) Equity and Inclusion in Water, Sanitation and Hygiene, https://wedc-knowledge.lboro.ac.uk/collections/equity-inclusion/general.html
- WEDC and WaterAid (n.d.) Facilitator Notes: Accessibility and Safety Audit of Water and Sanitation Facilities, https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/Accessibility%20and%20safety%20audit%20-%20facilitators%27%20guide.pdf
- WHH, Aguaconsult and GTO (2020) Strengthening WASH Systems: Tools for Practitioners, www.susana.org/en/knowledge-hub/resources-and-publications/library/details/3839?pgrid=1
- Whitley, L., Hutchings, P. Cooper, S., Parker, A.Kebede, A., Joseph, S., Butterworth, J., van Koppen, B. and Mulejaae, A. (2019) 'A framework for targeting water, sanitation and hygiene interventions in pastoralist populations in the Afar region of Ethiopia', International Journal of Hygiene and Environmental Health, 222.8: 1133-1144
- Wilbur, J. (2014) Undoing Inequity – WASH Programmes that Deliver for All in Uganda and Zambia, https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/undoing%20inequity%20wash%20programmes%20uganda%20zambia_0.pdf
- Wilbur, J. and Jones, H. (2014) 'Disability: Making CLTS fully inclusive', Frontiers of CLTS: Innovations and Insights Issue 3, Brighton: IDS, https://sanitationlearninghub.org/resource/disability-making-clts-fully-inclusive/

- Wilbur, J.; Norman, R. and Huggett, C. (2015) Reducing Inequalities in Water, Sanitation and Hygiene (WASH), A Synthesis of Experiences and Lessons Discussed in the RWSN Equality, Non-discrimination and Inclusion (ENDI) Group, www.wvi.org/sites/default/files/Reducing%20Inequalities%20in%20WASH.pdf
- WHO (2018) Guidelines on Sanitation and Health, Geneva: World Health Organization. Licence: CC BY-NC-SA 3.0 IGO, https://sanitationlearninghub.org/resource/guidelines-on-sanitation-and-health/
- Women for Water Partnership (2016) Fisher Women Lead Access to WASH in Uganda, blog, www.womenforwater.org/uganda-fisher-women-lead-access-to-water-and-sanitation.html#
- World Bank (2019) Water Supply, Sanitation and hygiene (WASH) Poverty Diagnostics Initiative, www.worldbank.org/en/topic/water/publication/wash-poverty-diagnostic#:~:text=These%20are%20the%20four%20key,states%20to%20middle%2Dincome%20countries.
- World Bank (2018) Scaling Up Rural Sanitation, www.wsp.org/global-initiatives/global-scaling-sanitation-project
- World Bank (2017) Self-Help Women's Groups in India Help Change Behaviour around Diets and Toilet Use to Improve Health, World Bank blog, https://blogs.worldbank.org/water/self-help-women-s-groups-india-help-change-behavior-around-diets-and-toilet-use-improve-health
- World Bank, Plan International, Water Supply and Sanitation Collaborative Council, SNV, WaterAid and UNICEF (2019) Delivering Rural Sanitation Programs at Scale, with Equity and Sustainability. Rising up to the SDG Ambition. A Call to Action, https://sanitationlearninghub.org/resource/delivering-rural-sanitation-programs-at-scale-with-equity-and-sustainability/
- WSSCC (2019) Equality and Non Discrimination Handbook for CLTS Facilitators: Guidelines for Practitioners, https://www.wsscc.org/media/resources/equality-and-non-discrimination-handbook-clts-facilitators
- WSSCC (2018) Guidance and Tips for Learning from People who May be Most Disadvantaged during the Programme Process, https://sanitationlearninghub.org/resource/guidance-and-tips-for-learning-from-people-who-may-be-most-disadvantaged-during-the-programme-process/

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SLH Learning Paper

Rural Sanitation Programming in Challenging Contexts: A desk based review

This report summarises the findings of a desk review on 'Rural Sanitation in Challenging Contexts'. It was researched and written by Will Tillett (Aguaconsult) and Oliver Jones (Bluechain Consulting), on behalf of the Sanitation Learning Hub (SLH), UNICEF and WaterAid. The study sought to identify the current approaches, experiences and existing guidance in the sector in reaching those at risk of being 'left behind' from rural sanitation initiatives. The research looked at five broad, interconnected themes of 'challenges', including: poverty and social marginalisation; tough physical environments; entrenched social norms; livelihoods and lifestyles; fragile contexts. Through a review of around 180 documented resources and key informant interviews with 44 sector experts, it documented examples of literature, guidance and experiences in efforts for overcoming these challenges, noting common trends, and importantly, key gaps. Numerous recommendations arose through the study, which SLH, UNICEF and WaterAid are discussing with wider sector actors as to how to take some forward.

the sanitation learning hub

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