ACKNOWLEDGEMENTS

This paper has been written by Will Tillett (Aguaconsult), with significant contributions from Joanna Trevor from Oxfam (Case studies, text boxes, interviews, lead-authoring Section 7); Juliane Schillinger, PhD candidate at University of Twente (support on literature review, overall editing, and co-authoring Section 8); and David DeArmey of Water for Good (authoring Section 2). This paper’s development was financed through Welthungerhilfe’s (WHH) Sustainable Services Initiative (SSI), which is generously supported by Viva con Agua. Many thanks to all the organisations that contributed case studies for this paper: Action Against Hunger – Bram Riems and Tom Heath; CARE – Kelly Alexander; Concern – Franck Flachenberg; the German Toilet Organization – Robert Gensch; Join For Water – Harald Van Der Hoek; Oxfam – Joana Trevor; UNHCR – Ryan Schweitzer; and WHH – Stephan Simon. Many of these organisations were also interviewed in the process of developing this paper and provided feedback. Thanks also to Bill Twyman (Aguaconsult), Evarest Ochola and Kyla Gregoire (CARE), Gian Melloni (Concern), Thilo Panzerbieter and Johannes Ruek (GTO), Jean-Christophe Barbiche (GWC), Jorge Alvarez-Sala (UNICEF) and Don Fejfar (UNC) who also reviewed draft versions of this paper. Thanks also to Water for Good’s Lauren Wright for the responsive support on the final layout, graphic design and edits of this paper. Lastly, thank you to to Ashlie Hartgraves for her time and patience in the formatting and design of this paper.

The suggested citation of this paper is: Tillett, W. Trevor, J, Schillinger, J & DeArmey, D (2020): Applying WASH systems approaches in fragile contexts: A discussion paper.

We welcome thoughts and feedback on this paper. Please send these to w.tillett@aguaconsult.co.uk.

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ACRONYMS

ACF Action Contre la Faim / Action Against Hunger  
CAR Central African Republic  
CARE Cooperative for Assistance and Relief Everywhere  
CERF Central Emergency Response Fund  
CLTS Community Led Total Sanitation  
CSO Civil Society Organisation  
DAC Development Assistance Committee  
DFID Department for International Development  
DRC Democratic Republic of Congo  
FSM Faecal Sludge Management  
GTO German Toilet Organization  
GWC Global WASH Cluster  
HDN Humanitarian – Development Nexus  
HRP Humanitarian Response Plan  
IASC Inter Agency Standing Committee  
IDP Internally Displaced Person  
INGO International NGO  
JSR Joint Sector Review  
KPI Key Performance Indicator  
LCCA Life Cycle Costs Analysis  
LIF Low-Income Fragile  
LIS Low-Income Stable  
LRRD Linking relief, rehabilitation and development  
NFI Non-Food Item  
NGO Non-Governmental Organisation  
OCHA Office for the Coordination of Humanitarian Affairs  
ODA Official Development Assistance  
ODI Overseas Development Institute  
OECD Organisation for Economic Cooperation and Development  
PAA Political Economy Analysis  
PPP Public Private Partnership  
SDF Sustainable Development Goals  
SSI Sustainable Services Initiative  
SWA Sanitation and Water for All  
WASH BAT WASH Bottleneck Analysis Tool  
WASH Water, Sanitation & Hygiene  
WFG Water for Good  
WHH Welthungerhilfe  
WSP Water & Sanitation Programme (World Bank)
SUMMARY

BACKGROUND AND PURPOSE
By 2030, 80% of the world’s poorest people will reside in ‘fragile’ states (UNICEF, 2019c), and many of such states are off track to meet the WASH SDGs (Sadoff et al., 2017). Failing to find effective means to sustainably raise WASH service levels in fragile contexts may mean failing to meet the WASH SDGs. This paper seeks to address the relative gap in sector guidance and documentation on how to apply WASH systems concepts and approaches in fragile contexts to strengthen WASH service resilience.

There is no universal definition of fragility, but this paper uses OECD’s definitions and lists of fragile states. Section 2 introduces the definitions used, and the different temporal, spatial and thematic dimensions of fragility. Case study examples are presented from countries listed by OECD (2018) as both ‘extremely fragile’ (i.e., Yemen, DRC) and fragile areas of ‘fragile’ countries (i.e., North Eastern Nigeria, Northern Kenya).

Fragility has a major detrimental impact on a country’s developmental progress. Shocks – both internal or external – can easily pull country systems and the wider sector back down the developmental trajectory (World Bank, 2011). It can take countries 20–30 years to return to pre-conflict levels of service delivery following protracted conflicts (UNICEF, 2019c). Poor water governance can also be both a cause and aggravator of fragility (FAO and World Bank, 2018).

The nature of the humanitarian ‘challenge’ is evolving: crises are affecting more people, occur more frequently, and persist for longer. The number of people globally in need of humanitarian assistance reached a historical record of 120 million people in 2018 (UNICEF, 2019c); the average length of Humanitarian Response Plans increased from 5.2 years in 2014 to 9.3 years in 2018 (GWC, 2020), and UNHCR (2019) estimates that the average refugee displacement event lasts 17–20 years.

Conventional short-term humanitarian action, and the funding that supports it, are undoubtedly essential for saving lives. However, it is increasingly recognised that they are largely unable to address the root causes of fragility or systemic challenges. There can sometimes be a tendency to bypass or substitute capacities of the (weak) state institutions or local markets to allow for rapid and independent humanitarian response (GOAL, 2020a). In protracted contexts, this can lead to challenges in transitioning out of humanitarian assistance (Waal et al., 2017). Without effectively strengthening capacities and resilience, the “emergency intervention mode is self-perpetuating” (Mason and Mosello, 2016, p. 46). There can also be a reticence of developmental actors to engage in systems approaches in fragile contexts, where risks are high and means of achieving success uncertain.

There are strong ‘silos’ between humanitarian and development WASH programming and funding, which pose particular challenges in the transition from relief to long-term development (Gensch et al., 2014). There is increasing recognition of the need to bridge these silos, focussing on the Humanitarian–Development ‘Nexus’ (HDN) issues such as disaster prevention, preparedness, and resilience (GWC, 2018), and increasing the wider ‘connectedness’ and complementarity between humanitarian and development action. Global humanitarian strategies and commitments such as the Agenda for Humanity and the Grand Bargain seek to change the ways of working and funding in fragile contexts. These commitments and encouraging shifts towards longer-term, more flexible funding in protracted crises (Metcalfe-Hough et al., 2019) provide an increasingly strong enabling environment and mandate for applying longer-term, systems-strengthening approaches in protracted crises contexts. However, the question is then, how?
This paper builds on related work in the sector on WASH in fragile contexts and on nexus issues\(^a\) and seeks to add value through applying a systems lens. It is based on the experience of the authors and a number of actors working in fragile contexts, with a mixture of theory and practical case study examples and reflections from 8 INGOs and UNHCR, augmented by a review of relevant sector literature. It is a discussion and practice paper seeking to deepen sector thinking and dialogue on applying WASH systems approaches in fragile contexts, and more broadly in integrating aspects of resilience into systems thinking.

\(^a\)Such as UNICEF (notably its Water Under Fire series), World Bank, GWC, SWA, UNHCR, ODI. See Section 1.1.

While this paper focuses on fragile contexts, it highlights the issue of mainstreaming preparedness and resilience into WASH systems approaches, which is not a topic relevant for fragile states alone.
WHAT DO WE MEAN BY WASH SYSTEMS, AND SYSTEMS APPROACHES?

Section 4 provides a brief orientation to concepts and terminology often used in WASH systems thinking. It emphasises how WASH systems, which deliver and enable (and sometimes hinder) WASH service delivery, comprise a complex web of interrelated actors and factors. Weaknesses in the system – be them weak ‘building blocks’, actors’ counter‐productive behaviours, or ineffective linkages within the system – all undermine the system’s potential to deliver sustainable, inclusive, WASH services at scale.

Approaches to strengthen WASH systems are diverse; however, they often involve processes of systems diagnostics, and often involve collaboration of multiple actors, at multiple levels, to address systemic challenges. WASH systems approaches often focus on strengthening government systems and leadership.

WASH SYSTEMS IN FRAGILE CONTEXTS

Section 5 analyses how WASH systems can ‘look and behave’ both in ways similar to systems in low‐income stable contexts and with some specific characteristics and challenges that can typify fragile contexts. Section 6 then considers how systems concepts and approaches may need to be adapted based on these specificities. Some of the specificities of fragile contexts are listed below:

» **Wider contextual aspects (beyond the WASH system boundary):** Depending on the context, this may include: weakened security and the rule of law; weak governance, and impaired legitimacy or functional presence of the state, and eroded trust and ‘social contract’ between citizens and the state; volatile, politicised changed environments; short‐term perspectives and focus on immediate needs rather than longer‐term goals; environmental degradation and exposure and vulnerability to natural hazards and climate change; economic fragility; erosion of livelihoods and extreme poverty; aid dependency; Internally Displaced People (IDPs) and refugees.

» **WASH system actors and behaviours:** Impaired capacity or role of state institutions to lead the sector; the presence of the ‘humanitarian system’ with its cluster architecture, actors, mandate and processes; a plethora of non‐state actors (e.g. NGOs); humanitarian‐development silos; the widespread presence of informal service providers; skillsets and perspectives of WASH actors may be more ‘humanitarian focussed’; at times, competition between actors for resources, leadership struggles, reluctance to engage with the government; tendencies to bypass or substitute country systems and undertake direct service delivery; often short‐term programming cycles and supply‐driven approaches; dynamics of willingness to pay and ‘ownership’ of WASH services by users.

» **WASH system factors:** Table A provides a summary of common gaps and systemic weaknesses in fragile contexts, organised around the system ‘building blocks’ presented in Figure B.

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*aSee the eight building blocks within Figure B. Note: there is no sector‐wide consensus on a single framework.

*bNote, these tables aim to focus on specifics in fragile contexts, which are in addition to wider systemic gaps present in low‐income stable contexts that are also likely to be issues in low‐income fragile contexts.
INSTITUTIONAL ARRANGEMENTS & COORDINATION:
» Low-capacity/leadership authorities, substitution
» Short-term projectised capacity strengthening
» Plethora of non-state actors, issues of fragmentation and low alignment / harmonisation

FINANCE:
» Short-term, restricted-mandate aid financing
» Economic fragility, market price volatility, limited public sector budgets, and corruption
» Users’ limited willingness/ability to pay

SERVICE DELIVERY:
» Legacy of lifesaving interventions → ‘chaotic’ asset base, posing challenges for asset management
» Supply-driven response undermines market actors
» Surges in demand due to mobility of populations

REGULATION & ACCOUNTABILITY:
» Humanitarian / development ‘silos’ with different standards and accountability lines
» Limited state regulatory capacity / governance
» Impaired trust (users↔utilities, govt↔NGOs)

MONITORING:
» Security challenges to project/sector monitoring
» Projectised, fragmented sector monitoring efforts
» Ad-hoc ‘needs assessments’ rather than routine, systematic, area-wide service level monitoring

WATER RESOURCES MANAGEMENT:
» Poverty & displacement → enviro. degradation
» Water scarcity, climate change, conflict, linkage water resource planning↔E-response
» Governance and regulation of water resources

PLANNING:
» Silos in humanitarian-development planning
» Highly changeable, projectised, low-funding-predictability context, impedes long-term planning
» Limited government leadership in sector planning

LEARNING & ADAPTATION (L&A):
» Institutional memory loss due to high staff turnover (government, humanitarian actors…)
» Actor dialogue more on coordination than L&A
» Short, targets-focussed projects: time for L&A?

FRAGILITY CREATING BOTH CHALLENGES AND OPPORTUNITIES FOR WASH SYSTEMS APPROACHES
If it was easy to apply systems approaches in fragile contexts, such approaches would be commonplace. The fact they are not reflects the clear challenges to implementing such approaches in fragile contexts. However, fragility and shocks also create clear windows of opportunity for systems strengthening. These are briefly summarised below, and elaborated in Section 6.1:

» **Challenges:** Short-term, strict-mandate sector funding restricting the ability to take a longer-term approach; high-risk context, short-term target-driven projects and weak government/ market capacity incentivises direct implementation/ substitution, and disincentivises local market-friendly procurement; concerns of government engagement and risks to reputation and core humanitarian principles; sector stability and continuity of longer-term efforts; political sensitivities for long-term solutions for displaced persons; life-saving priority over sustainability.

» **Opportunities:** Donor commitments such as the ‘Grand Bargain’; donor interest in ‘exit strategies’, ‘nexus’ issues, ‘building back better’ and ‘transformative programming’; residual funding in the sector following crises; relative areas of systemic ‘strength’ (e.g. in reporting, coordination and planning) that can be entry points to build on; how shocks and crises can ‘press the reset button’ on sector agendas, and outbreaks raise political will on WASH; the growing humanitarian trend of cash and market-based approaches; how many NGOs (and UNICEF) have ‘dual mandates’ (humanitarian and development); appetite to find longer-term arrangements for displaced persons; technological advancements facilitating remote working and monitoring.

TABLE A: Common weaknesses across the ‘building blocks’ in fragile contexts. See Table 5 for a detailed version of this table.

EXECUTIVE SUMMARY
TABLE A:

ADAPTING HOW WE CONCEPTUALISE AND STRENGTHEN WASH SYSTEMS IN FRAGILE CONTEXTS

Evolving the Conceptual Framework, and Overall Objectives for Systems Strengthening:

While many of the characteristics of WASH systems in fragile contexts are similar to low-income stable contexts, there are specificities in fragile contexts that should nuance how we conceptualise, analyse, and strengthen WASH systems in such contexts. Section 6 outlines suggestions and examples of this.

To reflect these specificities, certain adaptations have been made to the conceptual framework (highlighted in red in Figure C), and Annex 1 provides further suggestions on how sub-factors within each building block can be further nuanced. Building on this, the simplified Theory of Change for WASH systems strengthening has also been adapted and nuanced for fragile contexts (see Figure D).

FIGURE C:
Adaptations of the WASH systems conceptual framework for fragile contexts. Source: Authors.

FIGURE D:
An adapted, annotated high-level theory of change for systems strengthening in fragile states. Source: Authors.

WHAT WE DO
Systems Building / Change hubs

WHAT THAT ACHIEVES
Strong resilient national and local WASH systems

OUTCOMES
Resilient WASH services for everyone always

IMPACT
Improved: Health, Education, Economic options, Quality of life, Peace and stability, Legitimacy of the state

Emphasis:
» Resilient services
» Resilient systems
» Resilient efforts to strengthen them

Emphasis:
» Everyone - even the displaced
» Always - even during crisis

[In addition to efforts to strengthen systems applicable to low-income ‘stable’ contexts, also strengthening:]
» Humanitarian - development connectedness
» Resilience and autonomy of service providers, strengthening markets
» Local response and preparedness capacities
» Trust, alignment, and government leadership
Section 6.2 outlines how objectives for systems strengthening could be evolved, such as:

» **Strengthening country systems for disaster preparedness and response**: Strengthening local capacities and processes for disaster preparedness and response (and management and coordination of this response), before crises, can help “avoid the inefficiencies and other far reaching negative consequences of creating parallel systems” (GOAL, 2020b) in the event of crises.

» **Strengthening resilience of WASH services and WASH systems**: Section 6.4 details how systems approaches can be applied to strengthen service providers and market-based actors’ resilience to shocks and withstanding periods of weak or absent government support and oversight.

» **Strengthening the humanitarian-development nexus**: Systems strengthening can be applied to the ‘humanitarian system’ in its ability to effectively deliver on its mandate, and particularly in building the connectedness with the wider sector / development actions (see section 6.4.4).

» **Contributing to peace and state building efforts**: Particularly in areas of water scarcity and existing tensions around water governance, systems approaches can be used to strengthen inclusive methods of water resources management, strengthen processes for dialogue and conflict resolution on water issues, and increase WASH service providers’ inclusiveness and accountability. This can reduce legitimate grievances that may spark future conflicts (FAO & World Bank, 2018; Mason, 2012). Strengthening accountability and governance of WASH services can also help rebuild the legitimacy of the state to its populations and rebuild the ‘social contract’ (see 6.2.2).

**Evolving Processes and Focus Areas for Systems Strengthening**:

Section 6.3 provides suggestions on how WASH systems diagnostics and multi-stakeholder visioning processes – common in WASH systems approaches – may be adapted for fragile contexts. It highlights how such processes can be nuanced to act as forums that bring both humanitarian and development actors together and help develop a longer-term, connected vision to which they all subscribe to and see their clear role in. It also highlights additional aspects that WASH systems analysis in fragile contexts could consider, such as conflict and power analysis, and market assessments.

Section 6.4 provides theoretical suggestions and practical case study examples of different ‘areas’ of the WASH system that may be relevant to strengthen. It highlights the need for systems approaches to include the work on governmental systems strengthening that is common and well documented in more ‘stable contexts’, while stressing that efforts should not be limited to this. In light of the sector context and fragility of the state, systems strengthening should also focus efforts on strengthening service providers’ resilience (6.4.2), the local WASH market system (6.4.3), and the wider ‘humanitarian system (6.4.4).

**Examples of focus areas and case studies for systems strengthening in fragile contexts**

**Table B**

<table>
<thead>
<tr>
<th>AREA OR ACTOR OF THE WASH SYSTEM</th>
<th>EXAMPLE FOCUS AREAS FOR SYSTEMS STRENGTHENING RELATING TO FRAGILITY</th>
<th>EXAMPLES PROVIDED (IN TEXT BOXES AND/OR CASE STUDY ANNEXES)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CENTRAL AND LOCAL GOVERNMENT</strong> (where humanitarian principles allow engagement) See Section 6.4.1.</td>
<td>Strengthen foundations for transition from parallel systems, and capacities for emergency coordination and response; strengthen leadership role in sector; strengthen WASH service governance, and the ‘social contract’.</td>
<td>WHH’s work at central and decentralised levels in Somalia; Concern’s strengthening of local government in Northern Uganda; ACF’s work with local authorities in North Eastern Nigeria; Water for Good’s work on sector monitoring and planning in CAR.</td>
</tr>
<tr>
<td><strong>SERVICE PROVIDERS</strong> (e.g. utilities, water management committees) See Section 6.4.2.</td>
<td>Strengthen their resilience; increase their autonomy and ability to function in times of weak state support (strengthening capacities, adapting service delivery models); extend their services to IDPs/refugees; adapt accountability and regulatory arrangements; make service governance more inclusive.</td>
<td>JFW’s support to service provider associations in DRC; Oxfam and CARE’s work on utility strengthening in Northern Kenya; Concern’s work on life cycle costing in South Sudan and DRC; Water for Good’s maintenance model in CAR; CARE’s gender inclusion work in Yemen and Syria; UNHCR’s work on service delivery models for displacement camps in Uganda and Ethiopia.</td>
</tr>
<tr>
<td><strong>MARKET ACTORS</strong> (e.g. supply chains, maintenance/FSM providers, water truckers) (6.4.4)</td>
<td>Strengthen their resilience; improve the quality of services and products that they provide, and relative regulation of this; increase their capacity to be effectively used in emergency response.</td>
<td>ACF’s market-based approach for chlorine products in Haiti; JFW’s work on strengthening FSM services in Madagascar; Oxfam’s work on FSM service delivery for displaced and host populations in Myanmar.</td>
</tr>
<tr>
<td><strong>THE HUMANITARIAN WASH ‘SYSTEM’</strong> (e.g. the cluster), national CSOs (6.4.4)</td>
<td>Strengthen connectedness with development efforts; increase harmonisation / alignment of sector actors; strengthen capacities of local CSOs for preparedness and response.</td>
<td>UNHCR’s systems approach to planning and service delivery for FSM in Cox’s Bazaar, and its work on public service delivery models for displaced persons settlements in Uganda.</td>
</tr>
</tbody>
</table>
In preparing this paper, one stakeholder asked, ‘**but what if the government is the problem?**’. Indeed, it is a common (often valid) concern in humanitarian circles that engaging with governments may risk humanitarian principles of independence, impartiality and neutrality (Mason and Mosello, 2016). **Section 6.4.1** provides practical suggestions for engaging with and strengthening government in fragile contexts. It suggests that pragmatism is needed, that humanitarian principles should not be overused as a reason not to engage, and the state’s weak capacity should be the rationale to strengthen it not a rationale to bypass it.

**EXAMPLES OF STRENGTHENING THE DIFFERENT BUILDING BLOCKS, AND AT DIFFERENT PHASES**

**Section 6.6** provides examples of actions to strengthen the individual building blocks of the WASH system in fragile contexts. These are in addition to what would also be relevant to do in low-income stable contexts. These are summarised in Table 3, and **Table 5** lists more ‘concrete’ examples.

<table>
<thead>
<tr>
<th>EXAMPLE SYSTEMIC FACTORS TO CONSIDER STRENGTHENING:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INSTITUTIONAL ARRANGEMENTS, LEADERSHIP &amp; COORDINATION</strong></td>
</tr>
<tr>
<td>» Coordination processes and connectedness between H &amp; D actors / silos</td>
</tr>
<tr>
<td>» Leadership role of government in the sector, and issues of sector fragmentation</td>
</tr>
<tr>
<td>» Sector capacities in preparedness, response and in applying ‘development’ approaches</td>
</tr>
<tr>
<td>» Sector policy, strategy and guidelines to better include humanitarian and resilience aspects</td>
</tr>
<tr>
<td><strong>RESILIENT SERVICE DELIVERY MODELS / INFRA.</strong></td>
</tr>
<tr>
<td>» Models for WASH service delivery that are more resilient and locally autonomous</td>
</tr>
<tr>
<td>» Resilience of infrastructure, and processes of service provider asset management</td>
</tr>
<tr>
<td>» Sector usage and reinforcement of local maintenance services and supply chains</td>
</tr>
<tr>
<td>» Asset management capacities at the service authority and sector level</td>
</tr>
<tr>
<td><strong>MONITORING</strong></td>
</tr>
<tr>
<td>» Sector monitoring frameworks: the degree of alignment to / usage by sector actors; the inclusion of humanitarian and development indicators in assessments and monitoring</td>
</tr>
<tr>
<td>» Monitoring capacities – to monitor construction, service levels, and potential disasters</td>
</tr>
<tr>
<td><strong>INCLUSIVE, CONNECTED &amp; RISK-INFORMED PLANNING</strong></td>
</tr>
<tr>
<td>» Sector plans: The existence of risk-informed, strategic WASH plans at different levels that include humanitarian and development components</td>
</tr>
<tr>
<td>» Planning processes, government leadership of them, and actor alignment</td>
</tr>
<tr>
<td>» Processes of disaster contingency and response planning at different levels</td>
</tr>
<tr>
<td><strong>FINANCE</strong></td>
</tr>
<tr>
<td>» Processes for more connected, multi-year (transitional) sector financing strategies</td>
</tr>
<tr>
<td>» Service providers’ financial viability and resilience</td>
</tr>
<tr>
<td>» Foundations for cash /market-based approaches for use in humanitarian response</td>
</tr>
<tr>
<td><strong>TRUST, REGULATION &amp; ACCOUNTABILITY</strong></td>
</tr>
<tr>
<td>» Regulatory and oversight arrangements for service delivery (incl. adapting R&amp;A models)</td>
</tr>
<tr>
<td>» Accountability processes for WASH in conflict and humanitarian response</td>
</tr>
<tr>
<td>» Trust and accountability processes (e.g. users↔utilities, govt↔NGOs. citizens↔state)</td>
</tr>
<tr>
<td><strong>WATER RESOURCES MANAGEMENT &amp; ENVIRONMENT</strong></td>
</tr>
<tr>
<td>» Water resource planning, and usage of these plans to inform humanitarian action</td>
</tr>
<tr>
<td>» Institutions for inclusive and credible management of water resources, conflict resolution</td>
</tr>
<tr>
<td>» Legal, monitoring and (adapted) regulatory frameworks to protect water resources</td>
</tr>
<tr>
<td>» Climate and disaster resilience of service delivery infrastructure and technologies</td>
</tr>
<tr>
<td><strong>LEARNING &amp; ADAPTION</strong></td>
</tr>
<tr>
<td>» Learning and adaptation processes within humanitarian actors and platforms</td>
</tr>
<tr>
<td>» Knowledge management &amp; process for shared learning between the H-D silos</td>
</tr>
<tr>
<td>» Processes of learning between countries (e.g. on strengthening the ‘nexus’ and resilience)</td>
</tr>
</tbody>
</table>

\(^{\text{aSee also UNICEF, GWC & SIWI (forthcoming): WASH Accountability in Fragile Contexts, for further examples.}}\)
Different ‘phases’ present opportunities to strengthen WASH systems, with different objectives – considering interventions in this way can strengthen connectedness between actions in the different phases. **Section 6.7** and **Annex 2** provide examples of strengthening systems at different phases.

**REFLECTIONS FROM IMPLEMENTING ORGANISATIONS**

As part of the process of developing this paper, interviews were held with some of the organisations that submitted case studies to capture their experiences and reflections on applying systems approaches in fragile contexts. These are detailed in **Section 7.1** and summarised briefly below.

Key issues emerged, such as the trade-offs between meaningful government involvement and relinquishing some control on project timeframes and decision making; how meaningful partnerships are built on trust, which takes time to grow; the need to work ‘beyond the comfort zone’ of the community level, to work, in partnerships, at higher ‘levels’ of the system (and the need to evolve organisational skill sets to do so); about how a better understanding of the stakeholders and power dynamics is key, and how taking a longer-term perspective even in humanitarian contexts is key, but needs to be accompanied by risk-informed planning, and adaptive management.

**Section 7.2** continues with the interviewees perspectives, relating to how WASH sector funding in fragile contexts could better support, enable and incentivise efforts towards systems strengthening. It emphasises the need for longer-term, adaptive programmatic funding, which can be shifted between response and longer-term efforts, is outcomes focussed, supports costs of deeper contextual analysis, and enables ways of working to support systems strengthening.

**CONCLUSIONS AND FUTURE PERSPECTIVES**

In the development of this paper, one WASH systems (development) expert asked “but how can you strengthen the system if there isn’t one?”, whilst one humanitarian professional stated that WASH systems strengthening is “not my mandate”. This paper seeks to demonstrate that there is always a WASH system to engage with and strengthen, no matter how weak, and that strengthening WASH systems, with a mutual objective of strengthening WASH services’ resilience, is everyone’s business.

This paper aims to address a relative gap in sector guidance and documentation in how to apply WASH systems approaches in fragile contexts. It provides suggestions on how to adapt and nuance the way we look at, analyse, and seek to strengthen WASH systems in fragile contexts. It recognises that applying systems approaches in fragile contexts is faced with many barriers, yet there are also many opportunities and an increasingly favourable funding environment to apply such approaches.

The WASH sector needs to place the ‘nexus’ issue of resilience in the centre of efforts to strengthen WASH systems, aiming not only for resilient WASH services but resilient WASH systems and resilient efforts to strengthen them. The humanitarian principle of ‘do no harm’ should be extended to ‘do no harm to markets, systems, and prospects for sustainability’. Both development and humanitarian donors should continue to increase the proportion of sector funding that enables and incentivises systems strengthening in fragile contexts.

This paper builds on the emerging body of literature on WASH in fragile contexts. It is hoped that this paper will stimulate further discussion, thinking, documentation, guidance, and experience sharing in the sector on this issue of applying WASH systems approaches in fragile contexts.

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1 For example, pre-crisis, acute humanitarian response, protracted phase and post-crisis/recovery
2 For example, on ways of collaborating with government, and for market-sensitive, local procurement
1. BACKGROUND

1.1. THE PURPOSE OF THIS PAPER

More than two billion people currently live in fragile and conflict-affected contexts (Oxfam, 2018). By 2030, 80% of the world’s poorest people will reside in ‘fragile’ states (UNICEF, 2019c). Fragility manifests itself differently in each context. However, it is commonly characterised by features such as weak governance and capacity of state institutions, resource capture, economic instability, and periodic crises. Public services are often severely affected by fragility, and the Joint Monitoring Programme (JMP) indicates that access to water, sanitation and hygiene (WASH) services in such contexts are considerably lagging, and at times declining (Sadoff et al., 2017). Approaches to addressing WASH needs in such contexts – particularly protracted crises and chronically fragile settings – are often ‘humanitarian’ in nature. While critical in addressing immediate needs, short-term humanitarian interventions are often unable to effectively address the root causes of fragility and vulnerabilities.

Systems approaches to WASH are increasingly recognised among development practitioners as essential to achieving the scale and sustainability of WASH services that are required to attain the SDG targets (Huston and Moriarty, 2018). There is a rapidly growing body of evidence and guidance materials to support organisations in strengthening WASH systems (Valcourt et al., 2020). However, much of this has focused on ‘non-fragile’ (albeit often low-income) broadly developmental contexts. The gap in the literature on systems approaches to WASH in fragile contexts has been highlighted by numerous organisations active in these areas, that operate under a humanitarian or dual humanitarian-development mandate, and wish to apply systems approaches in such contexts.

There is considerable debate in humanitarian circles around the ‘humanitarian–development nexus’ (HDN), noting both the ‘silos’ that exist between humanitarian and development financing and programming, and how while traditional short-term humanitarian responses in fragile contexts (and especially chronically fragile or protracted crises) are essential for saving lives may not be effective at addressing the more systemic barriers and root causes of vulnerabilities.

Interestingly, when discussing the idea for this paper, one humanitarian professional responded that systems strengthening “was not their mandate”, while a WASH systems expert remarked “how do you strengthen a system when it doesn’t exist?”. This paper demonstrates that systems approaches are possible in fragile contexts and argues that they are essential to achieving both humanitarian and developmental actors’ broader objectives in such settings. Table 1 presents this paper’s broad objectives and the questions it seeks to address. This paper was written for a diverse audience: for humanitarian actors and dual-mandate agencies seeking to apply systems approaches in fragile contexts; for (development-focused) WASH systems thinkers and organisations considering how to evolve systems approaches and ideas for fragile contexts or more generally to better consider resilience in systems work (regardless of whether working in fragile or non fragile contexts); and for donors in humanitarian and development fields considering whether to support WASH systems approaches.

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1 See Section 2 for details of how this paper defines fragility.
2 For example, many of the newer members of Agenda for Change have such dual mandates.
3 Here we refer to the ‘double nexus’ of humanitarian–development, rather than the ‘triple nexus’, which also includes peace. However, Section 6.2 touches on the link between systems strengthening and peace.
4 UNHCR defines protracted as displacing 25,000 people or more, displaced for five consecutive years or more.
5 Although this paper is written primarily with the perspective of implementation organisations such as INGOs.
This paper builds on and seeks to complement past and current efforts related to this topic. This includes the ongoing work of the Global WASH Cluster (GWC), UNICEF, and Sanitation and Water for All (SWA) on integrating humanitarian indicators into WASHBAT and SWA’s collaborative behaviours; UNICEF’s Water Under Fire series that looks at WASH in conflict zones; GWC, the German WASH Network, and others’ work on the WASH HDN; related work by ODI and Tearfund relating to bridging the sectoral silos and linking WASH and peacebuilding in fragile contexts; work by the World Bank, the International Institute for Environment and Development (IIED), and FAO on water utility resilience and water management in fragile contexts; market-based programming work by GWC; and work by UNHCR, Oxfam, and others on more durable and inclusive WASH services for refugees and IDPs. A key difference between such work and this paper is that this paper applies a systems lens to challenges and the potential means to address them.

This paper is a discussion and practice paper, bringing together theoretical and conceptual aspects with practical case study examples. It does not prescribe frameworks or approaches, nor is it detailed enough to be a practitioner’s guide. It is written particularly from the perspective of international organisations undertaking WASH programmes in fragile contexts, particularly from the perspectives of INGOs. However, it is also relevant to other actors such as UN agencies and development partners active in such contexts.

This paper seeks to be applicable to the wide range of contexts defined as ‘fragile’ (see Section 2). Nevertheless, much of this paper’s focus is on chronically fragile and protracted crisis contexts (see Figure 1 for an overview of where examples used in this paper emanate from). Whilst this paper uses the OECD classification of fragility, which has a relatively large list of countries, the case studies that are included in this paper emanate either from ‘extremely fragile’ countries, or from the more fragile areas of countries listed as ‘fragile’ – such as conflict-affected North-Eastern Nigeria, Northern Uganda and Northern Kenya.

Many organisations are already undertaking aspects of systems approaches in their work in fragile states, but are potentially using different terminology under the banners such as ‘strengthening sustainability’, ‘resilience’ and ‘Disaster Risk Reduction (DRR)’.

This is largely due to the type of organisations involved in writing this paper and contributing case studies.
This paper identifies actions that can be considered to strengthen WASH systems from the humanitarian response phases to early recovery to development. However, it acknowledges that more can be done on strengthening systems before and following acute emergencies rather than during them. This paper does not propose that systems approaches should be priorities in the initial responses to level 3 emergencies. Further, while this paper touches on water resources and climate change issues, it has a primary focus on WASH rather than the wider water resources management–conflict linkage (see Section 6.2).

1.2. HOW THIS PAPER WAS DEVELOPED

This paper was developed based on an identified knowledge gap, through support from the Sustainable Services Initiative. The idea for the paper was discussed in a series of relevant sector events during 2018–2019, during which a growing number of organisations expressed interest in providing case studies for it. This paper is based on a review of around 80 documents, such as research papers and project reports, information on WASH projects in a variety of case study countries (see Figure 1) from contributing organisations (see Annex 3 for more information), and follow-up interviews with representatives from some of these organisations. This paper was initiated following discussions between INGOs and independent researchers. While interviews were not undertaken with a wider group of key stakeholders, external peer reviewers from both humanitarian and WASH systems strengthening communities of practice were engaged. Wider stakeholder perspectives on the questions raised in this paper were also obtained through short group work sessions in various sector conferences in 2019.

1.3. STRUCTURE

Section 2 defines key fragility terms referred to throughout this paper, while Section 3 outlines the scale of WASH challenges in fragile contexts and organisations’ efforts and commitments to address them.

Section 4 provides a brief overview of what we mean by systems and systems approaches in WASH, before Section 5 describes the characteristics of WASH systems in fragile contexts. Section 6 discusses how WASH systems approaches need to be adapted based on some of the realities of fragile contexts. Section 7 provides experiences on applying systems approaches in fragile contexts, arising from interviews with various organisations that submitted case studies for this paper. Section 8 provides concluding remarks and a call to action for those working and funding in fragile contexts. Annex 3 presents a series of 2-page case studies from collaborating organisations.

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8 “Level 3” emergencies are defined as, “major sudden-onset humanitarian crises triggered by natural disasters or conflict which require system-wide mobilization” (IASC, 2012, p. 1).
9 The SSI is an initiative of Welthungerhilfe (WHH), supported technically by Aguaconsult and the German Toilet Organisation (GTO) and financially by Viva con Agua which seeks to strengthen the sustainability of its WASH programmes and contribute to sector thinking and learning on WASH systems approaches.
10 Action Against Hunger, CARE, Concern, German Toilet Organisation, Join For Water, Oxfam, UNHCR, Water for Good, and Welthungerhilfe. These case studies were written by these organisations and contents were not verified by the authors.
11 Including short sessions at the IRC WASH Symposium, at a WHH internal WASH workshop, and at a two day “Building Resilient WASH Systems in Fragile Contexts” event in Geneva in December 2019 (German WASH Network, 2019).
2. WHAT WE MEAN BY ‘FRAGILITY’

Countries most characterized by fragility are often those that do not have the capacity—or in some cases, the willingness—to protect and provide for populations at risk and to cope with risk or sudden crises. They therefore do not have robust, resilient systems in place to foresee, manage, or react to change. State fragility can be defined and addressed in many ways, and there is no single, universal definition or list of ‘fragile’ countries. A wide range of characteristics, dimensions, and criteria contribute to defining fragility in a region or state. For this paper, keeping the definition clear, simple, and based on measurable facts enables the conversation to remain constructive and consistent throughout.

The OECD defines fragility as follows: “Fragility is characterised by a combination of exposure to risk and insufficient coping capacity of the state, system and/or communities to manage, absorb or mitigate those risks. Fragility can lead to negative outcomes including violence, the breakdown of institutions, displacement, humanitarian crises or other emergencies” (OECD, 2016, p. 21).

The OECD Fragility Framework (see Figure 2) considers fragility to be multidimensional, measurable on a spectrum of intensity, and expressed differently across five dimensions. While the framework identifies 56 countries considered to be most exposed to fragility to various degrees of severity (see Figure 1), fragility can be temporal or chronic and greatly varies geographically both regionally and within countries. Crises and conflict can be short-lived or protracted, and states can oscillate between phases of relative stability and fragility. Fragility is dynamic and non-binary, and a non-fragile country may be exposed to economic, security or environmental fragility in a specific area within its borders. UNICEF et al. (forthcoming) highlights how the literature has moved away from the concept of fragile “state” towards fragile “context”, as there are many states that have part of their territory under the conditions of fragility while others are not, and vice versa, there are fragile contexts that do not belong to any state in particular. The forthcoming paper by UNICEF, GWC & SIWI on WASH Accountability in Fragile Contexts provides a further discussion on definitions of fragility.

This paper seeks to be applicable to a range of fragile contexts. However, there is a particular focus on more protracted crises (of which a significant proportion are conflict induced), as this paper proposes that these contexts are where there is a particular added value for systems strengthening to help move the sector context from (protracted) cycles of relief, to resilience and development (FAO, 2010).
3. WASH CHALLENGES IN FRAGILE CONTEXTS

3.1. THE STATUS OF WASH SERVICES IN FRAGILE CONTEXTS

The percentage of the global population – and particularly the world’s poorest – that live in fragile contexts continues to rise. More than two billion people live in fragile and conflict-affected contexts (Oxfam, 2018), and by 2030, more than 80% of the world’s poorest people could live in fragile contexts (UNICEF, 2019c). Additionally, 60% of all disasters are estimated to occur in fragile contexts (UNICEF, 2018).

WASH access and progress toward the SDGs is markedly lower in fragile contexts. Those who live in extremely fragile contexts are three times as likely to practice open defecation; four times as likely to lack basic sanitation services and eight times as likely to lack basic drinking water services (UNICEF, 2019e). There are clear correlations between poor access to WASH services and increasing levels of fragility (Figure 3), and there are significant differences in the progress to increase WASH access between low-income stable (LIS) and low-income fragile (LIF) countries (World Bank, 2011). For example, between 1990 and 2008, LIS countries achieved an 18% increase in rural water coverage, compared to just 1% in LIF countries. In urban water supply, LIS countries increased coverage by 7%, while coverage decreased in LIF countries (World Bank, 2011). Using more recent JMP data, UNICEF (2019c, p. 10) established that globally, households in non-fragile contexts have 81% access to basic sanitation, 95% have access to basic water, and only 7% practice open defecation, compared to 26%, 57% and 19%, respectively for extremely fragile contexts.

WASH services suffer from direct and indirect impacts of fragility and conflict, increasing risks of epidemics. Diep et al. (2017), UNICEF (2019c) and Waal et al. (2017) highlight the direct, indirect and cumulative negative impacts of fragility, particularly in protracted crises and conflict, on WASH service providers and the quality of services. Examples of direct impacts include physical damage from conflict on infrastructure or staff, as well as overall security concerns in operation and maintenance. Indirect impacts include aspects such as restrictions to obtaining spare parts, fuel and chemicals, challenges in revenue collection, the disruption of established operation mechanisms due to the loss of trained staff, an increased strain on supplies due to the influx of refugees and internally displaced persons (IDPs), decreased customer willingness and ability to pay tariffs, interference from formal and informal leaders, and increased corruption (Schillinger et al., 2020).

Such impacts can trigger a ‘vicious downward spiral’ – as service providers are increasingly unable to cover operating costs, the quality and reliability of service delivery decreases.

FIGURE 3: Access to improved water and sanitation facilities by Fragile state index. Source: Sadoff et al. (2017). Note: Countries in the 2017 World Bank’s Harmonized List of Fragile Situations are shown in orange.
Customers might subsequently be less willing to pay for these services or may revert to self-supply or alternative informal and unregulated suppliers, particularly after shocks or displacement. This, in turn, reduces the utility’s market share and its potential revenues, exacerbating the financial troubles. It can also cause an increase in cartels or other protectionist measures of informal service providers. Whilst these examples focus on urban contexts, the realities of dwindling service provision and neglected maintenance are equally applicable in rural areas.

**In protracted crises, the decline has a cumulative effect, and neglect and long-term degeneration can cripple systems** (UNICEF, 2019d). As services decrease in quality, and regulation of informal water vendors is inadequate, the risks of epidemics grow – 93% of countries listed as ‘extremely fragile’ have endemic cholera (UNICEF, 2019c). Fragility not only impacts services; it also weakens the institutions that support and deliver them. The wider institutional and systemic impacts of fragility on rural and urban WASH service delivery are discussed further in Section 5.

These examples primarily focus on conflict contexts. However, the COVID–19 pandemic also represents an example of a shock to service providers, wherein utilities in many countries were forced to provide water and sewerage services for free to users.

### 3.2. THE CHANGING AND INTENSIFYING NATURE OF THE PROBLEM

**Humanitarian needs are growing; crises are affecting more people, occur more frequently, and persist for longer.** The number of crises that demanded a response from international partners doubled from 16 crises in 2005 to 30 crises in 2017. Moreover, the number of people globally in need of humanitarian assistance reached a historical record of 120 million people in 2018 (UNICEF, 2019c). The average length of Humanitarian Response Plans (HRPs) has also increased (from 5.2 years in 2014 to 9.3 years in 2018) (GWC, 2020). UNHCR (2020a) echoes such trends regarding forcibly displaced persons including refugees and IDPs; in 2019, 79.5 million people were forcibly displaced, with a new person becoming displaced every two seconds. The average displacement event is estimated to last 17–20 years, while the average length of displacement is over 26 years in ‘protracted situations’ (UNHCR, 2019).

**Humanitarian funds are increasingly channelled to protracted crises, yet funding gaps are increasing.** In 2016, around 90% of humanitarian aid went to protracted crises (OECD, 2018), mostly in the Middle East and Africa. Given the aforementioned increased needs and prolonged nature of responses, humanitarian funding requirements have increased three-fold between

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**FIGURE 4:**
The impacts of conflict on utility water services.
However, only 60% of the USD 25 billion needed to respond to humanitarian needs in 2018 was funded (IASC, 2019). WASH sector funding for humanitarian response has not kept pace with the needs projected in response plans (see Figure 5). Regarding the funding gaps to meet the WASH-related SDGs, fragile states have an estimated annual gap of USD 60 billion, representing half of the world’s financing gap to achieve SDG 6 (Rozenberg, 2020). While acute, high-profile catastrophes attract large surges of funding, chronically fragile, protracted crises can suffer from ‘donor fatigue’ (Mason and Mosello, 2016).

3.3. THE NEED FOR A PARADIGM SHIFT

‘Conventional’ humanitarian responses and funding are increasingly not fit to address the needs of protracted crises. ‘Conventional’ interventions to address WASH-related needs and increase access in fragile contexts are often relatively short-term, ‘access’ or ‘beneficiary’ target driven. In many cases, this is reflective of acute needs requiring life-saving interventions; however, it is also indicative of risk-averse approaches to programme design and funding, in light of often rapidly changing operational contexts. Funding in such contexts often restricts taking longer-term approaches. The weaknesses and at times reach or legitimacy of governments often lead supporting organisations to establish parallel (e.g., substitution) means of delivering humanitarian aid (ACF, 2017; World Bank, 2014). This can present what Waal et al. (2017) terms the ‘capacity conundrum’, wherein humanitarian interventions fail to rebuild the capacity of ‘decimated state institutions’ effectively, and countries can get locked into a pattern of unsustainable short-term service delivery solutions (Mason and Mosello, 2016). Without effectively strengthening capacities and resilience, the “emergency intervention mode is self-perpetuating” (Mason and Mosello, 2016, p. 46). Approaches in such contexts are needed that both support the lifesaving-saving needs, while also strengthening the wider system for longer-term and more sustainable solutions to WASH services. Understanding the long term and flexible approach needed to take the risk and accept degrees of failure is part of shifting the balance.

Strong silos exist between humanitarian and development WASH programming. Mason and Mosello (2016) provide a robust analysis of the ‘siloed nature’ between WASH humanitarian and development ‘worlds’, and some of the causes of these divisions. As discussed below, these silos pose a key challenge to transitioning from relief to longer-term approaches to WASH sector needs. Mason and Mosello (2016) further argue that the silos exist at all levels, from local to global, with structural barriers to integration stemming from three sets of issues. These are: (1) differing mission statements and objectives, core principles, standards and mandates; (2) contrasting incentives that drive actions, related to issues such as organisations’ financial risk-aversion and accountability structures; and (3) differing operational processes related to project implementation, dialogue, collaboration, and staff recruitment. Indeed, one interviewee referred to the different ‘language’ used in the two silos – for example, where development actors talk of sustainability, humanitarian actors may talk of connectedness or resilience. The resulting silos can cause development and humanitarian WASH stakeholders to work as two parallel systems, leading to “a compartmentalised approach of the assistance in the WASH sector and in the modalities under which international organisations are cooperating with national governments” (GWC, 2019b, p. 1). Moreover, the lack of complementarity

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14 In some contexts, it could be argued that this somewhat allows for a withdrawal by state actors to the delivery and management of services for their populations.
15 Although some actors may argue the inherent risks and challenges of undertaking longer structural systems strengthening programmes in contexts of chronically unstable governance (e.g., DRC and South Sudan)
16 One interviewee mentioned how at times humanitarian implementation modalities such as Cash for Work can risk undermining ownership and demand-led actions, for example, where using the modality to support people to dig their own pit toilet or own water wells.
17 For example, humanitarian actors refer to principles such as independence, neutrality, and impartiality. While there are not necessarily comparable sector-wide principles adopted in the development sector, increasingly there is a focus on the aid effectiveness agenda and SWA collaborative behaviours around strengthening and using country systems, and building government capacity to plan and lead in development.
18 For example, between UN-led WASH Clusters and Government-led Sector Working Groups.
and collaboration between the silos increases costs and threatens the sustainability and effectiveness of interventions (Mason and Mosello, 2016). As an example, until recently, there have been two key global WASH sector coordination bodies (GWC and SWA), focused on mandates of humanitarian needs and SDG attainment, respectively, and often funded by the same governmental donors, but often with limited dialogue between them. In terms of sector financing, silos often exist, with separate donor entities for humanitarian and development contexts. An interesting short introductory video around humanitarian-development connectedness can be accessed here.

**These silos and the ‘capacity conundrum’ pose significant challenges to building connectedness and potential transitions between humanitarian and development action and investments.** This transition along what has been termed Linking Relief, Rehabilitation, and Development (LRRD) has been a persistent challenge in the WASH sector (Carter, 2015; Day and Forster, 2018; Gensch et al., 2014), with DFID’s global WASH positioning paper remarking “Such a transition is complex, and we need to learn how to facilitate it” (DFID, 2018, p. 23).

“The delineation of what is and isn’t in an emergency can limit the ability of humanitarian agencies to address more systemic problems. [...] Agencies involved in emergency relief find themselves forced to use inappropriate tools and short-term funding to respond to chronic needs because they cannot find an acceptable way of walking away.” (Mason and Mosello, 2016, p. 34)

“We can no longer respond to crises with humanitarian assistance alone; we must work towards building sustainable and resilient services [...]” (UNICEF 2019c, p. v).

There is increasing recognition of the need to adapt approaches, focusing on ‘nexus’ areas between humanitarian and development programming, and applying development approaches as early as possible in crises. There is a growing focus in the WASH sector on the humanitarian–development nexus (HDN), which focuses on areas of convergence between the sector silos (and their link with peacebuilding). This convergence occurs around the mutual objectives of reducing vulnerability to, during, and after crises (Mason and Mosello, 2016) and increasing sustainability of services with the term ‘resilience’ increasingly being applied across humanitarian and development communities of practice. There are growing calls in the sector for development and humanitarian interventions in fragile contexts to not only include elements of disaster prevention and preparedness (GWC, 2018), but also to have a greater focus on addressing root causes of fragilities, building connectedness (including long term planning and development approaches), and building national and local systems as early as possible in crises, particularly protracted crises (DFID, 2018; UNHCR, 2020a; World Bank, 2011). This is in part using the rationale of ‘securing previous development investments’, as well as easing pressure on limited humanitarian budgets by preventing or dampening crises and their negative impact. As the OECD succinctly recommends for strengthening the HDN, ‘prevention always, development wherever possible, humanitarian action when necessary’ (OECD, 2020, p. 3).

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19 Also of the need to use development programming to increase resilience, thereby protecting development progress by mitigating crises and relieving the strain on scarce humanitarian budgets.
20 The humanitarian–development nexus is defined as “effectively connecting humanitarian and development efforts to work towards achieving collective outcomes that reduce need, risk and vulnerability, over multiple years.” (UNICEF (n.d.).
21 Resilience is defined as the ability of an individual, community, society or system exposed to a threat to resist, absorb, adapt and recover from its effects in a timely and effective manner (Mannaert and Aasent, 2013).
22 OECD DAC proposes ‘connectedness’ as an evaluation criterion for humanitarian action, a possible substitute to ‘sustainability’ putting in focus the role of humanitarian interventions towards a longer–term goal.
Strategies and commitments such as the Agenda for Humanity and the Grand Bargain seek to change ways of working and funding in fragile contexts. The New York Declaration for Refugees and Migrants 2016 and The World Humanitarian Summit in Istanbul in 2016 helped galvanise commitments around the Agenda for Humanity, which calls on global leaders and humanitarian actors to act on five core responsibilities. The fourth responsibility calls on governments and humanitarian actors to shift from ‘delivering aid to ending need’. As part of this, it calls on actors to ‘reinforce, not replace, national and local systems’. It also emphasises the need to better anticipate and prepare for crises and transcend humanitarian–development divides through ‘delivering collective outcomes’ (Agenda for Humanity, 2016). In the same year, the Grand Bargain was agreed upon between some of the largest donors and humanitarian organisations “to get more means into the hands of people in need, and to improve the effectiveness and efficiency of the humanitarian action” (IASC, 2019, p. 1). The Grand Bargain commitments that are most relevant to this paper include the ‘localisation’ agenda in increasingly supporting national (rather than international) entities, increasing the use of cash (market)-based programming, encouraging the HDN, and increasing collaborative multi-year planning and financing, as well as making such financing more flexible (IASC, 2019). See the hyperlinks to the Grand Bargain and Agenda for Humanity websites for further information on these important sector shifts and commitments.

There are encouraging shifts, albeit not at the pace required. Such commitments are gaining traction. For example, the Grand Bargain now has 61 signatories, which collectively represented 73% of all humanitarian contributions donated in 2018 (IASC, 2019). Donors are starting to provide longer-term flexible funding in fragile contexts, although there are concerns about the speed of change (Metcalfe–Hough et al., 2019). The GWC has an increasingly strong focus on the HDN, and one of the three core axes of GWC’s 2020–2025 roadmap is that humanitarian WASH response “results in sustainable impacts rooted in preparedness and resilience” (GWC, 2020, p. 19). SWA’s new strategic framework 2020–2030 also highlights the importance of resilient delivery systems, better preparedness and improved coordination with humanitarian responses and their respective multi-stakeholder platforms, particularly in protracted crises (SWA, 2020). UNICEF’s Water Under Fire series also places significant advocacy on strengthening nexus issues. As a result – and also due to the current COVID-19 pandemic – there is growing dialogue between GWC and SWA (see text box. UNHCR’s recent position papers highlight its commitments to work on more durable, sustainable, and systemic solutions to IDPs and refugees’ WASH needs (UNHCR, 2019). Additionally, the WASH HDN discussions in the sector are intensifying, with recent events bringing together increasingly large representation from the development community.

These sectoral shifts provide a strong foundation for longer-term approaches, seeking to strengthen country capacities and systems. The global commitments’ focus on reinforcing rather than replacing country systems, localisation, and increasing resilience, provides a clear rationale for WASH systems approaches in fragile contexts. Moreover, encouraging humanitarian financing trends can help make such systems approaches increasingly viable.

Efforts are being made to bring two major WASH convening and coordination entities from the development and humanitarian spheres (SWA and GWC) to increasingly find synergies and complementarity. A rationale for this is that 19 of the 25 most fragile countries are SWA members.

GWC, UNICEF and partners have made suggestions for including prevention and preparedness in SWA’s global agenda, through integrating key humanitarian features into SWA’s five sector ‘building blocks’ and four collaborative behaviours. Additional indicators have been proposed for the WASH BAT tool.

A joint technical working group is also being discussed and could assist in undertaking joint national planning and review in certain countries.

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### Strengthening alignment between SWA & GWC:

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23 Which emphasises the need to make linkages between humanitarian assistance and development programming.

24 Relevant to this paper are those that call on efforts for the prevention and end of conflict, the ‘leave no one behind’ principle, investing in local capacities and strengthening inclusive state institutions, targeting investments in risk-prone contexts, and increasing the flexibility, predictability and duration of financing in humanitarian contexts.

25 Five donors (UK, Belgium, Canada, Netherlands and Germany) increased the share of their humanitarian funding that was multi-year to >50% (Metcalfe–Hough et al., 2019).

26 “Building Resilient WASH Systems in Fragile Contexts” event in Geneva in December 2019 (German WASH Network, 2019).

27 Key sector donors such as DFID and DGIS, with a systems approach central to their WASH strategies, are increasingly focusing their resources in fragile contexts (DFID, 2018; Dietvorst, 2019).
4. WASH SYSTEMS AND SYSTEMS APPROACHES

This chapter briefly introduces what we refer to as WASH ‘systems’ and ‘systems approaches’. Subsequent chapters discuss common features of WASH systems in fragile contexts, and hence areas where concepts and approaches for WASH systems may need to be adapted.

4.1. CONCEPTS AND CONCEPTUAL FRAMEWORK

In some sectors, such as health and education, the concept of a ‘system’ has been embraced for many years. The concept of a ‘WASH system’ is a newer – arguably more abstract – concept to sector practitioners. Huston and Moriarty (2018, p. 6) define a WASH system as “all the social, technical, institutional, environmental and financial factors, actors, motivations, and interactions that influence WASH service delivery in a given context.” There is rapidly growing recognition in the WASH sector of the critical importance of the wider system in which WASH services are delivered and that weaknesses in this ‘system’ undermine the potential for sustainable WASH services at scale.

Systems are comprised of interrelated ‘actors’ and ‘factors’:

- **Actors** are the key stakeholders that directly or indirectly influence the system, including public, private, politicians, technocrats, non-state, civil society, and users. There are also different ‘levels’ of actors, such as national-level authorities (responsible for aspects such as legislation, policy and regulation); ‘service authorities’ (those legally responsible for WASH services in a defined area – which is often, but not always, local government); and ‘service providers’ (those responsible for the day-to-day operation and management of WASH services).

- **Factors** are “a non-human element, aspect, or component of a system that directly or indirectly influences system functioning or outcomes” (Huston and Moriarty, 2018, p. 5). These could be, for example, monitoring systems, planning frameworks, institutional structures, and regulatory arrangements.

**Systems thinking embraces complexity**, acknowledging the dynamic interplay between actors and factors, which each have a differing relative influence on the WASH system. Systems thinking also acknowledges that systems are adaptive through time (Welthungerhilfe et al., 2019). Systems practitioners use conceptual frameworks to help break down the complexity for understanding, analysis, and monitoring purposes. Many such frameworks include ‘building blocks’ to represent key factors within a WASH system, often based on essential components of the system that need to be in place and strong for sustainable services at scale.

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28 This section draws content from Welthungerhilfe et al. (2019), and Tillett et al. (2020), both of which provide detailed introductions to WASH systems. IRC WASH also provides free online courses through its WASH Systems Academy.

29 See Valcourt et al. (2019) for a useful overview of WASH systems complexity. In it there is the categorisation of complexity in the ‘Cynefin framework’. This complexity thinking is particularly important in fragile contexts, which are characterised by complex and interconnected problems and competing interests of different stakeholders.
There are many frameworks to represent the WASH system (Valcourt et al., 2020), each proposing slightly different names or numbers of building blocks. This is, in part, because they were developed to focus on or analyse different aspects of the system, or to be applied in specific contexts. However, there is significant convergence in core areas that the frameworks cover. This paper uses Agenda for Change’s WASH systems conceptual framework (Figure 6) with its eight building blocks, its representation of what sits ‘within’ the WASH system, how this interacts with related systems, and how these sectoral systems are influenced by wider contextual factors such as political economy and governance. Section 5 presents the adaptations proposed for this framework to better apply to fragile contexts.

4.2. SYSTEMS APPROACHES, AND RATIONALE FOR SYSTEMS STRENGTHENING

Weak systems undermine sustainable WASH service delivery. Such weaknesses can occur when elements of the building blocks are weak, when the actors in the system lack capacity or effective linkage between them, or when there are destructive behaviours or dynamics within the system. Conversely, if systems are strong, they provide a solid foundation for providing sustainable WASH services at scale.

The SDGs can only be achieved by strong systems. By working to strengthen systems, supporting organisations can broaden the scale of their impact beyond the immediate focus populations of their programmes, and can build foundations for more sustained outcomes. For example, when properly designed and implemented, a set of systems strengthening interventions at the district (or equivalent) level can positively impact the whole population within the district, not only those in the communities identified by the project. Moreover, if the lessons learned are shared at the regional or national level, systems strengthening interventions can strengthen a country’s entire WASH sector (Welthungerhilfe et al., 2019).

For example, one could suggest that the building blocks used by SWA were designed to focus more at sector-level enabling environments for achieving universal WASH access, whilst that of Agenda for Change focuses more on the sustainability of service delivery, particularly at the decentralised levels. There is still however a lot of similarities between them.

See Huston and Moriarty (2018) and Tillett et al. (2020) for further information on this framework and the building blocks.

See Gensch and Tillett (2019) for work on adapting this framework to better represent the specific features of sanitation and hygiene, to ensure the framework does not have an implicit ‘water bias’.
WaterAid (2019) defines a WASH systems strengthening approach as ‘understanding that WASH exists in complex systems with many component parts and within different social, economic, political and environmental contexts. It involves identifying and working to address the barriers in behaviours, policies, processes, resources, interactions and institutions that block the achievement of inclusive, lasting, universal access to WASH’.

WASH systems approaches generally emphasise collective action and reinforce government leadership. Agenda for Change, for example, aligns with SWA’s collaborative behaviours of supporting government leadership in the sector, and their efforts to develop plans and finance strategies and ensure mutual accountability processes between sector actors (Agenda for Change, 2018). Mindful that no single organisation can address all systemic weaknesses across all building blocks and at all levels, collective action between multiple organisations, including governments, is a common feature of systems approaches (Tillett et al., 2020).

Systems assessments are often a starting point for WASH systems interventions. This may include, for example, an analysis of the strength of the building blocks using pre-defined checklists and looking at the more ‘dynamic’ aspects of the system through political economy or network analysis (Mason, Samuels et al., 2019). These assessments can help practitioners to understand where gaps lie and how the system ‘works’. From this, potential entry points or ‘levers’ that an organisation can use to start strengthening the system can be identified. Tillett et al. (2020) provide practical examples of strengthening WASH systems by Agenda for Change members – both of strengthening ‘building blocks’ at different levels of the system16 and of working to address behaviours, such as increasing political commitment and encouraging a culture of learning and mutual accountability in the sector. However, such examples focus predominantly on ‘stable’ contexts. This paper provides examples from fragile states.

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16 Many of such organisations refer to NGOs working at the sub-national level, in a kind of District-Wide Approach – as this level is where it is felt they have comparative advantage
5. WASH SYSTEMS IN FRAGILE CONTEXTS

This section considers how the WASH system may ‘look’ and ‘behave’ differently in fragile contexts, with subsequent chapters considering how to adapt approaches to systems strengthening in light of this.

Each fragile state has differing actors, factors, and dynamics that have different influences on WASH service delivery. Even within a country, the WASH system can look and behave very differently both spatially (e.g., within more stable and more insecure areas) or through time (e.g., during acute crises or pre- or post-crises). This section makes generalisations about WASH system characteristics in fragile contexts, which will not be applicable in all cases. It also explores some of the wider ‘beyond the WASH system’ contextual aspects, then discusses some particularities in the actors, behaviours, and dynamics, and potential weaknesses in factors (building blocks) that may occur. Recognising that access to WASH services is often the most immediate need.

5.1. WIDER ‘BEYOND THE WASH SYSTEM’ CONTEXTUAL FEATURES

The following broad contextual issues within the country may affect the WASH system:

- **Stability, security and the rule of law:** Many countries classified as fragile experience armed conflict or some other form of insecurity, which is often protracted. This bears considerable influence on the type of programming possible given site access, security considerations, and risk. It therefore influences implementation modalities35 and the types of implementing partners. For example, heightened tensions can make confrontational approaches like CLTS more challenging (Balfour et al., 2015). Reduced rule of law can influence the government’s ability to regulate services and enforce standards and contracts and can lead to theft or damage to infrastructure assets. Water infrastructure can deliberately or accidentally be damaged by conflict, and during conflict, water sources can even be deliberately poisoned or constrained to punish or subjugate certain populations (Schillinger et al., 2020; UNICEF, 2019d). Conflict can also cause population displacements (see below), lead to intimidation or reduced operational capacity of staff from service providers or service authorities, and can affect such actors’ human resources through attacks or outwards migration (Diep et al., 2017). Section 3.1 discussed other direct and indirect impacts.

- **Highly politicised and volatile contexts:** Insecure settings can considerably increase the programming risk, with associated implications on the types of programmes that are funded and implemented. They can also create challenges in government engagement in programme planning and delivery, thus affecting the government’s ability to perform its leadership role in the sector (Lindemann, 2008).

- **Governance, legitimacy of the state, and undermined ‘social contract’:** Where governments’ legitimacy is in question or they are not adhering to core humanitarian principles, it can pose strong constraints on organisational readiness to engage with them or strengthen their capacities. Where the state fails to provide protection and basic public services to its population, perceived legitimacy and public trust in the state can be undermined, eroding the ‘social contract’ between the state and society (Sadoff et al., 2017; Wild and Mason, 2012). In the context of public water utilities, this can have a significant impact on customer–utility relations. Weak governance can also include issues such as limited accountability, social exclusion, and corruption—all factors that can further aggravate tensions and fragility.

- **The wider economic context and erosion of livelihoods:** Conflicts and fragility have severe impacts on economies. FAO and World Bank (2018) note that Syria and Yemen are losing as much as half of their pre-war GDP, and World Bank (2011) asserts that a protracted civil conflict costs the average developing country roughly 30 years of GDP growth. Protracted crises can undermine livelihoods and market systems, reducing people’s ability to pay for services, and shifting spending priorities to commodities they deem essential. Economic

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35 For example, longer-term demand-responsive approaches vs. short-term supply-driven approaches.
36 An attempt to catalogue all water-related conflict is presented here: http://www.worldwater.org/conflict/list/
volatility can make it harder for service providers and users to access commercial finance and can act as a disincentive for saving funds. Decreased public revenues from taxes, in some cases combined with externally imposed sanctions, can impact state subsidies for public services and lead to limited operational budgets and erratic payment of salaries, both of which can considerably undermine staff motivation (Diep et al., 2017; Sadoff et al., 2017).

» **Vulnerability or exposure to natural hazards and climate change:** Many of the countries listed as ‘extremely fragile’ are in contexts where there is water scarcity, with droughts being common features (such as in the Horn of Africa), and localised tensions around water resource access and governance37 (Sadoff et al., 2017).

» **Displacement and mobile populations:** Migration and displacement are both causes and consequences of fragility (UNICEF, 2018). Using OECD’s definition of fragility, as of the end of 2019 approximately 80% of the 79.5 million forcibly displaced persons came from fragile countries, with 65% of the total displaced population being hosted in fragile countries. A common misconception is that refugees and IDPs mainly live in camps; however, UNHCR estimates that 61% of refugees and 80% of IDPs live outside of camps and managed settlements (UNHCR, 2020a). The influx of refugees and IDPs and their eventual return can cause significant surges in demand on existing WASH resources and services. This new pressure on available resources, in addition to refugees or IDPs receiving, or being perceived to receive, higher levels of service38 than host communities, can be a considerable source of tension (UNHCR, 2019; WWAP, 2019). With the necessity of quick solutions to address immediate needs and the subsequent uncertainties on the tenure of the displaced populations and political sensitivities about accepting ‘permanent infrastructure’ services and infrastructure can be expensive to run and challenging to sustain (Huang and Njoroge, 2020). Certain protracted refugee/IDP settlement populations may become accustomed to externally subsidised services and may have reduced willingness and ability to pay for these services in the future39. Outwards and inwards migration can affect social cohesion and social support networks, which can impact the effectiveness of community–based approaches like CLTS (Ekhator and England, 2015), and affect the staff and volunteers supporting WASH services. IDPs and refugees can also risk being socially excluded and not counted for in planning and monitoring for WASH services, and their importance in ‘leaving no one behind’ is key (UNHCR, 2019).

5.2 ACTORS, BEHAVIOURS, AND INTERACTIONS

Many of the actors and dynamics in the WASH system may be similar to WASH systems in LIS countries. However, fragile contexts, with their additional humanitarian architecture, are likely to have some distinctions:

» **Weak and ineffective public institutions and utilities:** Protracted crises can ‘decimate’ and ‘hollow out’ institutions (FAO and World Bank, 2018; UNICEF, 2018; World Bank, 2011) from the national down to the service provider levels40. Depending on the context, these institutions may always have been weak, or could have been diminished due to the crisis41. Institutions’ legitimacy may be in question both by international actors and the population, and their technical and operational capacities can be severely undermined. The considerable human and financial resource constraints of decentralised service authorities can significantly affect the extent they can provide ongoing support and oversight to WASH service providers. The weakness or illegitimacy of state institutions can undermine their credibility and capacity to ‘lead’ the sector in terms of planning, standard-setting, coordination, amongst other areas. In turn, this often leads to parallel structures and processes being developed and the aforementioned ‘capacity conundrum’ (World Bank, 2011).

37 In such contexts, whilst this paper looks at ‘WASH’ issues, access to water is usually the most pressing perceived need.
38 For example, interventions for IDPs and refugees are likely to aim to attain at least SPHERE standards (Sphere Association, 2018) and UNHCR standards (UNHCR, 2020b).
39 However there are cases where refugees are expected to pay, for example in Uganda.
40 Such as national authorities (e.g., regulators, central health/water ministries), service authorities (e.g., decentralised governments and their water/environmental health units, catchment management entities), and service providers (e.g., utilities, water committees, FSM operators).
41 For example, countries affected by the ‘Arab spring’ in some of the Middle East & North Africa contexts.
» A wide range of formal and informal WASH service providers: The deterioration of publicly provided water supply services (outlined in Section 3.1) often leads to the proliferation of small-scale and often informal and unregulated service providers, such as private water vendors and water truckers, or households selling water from private sources. Consequently, such substitute private service providers can benefit from the situation and might grow resistant to re-instating state institutions as key actors in WASH service provision (Sadoff et al., 2017). Faced with diminished service levels, households may also revert to substitution (e.g., using bottled water instead of piped water), or invest in constructing their own water source.

» International organisations acting as service providers: In contexts such as refugee and IDP camps, organisations like UNHCR or NGOs contracted by them may be the ongoing service providers. In emergency response contexts, service provision can be directly commissioned and financed by aid organisations (for example, water trucking services or desludging of latrines).

» Different structures related to the humanitarian context, with distinct processes and lines of communication and accountability: In 2019, GWC was activated, through the national system, in 29 countries, of which 76% are fragile contexts (GWC, 2020). The cluster system comes with its own humanitarian ‘architecture’, which is a system that often (especially in fragile contexts, although not always) exists parallel to the host government, with individual sectoral ‘clusters’ (such as WASH) feeding upwards to a resident Humanitarian Coordinator. Both the resident coordinator and the individual clusters have upward reporting lines and downwards steering and support from global level counterparts. This humanitarian architecture has well established normative processes, templates and protocols for reporting, communications, coordination and needs assessments, and specific processes for planning, budgeting and financing. There is also the Refugee Coordination Model.

» Presence of different international organisations (NGOs, UN), with different perspectives and skillsets: In humanitarian contexts, actors that may not be present or highly active in stable contexts become more prominent and influential, while more risk-averse or ‘development mandate’ actors may not be present or operate remotely. UNICEF, which is generally the cluster lead, plays a significant role in the sector in fragile contexts. ‘Dual mandate’ entities tend to be present; however, their in-country teams’ experiences and perspectives – and the programming modalities they use – may be more humanitarian focused rather than longer-term development or may implement different programmes in parallel. Due to contextual ‘hardship’ factors and short/unpredictable funding, staff contracts may be shorter and turnover higher than in more stable development contexts.

» Differing lines of accountability, perceptions of leadership, and inter-agency and inter ‘silo’ dynamics: Non–state WASH sector organisations’ lines of accountability can shift towards the cluster and donors, rather than to host governments (Mason and Mosello, 2016). Indeed, it is not uncommon to hear UNICEF being referred to by NGO staff in humanitarian contexts as the ‘sector lead’ (rather than cluster lead). In the absence of (or limited) government leadership, and in settings of unpredictable funding, there can also be competition between international agencies or between the humanitarian and development silos. These dynamics may affect the cooperation and dialogue between actors and across silo boundaries. (Oxfam, 2018) notes that some agencies active in fragile contexts may have ‘perverse incentives’ in maintaining the humanitarian context and funding ‘status quo’, with financing arrangements providing fewer incentives to shift from humanitarian to development approaches.

42 Albeit often with a level of representation from government.
43 There are clear templates and processes for humanitarian needs assessments, humanitarian response plans, ‘4W’ reporting systems, and specific (generally short-term, reactive) financing mechanisms (CERF and ERF).
44 https://emergency.unhcr.org/entry/38270/refugee-coordination-model-rcm
45 For example, refugee/IDP mandated institutions such as UNHCR, IOM, ‘single-mandate’ NGOs such as MSF or donor agencies such as ECHO and OFDA.
46 This may also be the case for the teams that support the country programmes, where some organisations have ‘humanitarian departments’ or group more fragile contexts together under specific HQ advisors.
5.3. FACTORS AND COMMON GAPS

Table 1 (overleaf) identifies examples of how fragility can influence different factors of the WASH system, presented around the eight building blocks. This will vary by context, so should not be viewed as a list of issues that occur in every fragile context. This table focuses largely on weak factors or factors that can weaken the system and its ability to deliver sustainable services at scale. In contrast, Section 6.1, highlights some of the key opportunities that fragile contexts provide for strengthening systems. This table focuses on specific issues relating to fragile contexts – there are a wide range of systemic challenges faced by low-income stable contexts, which are not stated here (see Gensch and Tillett, 2019; Huston and Moriarty, 2018).
INSTITUTIONAL ARRANGEMENTS & COORDINATION

INSTITUTIONAL CAPACITY:

» ‘Decimated’ and ‘hollowed out’ public institutions and utilities have reduced physical, human and economic resources (Diep et al., 2017) to fulfil designated mandates or have no clear legal mandate.

» Limited capacity of the state to lead, coordinate or implement emergency WASH response activities, which leads to capacity substitution by non-state actors, often through the cluster mechanism.

» Personnel in international organisations may have less experience in longer-term development approaches. Gaps in sector actors’ experience in certain contexts in emerging issues such as urban humanitarian WASH and markets/cash-based approaches.

» Increased tendency for short-term, one-off interventions (e.g., training to water committees) means there are insufficient capacities to sustain infrastructure and services.

» Service authority capacity to provide ongoing support and oversight to service providers is severely constrained, as is support and oversight from central to decentralised state institutions and can lead to parallel decision making or semi-autonomous bodies supported by donors that can become more influential than government agencies.

» Capacity building efforts (e.g., to government entities) may be focused on shorter-term, more predictable activities (e.g., provision of equipment and one-off technical trainings) rather than longer-term more systemic approaches (Brinkerhoff, 2010).

» Capacity building needs and efforts to strengthen them are projectised and piecemeal rather than guided by overarching plan that multiple actors support and align to.

» Already weak capacity of market actors (e.g., FSM operators, water truckers, supply chain actors), is further undermined by supply-driven humanitarian action.

MANDATES, ROLES AND INCENTIVES:

» Ambiguities in institutional mandates on WASH for humanitarian response and support to IDPs/refugees within government (e.g., between Ministries of Water and Disaster Management and refugee specific ministries, where they exist).

» Difficulty motivating and holding civil servants accountable.

» Projectised and fragmented approaches with different implementation modalities, per diem arrangements, cash for work, amongst others, creating implementation challenges and establishing lots of project-based volunteers and community structures, and potentially affecting demand and perceptions of ‘ownership’.

COORDINATION:

» Many NGO and UN actors are present, posing coordination, fragmentation and sector harmonisation challenges.

» Competition for beneficiaries can lead to a lack of harmonised approaches.

» Coordination challenges and institutional competition between actors across the humanitarian and development silos.

» Coordination, if done through the WASH cluster, is usually led by international agencies rather than government (and may not include or bypass government).

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47 This challenge is not unique to fragile contexts, but also common in many low-income stable countries

### TABLE 2:
Common features and gaps that may be present in fragile contexts, presented by ‘building block’ of the WASH system.

Note: this is in addition to common gaps that may be found by building block in low-income stable contexts.
FINANCE

BUDGETING AND FINANCING:

» Short-term, earmarked/restricted, and unpredictable humanitarian aid hinders longer-term planning and longer-term efforts to strengthen the sector.

» Economic fragility, poor financial management, corruption, limited revenues from taxation and sector budget allocations, alongside international debt severely constrains governmental actors’ financial resources, impacting their ability to deliver or subsidise services, pay salaries, and effectively fulfil their mandates at different levels.

» Resource-poor government institutions having ‘turf wars’ over mandates due to increased availability and relative importance of project funding.

» Decreased governmental financial resources reduces willingness to decentralise fiscal resources for fear of a loss of power or importance.

» Infrastructure and arrangements to provide WASH services in the relief phase may have high recurrent costs over the medium-term (UNHCR, 2020a).

» Price volatility of inputs needed for WASH service construction, operation and maintenance due to spikes in demand, economic instability and importation/supply chain challenges.

» The economic and risk context translates to a high cost of capital (e.g., reduced number of financial institutions and availability of services as well as high-interest rates on loans) hinders private sector growth and affordability for households to take loans.

» Direct and indirect causes of fragility increase rates of non-revenue water and makes it increasingly difficult for service providers (e.g., utilities) to maintain commercial viability (Diep et al., 2017; World Bank, 2011).

» Economic instability and criminality disincentivise service providers from maintaining contingency savings.

REVENUE COLLECTION:

» Users’ ability to pay (e.g., for water tariffs and construction or emptying of toilets) decreases due to increased prevalence of poverty, erosion of livelihoods and/or (in the case of refugees in some contexts) inability to work (UNHCR, 2020a) this can be compounded by mistrust in services providers.

» Temporarily subsidised services (e.g., in camps or emergency water trucking), supply-driven approaches, or eroded trust and dialogue between users and service providers negatively impact users’ willingness to pay.
SERVICE DELIVERY INFRASTRUCTURE

DESIGN AND CONSTRUCTION:
» Short-term ‘life saving’ interventions and challenging operational conditions leads to poor quality infrastructure or repairs. It can also mean that infrastructure is designed and installed without a specific design life, nor considering the wider likely longer-term life cycle costs.
» More limited monitoring and enforcement of infrastructural standards by government, and potentially non-consistent application of government standards (actors are rather using SPHERE / Cluster standards and designs48).
» Infrastructure is unable to cope with large fluctuations of demand (e.g., due to population displacements).
» Variable technical capacity of NGOs, contractors and service providers to deliver high-quality infrastructure.
» Many actors and lower enforcement of standards results in a more ‘chaotic mix’ of technologies being installed, posing economy of scale challenges for ongoing supply chains and maintenance services.
» Non-state actors’ procurement practices (e.g., international procure-and-supply) undermines local supply chains and creates future challenges in the ensuring the local availability and replacement of items.
» Procurement and implementation activities for construction or rehabilitation (or pit emptying) undermine the viability of local maintenance/emptying services.
» Increasing challenges in sourcing spare parts, consumables and fuel locally, and the price volatility of these.

MAINTENANCE:
» Physical damage to WASH infrastructure, and chronic neglect in maintenance and replacement, leading to ‘asset decay’. Asset decay can be a result of overuse due to an increase in population with insufficient maintenance.
» Progressively less strategic/preventative, and more ad-hoc/ responsive approach to infrastructure maintenance and asset management.
» A growing number of infrastructural assets (e.g., water points and schemes) that have been installed, at haste, during responses, some of varying quality/adequacy, that the service authority struggles to oversee and support49.
» Lack of district/nationwide water supply asset inventory that is updated by all actors (e.g., different agencies using different water point mapping, and lack of pooled data that is used/owned by government).
» Difficulty transitioning out of/replacing temporary arrangements for service delivery (e.g., for provision in camp settings) with long-term solutions (Day and Forster, 2018).
» Supply-driven repairs to WASH infrastructure can confuse roles and responsibilities around maintenance and create ongoing expectations for external assistance.
» Capacity of service authority to plan for and support service providers in capital maintenance is undermined.

PROJECT DELIVERY:
» Short-term programming cycles are often restrictive in achieving meaningful behaviour change (e.g., on hygiene or sanitation practices), or demand-based techniques may be undermined by extreme humanitarian needs, or ‘subsidy pollution’ in the sector.

48 Although it is important to note here that clusters often develop interim cluster standards or guidance, and/or help government to develop such standards.
49 “Governments of countries affected by fragility, conflict, and violence often face a chaotic mix of damaged infrastructure, alternative service delivery arrangements, dilapidated utilities, and externally driven support to water service provision.” (Sadoff et al. (2017, p. 19).
**REGULATION & ACCOUNTABILITY**

**LEGAL FRAMEWORK:**
» Different actors using different service standards (e.g., sector vs. sphere standards).

**ACCOUNTABILITY:**
» Regulatory capacity and effectiveness of state institutions at centralised and decentralised levels is severely constrained due to resource constraints, the weak rule of law, the state’s limited credibility/legitimacy, poor governance and corruption.
» Proliferation of small scale, informal WASH service providers (e.g., water truckers, vendors, and FSM operators) that are not legally registered, and may actively avoid dialogue with government entities creates significant challenges in enforcing service or economic (e.g., tariff) regulations on service providers.
» Lines of accountability affected by humanitarian–development silos and dynamics – international actors are more oriented to being accountable to donors, cluster leads and possibly beneficiaries, rather than the host government.
» Limited mutual accountability between government and supporting agencies/donors.
» Difficulty for cluster lead agencies to hold organisations in the cluster accountable.
» Limited accountability or dialogue platforms between service providers (e.g., public utilities) and service users[^50].
» Deteriorating service levels and access can ‘lower the bar’ on service regulation and standards (e.g., ‘as long as people get some water sometimes’).
» Actors’ struggle to enforce legislation due to insecure or poor governance settings (e.g., utilities’ ability to address illegal connections).

**MONITORING**

**CAPACITIES AND OTHER CHALLENGES TO UNDERTAKING MONITORING:**
» Short-term supply-driven projects, failing to build local capacities and structures to undertake ongoing monitoring post-project.
» Challenges establishing community-level monitoring and reporting structures due to the mobility of populations and insecurity.
» Security/crises context can affect or curtail nationwide surveys (e.g., MICs) leading to outdated data on SDG progress.
» Operating context (e.g., security) restricts state and non-state actors’ monitoring activities.
» Insufficient availability or allocation of government resources to conduct monitoring activities (including limited capacities) of the state at central and service authority levels to monitor WASH services is substituted by ad-hoc, periodic assessments by NGOs (e.g., monitoring is externally driven and not recurrent) and one-off assessments (e.g., large-scale water point mapping) that do not have realistic mechanisms in place for ongoing (recurrent) updating.

**MONITORING PROCESS AND SCOPE:**
» Limited decision-making / resource allocation based on WASH-related disease or outbreak surveillance data.
» Parallel reporting and monitoring processes to governmental actors (e.g., national, regional, district) via the cluster[^51].
» ‘Development’-focused monitoring indicators and frameworks do not include humanitarian contexts, and IDPs/refugees.
» Fragmented and projectised approach to surveys and service monitoring by individual organisations, which do not feed into government sector datasets.
» Monitoring and assessments are focused on affected populations’ immediate needs, rather than systematic, nationwide service-level monitoring looking at SDG attainment.
» Politicisation of data on services (and disparities), and reduced reliability of government data.

[^50]: Although this can often be the case in low-income stable contexts also
[^51]: For example, see GWC (2017).
WATER RESOURCE MANAGEMENT

ENVIRONMENTAL DEGRADATION, HAZARDS, SCARCITY, AND CONFLICT:
- In certain contexts, water scarcity and poorly governed or exclusionary management practices of water resources lead to tensions and conflicts (discussed further in Section 6.2.2).
- Catchment degradation due to issues such as deforestation, uncontrolled development, pollution, and conflict may limit access to water sources (UNICEF, 2019d).
- Deliberate contamination of water sources due to conflict (UNICEF, 2019c).
- Significant localised pressures on water resources due to IDPs/refugee influxes.
- Exposure of WASH infrastructure to flooding and natural disasters.

PLANNING, MANAGEMENT AND REGULATION OF RESOURCES
- Limited strategic, cross-sectoral water resources planning, and limited usage of such plans in humanitarian response planning.
- Impaired processes for abstraction permits, and ongoing unregulated abstractions including by large numbers of informal service providers and by domestic water supplies.
- Instability and functional capacity of government restricts routine hydrological monitoring.
- High rates of physical water losses in pipe networks due to infrastructural damage or decay, and poor-quality maintenance.
- Limited priority placed on environmental regulation, and unregulated/unprosecuted pollution by industries and FSM operators, amongst others.

PLANNING

PLANNING PROCESS, LEADERSHIP AND ALIGNMENT:
- Planning processes are not always fully government-led (e.g., cluster-led).
- At the local level, supply-driven activities and top-down project design processes sometimes do not adequately consult local stakeholders in intervention design.
- Processes of humanitarian needs assessments may prioritise water (over sanitation and hygiene), as they can at times reflect the bias of what affected populations prioritise in terms of needs.
- Lack of strategic, government-led plans (at national or decentralised levels) that guide sector actions and ensure alignment by non-state actors (either not existing, or not used) – this is at times substituted by donor-led and project-based priority setting and planning (at sub-sector level), and particularly cluster-led planning (at sector level).
- Limited/unreliable data on which to plan – lack of evidence-based plans undermines decision making and accountability of planning process.

LONG-TERM VS SHORT-TERM, AND CONNECTEDNESS IN PLANNING:
- Siloed planning processes between humanitarian and development actors.
- Development plans do not adequately capture resilience and preparedness.
- Whilst the context presents high risk, plans (and the assessments that feed them) are not risk-informed or conflict-sensitive (discussed later).
- Rapidly changing context can render existing plans obsolete (or perceived to be obsolete) – this is exacerbated when there are limited government-led processes of review and updating of strategic plans.
- Challenges in knowledge management and staff turnover/institutional memory loss (see 5.2) means sector actors may not be aware of existing sector plans.
- Humanitarian plans aimed at addressing short-term needs are not necessarily geared toward ensuring sustainable WASH service delivery.
- Short-term planning cycles due to unpredictability/rapidly changing nature of context, and unpredictability of funding, affects type of programming (see 5.1, 6.1).
- Unpredictability of context, limitations on capacity and resources, reactive management, and expectations of external support hamper practices of planning in service providers like utilities (Diep et al., 2017).
- IDPs and refugees are not systematically considered in sector (non-humanitarian) planning processes.

Note – it could be argued that the humanitarian ‘system’s planning process is often relatively robust (albeit limited in scope), and presents an example of an area of relative ‘strength’ in the system in fragile contexts.
LEARNING & ADAPTATION

PROCESSES AND CULTURE FOR REVIEW AND LEARNING:

» Fragility events can interrupt sector-wide review and learning processes such as Joint Sector Reviews.

» Strong focus on ‘coordination’ in the WASH cluster places an emphasis on information updates rather than processes of reflective learning.

» Limited time/appetite of humanitarian actors to strategically review progress in the context of humanitarian response or when delivering short-term, targets-focused projects (although cluster ‘after action reviews’, in instances when they are undertaken, are clear exceptions to this generalisation).


» Intensified inter-agency competition (due to power dynamics and unpredictable funding) can reduce the willingness of organisations to share failures (for risk of reputational damage) or learnings (to maintain a competitive edge).

KNOWLEDGE MANAGEMENT, INSTITUTIONAL MEMORY AND SILOS:

» Highly projectized, fragmented context coupled with poor sector knowledge management and institutional memory loss, leads to a large amount of repetition in ‘pilots’ and associated cost inefficiencies.

» Shorter-term contracts of expatriate staff, evacuations of ‘development workers’ during crises (and shifts from ‘development phase to emergency phase, and back), and short-term projects with unpredictable funding, leads to institutional memory loss in the sector and potential discontinuity of longer-term efforts.

» Incoming humanitarian actors may not have access, time or incentive to read sector policy, strategies and legislation.

» Humanitarian–development silos restrict the sharing of information and processes of joint review and learning, which could enhance connectedness and complementarity.
5.4. PROPOSED ADAPTATIONS TO THE CONCEPTUAL FRAMEWORK FOR APPLICABILITY IN FRAGILE CONTEXTS

This section considers the applicability of the existing Agenda for Change conceptual framework for WASH Systems to fragile contexts and proposes adaptations of the framework and nuances within each building block. These adaptations are marked in red in FIGURE 10. It should be noted that this adaptation utilised the Agenda for Change example, whilst Gensch and Tillett (2019) have undertaken earlier work on adapting this framework, with a focus on sanitation and hygiene.

The existing framework and building block titles are broadly applicable to both fragile and non-fragile contexts, with some modifications, as indicated. Agenda for Change has not yet articulated the ‘sub-factors’ behind each of these building blocks. Accordingly, the building block titles within the conceptual framework remain relatively open to interpretation as to what each block includes. Work by Gensch and Tillett (2019) sought to build on existing resources from various Agenda for Change members to list out some of the key sub-factors behind the different building blocks. That paper proposes a range of indicators behind each of the building blocks, which sector actors can use to analyse the strength of WASH systems at the local (e.g., district, or equivalent) level. An updated version of this can be found in the WASH systems toolkit, produced by WHH, Aguaconsult and GTO (Welthungerhilfe et al., 2019).

Beyond the building block titles, this paper provides examples of nuanced differences within the sub-factors of each building block – see Annex 1. This may be of benefit for sector practitioners looking to evolve their systems diagnostics tools to fragile contexts. Similar work has been done by the GWC and SWA to incorporate humanitarian issues into the SWA building blocks, and within WASH BAT (see text box in Section 3.3).

53 As mentioned in Section 4, this paper uses the Agenda for Change framework as one example of a framework, whilst acknowledging that many frameworks exist in the sector.
6. ADAPTING WASH SYSTEMS APPROACHES TO FRAGILE CONTEXTS

Adjustments to approaches and concepts used for systems strengthening in ‘stable’ contexts are needed when applying them in fragile contexts to reflect the challenges and opportunities that fragility poses to systems strengthening. Adaptions are also needed to tools, processes and objectives as well as the focus areas to be strengthened. This is this section’s focus.

6.1. FRAGILITY CREATING BOTH CHALLENGES AND OPPORTUNITIES FOR SYSTEMS STRENGTHENING

There are genuine barriers to more systemic programming, especially in humanitarian contexts. However, are these insurmountable, and are there also opportunities in fragility? These questions were asked in various group work sessions in sector conferences and workshops, and the information is presented below.

There are clear challenges and barriers to implementing systems approaches in fragile contexts. Systemic challenges in fragile contexts have been summarised in Section 3. Relating to challenges to implementing systems approaches in such contexts, the following aspects have been identified:

- High-risk and rapidly changeable context can lead to donors tending to focus on shorter-term programming cycles, and (donors and implementers) focusing more on clear ‘achievable’ quantitative targets (rather than less tangible or less directly influenceable systemic impacts);
- Restrictions on usage of funding streams linked with the mandates of the funding streams/donors (and challenges to raise funds for DRR and resilience actions);
- Unpredictable and short-term funding undermining ability of agencies to take longer-term presence (and develop relationships) in certain locations and with local actors; highly politicised and volatile environments, and issues of engagement with government due to concerns on how this effects the humanitarian principles of impartiality, neutrality, or the reputation of the agency (e.g., NGO) (see 6.4.1);
- Waves of crises causing discontinuity of longer-term initiatives; challenges of political sensitivity in providing longer-term solutions for refugee and IDP settlements; and finally; in contexts of acute crisis or overwhelming immediate humanitarian needs, conversations on ‘sustainability’ are understandably not prioritised.

However, fragility and ‘shocks’ also create clear windows of opportunities for applying systems approaches. Shocks, and the resulting shifts in the sector between focusing on developmental and humanitarian activities, can provide windows of opportunity for systems strengthening (Fustukian, 2017). Table 3 summarises examples of opportunities.

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54 Although many concepts, and focus areas for systems strengthening in ‘stable’ contexts are also applicable in fragile contexts.

55 Section 7 further elaborates on some of the challenges and experiences in implementing systems approaches as mentioned by interviewees in the development of this paper.
AREAS OF RELATIVE SYSTEMIC STRENGTH AS OPPORTUNITIES TO START WITH

The humanitarian context and cluster processes place emphasis and have good capacities in the following areas, which can be built on, particularly if progressively absorbed under government leadership:

☐ Coordination within the sector and across sectors, and harmonised reporting by actors.
☐ Assessments\(^{56}\), surveys, data management and visualisation, data-informed and consultative planning.

OTHER, MORE GENERAL OPPORTUNITIES INCLUDE:

☐ Sector commitments on prevention, preparedness and resilience, ‘building back better’, and donor expectations for ‘connectedness’ and ‘exit strategies’ for humanitarian action, provide a clear rationale and entry points for systems strengthening.
☐ Where water has been a source of tensions, or government legitimacy can be reinforced through improving public services, objectives of peace and state building provide further rationale for systems strengthening (further discussed in \(^{6.2.2}\)).
☐ Financial resources remaining in the aftermath of crises for increasing resilience and DRR.
☐ While central governments may be failing, in some cases it is an opportunity for local governments to demonstrate their effectiveness (opportunity to support decentralisation) (Waal et al., 2017).
☐ Many sector actors (NGOs and UNICEF) have dual mandates and overall objective of attaining SDGs
☐ Technology advances can enable monitoring and accountability even in unstable contexts\(^{57}\).
☐ The presence of an organisation in a country or district ‘even during the hardest times’ can create goodwill for partnerships with governments.
☐ The presence of IDPs in host communities, and the need for strengthening WASH services within the communities, can be a good entry point for integrating development and humanitarian initiatives. There are similar opportunities for looking for longer-term sustainable service solutions on issues of protracted crises, refugee and IDP camps, and also in planning for ‘durable solutions’ for returnees.
☐ Crises can ‘press the reset button’ on the sector, with institutions in a state of flux, and thereby create significant windows of opportunity for reforms (Fustukian, 2017).
☐ Public interest and political commitment to addressing ‘root causes’ in the aftermath of epidemics (e.g., cholera), or to build resilience to future epidemics (e.g., COVID-19). Related to this, opportunities to influence user behaviours (e.g., hygiene practices) during epidemics (e.g., handwashing during COVID).
☐ Commitments made in the Grand Bargain around longer-term, more flexible and predictable funding for fragile contexts as well encouraging the ‘localisation’ agenda.
☐ Insecurity and restricted field access can force international actors to work with local partners and service providers to build their capacity to undertake activities directly.
☐ An increasing trend toward cash and markets-based approaches in the humanitarian sector (and within GWC) poses strong opportunities for market systems-strengthening and changing ‘conventional’ means of humanitarian programming to be more market-sensitive (see \(^{6.4.3}\)).
☐ Water resources management can be a potential entry point to wider conflict mitigation and peacebuilding work (discussed further in \(^{6.2.2}\)).

In summary, whilst there are clearly significant barriers to systems approaches, there are also opportunities, particularly given the evolving global agendas such as the Grand Bargain.

\(^{56}\) There is scope here to build in more systemic assessments into these processes
\(^{57}\) For example, water point sensors allowing remote monitoring, social media, mobile money, smartphone apps for real-time monitoring. Although in some conflict contexts, the use of equipment such as GPS, satellites and sensors can be restricted.
6.2. ADAPTING AND EVOLVING OBJECTIVES FOR SYSTEMS STRENGTHENING IN FRAGILE CONTEXTS

The common overarching rationale for WASH systems strengthening in development circles is to achieve the SDGs through building the foundations for sustainable WASH services at scale (Tillett et al., 2020). This is broadly represented in Figure 7. In Figure 11 below, and throughout this section, we look at how systems strengthening in fragile contexts may have adapted areas of focus, which contribute not only to building the foundations for progress towards the SDGs, but strengthen resilience to shocks, address some of the root causes of fragility, and help in the process of post-conflict peace and state-building.

6.2.1. STRONG AND RESILIENT SYSTEMS, FOR RESILIENT WASH SERVICES

Protracted crises have a major impact on progress towards the WASH SDGs. In fragile contexts, prevention and impact minimisation need to be prioritised, and resilience to future shocks strengthened. UNICEF (2019c) suggests that a protracted conflict can cause a major deterioration in WASH services and that it could take countries 20-30 years to return to pre-conflict service delivery. Diep et al. (2017), World Bank (2011) and UNICEF (2019c) highlight the crucial importance of avoiding service collapse, as the further WASH services and assets decline (see Section 3.1), the harder, and more expensive it is to recover. Using this logic, for the achievement of the WASH SDGs, there is a need to work to prevent crises from occurring in the first place (see Section 6.2.2) minimise the detrimental impact of current crises on WASH services and strengthen resilience to avoid or reduce the impacts of future crises on service delivery and the gains made in the SDGs. The Framework for WASH Sector Resilience in Fragile & Conflict-Affected contexts by UNICEF (2019c) summarises this well (Figure 12). It also aligns with Mark Lowcock’s general principle of early intervention to minimise the magnitude of response (CERF, 2020).

“Modalities that stabilise and where possible strengthen the existing infrastructure and basic service delivery systems mid crisis, avoid the inefficiencies and other far reaching negative consequences of creating parallel systems.”

(GOAL 2020b, p. 1)
Systems strengthening can contribute to this. The capacities and processes of permanent local actors such as market-based actors, faith-based actors, national NGOs and the Red Cross, service providers, service authorities and national and regional governmental entities in areas of disaster preparedness and response can be built. Systems strengthening can also be applied to humanitarian systems to improve their capability to effectively respond to disasters in a way that minimises damage to sustainable service delivery. The resilience of market-based actors and service providers can be enhanced to ‘weather the storm’ of internal and external shocks (see 6.4.3).

Systems approaches can also help to bridge the humanitarian–development divide and in the transition process. The earlier sections of this paper have referred to the ‘capacity conundrum’ and ‘self–perpetuating’ nature of creating and using parallel systems, and the challenges of transitioning from humanitarian to developmental ways of working. Systems approaches seek to understand and strengthen linkages between actors and factors in the system, demonstrate and strengthen collaborative behaviours, and address systemic weaknesses. In this, there is strong potential for systems approaches to help address the more ‘persistent’ sector bottlenecks to transitioning out of recurrent cycles of relief, to build realistic and credible ‘exit strategies’ for humanitarian action, and to increasingly build synergies and connectedness between humanitarian and development action. Hart et al. (2015) remark on the need (and opportunity) to build country systems to the level whereby they can start to be used to avoid the trade-offs that donors face between high levels of risk and using country systems.

In their objectives for their work in fragile contexts, World Bank (2014) asserted that it aimed “to support fragile states in transitioning their water supply and sanitation subsectors from largely donor–led, ad hoc emergency interventions to country–led sector development programmes. This, in turn, would help to re-link service delivery to core country systems and the political process, build the legitimacy of the state, and enhance the reach and rate of service delivery.” (World Bank, 2014, p. 6)
Resilient WASH services require resilient WASH systems and resilient efforts to strengthen them. Shocks, and the resulting shifts in the sector between focusing on developmental and humanitarian activities, can provide windows of opportunity for systems strengthening (Fustukian, 2017). However, they also risk discontinuity of longer-tern systems strengthening efforts in several ways. These risks include longer-term systems strengthening initiatives being curtailed or funds re-programmed for a humanitarian response; sector actors and systems ‘champions’ moving on from government59, supporting organisations and donors; and pre-crisis trajectories and developmental efforts being ‘forgotten’ through institutional memory loss and multiple actors pushing different agendas in the ‘post-crisis recovery’ phase (Fustukian, 2017). To avoid what Sadoff et al. (2017) terms ‘waves of progress and regress’ in systems strengthening, efforts are needed to ensure that systems strengthening approaches – and the gains that are achieved – are also resilient. Section 7 discusses what this means for how to implement systems approaches in fragile contexts.

“Shocks, internal or external, can easily pull country systems and the [WASH] sector back down the transition trajectory”
(World Bank, 2011, p. 6)

6.2.2. REDUCING FRAGILITY THROUGH PEACE AND STATE-BUILDING

There is a clear interaction between fragility and poor WASH services and a linkage between water scarcity, water management and conflict. The interactions between fragility and poor WASH service delivery are well documented (FAO and World Bank, 2018; Mason, 2012; Sadoff et al., 2017; UNICEF, 2019d). The literature highlights how weak institutions and poor WASH services can be both a consequence and a driver of fragility (Sadoff et al., 2017). Perceptions of the inability or unwillingness of the state to provide basic public services such as water, the lack of accountability or inclusiveness of service providers or the services they deliver, and poor management of water resources in water-scarce areas can all fuel grievances that could create or further aggravate conflict in fragile contexts. Water scarcity in times of droughts can also aggravate already fragile contexts. The failure of the state in providing basic public services and effectively preventing or responding to crises can also erode the perceived legitimacy of the state, and the ‘social contract’ between a country’s population and the state (Mason, 2012; UNICEF, 2018). Fragility erodes institutions and their ability to deliver and govern WASH services effectively. In this, increasing fragility and deteriorating WASH services can be mutually reinforcing. This undermining of trust between users and the state can have far-reaching impacts on system effectiveness both during periods of stability and periods of crises, as demonstrated in the text box.

Oxfam and HWISE study on water governance and public trust:

The legitimacy of and trust in the state and its institutions can be undermined in fragile contexts. This lack of trust in the system can undermine the effectiveness of the system, for example in the effectiveness of government communications to influence behaviour change, or how the public adheres (or not) to public health messaging.

Oxfam has undertaken a study in various contexts to understand the role of trust in public health emergencies. Preliminary indications from the current pandemic suggest that countries with the most effective coronavirus prevention measures tend to have higher levels of public trust. To enhance trust, and apply the lessons learned from the Ebola epidemic, Oxfam will work with local partners and government departments, to track community perceptions and rumours. In this way, the response can effectively respond to local needs, fears, misperceptions and feedback.

59 This turnover of stakeholders such as politicians and technocrats in the WASH sector causes significant and well-documented challenges to efforts in building capacity and strengthening systems (Tillett et al., 2020).
We can use systems strengthening to contribute to broader peace and state-building goals. Systems approaches to WASH and water security can help address some aggravating aspects of fragility. Through better delivery and governance of WASH services and equitable water resources, systems strengthening can help to prevent or mitigate conflict and rising levels of fragility. By strengthening states’ capacity to effectively, inclusively and accountably respond to their population’s WASH needs in times of crisis, we can strengthen the legitimacy of the state and mitigate tensions (USAID, 2014). Finally, through strengthening systems to deliver quality services as part of the post-conflict ‘build back better’ efforts, WASH and WRM services can help deliver the ‘peace dividend’ (Sadoff et al., 2017) and restore the social contract between the population and the state (Mason, 2012).

“A well designed WASH intervention can also reduce fragility and conflict risk.” (DFID, 2018 p.2)

“Just as mounting fragility and deteriorating services can be mutually reinforcing tendencies, improving services may enhance social and economic recovery, overcoming fragility in a virtuous upward spiral.” (OECD, 2008, p. 21)

“Water management offers the opportunity to empower communities and, more broadly, to develop inclusive institutions for responsible and transparent delivery of the resource. Sharing information and getting users involved creates ownership and common purpose providing the opportunity for peace and stability.” (FAO & World Bank, 2018, p. xi)

Systems strengthening is certainly not a ‘silver bullet’ to conflict, fragility and rebuilding population-state trust. However, it may be able to contribute — directly and indirectly — to wider peace- and state-building initiatives. To do this, systems approaches need to fully understand the dynamics of the contexts they are operating in.

**Diffa Region, Niger: Wells for Peace (CARE)**

CARE’s Water+ approach works across the continuum of domestic, productive, and resource management to address water security in fragile contexts. In Niger’s pastoral Diffa region, which is characterised by chronic vulnerability, acute drought, and humanitarian need, CARE implemented the Wells for Peace programme from 2005-2011. Water insecurity was addressed as an underlying driver of inter-communal conflict through facilitated dialogue, negotiations, and consensus-building around water and land resource sharing. This was paired with water infrastructure investments that benefitted 30,000 pastoralists with safe water for domestic use and for livestock. A modified community-based water and land governance system was established to manage water point governance and ensure equitable access to water and pasture around each site.

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60 For example, in the capacity of the state to reliably deliver inclusive and accountable WASH services, to meet the WASH-related needs of their citizens during crises, and for water resources management to be a source of dialogue and cooperation, rather than conflict (USAID, 2014).

61 Whilst acknowledging that in some cases, strengthening state legitimacy may not be desired or appropriate in all cases.
6.3. ADAPTING SYSTEMS ASSESSMENT AND VISIONING PROCESSES

While there are many modes and processes for WASH systems analysis, this section refers broadly to some of the processes and tools used by Agenda for Change members in more 'stable' contexts, reviewing their potential applicability and need for adaptation to fragile contexts.

**Systems diagnostics are a core part of systems approaches.** To strengthen the system, we first need to understand it. Systems diagnostic processes generally use a combination of reviewing ‘building block’ strength and assessing the more dynamic aspects of the system, for example, the political economy (Mason, Samuels et al., 2019) and undertaking social network analysis, to identify systemic weaknesses and potential entry points for system strengthening at different levels. These methods are often complemented by data relating to the WASH service levels, giving an indication of the ‘performance’ of the services that the system delivers (Tillett et al., 2020).

The process of ‘visioning’, systems analysis and subsequent action planning holds strong potential to begin bridging the humanitarian–development divide. A common starting point for participatory systems analyses is getting stakeholders to define their ‘vision’ for WASH services – for example, ‘sustainable WASH services for all in district X’ (Tillett and Smits, 2017). The subsequent systems analysis (e.g., building blocks analysis) can then help to identify barriers to attaining this vision, and actions can be defined as to how these barriers should be overcome, and by whom. This process of visioning, assessment and action planning is often done in a participatory workshop involving a range of WASH actors (government, NGOs/UN, service providers, etc.) active in that area. Relating to fragile contexts, literature concerning strengthening the HDN suggests that the co-creation and definition of overarching goals for the WASH sector in a country can improve the complementarity and ‘connectedness’ between humanitarian and development actors (Mason and Mosello, 2016; Oxfam, 2018). It can thus help increase dialogue and wider consensus of the gaps, and the joint action planning processes can increase cooperation and commitment to work in a more connected, complimentary manner.

**Collaborative systems analysis in Somaliland:*** Welthungerhilfe convened a series of stakeholder workshops in Somaliland, both at the sector and regional levels, whereby government and non–state actors collaboratively analysed the strength of the WASH system and identified and prioritised key actions to address these. In an attempt to ensure agreed outcomes of these workshops were operationalised and institutionalised, a sector task force on systems strengthening was established that is tasked to oversee the implementation of agreed actions. WHH co-leads this with the Ministry of Water Resources, with strong collaboration with other key partners such as Care and UNICEF.

**Service delivery to systems assessment in North East Nigeria:** ACF undertook an area–wide water point asset inventory survey, helping to identify the status of WASH infrastructure and prevailing functionality rates. This prompted discussions internally and with the government as to how to address high rates of non–functionality. A more comprehensive WASH systems assessment followed, helping to define areas of systemic weakness for ACF to collaborate with the government on. ACF designed an mWater database that was used to discuss water management issues with authorities. Building on this evidence, ACF is able to support the leadership of the government to address systemic issues of management.


63 For example, using building block checklists

64 Much of Agenda for Change members’ assessments have been at a sub-national level. The WASH Bottleneck Analysis (WASH BAT), championed by UNICEF, applies similar processes and tools at the sector level.
To maximise the relevance and effectiveness of systems diagnostics in fragile states, adaptations need to be made to the tools and process. **Suggested areas for adaptation include:**

- **Outputs/objectives:** In addition to understanding the systemic gaps, the visioning process needs to create a longer-term vision for the sector that humanitarian and developmental actors both subscribe to. The analysis process should enable constructive dialogue, relationship building and increased mutual understanding between humanitarian and developmental actors. Humanitarian and developmental actors should jointly own the action plan. The process should help actors see their respective ‘place’ and role in the system and self-reflect on how their current actions are help or hinder progress towards attaining the agreed-upon vision.

- **Process and participants:** Undertaking such a process in a workshop type setting would be relevant. Strong facilitation and diplomacy skills may be needed to ensure that the dialogue is constructive, particularly in settings with sectoral tensions and inter-agency power struggles (see Section 5.2). Wherever possible, the process should be led, albeit likely not facilitated, by the government, providing it the opportunity from the outset to be a nationally owned and steered initiative. Representation from both humanitarian and development-focused stakeholders should be ensured, mindful that the latter may not be based in-country. Depending on the context, other actors from beyond the WASH system’s boundaries may also be involved, such as those from related clusters, and those focusing on peace- and state-building.

- **Scope and tools:** The scope of systems analysis tools (such as Building Block Checklists) must be broadened to capture preparedness, emergency response and resilience aspects (see Section 5.4). Political Economy Analysis (PEA) should also be broadened to understand divisions between humanitarian and development silos and the possible motivations and incentives to maintain or change the humanitarian ‘status quo’ (Oxfam, 2018). As mentioned in the text box in Section 3.3, UNICEF, SWA and GWC are collaborating on adapting WASH BAT indicators, and WASH BAT has reportedly been applied in fragile contexts in Somalia and Syria. GOAL (2020b) and an interviewee working with ACF highlighted the use of service provider assessments and sector network analysis in humanitarian contexts to understand what is in place that can be built upon and used in humanitarian action. Assessments should be made on different project implementation modalities and their connectedness and complementarity. Assessments of current WASH service levels should include SDG access levels, but also service levels in humanitarian contexts and those received by displaced persons. The systemic analysis should be complemented by conflict/fragility assessments and risk assessments, to ensure wider contextual (those beyond the WASH system) factors are considered and linked to the PEA. This will also help to ensure that the vision and action plans produced are risk-informed and conflict-sensitive. In turn, this will help to ensure the systems strengthening plan itself is more resilient and adaptive to shocks and changing operational contexts. Additionally, WASH markets assessments are increasingly conducted in WASH humanitarian circles (see Section 6.4.3). Such an assessment should form part of the systems analysis, and would ideally serve both humanitarian and development needs.

- **Frequency of review and operationalisation of the action plan:** WASH systems are dynamic; analyses should be periodically reviewed and updated (Mason, Samuels et al., 2019). This is particularly important for fragile contexts, which can be unpredictable and evolve rapidly. Periodic reviews might also include the need for re-calibrating the interim milestones or risk analyses of the action plan. They can also be opportunities to remind stakeholders of the agreed-upon vision and action plan, and to further socialise the vision and plan to encourage alignment.
6.4 ADAPTING AREAS OF FOCUS FOR SYSTEMS STRENGTHENING IN FRAGILE CONTEXTS

“How do you strengthen a system when it doesn’t exist?” asked one development WASH systems expert when discussing ideas for this paper. In contrast, a closing remark from a recent online debate on systems in fragile contexts concluded, “however weak a government or state is, there is always some system in place” (Dietvorst, 2019), whilst World Bank (2011, p. 4) emphasises that, “fragile states are not necessarily fragile in all areas,” and that aspects of strength should be identified and built upon as entry points.

Systems strengthening includes but is certainly not limited to strengthening government systems. It is a misconception that systems strengthening only focuses on strengthening government systems. Certainly, efforts should, where possible, be placed on strengthening country systems, meaning those that are permanently based in the country and localities; however, this can also include market actors, civil society, and non-state service providers. Given the ‘humanitarian’ context of many fragile states, it is necessary to also consider the strength of the ‘WASH humanitarian sub-system’, including its effectiveness and its linkages with more permanent country systems.

Certain areas of the WASH system receive more attention in fragile contexts than they would in low-income stable contexts. The specifics of fragility require emphasis to be placed on different system actors and factors. Table 4 summarises examples for such areas or actors within the WASH system.73

Table 4: An overview of potential focus areas and objectives for systems strengthening in fragile states.
Source: Authors

<table>
<thead>
<tr>
<th>AREA OR ACTOR OF THE WASH SYSTEM</th>
<th>EXAMPLE FOCUS AREAS FOR SYSTEMS STRENGTHENING RELATING TO FRAGILITY (in addition to areas relevant for ‘stable’ contexts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CENTRAL AND LOCAL GOVERNMENT</td>
<td>Strengthen foundations for transition from parallel systems, and capacities for emergency coordination and response; strengthen leadership role in sector; strengthening WASH service governance, and the ‘social contract’ between populations and the state.</td>
</tr>
<tr>
<td>(where humanitarian principles allow engagement – see Section 6.4.1)</td>
<td></td>
</tr>
<tr>
<td>SERVICE PROVIDERS (e.g. utilities, water management committees, etc)</td>
<td>Strengthen their resilience; increase their autonomy and ability to function in times of weak state support – both through strengthening their capacities, and also in adaptations to the wider service delivery models; extend sustainable services to IDPs/refugees; adapting accountability and regulatory processes.</td>
</tr>
<tr>
<td>MARKET-BASED ACTORS (e.g. supply chain actors, maintenance and FSM service providers, water truckers, etc)</td>
<td>Strengthen their resilience; improve the quality of services and products that they provide, and relative regulation of this; increase their capacity to be effectively used in emergency response.</td>
</tr>
<tr>
<td>NATIONAL NGOS / CSOS, FAITH-BASED ACTORS AND THE LOCAL RED CROSS SOCIETIES</td>
<td>Increase (and localise) preparedness and response capacities; increase capacity to adapt ‘humanitarian modus operandi’ to also strengthen sys-tems</td>
</tr>
<tr>
<td>THE HUMANITARIAN WASH SUB-SYSTEM (e.g., cluster and its actors)</td>
<td>Strengthen connectedness with development efforts; orientate to lay the foundations for transition; increase effectiveness and harmonisation / alignment of sector actors.</td>
</tr>
</tbody>
</table>

73 For an overview of focus areas in stable contexts, based on the experiences of Agenda for Change members, refer to Tillett et al. (2020).
6.4.1. ENGAGING WITH GOVERNMENTAL INSTITUTIONS

In some instances, humanitarian agencies note that humanitarian principles\(^{74}\) can present a barrier to government engagement. A strong focus of existing systems approaches in WASH is strengthening government capacity. However, as one interviewee put it, “but what if the government is the problem”?

Challenges to engage due to humanitarian principles could arise in cases where, for example, the state is accused of war crimes; where it is deemed illegitimate by the international community; and in highly politicised contexts where engagement with a particular party can risk being perceived as political alignment or endorsement, and a potential risk for organisational reputation. Additionally, in countries affected by economic sanctions, certain donors may have restrictions related to a grantee’s engagement with the government, particularly restrictions on financial flows to government entities. GOAL (2020a) provides a useful analysis in Syria on how supporting various WASH service delivery options may inadvertently legitimise or empower actors that may be party to conflict.

Organisations may also be reluctant to work with the government for other reasons. While not specific to fragile contexts, organisations such as NGOs can have reservations about engaging government at different levels because of concerns about rent-seeking behaviours, limited added value to ‘their’ programme, and concerns that such engagement could pose risks to the timely delivery of their programme. In cases where the government’s budget and capacity are very limited, its presence ‘lower down the chain’ (e.g., at the district level) can be almost non-existent.

Working with governments in humanitarian contexts (Mason & Mosello, 2016):

“Humanitarian principles such as neutrality and independence are sometimes perceived as incompatible with development principles such as ownership, especially in politically charged contexts.” (p. 21)

“The emphasis on enhancing government leadership of the sector, using country systems, and mutual accountability, could be challenging for many humanitarian agencies. Especially where government legitimacy is compromised by recent or ongoing crisis, engaging at all with government, even with a sector line ministry, could be at odds with neutrality and independence.” (p. 23)

“Perceived failures of [state] legitimacy and capacity therefore present a real challenge to adopting the collaborative behaviours in protracted crises.” (p. 23)

“[However,]Principles do not prevent compromise, e.g. neutrality and independence does not prohibit engaging with government entirely. Even in more challenging contexts, collaboration at the local level may be possible as an interim step towards sector leadership and ownership with the government [...].” (p. 21)

\(^{74}\) Humanity, neutrality, impartiality, and independence (UN OCHA, 2012).
Mindful of these challenges, the following suggestions are made on government engagement in fragile contexts:

- Engage, but choose the appropriate level. Weak government capacity is not a reason not to engage. It is a rationale for engaging. However, depending on the functional capacity, the level on which to focus efforts should be carefully chosen (see text boxes). Waal et al. (2017) suggest that, in some fragile contexts, the central government may be failing or illegitimate, while local government may be more appropriate to work with and keen to show their legitimacy. UNICEF (2018) notes that strengthening the local government’s accountability and ability to deliver inclusive services can strengthen the social contract.

- Engage carefully, and at a technical rather than political level. While engaging central level ministries at the political level (e.g., engaging the Ministers) may be inappropriate or high-risk, it may be that agencies can engage administrative or technical levels in less ‘political’ institutions, and focus dialogue specifically on technical issues (e.g., on standards, guidelines) as an entry point.

- Do not try to address all gaps at once and set realistic objectives. Systems analysis in fragile, very low capacity contexts may highlight an overwhelming number of gaps within the government. It is unrealistic to expect this to be transformed rapidly. Rather, the subsequent action planning process should identify and prioritise ‘low-hanging fruits’ and set realistic objectives on ‘minimal core competencies’ that can be worked towards.

- Where government engagement is not possible, work on other aspects of the system, and engage as soon as it becomes appropriate. Strengthening country systems is a core SWA collaborative behaviour, and a commitment in the Grand Bargain. Therefore, when choosing not to engage, this decision should be based on inability rather than unwillingness. While working on other aspects of the system (see below), do so with a longer-term vision of an eventual return to sector leadership by the government, and build foundations to allow this transition to happen in the future.

- Where engagement is possible, efforts to strengthen systems could be similar in nature to ‘stable’ contexts, albeit with some additional focus areas: Efforts to strengthen capacities and core functions of government at the national and sub-national level that are undertaken in stable, low-income contexts (see examples in Gensch and Tillett, 2019; Tillett et al., 2020) are likely to be broadly applicable in low-income fragile contexts, but potentially with some nuances. For example, supporting district-wide planning processes could include elements of emergency response, resilience and humanitarian and development ‘connectedness’, while efforts on strengthening monitoring processes could include humanitarian aspects (see text box).

Supporting decentralisation in Somaliland:

In Somaliland, WHH is collaborating with both the central and regional governments to facilitate the strengthening of systems at the regional level. Sector policy in Somaliland promotes decentralisation; however, this is very limited in practice. WHH will support the ‘pilot’ or ‘demonstration’ of strengthening the functional capacities and processes of the regional Ministry of Water Resources (MoWR) in one region, while CARE is looking to support another region. The findings and learnings of this pilot would be fed ‘upwards’ to the MoWR-led taskforce on systems strengthening. The decision to work at regional, rather than at district level, was reflective of the extremely limited capacities and recurrent budgets at the district level in Somaliland, and the need to take a ‘step-by-step’ approach to supporting functional decentralisation in the water sector.

Advocating for decentralised budgets in post-crisis northern Uganda:

In Pader district, Concern has provided support to the district water office to establish their yearly budget requests while concurrently conducting advocacy at central level to obtain this functioning budget. Concern then tracks the budget allocation all along the chain from the ministry to the district. See here for more information.

However, during this paper’s development, interviewees noted how it is sometimes important to engage both levels (central and local) where navigating issues – these decisions will be highly context-specific.

See Tillett and Smits (2017) for a guidance document on this in stable contexts.
Strengthening local government monitoring and regulatory processes in post-emergency contexts in northern Uganda:

In response to the insurgency of the Lord’s Resistance Army (LRA) that led to massive levels of displacement into camps, Concern initially implemented water projects in such camps, and later in transit sites and return villages. Rather than setting up their own WASH database, Concern assisted the District Water Offices (DWOs) in recruiting two Data Clerks, tasked with managing the water data. This allows the DWOs to plan corrective actions as soon as water points stop functioning. The positions were financed by Concern for two years, and advocacy work was undertaken to ensure that the posts would be secured in the long term.

They also worked on strengthening the DWOs abilities for improved oversight of maintenance services. Concern worked with the DWO to carry out capacity assessments of hand pump mechanics, reviewed and reduced the membership of the district hand pump mechanics association (these associations are responsible for coordinating hand pump mechanics and providing a degree of professionalisation) from 90 to 36 to make it a manageable number. The membership was confirmed by individual annual registration at a sub-county level. Through this, the DWO is able to control labour charges, monitor quality of work and provide technical support where necessary.

See here for more information.

Section 7 provides some further reflections and experiences on the issue of working with governments.

6.4.2. STRENGTHENING SERVICE PROVIDERS, AND ALTERNATIVE MODES OF SUPPORT AND OVERSIGHT FUNCTIONS

How can we make WASH service delivery sustainable and resilient, even in the face of weak state support and oversight? A core tenant in WASH systems is that external oversight and support for WASH service providers is required for long-term sustainable service delivery (World Bank, 2017). Efforts in systems strengthening often focuses on decentralised governmental service authorities (e.g., the district water office) or national institutions (e.g., central ministries and regulators) to fulfil this role. However, in settings of very weak governance structures or a lack of government capacity, a stronger focus needs to rest on strengthening service providers and making them more locally autonomous. This includes increasing service providers’ (e.g., utilities, water committees) autonomy through modifying service delivery models77, increasing their financial autonomy and adapting service regulatory and governance arrangements.

“Developing models of WASH service delivery that can operate during conflict is a fundamental part of resilience.”

(UNICEF, 2019a, p. 39)

“The greater the emphasis on the autonomous sustainability of schemes and utilities throughout the transition process, the more likely services will be able to weather shocks […].”.

(World Bank, 2011, p. 6)

“Community-based and public–private partnership models of WASH service delivery can operate during conflict due to a level of independence from political and financial manipulation by parties to the conflict”.

(UNICEF 2019a, p. 40)

77 Defined by World Bank (2017, p. 12) as “The combination of management model at service delivery level (for example, community–based organisations, private, public utility, and so on) and the necessary vertical legal, policy, institutional, regulatory and financing frameworks that support these management structures and allow them to function effectively”.
Service delivery models can be adapted to be more locally autonomous. There is an increasing body of literature describing different water supply service delivery models (Deal and Furey, 2019; Lockwood et al., 2018; World Bank, 2017). While not specifically focused on fragility, some of the models bear relevance in such contexts. For example, Lockwood et al. (2018) demonstrate how economies of scale in terms of financial, technical and logistical capacities can be increased through individual rural water supply service providers (e.g., water committees) forming umbrella associations, or by merging to allow single service providers to serve multiple schemes. In Ethiopia’s Afar region, individual public town water utilities are being clustered into geographical zones, whereby utilities within each zone provide technical assistance and pool maintenance equipment. There is also an association of water utilities at the regional level, which provides training and knowledge between members (Tillett, 2017). In other areas (including CAR and Burkina Faso), there are alternative maintenance service delivery models being applied at a considerable scale. In these instances, social enterprises and NGOs perform the role of a maintenance service provider and operate over defined geographical areas, providing reactive and preventative maintenance services, with an inclusion of subsidy models for the poorest. They are contracted and paid by either the WASH committees or government (albeit generally with a sizeable – but for the time being necessary – subsidy), sometimes with performance-based financing elements from donors. Such models have considerable potential and are gaining increasing sector interest (Lockwood, 2019).

In Ituri province, DRC, Join For Water and its local partner NGO CIDRI have installed a number of gravity flow water schemes operated by community management committees (CMCs). Until recently, these committees operated separately, and although the schemes are all functional, there is room for improvement. Therefore, the CMCs were encouraged to create their umbrella organisation ‘Structure d’Appui à la Gestion de l’Eau (SAGE). It can assist them in financial, administrative and technical management through training, exchange and maintaining a stock of spare parts. SAGE also represents the CMCs and defends their interests with authorities and other stakeholders.

In Bentiu and Rubkona towns, Unity State, Concern has repaired and placed back in service two water treatment plants. The government is currently lacking the resources to manage these water treatment plants but Concern has worked with its local representative to document the different budget lines needed for securing the functioning of these services in the long term. By doing so, the District Water Office is preparing for integrating, little by little, the functioning cost of these water treatment plant into their yearly budget request.

The financial viability of service providers can be increased to make them less reliant on government maintenance support. UNICEF (2019c), UNICEF (2019a), Diep et al. (2017) and Waal et al. (2017) highlight the need to improve the financial viability and efficiencies of water utilities in fragile states, to be better able to absorb shocks and avoid the ‘downwards spiral’ of reducing revenues and deteriorating services. Examples of interventions include efforts to address physical losses and non-revenue water, such as strengthening billing systems and improving the quality of customer databases (see text box). Efficiency gains can also be made by addressing management practices and assisting utilities to switch to alternative technologies (e.g., solar), which help to reduce overall life cycle costs (UNICEF, 2019c). In more rural contexts, service providers can receive training to better understand the full life cycle costs of WASH services. In turn, this can be used to inform tariffs, build user willingness to pay for services, and link interventions or WASH committees to income-generating activities or to village savings and loans schemes, for example. In other cases, financing mechanisms may help service providers withstand shocks and finance capital maintenance, for example, through revolving funds held by associations of service providers or insurance schemes.

Although there are more limited examples, beyond CAR, where this is being applied, and some interviewees in the development of this paper mentioned theoretical concerns of service providers potentially focusing on the more ‘commercially viable’ communities, which may not meet the humanitarian needs-based approach.
Addressing non-revenue water in Northern Kenya:

In Northern Kenya, a context of drought, displacement and a history of neglect, Oxfam worked with water utilities to both improve infrastructure by increasing solar technology as well as strengthen financial management by introducing e-billing and reduce financial wastage through integrity management training. The support enabled a significant increase in finances and staff morale. The water utility in Lodwar is now able to meet costs and ensure the poorest are subsidised to access water.

Financing of water services in DRC:

In DRC, WASH Management Committees were supported by the NGO members of the DRC WASH Consortium (headed by Concern) to develop business plans, with strategies for revenue streams to cover water service costs. The Committees collected fees for water services from households with provisions made for more vulnerable households. Evidence from life cycle costs analysis, which was a new approach for many of the areas, was the basis for the strategies and plans. Income generating activities were added by some committees to diversify revenue sources. In a context of years of humanitarian aid, this self-sufficiency has shifted the ways of working for local committees and communities. For more information see the case study in the annex, and [here](#) and [here](#).

Public-Private Partnerships (PPPs) are providing encouraging results in some urban contexts. In some cases, a vibrant private sector can fill the service delivery gap caused by a weak state (World Bank, 2011). Somalia and Somaliland are examples of this (Balfour et al., 2015; UNICEF, 2019b). Private sector actors may have access to overseas finances that can shield them from economic challenges in the country, and as non–state actors, they can potentially be seen as more ‘independent’ during conflicts (UNICEF, 2019c; Waal et al., 2017). They may also be easier for organisations to work with where government engagement is not viable.

Arrangements for service governance, oversight and regulation can be adapted to weak governance or state capacity contexts. While aiming to strengthen the ‘formal’ regulatory environment at the sector level, organisations can seek to strengthen complementary accountability and regulatory processes. Although state institutions might not be able to effectively oversee and regulate WASH services, there may be more opportunities for localised accountability structures, such as increasing traditional leaders’ role and the customers themselves in service monitoring. Alternatively, this could look at the governance arrangements of the service provider. Where service provision is primarily private sector–led (for example, for toilet emptying services or water vendors), and if they have an umbrella organisation, efforts could be made to establish or strengthen minimal operating standards and compliance measures for the association members (or indeed help to establish the association itself). In cases in which the state is still involved with service provision, this might also help address tensions between society and state. Examples include measures that increase accountability and dialogue between service providers and customers, such as user associations and customer–utility dialogue platforms and establishing customer complaints mechanisms (Tillett, 2017). Another example is customer, traditional leadership or local CSO–led tracking of key performance indicators (KPIs) or periodically auditing service providers. In some cases, international doners can also play a more direct role, for example, making funding to utilities conditional on externally verified KPI achievement. There is an upcoming paper on WASH accountability in fragile contexts, being worked on by UNICEF, GWC and SIWI, which provides further information on this topic.

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79 In Somalia and Somaliland, while the state’s capacity and recurrent budgets are severely constrained, the private sector, through in–country and diaspora support and funding, is comparatively strong (Balfour et al., 2015). In this context, actors such as UNICEF and the EU have supported PPPs for urban water services, as an alternative to struggling state utilities (UNICEF, 2019b).

80 While regulation is often discussed in the context of private sector engagement in WASH services, any entity providing public WASH services, be them private, state or community, should be regulated.

81 For example, strengthening the legal, policy and institutional arrangements for WASH service regulation, and helping to improve the credibility and legitimacy of formally mandated sector regulators.
Tackling rural water management in Garissa County, Kenya:
CARE Kenya facilitated the Garissa County government to develop a water policy and strategic plan. The Water Act 2018 empowered the county to create Garissa Rural Water Corporation (GRWC). Although still in its infancy, the GRWC will manage all Garissa rural water supply schemes. The rural water schemes are currently managed by community water committees, which are often not accountable to water users and often reliant on external support for maintenance and repairs. Once fully operationalised, the GRWC is expected to bring accountability and transparency to these water systems so they can be more efficient and sustainable.

Addressing issues in poor governance through strengthening service provider representation – DRC:
The SWIFT Consortium led by Oxfam worked to professionalise Local Water Associations (termed ASUREPs) in Eastern DRC. One management body in North Kivu was succeeding in financial and operational management. In a context of minimal rule of law without financial decentralisation and high levels of mismanagement, the local authorities demanded informal taxation of the water management team. With the support of the local partner HYFRO, the ASUREP president advocated to local and eventually the Provincial Governor to stop these demands and instead invest the money in the water systems.

Such efforts should complement, not substitute governmental systems strengthening. The examples listed above may be pragmatic to address current weaknesses of state capacity. However, in undertaking such activities, efforts should be made to provide foundations for such a time when state institutions can increasingly assume their mandated role as a duty bearer for WASH services.

Systems strengthening efforts at the service provider level should aim not only at ensuring the sustainability of services but also strengthening resilience. In this, efforts to strengthen service providers’ capacities need to include disaster preparedness and response elements. Service providers, both large and small, could be helped to develop emergency contingency plans (Diep et al., 2017; World Bank, 2014), encouraged to develop reserve funds and materials (e.g., spare parts or consumables), and trained in emergency response activities. Infrastructure could be developed or upgraded to increase its disaster resilience, and potentially allow levels of redundancy in the schemes to withstand surges of demand (e.g., from IDPs) or the failure of certain components (e.g., due to infrastructural damage during a conflict).

Systems strengthening efforts should also ensure that the management and provision of WASH services are inclusive. The exclusion of certain groups from receiving services, or in the management structures of such services, can create legitimate grievances that can create or aggravate conflict (FAO and World Bank, 2018). Additionally, UNHCR (2020a) emphasises the need, given the longevity of displacement events and increasing trends that displaced persons live in host communities, to ensure service delivery considers refugees and IDPs’ needs.

Multiple-Use Approach for water resource conflict in Niger:
As a micro-level example of inclusive, conflict-sensitive water governance, in Niger’s Tahoua region, Concern has implemented a MUS (Multiple Users of water Services approach) pilot. Under this approach, representatives of the different water users categories were gathered around the table to discuss how they can resolve the potential conflicts between the different water users; for instance, by establishing an agreed action point defining the priorities of access to the water point in case of droughts.

Gender inclusion in service management in fragile contexts:
CARE integrates an indicator of gender and equity into their system strengthening criteria. In Somaliland, Yemen, Syria, and other similar contexts, CARE addresses men’s initial resistance to female inclusion, and develops the capacity and confidence of women to participate in decision-making and governance of water supplies.

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82 This could be mainstreamed into water safety planning processes, for example.
83 One interviewee mentioned how it was more ‘predictable’ in terms of calculating potential demands for returnees than for potential arrival IDPs.
More sustainable service delivery models are needed to meet the needs of refugee/IDP camps, and work in this area remains ongoing. With the increasing recognition that displacement events and the settlements designed to cater to them can be in place for decades, there are moves to look at longer-term, more cost-effective service delivery methods, particularly in camp settings. UNICEF has developed an LCCA tool\(^4\) that helps inform choices of technologies and modes of WASH service delivery (e.g., trucking vs. durable infrastructure), to inform initial decisions during the response phase, that can avoid significant longer-term operational costs. Beyond technologies, UNHCR, Oxfam, and the Danish Refugee Council, amongst others, are studying and piloting alternative management and financing models for the initial construction and ongoing management of WASH services for displaced persons (Day and Forster, 2018; DRC and Grundfos, 2019).

UNHCR and partners: Adapting models of service delivery for displaced person settlements:

Globally there are 20.4 million refugees within UNHCR’s mandate, and the majority (78%) are in protracted situations of five years or more with some displacements lasting over 40 years. Recognising this reality, UNHCR and its partners are looking to shift as quickly as possible from humanitarian relief to development programming and develop long-term models for service delivery to meet the needs of displaced person settlements. This is being done, for example, in Uganda, whereby UNHCR is working with the Government of Uganda to identify how Ugandan water utility companies can progressively ‘take on’ the ongoing service delivery to such settlements. The first phase of the transfer process involves mapping the key stakeholders, clarifying their roles and responsibilities, delineating the geographic area to be transferred (i.e. ‘gazetting’), and carrying out a comprehensive assessment of the physical infrastructure and operational performance to understand the investment requirements. The second phase consists of upgrading infrastructure to meet Government of Uganda water supply service standards and ensure the commercial viability of the scheme(s), training and capacity building of the Water Authority staff, and the gradual handover of operations. The Authority eventually assumes full responsibility of service delivery including legal custody of all assets and responsibility for billing and financial management. A key component of this initiative is ensuring the right of the displaced persons to work, thereby enabling water users to pay for services.

UNHCR is also working in other countries to integrate refugees into local/national WASH systems. Notable achievements have been made for the inclusion of protracted populations in Nepal and Ethiopia. In Nepal, UNHCR has been working with the government to upgrade the WASH infrastructure that serves both refugees and host communities and formalises governance and accountability mechanisms so that refugees are represented. In Ethiopia, UNHCR and UNICEF, with funding from KfW, upgraded the water supply infrastructure and established a public utility to operate the services that supply water to three refugee settlements as well as the host community.

6.4.3. STRENGTHENING ‘MARKET SYSTEMS’

Market-based approaches are inherently systems approaches, and market players are key actors in the WASH systems\(^5\) in fragile contexts. The fact that market-based approaches are not always considered WASH systems approaches can be linked to the aforementioned focus on government actors. The local private sector plays a vital role in fragile contexts, particularly for water, not only in filling the gaps in public WASH service delivery, but also (potentially) in the preparedness, response and resilience capacities of the WASH sector. Strengthening market systems is in line with the localisation agenda of the Grand Bargain, and market-based approaches increasingly applied in humanitarian programming (GWC, 2018).

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\(^4\) https://www.unicef.org/publications/index_81164.html

\(^5\) Just as conversely, WASH system actors are considered part of the WASH Market system.
“If humanitarian agencies do not consider markets, interventions can accidentally harm these markets and the whole population depending on them.” *(GWC, 2019a, p. 8)*

**Fragility presents risks and opportunities for market actors**. In terms of risks, the fragile context itself poses challenges for businesses regarding access to and cost of capital, supply chain disruption, economic instability (i.e., inflation) and potentially growing rates of poverty in their customer base. The aid sector can also present a risk. For example, through practices of international procurement and supply–driven approaches undermining demand for locally available products and services. However, fragility – and the related low coverage of water and sanitation – also provides significant opportunities to local market actors. In the face of deteriorating public water supply services, demand will increase for household treatment, household wells, and trucked, bottled and vended water. Humanitarian aid typically creates significant financial inflows to the local area, which could lead to demand on supplies and services, for example, in emptying toilets in IDP camps or supplying non–food items (NFIs). Cash, vouchers and market–based interventions are becoming increasingly common in humanitarian programming, including in WASH, and when implemented following a market assessment and response analysis process, have the potential to stimulate demand and markets in local areas. GWC has a technical working group specifically on this topic (see here), and has recently released a useful Guidance on market based programming for humanitarian WASH practitioners. It calls on humanitarian WASH actors to ensure that their interventions are ‘market–sensitive and informed’, to maximise the positive impacts they have on local markets and minimise risks of harming them. The Compendium of Water Supply Technologies in Emergencies also mentions social marketing approaches – highlighting the potential for such approaches to complement cash and voucher–based approaches in post–crises phases (Gensch et al., 2018).

**Market–based approach for chlorine in Haiti:**

In Haiti, direct distribution of water treatment tablets has been the standard response since the start of the cholera outbreak in 2010. In 2017, ACF conducted a pre–crisis market assessment of available household water treatment technologies in the Artibonite department. This helped to encourage authorities to develop a national water treatment strategy (2018) and led to increased oversight by authorities in the chlorine market. More recently, ACF assessed willingness–to–pay to inform the social marketing strategy of a liquid chlorine product. The current approach is a combination of distributing vouchers to the most vulnerable households, and social marketing to promote sales among those able to pay, helping to move the sector from ad–hoc supply driven interventions to longer–term, market–based chlorine provision. For more information watch the webinar (in French) here.

**Systems strengthening can increase the resilience of market actors to shocks.** GWC (2019a) suggests that WASH market assessments should seek to understand market vulnerabilities to shocks and understand how market actors' resilience can be increased. Undertaking such assessments can guide interventions in systems strengthening to address such vulnerabilities by strengthening access to insurance or financing products to mitigate the impact of shocks.

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**Notes:**

86 Examples of market–based actors here could be, for example, local maintenance service providers, spare part retailers, retailers and manufacturers of items relevant for WASH (e.g., soap, cement), local masons and construction contractors, water truckers, FSM service providers.

87 For example, a local handpump technician’s potential customer demand can be decimated by an incoming NGO that uses a national contractor to repair all pumps in their area, and doing such fixes ‘for free’.

88 At the time of writing this paper, GWC was also undertaking a literature review on examples of cash–based interventions in WASH, which is expected to be publicly available later in 2020.

89 However, one interviewee mentioned challenges in market based approaches to define or measure resilience, and so focused on improvement of market indicators during the preparedness, recovery and development phases.

90 Other actions include cash grants to support hygiene vendors during the emergency response; training to support water trucking operators to improve chlorination; improving linkages between rural communities and water trucking operators; franchising urban water kiosks; working with all hygiene vendors to ensure they will have the necessary stock if emergency occurs.
It can also enhance their potential to effectively contribute to disaster preparedness and response. A key objective of humanitarian market-based approaches in the ‘pre-crisis’ phase is strengthening market actors’ capacity to effectively and adequately respond to disasters through the provision of WASH products and services, to support humanitarian response, particularly (but not exclusively), to enable a cash or voucher-based intervention modality. In this, areas of strengthening could include strengthening the capacity (technical, administrative) to provide services and products of requisite quality and quantity; strengthening their processes to be able to process vouchers and provide the required monitoring or verification data (if applicable); and advocating for WASH service provision to be included into the minimum expenditure basket. Interventions could improve the wider systemic ‘readiness’ to use such approaches. This can be done in several ways. For example, inclusion of such actors within contingency plans and coordination mechanisms, ensuring harmonisation and alignment in cash-based and non-cash based approaches, ensuring the readiness of financial service providers to undertake such transactions and ensuring they have the requisite information (and developing stand-by contracts with them). See GWC (2019a) for further examples.

Beyond humanitarian imperatives, systems strengthening can more broadly improve the quality and scale of market actors’ services and their contribution towards the SDGs. Given the aforementioned ‘proliferation’ of small-scale, informal service providers that often rise to fill the gap in deteriorating WASH service quality, it would be a missed opportunity not to consider market-based (e.g., local private sector) actors in wider systems approaches. Possible ways to improve quality, reach and affordability of market-provided service delivery include providing business development support to service providers such as water truckers and pit emptiers; technical training to improve quality of services and products provided; supporting mechanisms for increased formalisation and regulation of their services; including market-based actors within strategic sector dialogue and planning processes; helping build consumer demand and willingness to pay; and adapting service delivery models and strengthening contracting processes for more formalised delivery of services (i.e., ATMs in informal settlements and rural areas).

Strengthening FSM services in Madagascar:
Political and resulting economic crises have plagued Madagascar since its independence, very few services are well managed. One instance is the desludging in Tamatave city, where 20 years of mismanagement has led to a dysfunctional FSM service chain. Join For Water worked with a local entrepreneur to set up a private FSM company. The company staff received training in collection techniques and safety measures, business management, marketing and communications. Investment in collection and rolling equipment were covered by the project’s budget. This company has almost doubled the collected sludge from 700 m3 to 1100 m3 in 2019, took over the management of the treatment plant from the state service and generated a 6.3% profit after depreciation whilst subsidising the poorest households. The company is now diversifying its services by collecting household waste. This not only increases income but allows for more frequent interaction with customers.

6.4.4. STRENGTHENING THE ‘HUMANITARIAN SYSTEM’
Humanitarian actors and architecture (e.g., the WASH cluster) are often a major part of the WASH system in fragile contexts. Consequently, systemic assessments and system strengthening efforts in these contexts need to include humanitarian actors and processes.

Systems approaches can strengthen the national cluster’s capacities and core processes and its actors to effectively fulfil their mandate and adhere to core humanitarian standards. This could include cluster’s capacity to prepare for and effectively respond to humanitarian needs in a timely manner. Beyond this, it could look further at core processes that the cluster has, which bear similarities to areas of strengthening governmental systems. For example, inclusive

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91 This is where, rather than NGOs directly procuring and supplying products and services to affected households, they instead provide cash or vouchers, which households can use to procure such items locally.

92 Here, the examples provided have been focused on how markets can help humanitarian agencies to deliver their objectives; however, some may argue that a ‘customer perspective’ of analysis should be taken where external agencies can support customer access to products and services.
and risk-informed planning and budgeting processes that are based on robust assessments and monitoring data; coordination and consultation processes; monitoring and reporting processes; mutual accountability arrangements; knowledge management; human resource elements; and the cluster (and its members’) capacity to learn and adapt.

**Applying a systems approach to FSM for humanitarian response in Bangladesh:**

UNHCR and partners applied systems thinking from the outset in its work around provision of FSM services in Cox’s Bazaar refugee camps. A longer-term perspective was used in planning for such services, considering FSM needs in short-term toilet facility provision, and encouraging planning and actor alignment to reinforce a viable FSM system for the camp.

In particular, systems strengthening can aid the transition away from parallel systems and ensure connectedness between humanitarian and development interventions. Here efforts on strengthening could look at national capacities and processes for preparedness and response (for example, local NGOs, state and market actors) and the ability (and willingness) of cluster actors to develop these. It could also look at processes for transition for humanitarian response coordination and management to government actors, and the engagement of development actors in planning and dialogue processes, to improve connectedness and complementarity across the silos. Beyond capacity building for ensuring effective coordination, it should also look at capacities to reduce fragmentation and improve humanitarian actors’ alignment in the sector behind common standards, implementation modalities, monitoring processes, and overarching plans and goals, and to be held mutually accountable on this. In this, the objective should be to strengthen the cluster’s ability to achieve much of the tenants of the collaborative behaviours, which may make the transition to government leadership and respective actor alignment behind their leadership an easier process.

### 6.5. ENTRY POINTS TO WASH SYSTEM STRENGTHENING IN FRAGILE CONTEXTS

This section provides concrete examples of how organisations have started systems strengthening in fragile contexts.

**Where to start?** In a context where organisations are used to parallel (direct) delivery and have limited meaningful relationships with, for example, government or market actors, and in the face of what would likely be an intimidatingly large list of issues identified from a systems analysis (see Section 6.3), the question will likely arise of ‘where to start?’.

Below are some examples from the literature, case studies and interviews of how organisations ‘got started’ in systems strengthening. It includes how their initial actions (for example, on one building block at a certain level) led to them progressively work on different building blocks, at different levels, as their familiarity with the system and mutual trust with the actors grew.

**Data collection and surveys as an entry point.** Waal et al. (2017) note how “primary data collection on service delivery was an effective entry point [for the World Bank] for restoring government into a sector oversight role by enabling ministries responsible for water to pinpoint critical sector issues”. Indeed, international organisations’ capacity to undertake and commission surveys and studies on sectoral issues is a clear comparative advantage. Where undertaken jointly, surveys and studies can create opportunities for supporting organisations to collaborate on a task with, for example, local government. This can create opportunities to develop relationships. The generated data often highlights the true extent of challenges and either organically triggers a change in stakeholders’ priorities or provides a vital resource for raising political or stakeholder focus on a particular topic (Tillett et al., 2020).

**Entry points for systems approaches in Karamoja:**

In the conflict–stricken district of Karamoja (Uganda), Welthungerhilfe used a water point asset inventory mapping process as an entry point for progressively engaging with the service authority to first strengthen asset management arrangements. They then progressively worked on planning, monitoring and budgeting. In this process, their work on systems strengthening deepened as their relationship with and trust in the service authority improved.

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93 Aspects of human resources, learning and accountability are three of the nine Core Humanitarian Standards.

94 This is an area of work that GWC has been researching, with guidance provided by Maskall (n.d.).

95 Mindful that many organisations would have already been doing actions that strengthen the system in different ways, but potentially not named as such.
Service assessments for refugees in Uganda:
UNHCR and Deltares have been working with the Ugandan Ministry of Water and Environment to develop an approach to the strategic planning for accommodating new refugees. This approach considers the area’s feasible capacity of the area concerning water resources and water security from an IWRM perspective. The approach includes various analyses and assessments on drought risk, water availability, water balance, water quality/security, cost, and economic potential amongst others. The results were used to form the contingency planning for future influxes from DRC and South Sudan and link to SDG prioritisation.

» The process of the systems analysis as an entry point. Section 6.3 describes how such processes can bring together multiple system actors to identify systemic weaknesses and define priority actions to address these.

» The process of co-developing strategic plans as an entry point. The process of collaborating with local authorities in the development of WASH plans (e.g., to attain the WASH SDGs in X district) is a common area of focus in many Agenda for Change members (Tillett and Smits, 2017). Through collaborating on the assessments that feed data for the WASH plan, the supporting organisation (e.g., NGO) builds the foundations for future government–led recurrent monitoring processes. The planning process helps bring multiple actors together and reinforces the leadership role of the local government and the requirement for WASH actors in the district to align to (and contribute to) their WASH plan. Water for Good is going through this process at the regional level in CAR (see text box). A related area could be to help integrate existing humanitarian response and preparedness plans with longer-term strategic development plans, at different levels.

Digital data collection as entry point for system strengthening in the Central African Republic
After years of collecting water data regularly for nearly 2,000 hand pumps through its circuit rider maintenance programme, Water for Good has built a region-wide roadmap towards sustainable, universal access to water, in agreement with the Ministry of Hydraulics. Water for Good is working towards sectoral buy-in and institutional capacity building.

» WASH-related epidemics as an entry point. Mason and Mosello (2016) provide examples of where cholera outbreaks, and particularly the period immediately following the outbreak, provide the opportunity to convene both humanitarian and development actors for dialogue, mutual learning and joint planning on the topic of prevention and preparedness. COVID-19 has and will create many similar opportunities.

6.6. EXAMPLES OF ACTIONS TO STRENGTHEN THE WASH SYSTEM ‘BUILDING BLOCKS’
Table 4 below provides generic examples of how a supporting organisation (such as an NGO or UN agency) can strengthen the various ‘building blocks’ of the WASH system at different levels. These examples are based on the common systemic challenges and weaknesses outlined earlier, and broadly follow the adapted objectives and focus areas for systems strengthening in fragile contexts.

Broadly, the examples relate to one or more of the following objectives, relevant for fragile contexts:

» Bridging the humanitarian–development divide, improving connectedness, and supporting the transition from parallel humanitarian systems to government–led processes
» Strengthening the preparedness and response capacities of country actors
» Strengthening the resilience of WASH service providers and market–based actors, and the quality of the services they provide
» Improving the sustainability and inclusiveness of service delivery for IDPs and refugees Contributing to broader objectives of state– and peace–building

Examples listed focus specifically on fragility. However, many appropriate actions in non–fragile (or developmental–context), low–income contexts are also applicable to fragile contexts, but are not replicated in the table below. Examples can be found in publications such as Welthungerhilfe et al. (2019), Tillett et al. (2020) and Gensch and Tillett (2019).
INSTITUTIONAL ARRANGEMENTS, LEADERSHIP & COORDINATION

STRENGTHENING COORDINATION PROCESSES AND CONNECTEDNESS BETWEEN HUMANITARIAN AND DEVELOPMENT ACTORS

» Strengthening the effectiveness of WASH coordination platforms at central and decentralised levels, and ensuring these are inclusive of both development and humanitarian sector actors, and strengthening cross-sectoral coordination.

» Strengthening the flow of information between central and decentralised coordination structures.

STRENGTHENING LEADERSHIP ROLE OF GOVERNMENT AND REDUCING FRAGMENTATION OF ACTORS’ ACTIVITIES

» Strengthening coordination and information flow between government entities (e.g., disaster management agency and water ministry) and helping to clarify ambiguities in institutional mandates for disaster preparedness and response and humanitarian coordination.

» Strengthening capacities and processes within mandated government institutions for coordination, information management, and communication to allow the progressive assumption of cluster functions (where appropriate).

» Support the government to undertake studies, or provide them with study findings and data, to help in their ability to lead the sector.

» Where appropriate, working with government at different levels to understand and address some of the disincentives of non-state actors to engage with government (e.g., accountability, rent seeking behaviours, risks of politicisation).

» Support government to lead process whereby sector actors define and agree an overarching vision for the WASH sector and implore sector actors to align behind a common sector plan and vision in their respective projects (valid at national and sub-national levels for planning and alignment).

» Defining standard operating procedures and developing implementation guidelines covering development and humanitarian phases, which help to reduce fragmentation of implementation approaches between actors (e.g., on issues such as engaging project volunteers, per diems, subsidy for rural sanitation).

» Where appropriate, strengthen decentralised capacities and decision making in local authorities.

ASSESSING AND STRENGTHENING THE CAPACITY OF SECTOR ACTORS IN PREPAREDNESS, RESPONSE AND DEVELOPMENT

» Undertaking multi-stakeholder capacity assessments and helping the sector to develop strategic capacity development plans that stakeholders align and contribute to (moving away from short-term, projectised approaches to capacity development), and ensuring such capacities cover development and crisis-phase contexts.

» Undertake capacity development activities with service providers, government entities and CSOs that are longer-term, moving beyond simply one-off training and equipment provision.

» Strengthening stand-by capacities of market actors to provide timely, quality humanitarian actions, for example, the capacity of handpump mechanic associations or local private sector actors to be contracted by NGOs for rapid repair services.

» In chronically fragile contexts, strengthen the capacities of CSOs and state entities in their understanding of and ability to implement developmental approaches for WASH.

» Building partnerships between private and humanitarian actors for the procurement of items meeting humanitarian standards.

ENSURING SECTOR POLICY, STRATEGY AND GUIDELINES INCLUDE HUMANITARIAN AND RESILIENCE ASPECTS

» Work with key stakeholders to strengthen legislative, policy and strategy frameworks to ensure they consider different phases from acute crisis to development, and that they prioritise and mainstream crisis prevention and resilience.

TABLE 5: Examples of strengthening the building blocks in fragile contexts
RESILIENT SERVICE DELIVERY MODELS & INFRASTRUCTURE

DEVELOP / EVOLVE SERVICE DELIVERY MODELS WHICH ARE MORE RESILIENT AND LOCALLY AUTONOMOUS

» Test and demonstrate service delivery models that can operate more autonomously and are less reliant on the state (e.g., PPPs, umbrella associations of service providers).

» Test models for service delivery during humanitarian contexts, and incorporate service delivery mandates of utilities to also cover IDPs (where appropriate/viable).

» Test and develop models for preventative maintenance service delivery, which could be used both in times of crises and stability.

» Develop networks of local actors (such as community volunteers or the Red Cross) who can support maintenance and service delivery activities while service provider staffs’ field access is restricted, formalise links between the informal service providers and the mandated service provider.

INCREASE RESILIENCE OF SERVICE DELIVERY INFRASTRUCTURE, AND IMPROVE SERVICE PROVIDERS’ ASSET MANAGEMENT PRACTICES

» Develop, demonstrate and promote disaster and climate resilient infrastructural designs, and encourage the adoption of these as sector (not only cluster) standards and guidelines.

» Support service providers to have durable, resilient infrastructure, which require relatively limited operation and maintenance inputs or reduce reliance on overseas supply chains, and with redundancy within the system to cope with spikes in demand or to mitigate the impact of damage to critical assets.

» Support service providers to develop asset management and maintenance plans, and prioritise preventive maintenance practices.

REINFORCE ROLE OF LOCAL MAINTENANCE SERVICES AND SUPPLY CHAINS

» Increase the local capacity for maintenance (e.g., within the service provider staff or local private sector) and develop stand-by agreements with local contractors and suppliers for maintenance.

» Build the capacity of maintenance service providers and supply chain actors to be used during humanitarian response activities, and help them to promote their services in the sector, and encourage alignment of actors in the use of their services to reinforce their viability.

STRENGTHEN ASSET MANAGEMENT CAPACITIES AT SERVICE AUTHORITY AND SECTOR LEVEL

» Undertake nationwide or area-wide asset inventories (such as water point mapping), using the data to facilitate dialogue on maintenance arrangements, structure maintenance services, and discuss technology standardisation and quality issues.

» Facilitate the process of the transition of one-off asset mapping surveys to recurrent asset monitoring processes, led by government and supported by non-state actors (where appropriate).

» Support the development of sector standards and guidelines on infrastructure (including for humanitarian phase) and strengthen arrangements for monitoring of such standards by permanent local actors (where appropriate) and accountability mechanisms for those who do not meet these standards.

» Strengthen capacities of permanent actors in stockpiling and management of stored equipment for maintenance and humanitarian response at central and decentralised levels.
MONITORING

STRENGTHEN THE SECTOR MONITORING FRAMEWORK, ALIGNMENT, AND LEADERSHIP OF IT BY GOVERNMENT

» Strengthen the overall sector monitoring framework, helping move from isolated periodic field assessments to recurrent monitoring. Strengthen alignment to and contribution to such monitoring processes by all sector actors.

» Strengthen data management, analysis and visualisation capacities of government, to help in the transition of sector monitoring and datasets from the cluster/NGOs to government.

» Increase stakeholder willingness to share monitoring data (e.g., between state and non-state actors—where appropriate, and between non-state actors), and for sector datasets to be accessible by all sector actors.

INCLUDE HUMANITARIAN AND DEVELOPMENT ASPECTS IN ASSESSMENTS AND MONITORING PROCESSES

» Include humanitarian indicators within WASH sector monitoring frameworks (e.g., IDPs, service levels during disasters).

» Where appropriate, include development indicators and aspects within humanitarian assessment processes. For example, assessing against sector service standards, analysing capacities vis-à-vis their policy mandated functions, and measuring system strength not only beneficiary needs\(^\text{96}\).

STRENGTHEN MONITORING CAPACITIES – OF CONSTRUCTION, SERVICE LEVELS AND OF DISASTERS

» Strengthen the capacities of permanent local actors (e.g., national NGOs, local consulting firms, utilities/service providers, government at different levels) in assessment and monitoring processes, for example to assess humanitarian needs, to monitor quality of construction and humanitarian response actions, and to monitor service levels (including aspects of water quality).

» Strengthen sector processes for disaster surveillance and early warning systems (e.g., epidemiological, meteorological, geological disasters), improve flows of information between sectors and institutions, between levels of government, and between state and non-state actors.

» Pilot / upscale modes of remote monitoring (e.g., sensors, mobile-to-web applications), and build local capacities for reporting, to allow ongoing monitoring even during periods of instability.

\(^{96}\text{Note – this is unlikely for acute humanitarian assessments.}\)
INCLUSIVE, CONNECTED & RISK-INFORMED PLANNING

DEVELOP RISK-INFORMED, STRATEGIC WASH PLANS AT DIFFERENT LEVELS THAT INCLUDE HUMANITARIAN AND DEVELOPMENT COMPONENTS

» Support the development of sector strategies, or plans (at central or decentralised levels) that mainstream resilience and consider humanitarian issues (e.g., IDPs).

» Develop plans that cover the transition from humanitarian to development and include an overarching vision for WASH services and the sector to which both humanitarian and development actors agree to.

STRENGTHEN SECTOR PLANNING PROCESSES, AND GOVERNMENT LEADERSHIP OF THEM, AND STAKEHOLDER ALIGNMENT

» Strengthen the inclusiveness of sector planning processes, for example, including both humanitarian and development actors (to ensure complementarity and connectedness of their respective actions and investments), and of different affected stakeholder groups (for reduction of tensions).

» Strengthen capacities for risk and conflict analysis, and build this into planning processes, and more broadly strengthen government and service providers’ planning capacities.

» Strengthen platforms and processes for periodic review of sector plans and strengthen government capacity to communicate sector plans and encourage actors to align to it.

» Strengthen assessment tools, build the evidence base in the sector for planning (e.g., surveys, markets assessments), and increase linkage between assessments, monitoring and planning processes.

» Strengthen processes of cross-sectoral and cross-institutional assessments and planning (e.g., between clusters97, between Ministries of Water and Disaster Management Agencies).

DEVELOP CONTINGENCY AND RESPONSE PLANS AT DIFFERENT LEVELS

» Support the development of disaster preparedness and response / contingency plans at the sector, local authority and service provider levels.

FINANCE

STRENGTHEN AND ADVOCATE FOR MORE CONNECTED, MULTI-YEAR FINANCING STRATEGIES

» Support processes that bring together humanitarian and development actors in the development of multi-year financing strategies for the sector.

» Support the development of transitional financing strategies at different levels (e.g., in long-term camp settings, utilities, and at the local and central government levels.

» Advocate for and track budget allocation in the sector for resilience and DRR.

SUPPORT TRANSITION OF FINANCIAL PLANNING AND INVESTMENTS BACK TO GOVERNMENT (WHERE APPROPRIATE)

» Strengthen government public financial management capacities and processes to meet core donor accountability requirements to allow resumption of investments channelled through the government.

» Strengthen capacities and information base within government to allow a progressive shift from cluster–led to government–led sector budgeting processes.

STRENGTHEN THE FINANCIAL VIABILITY AND RESILIENCE OF SERVICE PROVIDERS

» Where necessary, provide targeted subsidies or output–based investments in service providers to avoid collapse and maintain minimal service levels during acute crisis phase.

» Increase creditworthiness of service providers to enable access to non–state investments and test and increase service providers and market actors’ access to financing mechanisms such as disaster insurance or revolving funds.

97 See https://www.sheltercluster.org/sites/default/files/docs/201905022_urban_compendium_highres.pdf for an example of multi-sectoral planning in Syria.
Increase operational efficiencies of service providers (e.g., efforts to reduce non-revenue water, switch from diesel generators to solar power) to increase their financial viability and reduced reliance on subsidy from the state.

Increase user willingness and ability to pay for WASH services, for example, through customer mobilisation campaigns, advocating for right-to-work for displaced persons, and introducing income generating activities.

Advocate for investment in more durable, financially sustainable solutions in humanitarian response (e.g., using low recurrent cost technologies, undertaking basic life cycle cost analysis on various solutions).

**STRENGTHEN FOUNDATIONS FOR CASH AND MARKET-BASED APPROACHES FOR HUMANITARIAN RESPONSE**

Develop stand-by agreements, processes and capacity in permanent market actors to be able to rapidly implement cash- and voucher-based interventions and meet accountability and quality standards.

**TRUST, REGULATION & ACCOUNTABILITY**

**STRENGTHENING AND ADAPTING REGULATORY AND OVERSIGHT ARRANGEMENTS FOR SERVICE DELIVERY**

- Strengthening the legal framework regarding service standards and regulatory aspects to cover the informal service providers, help to formalise them (e.g. as individual providers or through associations) and their link with the service authorities and (where appropriate) mandated service providers (e.g., utilities).
- Strengthen the legal framework for alternative service delivery models (e.g., PPPs or more autonomous service delivery models such as umbrella associations of service providers, etc) to work effectively and accountability.
- Where appropriate, test and strengthen additional/alternative modes to official centralised state regulation, for example, increasing the role of traditional or religious leaders, local governance and oversight boards, internal regulation within service provider associations. Donors/supporting agencies may also make compliance with defined KPIs pre-requisites for ongoing support and undertake external audits.
- Strengthening standards development and compliance monitoring (with actors like Standards Bureau) for domestic manufacture and vending of WASH items (market-based approaches).

**STRENGTHENING ACCOUNTABILITY FRAMEWORKS AND PROCESSES RELATED TO WASH IN CONFLICT AND HUMANITARIAN RESPONSE**

- Strengthen the legal and policy framework in the country to ensure humanitarian issues and rights are captured, for example, requirements to provide services to IDPs/refugees, service standards, damage to infrastructure or denial of services during conflict, human rights during humanitarian response, and adherence to core humanitarian principles.
- Strengthen the capacities of local CSOs and media to monitor, report and record violations and track compliance, and increase public awareness on their rights related to these issues.
- Strengthen arrangements for beneficiary accountability for humanitarian response and institutionalise these processes within permanent institutions (where appropriate).
- Inclusion of humanitarian indicators within service provider KPI monitoring and reporting frameworks.

**STRENGTHENING TRUST AND ACCOUNTABILITY BETWEEN SERVICE PROVIDERS AND USERS, AND POPULATIONS AND THE STATE**

- Increase capacities and create platforms for increased customer orientation of service providers and for dialogue between users and service providers (e.g., customer forums, user committees).
- Ensure service provider governance and oversight structures are inclusive and representative of different user groups (to increase credibility and reduce potential tensions).

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98 See the upcoming paper from UNICEF, GWC & SIWI on WASH Accountability in fragile contexts. Also, there is an upcoming WASH regulation tool upcoming from UNICEF and SIWI – see [https://www.worldwaterweek.org/event/9008-water-and-sanitation-regulation-in-the-climate-change-era](https://www.worldwaterweek.org/event/9008-water-and-sanitation-regulation-in-the-climate-change-era)
» Strengthen arrangements and processes for greater accountability and transparency of central and local government entities to populations, for example, increasing public access to information, periodic public dialogue forums, more accountable planning and decision-making processes.

» Strengthen the accountability of service providers on financial management (e.g., public audits) and test technologies to increase accountability (e.g., mobile payments, water ATMs, better billing and meter reading systems).

» Strengthen capacities and processes for complaints, dispute resolution, and impartial arbitration, at service provider and wider government institution levels.

STRENGTHENING MUTUAL ACCOUNTABILITY PROCESSES IN THE SECTOR, BETWEEN STATE AND NON-STATE ACTORS

» Increase the presence of government, NGOs/UN agencies, and development and humanitarian actors in sector coordination platforms to develop a culture of dialogue and mutual accountability.

» Strengthen processes of Joint Sector Reviews, ensuring presence of and dialogue and accountability between humanitarian and development actors, and between the state and non-state actors.

WATER RESOURCES MANAGEMENT & ENVIRONMENT

STRENGTHEN WATER RESOURCE PLANNING AND INCREASE USAGE OF THE PLANS IN HUMANITARIAN PLANNING AND ACTION

» Undertake water resources assessments at different levels and strengthen hydrological monitoring systems to increase the availability of data to support (accountable) planning and decision making.

» Strengthen the inclusion of humanitarian issues in the planning process for water resources and strengthen the usage of and alignment to such plans in humanitarian planning and action.

STRENGTHEN INSTITUTIONS FOR MORE INCLUSIVE AND CREDIBLE MANAGEMENT OF WATER RESOURCES

» Strengthen capacities of permanent institutions for water resource monitoring, data analysis, inclusive planning, and strengthen coordination between state and non-state actors on planning.

» Strengthen processes for (accountable) water resources allocations, and for conflict resolution, and increase sharing and public access of water resources data.

» Support the creation and effectiveness of multi-stakeholder dialogue platforms on water resources issues.

STRENGTHEN THE LEGAL AND MONITORING FRAMEWORKS TO PROTECT WATER RESOURCES

» Formalise informal WASH service providers and strengthen processes for allocation of abstraction licenses and processes for monitoring and compliance of these.

» Strengthen the legal framework and enforcement processes (which may be non-state reliant) related to protection of water resources and addressing issues of deliberate contamination.

STRENGTHEN CLIMATE AND DISASTER RESILIENCE OF SERVICE DELIVERY

» Strengthen hydrological monitoring and drought early warning systems and strengthen the connectedness and flow of information between state and non-state institutions regarding surveillance and planning for droughts and natural disasters.

» Support the development of disaster preparedness and contingency plans at the sector, local authority and service provider levels, and strengthen local capacities for disaster surveillance and response.

» Develop, demonstrate and promote climate and disaster resilient infrastructure designs, and advocate for the mainstreaming of climate and disaster resilience into sector policy and plans at different levels.

» Identify secondary sources of water that can be used as additional sources for service providers during emergencies, including stand-by arrangements with owners of private water sources.
**LEARNING & ADAPTATION**

**STRENGTHEN LEARNING AND ADAPTATION PROCESSES WITHIN HUMANITARIAN ACTORS AND PLATFORMS**
- Institutionalise learning topics as a standard agenda item in WASH cluster coordination meetings at different levels and encourage a culture of sharing learnings (and failures).
- Support processes for post implementation review, such as humanitarian after action reviews, post implementation monitoring surveys and evaluations of the WASH response.

**STRENGTHEN AND INSTITUTIONALISE KNOWLEDGE MANAGEMENT, AND ENCOURAGE LEARNING AND REVIEW BETWEEN THE SILOS**
- Encourage greater sharing of learning and information between humanitarian and development actors, and the inclusion of such actors in joint sector review processes. Strengthen links between review, learning, and policy/plan adaptation processes.
- Support the adaptation of generic approaches in WASH (e.g., CLTS, community management) to the fragility context of the country and help government to adapt guidelines accordingly.
- Strengthen knowledge management processes and platforms in the sector and build capacity of permanent actors (e.g., CSO network or government) to progressively take on the knowledge management functions of the cluster.
- Strengthen information sharing processes in the sector, such as sector newsletters, and help categorise learnings between different ‘phases’ to help in transition planning and prevention strategies.

**FACILITATE LEARNING AND EXCHANGE PROCESSES TO HELP UNDERSTAND TRANSITION JOURNEYS OUT OF FRAGILITY**
- Support stakeholder exchange visits (e.g., between humanitarian and development actors) to help increase knowledge and mutual understanding of issues.
- Support exchange visits of government and other local actors to other countries, or other parts of the country that have successfully transitioned from humanitarian to development phases, to inspire stakeholders as to possible pathways out of chronic fragility. Also showcase examples from elsewhere of how humanitarian efforts have adapted systems approaches.

**STRENGTHEN ENGAGEMENT AND CAPACITIES OF LOCAL RESEARCH AND TRAINING INSTITUTIONS**
- Build the capacity of local/regionally based universities and training institutions to meet the humanitarian and development skill needs of the sector.
- Engage local research institutions and consulting firms in appraisals and reviews of humanitarian action to build knowledge base within permanent local structures.

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*See the GTO case study in the annex for an example of this for CLTS in South Sudan.*
6.7. STRENGTHENING SYSTEMS AND BUILDING CONNECTEDNESS IN EACH AND EVERY PHASE

Different ‘phases’ of the fragility-stability trajectory present different opportunities to strengthen WASH systems, and with different, yet related objectives. Section 2 introduced how there can be different ‘phases’ of operational context and response types in fragile contexts. Most documented examples of WASH systems strengthening are from contexts within the ‘development’ phase. However, there is a clear rationale to (and need to) strengthen systems in all phases, with the objectives of preventing and minimising the impacts of crises, strengthening service resilience, and building connectivity and complementarity of humanitarian and developmental investments in the WASH sector. Annex 2 details examples of objectives and actions for systems strengthening across different phases, building off existing work by UNICEF (2019c), World Bank (2011) and World Bank (2014).

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For example the ‘pre-crisis’ phase, the acute response phase, during protracted crises (during which there will be periods of relative stability and instability), post-crisis (also called ‘stabilisation’ or ‘early recovery’ phases), and the ‘development’ phase.
7. REFLECTIONS FROM IMPLEMENTING ORGANISATIONS ON APPLYING SYSTEMS APPROACHES IN FRAGILE CONTEXTS

This section provides practical experiences and reflections from several organisations that have applied a systems approach (or aspects of it) in fragile contexts. The content for this section is drawn primarily from interviews with representatives of several organisations that submitted case studies for this paper (ACF, CARE, GTO, Join for Water, Oxfam, UNHCR, Concern, WHH). As such, the contents present a diverse set of reflections and suggestions, largely from the perspective of an implementing organisation (e.g., rather than donor), on issues of programme design, implementation, management, and broader organisational ways of working. This section’s reflections and suggestions are intended to be of particular value for organisations working in fragile contexts that are seeking to apply systems approaches to their WASH programmes and keen to learn from others’ experiences, who are equally finding their way as to how to do this.

This section also provides reflections and suggestions on how WASH programmes are – and can be – funded in fragile states, to better enable a systems approach.

7.1. REFLECTIONS ON WAYS OF WORKING AND PROGRAMMING

Below we present some of the key, diverse reflections and suggestions of interviewees on the themes of programme design, context analysis, and programming into risk:

> Context analysis is key for programme planning and implementation in fragile settings. **Linking WASH systems analysis tools with processes of conflict and power analysis may provide valuable insights.** Understanding the context, the drivers of instability and conflict, the power dynamics and the gender dynamics provides a good basis for programme planning. Water is inherently political in many contexts but even more so in fragile settings where water security and climatic and conflict dynamics conflate. Understanding this and, therefore, how a programme can operate within the context, is important as a minimum to ‘do no harm’ and to plan for sustainability. Organisations such as WHH, ACF and Oxfam use power analysis and conflict analysis as essential tools to plan interventions, providing a secure basis for looking at system strengthening. ACF, WHH and Water for Good have, in different countries, undertaken a structured analysis of the WASH system, using Building Block analysis tools, in a process involving partners and government representatives. They found this to be really helpful in assessing gaps, designing and setting ambitions for a programme, and adapting ongoing programmes. These assessments complement each other, providing a strong context and gap analysis to plan programming, understand the entry points and programme into the uncertainty and with the whole system in mind. Another example raised by interviewees was the (often not fully utilised) potential of humanitarian actors mapping out governmental actors and mandates, to better understand their own role in the system and the potential complementarity and coherence of their actions.

> Taking a longer-term approach to planning is a vital step in ensuring more durable, resilient WASH services. Equally important is considering the exit strategy of humanitarian action, from the outset. Planning for sustainability – or at least longer-term solutions to humanitarian needs – can be done in even the most challenging contexts. For example, in Cox’s Bazaar, from early in the displacement, UNHCR and Oxfam considered the potential WASH needs that may arise in the event of longer-term residency of the refugee settlements. As a result, they set up a faecal sludge management system in the camp and convinced other humanitarian actors to refrain from ‘business as usual’ short-term solutions to immediate sanitation needs. In this, they aimed to design a sustainable sanitation system with cess pits in the camp, planning for the long-term displacement. The sanitation system was a move away from previous camp planning where the construction of pit latrines was done as people arrived. Rather, this approach was based on strategic planning and intentions to ensure sustainability of service for those displaced. Critically, numerous interviewees remarked how the humanitarian WASH sector is not always strong in considering the ‘exit strategy’ of their action from the outset.
Planning and programming are about understanding and programming into recurrent risks. Practically speaking, this involves interventions designed to absorb displacements from conflict, drought or flooding, and designing water systems that can meet expanding and contracting demand as needed. It involves flexible funding that allows for shifts in contexts, supporting programmes that understand the likelihood of, and work within, political uncertainty or instability and the changing dynamics. As an example of not being ‘surprised by’ risks, droughts in northern Kenya should not be reactively approached as a ‘humanitarian emergency’ but rather a biennial recurring problem that needs to be factored into any WASH programming in the area.

Beyond programme design, the points below highlight some of the reflections and suggestions of interviewees on themes relating to implementation of programmes with systems elements in fragile contexts. These touch on aspects such as focus areas of the system to work on and start with, and adaptive management.

There is organisational intent to strengthen the system; however, there are key practical challenges. A systems approach was seen as important by the various organisations that were interviewed, and significant commitments have been made by them to pursue long term and outcome-based programmes across their portfolio, including in fragile contexts. Nevertheless, there have been significant challenges to this commitment.

One relates to the breadth of the system and the ability to focus on all elements (or the perceived need to do so). One reflection from the interviews and the case studies is that addressing certain ‘building blocks’ of the WASH system, at certain levels, is easier than others in fragile contexts. Some interviewees remarked how conceptual frameworks of WASH systems and their related ‘building block analysis’ tools led them to feel that they should work on strengthening all building blocks101. While several of the aspects or building blocks were addressed intentionally and as the programmes progressed, some ‘building blocks’ were found to be harder to work on. For instance, there were significant constraints to tackling regulation and regulatory mechanisms, often because regulation is done at various levels102 or in the absence of an accessible or reliable mandated body for regulation that organisations could engage with and strengthen.

Studies and surveys can be catalytic in providing evidence to adapt programmes’ focus and engage with government on addressing certain systemic failures. For example, following years of an ‘infrastructure approach’ to WASH services in Nigeria, ACF surveyed all the water systems and water points in Borno and Yobo districts. From this, they got a better picture (and hard data) on the extent of the sustainability challenges for rural water supplies. The data provided an impetus to start looking at more systemic barriers and solutions to addressing the non-functionality of services and to engage local government on the study findings. Working with the government, academics and other stakeholders the evidence supported strategic decision making to address water management across the districts.

Often organisations start by working on strengthening foundations for sustainability at the service provider level. But as many issues cannot be solved at this level alone, progressively they work ‘upwards’, at higher system levels. Constructing technically good water supply and sanitation infrastructure and working with service providers to establish a financial management system was a common entry point for many organisations getting started in wider systems approaches. It provided a platform to address other system elements, beyond the community level, that support ongoing service delivery, such as engaging with policy changes, coordination and planning. For instance, in Somalia, CARE built on the relationship it initially developed with the Government in constructing and managing water systems, and is now working within two departments (Department of Water and Department of Regulation) to write and implement the manual to effectively decentralise the management of water systems to utilities or companies across the region. In this, they started by working ‘on the ground’ on issues in specific communities (e.g., establishing a school and training village-based technicians to provide repair services), and they progressively worked on higher ‘levels’ within the system, allowing them to achieve a greater system-wide impact and scale.

101 To note – this is not the expectation in organisations taking a systems approach that they work on all elements of the WASH system at all levels. Indeed, it is unrealistic to expect any single organisation can be effective across all elements and levels, nor that programmes will allow the potential to do so. However, some organisations can interpret a systems approach as one which they work across the whole system.
102 Some of which the organisation or project didn’t work at – such as the overall national level.
Adaptive management is a necessity for applying systems approaches in fragile contexts due to the changing context and shifting dynamics. For instance, research in the SWIFT programme found that staff in Kenya and DRC adapted the approach in response to the problems they faced (e.g., adjusting the monitoring framework, adapting latrines and professionalising water management) (Mason, Le Seve et al., 2019). However, building on local problem solving and working across the organisation to go to scale is a critical challenge as adaptations are often kept at the local level. Some of the reasons it is difficult to take these adaptations to scale include time pressures and difficulties collating large swathes of data to input into the next programme. Establishing ways of capturing the lessons learnt or changes, and exploring how they can be used or taken scale is important but because these adaptations are often intuitive with staff not always capturing them as part of the official reporting mechanisms, interviews or ongoing conversations are a good way to collect and use this information. Setting up and using adaptive evaluations that rely on ongoing monitoring rather than an end line improves the responsive nature of the programme, which is key, given fragile states’ highly changeable operating context. This is also important because of the typically high dynamism of the WASH system, which can create unexpected or unanticipated challenges – and also opportunities – for systems strengthening at any time. Many interviewees felt that taking a systems approach encourages and supports adaptation; however, evidencing adaptations and scaling them is difficult if timeframes are short and funding restrictive.

Continuing the theme of programme implementation, interviewees raised the following points regarding risk management, working with governments, and the role of trust in effective partnerships:

- **The need to understand and mitigate unintentional risks when applying systems approaches in fragile settings.** Fragile contexts are characterised by weak, neglectful or incapacitated institutions and governments. This often negatively impacts effective coordination and planning in the WASH sector. The result of this can be very little or no oversight over NGOs and organisations and, therefore, parallel systems outside of government coordination and oversight can be established without challenge. While this ‘gets the job done’, it can result in ad hoc approaches being implemented and prevent progress being made in addressing critical long-term sustainability challenges.

- **The ambition of working through government may not be possible all the time in fragile contexts; however, working alongside and with government institutions, and understanding and aligning to wider sector frameworks is essential to systems strengthening.** Embedding the intervention in the national context, policies, and decision-making at the local, provincial and national level is vital to effectively implement long-term and ambitious interventions. Working within these frameworks is necessary to embed the programme in the national standards. For instance, Join For Water used the Water Law in DRC to not only encourage payment for water services, but to work with local authorities to go beyond just supporting the programme and engage in the management and operations of the water systems and support the independent management process. In Uganda and UNHCR planned the water systems together with the national government. The water supply schemes set up for refugees in Northern Uganda are being subsumed into the national utilities. Both these examples highlight the need to, and benefits of, embedding interventions within the sector framework and sector institutions. Even when NGOs are acting as direct service providers, there needs to be a greater understanding of, and alignment to, the government and wider sector framework.

- **Working closely with government can be challenging.** Interviewees spoke of challenges mentioned in Section 6.1 such as the sometimes chronic underfunding of local authorities and rent-seeking behaviours of government staff for involvement or support of NGO projects. As one interviewee mentioned, “it is easier to work around them than with them”. However, many examples were also given of constructive, longer-term collaborations.

- **Working effectively with government to strengthen the system requires trust, and this doesn’t develop overnight.** It also entails a different way of working, whereby the NGO accepts others can influence the project and its timelines. All organisations highlighted the need to build relationships with local and provincial authorities, to be closer to them, to enable them to effectively influence their actions. However, this takes time and trust. In Sierra Leone, the Urban WASH Consortium supported the city water utility (GUMA) to launch a pilot of a public–private partnership for decentralised water points. The pilot was agreed by the Minster of Water and the national water utility managed the tendering and contracting. In February 2020, the operators were trained and installed. The project worked with stakeholders for two years to achieve buy-in and implement the recommendations.
from a governance study. It took this long as ACF worked on the principle that during every step GUMA would be the lead and ACF just supporting (GUMA were part of the survey team and every training). Building trust and respect between the consortium and the authorities took almost two years, during this time implementation slowed as decisions were made collectively. While working like this with the government authorities or institutions requires long-term planning and adaptation, it also means that NGOs are not necessarily in the driving seat but are partners to the government, requiring a different way of working. As one interviewee pointed out, “the NGO’s role is one of accompanying, advocating for leaving no one behind and supporting greater accountability to its population”.

7.2. ADAPTING WAYS OF FUNDING WASH PROJECTS IN FRAGILE Contexts

Whilst the previous section looked at the practicalities of implementing systems approaches in fragile contexts, this section considers, again from the perspectives of the interviewees (whom were largely implementing organisations rather than donors), the implications of funding for applying systems approaches in fragile contexts.

- **Funding mechanisms that are responsive and support systems strengthening are key.** Long term and flexible funding that supports in-depth planning, assessments and significant participation by populations and governments during the inception phase lays the groundwork for adaptation during implementation. While this is not a new ask (e.g. an ask from NGOs to donors), and it is being done to varying degrees by donors (as highlighted in Section 3.3), it is important that funding mechanisms systematically support and push for proper planning, assessments and participation in these contexts. Interviewees remarked that the programmes where they have seen success in systems strengthening and sustainability are those with multi-year secure funding. One of the key challenges raised by all those interviewed was the limited strategic and flexible funding for sustainable and outcome-based programming in fragile contexts. Short term project funding often leaves little time for adaptation and long-term planning as organisations are piecing financing together. An interesting example of more developmental approaches and funding perspectives come from KfW (the German Development Bank). KfW is reportedly increasingly engaging in fragile contexts and is bringing its development-context experience and perspectives and collaborating with humanitarian actors on longer-term programming and service delivery investments.

- **Funding for sustained outcomes, not only outputs, incentivises and creates an enabling environment for organisations to implement systems approaches, even in fragile contexts.** In a multi-country, multi NGO programme103 supported by DFID, a Payment by Results financing mechanism helped to focus on paying for outputs rather than inputs. It included paying not only for increased access, but sustained outcomes (e.g., continued usage of WASH facilities over time). Across the NGOs that were delivering this programme, this shift in funding priorities generated a lot of learning, not only on what success might look like, but ways of working in different contexts to achieve these sustained outcomes. Payment-by-results certainly is not necessarily the best or only vehicle to achieve systemic change. However, the intention of funding outcomes caused a positive shift in how organisations measured results. In this, donor funding (payment-by-results or otherwise) that focuses on – and rewards – sustained outcomes actively incentivises implementing organisations to take more of a systems approach as a necessary action to achieve such sustained outcomes.

103 The suppliers were SAWRP (Plan International, WaterAid and WEDC) SNV and SWIFT (Oxfam, Tearfund, WSUP, Concern, Sanergy and Practical Action) in Bangladesh, Pakistan, Kenya, Ethiopia, Tanzania and DRC.
8. CONCLUSION AND FUTURE PERSPECTIVES

‘Conventional’ humanitarian responses are increasingly not fit for addressing the root causes and reduce underlying vulnerabilities, especially in protracted and chronic crises. There is a need to find ways to bridge the humanitarian-development divide and support the transition from relief to development interventions. There are encouraging sector commitments to this, with the Grand Bargain paving the way, potentially for evolving ways of working – and funding – in such contexts.

Systems approaches are increasingly being more widely applied in the WASH sector. Strong WASH systems are not only a pre-requisite to meeting the SDGs, systems strengthening can also improve preparedness, response and resilience in the WASH sector and help to lay the foundations for transitioning from humanitarian to development investments. While not a silver bullet, systems strengthening might also play a role in crises prevention and wider state- and peace-building efforts.

Most documentation and guidance in the WASH sector concerning systems approaches focus on more ‘stable’, developmental contexts. While systems approaches are highly relevant and needed in fragile contexts, the existing guidance and concepts developed for stable contexts need to be adapted to better reflect fragility aspects.

At this point, we return to the scepticism towards systems strengthening as part of interventions in fragile contexts, exemplified by the two quotes from this paper’s introduction: “how do you strengthen a system when there isn’t one?” (development practitioner), and systems strengthening “is not my mandate” (humanitarian actor). This paper has demonstrated that there is always a system in place, and that it is the mandate of any actor involved in the WASH sector to understand their role and influence in the WASH system in which they are operating, and to work, in collaboration with others, to remove systemic barriers to sustainable WASH service delivery.

Fragility creates fragile WASH services and fragile institutions. While there is always a system in place, this system can be significantly weakened by the circumstances. System strengthening efforts, therefore, need to not just strengthen but potentially re-build system components. While systems strengthening documentation in the sector tends to focus on strengthening government aspects of the system, in fragile contexts, this alone may not be effective. When strengthening government’s role to fulfil their mandate and the social contract to its population, efforts need to be made to work on strengthening the resilience of services to function even in events where the government capacity and presence cannot be guaranteed. In this, working on strengthening service providers’ autonomy and strengthening market-based systems are components to consider in systems strengthening in fragile contexts. In addition to this, the ‘humanitarian system’ can be an additional aspect to strengthen, particularly in its connectedness to developmental action.

The resilience of WASH services to external shocks is crucial in fragile contexts. Resilient services require equally resilient systems and resilient efforts to continuously strengthen them. This requires predictable, programmatic, longer-term funding that WASH actors can rely on, independently of unpredictable shifts in the broader context. Such reliable funding streams need to incentivise long-term planning and programming for sustainable outcomes, rather than short-term ‘beneficiary’ outputs. Likewise, implementing organisations working in fragile contexts need to evolve skillsets and perspectives and readiness, to work much more collaboratively and effectively with local institutions and market-based actors. Development actors need to evolve how they see their role in building resilience, prevention and preparedness.

This paper has sought to contribute to the growing body of literature on WASH in fragile contexts, applying a systems lens. It aimed to bring together actors from humanitarian and development fields and identify areas for mutual collaboration and cross-learning in strengthening systems in highly challenging environments. While this paper may help stimulate dialogue in the sector on systems strengthening in fragile contexts, it is by no means the final word on the topic! We, therefore, call on humanitarian and development actors in the WASH sector to continue to research, test, document and share approaches to systems strengthening in fragile contexts.

104 Albeit that organisations have been doing actions to strengthen elements of the system fragile contexts, but possibly not named as systems approaches.


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ANNEX

1. EXAMPLES OF HOW BUILDING BLOCK ‘SUB-FACTORS’ CAN BETTER REFLECT FRAGILE CONTEXTS.

This table builds on work undertaken by Gensch & Tillett (2019) that seeks to ‘unpack’ the individual building blocks to list out sub-aspects of each building block. It aims to adapt sub-factors for fragile contexts.

<table>
<thead>
<tr>
<th>BUILDING BLOCK (AS PER ORIGINAL A4C FRAMEWORK)</th>
<th>BUILDING BLOCK SUB-FACTORS, AS LISTED IN GENSC &amp; TILLETT (2019)</th>
<th>FURTHER NUANCES TO CONSIDER FOR FRAGILITY ASPECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTIONAL ARRANGEMENTS, LEADERSHIP &amp; COORDINATION</td>
<td>Clarity in mandates and roles; coordination; institutional capacity; incentives; legal status of service providers; policies and legislation; alignment and collaboration with other relevant thematic fields or sectors</td>
<td>Leadership role of government, and alignment of actors behind this (where appropriate); harmonisation and coordination of ‘projects’; coordination between humanitarian and development actors; coordination with other relevant thematic clusters; clarity of institutional roles for emergency response and coordination in WASH sector; sector capacities for both developmental and humanitarian action; emergency preparedness and response capacities; policy and strategy inclusive of humanitarian and development issues; degree of sector alignment in approaches and activities</td>
</tr>
<tr>
<td>RESILIENT SERVICE DELIVERY MODELS &amp; INFRASTRUCTURE</td>
<td>Service delivery models; technologies; infrastructure guidance, standards; quality; maintenance and parts; asset management</td>
<td>Extent of autonomy, preparedness, and resilience of service providers and service delivery models to shocks; infrastructural standards, quality and durability in humanitarian action; inclusiveness of displaced persons</td>
</tr>
<tr>
<td>TRUST, REGULATION &amp; ACCOUNTABILITY</td>
<td>Regulatory framework and enforcement; accountability mechanisms and processes, service standards; capacity, social norms</td>
<td>Degree of legitimacy, accountability and trust of government and mandated service providers to citizens; regulation of informal service provision; resilience of regulation and accountability mechanisms to shocks; trust between sector actors</td>
</tr>
<tr>
<td>INCLUSIVE, CONNECTED &amp; RISK-INFORMED PLANNING</td>
<td>Participation and accountability of process, inclusion; evidence basis; targets and strategy focus, resilience; aligned with other thematic fields and sectors</td>
<td>Plans cover humanitarian and development aspects and process of development engages other respective sets of actors; inclusion of displaced persons in longer-term planning; alignment of non-state actors behind plans; strategic plans are risk-informed and regularly updated/adapted as needed; plans consider to ‘do no harm’ including to markets and sustainability efforts; government leadership of planning process</td>
</tr>
<tr>
<td>FINANCE</td>
<td>Budgeting and financing mechanisms; life cycle and service chain-wide costing; flows and responsibilities; revenue collection, tariffs; subsidies; using synergies with other relevant thematic fields and sectors</td>
<td>Connectedness, predictability and flexibility between humanitarian and development funding; humanitarian action considers longer-term life-cycle costs; development financing considers preparedness aspects; medium-term financing strategies to transition from humanitarian to development; willingness and ability to pay tariffs (in light of refugee constraints on ability to work, wider dependency syndrome in some humanitarian contexts, etc); inclusion of WASH in minimum expenditure basket (for cash-based approaches)</td>
</tr>
<tr>
<td>MONITORING</td>
<td>Monitoring framework and routine implementation; information management; harmonisation of monitoring; usage of data; multi-stakeholder involvement</td>
<td>Alignment of non-state actors to monitoring framework, and sharing of survey data; access to data; arrangements for monitoring in fragile/remote locations; inclusion of humanitarian indicators and displaced groups in sector framework</td>
</tr>
<tr>
<td>WATER RESOURCE MANAGEMENT &amp; ENVIRONMENT</td>
<td>Management and allocation of resources; resource monitoring and protection; dialogue platforms; balancing of interests; resource recovery</td>
<td>Environmentally sensitive humanitarian action; linkage of water resources planning and humanitarian planning; inclusiveness and conflict-sensitivity in water resources management arrangements</td>
</tr>
<tr>
<td>LEARNING &amp; ADAPTATION</td>
<td>Platforms for sharing and readiness to share; upwards/downwards flows; tailored trainings; link to planning and programming</td>
<td>After action reviews and real-time learning from humanitarian action; connectedness and dialogue between humanitarian-development actors; knowledge retention in humanitarian sub-sector; harmonisation of sector capacity development efforts;</td>
</tr>
</tbody>
</table>
2. EXAMPLES OF STRENGTHENING THE WASH SYSTEM AT DIFFERENT ‘PHASES’

This table briefly identifies (non-exhaustive) examples of objectives and actions for systems strengthening across different phases, building off existing work by UNICEF (2019b) and WSP (2011, 2014) on this topic.

<table>
<thead>
<tr>
<th>PHASE</th>
<th>PRE-CRISIS</th>
<th>ACUTE RESPONSE</th>
<th>PROTRACTED CRISSES</th>
<th>POST CRISSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXAMPLES OF BROAD OBJECTIVES OF SYSTEMS STRENGTHENING</td>
<td>Reducing / preventing tensions and legitimate grievances that may lead to conflict</td>
<td>Ensuring that humanitarian response ‘does no harm’ to markets and wider foundations for sustainable service delivery</td>
<td>Strengthening the resilience of the system to further ‘shocks’</td>
<td>Resumption of government leadership and sector harmonisation, and moves towards stabilisation and development programming (as soon as possible)</td>
</tr>
<tr>
<td></td>
<td>Minimising negative impact of upcoming crises on WASH services and WASH sector gains to date</td>
<td>Maximising the effectiveness of humanitarian response</td>
<td>Building foundations for developmental initiatives and connectivity between humanitarian and development action</td>
<td>Strengthening longer-term resilience</td>
</tr>
<tr>
<td></td>
<td>Strengthening the resilience of the system to ‘shocks’</td>
<td></td>
<td>Using WASH as one entry point for peace-building and socio-economic recovery</td>
<td>Use improved WASH services to demonstrate the ‘peace dividend’ and strengthen trust</td>
</tr>
<tr>
<td>EXAMPLES OF RELEVANT FOCUS AREAS FOR SYSTEMS STRENGTHENING</td>
<td>Strengthen governance, accountability and inclusiveness, and overall performance of WASH service delivery</td>
<td>Supporting service providers (e.g. utilities) to prevent collapse</td>
<td>Longer-term arrangements for service delivery for IDPs/refugees</td>
<td>Longer-term strategic planning focussing on resilient development</td>
</tr>
<tr>
<td></td>
<td>Building resilience in service delivery</td>
<td>Response to humanitarian needs</td>
<td>After action reviews of humanitarian action, and studies of connectedness of humanitarian action and developmental initiatives</td>
<td>Resilience building, strengthening early-warning systems</td>
</tr>
<tr>
<td></td>
<td>PREPAREDNESS</td>
<td>Market-based interventions, and interventions that strengthen not undermine longer-term sustainability prospects (wherever possible)</td>
<td>Developing longer-term vision and (risk-informed) roadmap, whilst building capacity for preparedness and responding to periodic shock</td>
<td>Institutional ‘rebuilding’ and widespread sector capacity development, and strengthening of WASH governance</td>
</tr>
<tr>
<td></td>
<td>Conflict, risk, market and fragility assessments</td>
<td>Enhancing local and national response capacities and plans (emergency preparedness).</td>
<td>Enhancing local and national response capacities and plans (emergency preparedness).</td>
<td>Transition of WASH cluster, strengthening government sector leadership role, and alignment of sector actors behind this</td>
</tr>
<tr>
<td></td>
<td>Enhancing local and national response capacities and plans (emergency preparedness).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strengthening preparedness and response capacities of humanitarian system, service providers and market-based actors, strengthening early-warning systems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. CASE STUDIES OF APPLYING WASH SYSTEMS APPROACHES IN FRAGILE CONTEXTS

This section provides a selection of practical case studies from various organisations and from various fragile contexts. These have been written by the individual organisations themselves, and present not only what they did, but also their experiences and reflections in the process.

The selection of case studies that this paper presents was based on those suggested by the contributing authors, and while efforts were made to obtain contextual and thematic diversity, there was not a specific methodology for selection.

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<th>Author/organisation</th>
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ACTION AGAINST HUNGER'S RESPONSE TO WATER POINT FRAGILITY IN NORTHEASTERN NIGERIA

CONTEXT

In Northeastern Nigeria, low levels of state services and limited community resources have been further depleted by 9 years of violent conflict: it is estimated that no less than 75% of the WASH infrastructure in the Northeast has been destroyed due to conflict (HNO 2017). According to the Humanitarian Needs Overview (HNO 2019) 3.6 million people require immediate assistance related to WASH. Action Against Hunger has been working in Yobe State since 2010, and Borno State since 2014. Our WASH interventions focus on enhancing access to sanitation, behaviour change and construction and rehabilitation of water supply schemes for IDPs and host communities. This case study describes how fragility is affecting sustainability in Northeast Nigeria, and how Action Against Hunger is adapting its approach.

SERVICE AND SYSTEM ASSESSMENTS

Action Against Hunger has constructed and rehabilitated several hundred water points and trained water point user committees. These works were for communities with large numbers of Internally Displaced Persons (IDPs) and were completed with short-term donor funding and almost no longer-term follow-up. Systematic institutional gaps within the Local Government Areas (LGAs) or at the State level were identified as an issue, but not addressed. In 2018 we revisited all 208 water points in both States (146 in Yobe State and 62 in Borno) in order to assess water point functionality, acceptance by communities and water user committees’ capabilities to maintain them. The overall water point functionality rate was 84% (details in table below).

But behind this relatively high rate lie serious challenges which will almost certainly affect rural water supply in the medium-term. The Action Against Hunger survey was based upon Water Safety Checklists, Water Quality Analyses and Focus group discussions with users and WASH committees. The results indicated that low access to spare parts and well-trained mechanics are significant barriers to continuous functionality and is further hampered by the security situation. The water demand is directly impacted by the influx of new refugees, which affects the installations beyond normal wear and tear. Fuel availability and maintenance were clearly an issue for generator-powered systems, and therefore Action Against Hunger decided to fully transition to solar power. However, water user committees of handpumps or solar systems also face serious (financial) challenges to operate the facilities, and several water points were found to be re-contaminated since they were handed over to local committees despite extensive training on maintenance.

All these issues prompted the team to look at the wider (institutional) environment and budget for a governance study to analyze the water supply system. Therefore in 2019 Action Against Hunger conducted a more thorough analysis of gaps and opportunities at national, State and local levels. The study identified a large number of diverse actors involved in the WASH sector, both with public and private sector entities. Although the State keeps the main responsibility for water resources management planning, Borno State does not have any legal framework relating to water resources management. In terms of public budgetary allocation, the low level of investment in the sector cannot match the rapid population growth. All stakeholders are requesting higher budgetary allocations to upgrade and rehabilitate and there is limited

### Table 1: Functionality survey of Action Against Hunger water points. N refers to the sample size (e.g. 5 hand pumps were functional in Yobe state)

<table>
<thead>
<tr>
<th></th>
<th>Handpump Not functional</th>
<th>Handpump Functional</th>
<th>Submersible Pump (Generator)</th>
<th>Submersible Pump (Solar)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yobe</strong></td>
<td>29% (n=2)</td>
<td>71% (n=5)</td>
<td>6% (n=2)</td>
<td>13% (n=13)</td>
<td>12% (n=17)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Borno</strong></td>
<td>83% (n=5)</td>
<td>17% (n=1)</td>
<td>75% (n=3)</td>
<td>15% (n=8)</td>
<td>26% (n=16)</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

*The WASH Governance Study objective was to inform the most appropriate ways for AAH to strengthen and/or assist local authorities and public institutions, in their respective domain of competence. The study consisted of: a. Analysis of the institutional and regulatory framework; b. Assessment of the capacity and political mobilization of existing institutional actors to ensure longer-term sustainability of the WASH interventions; c. Identify opportunities, interests, coordination mechanisms and synergies that stakeholders may have with AAH’s WASH program in Borno*
maintenance of water points. When works are completed urban supply schemes are prioritized due to political economy, inaccessibility and instability of rural LGAs. There is no mechanism to tap into domestic resources for WASH financing and a lack of cost recovery mechanisms. While the private sector is expected to play a growing role (per national and state level policy), it appears to be almost absent from sector coordination meetings in Borno State. On the other hand, the main WASH Governance stakeholders lack the understanding and skills of the private sector. There is also a lack of a WASH accountability, and the level of monitoring and evaluation in the sector is weak.

**ACTION AGAINST HUNGER’S RESPONSE TO DELIVER MORE SUSTAINABLE SERVICES**

The water point review allowed Action Against Hunger to assess functionality and lead to a focus on system strengthening approaches. Action Against Hunger has adapted its approach focused around the ‘building blocks’.²

At the monitoring level, Action Against Hunger is now mapping all its past and current water points to develop an asset database in mWater and enable the continued monitoring of functionality.

At the institutional level and following the Governance study recommendation Action Against Hunger is trying to facilitate an open-ended inter-ministerial Water Governance Roundtable in Borno State, including key public agencies, LGA representation and a series of observers (civil society organizations, development partners and the private sector). This would be used as a hub to gradually review the status of the WASH system’s building blocks. In addition, Action Against Hunger is committed to prepare a capacity building plan with LGAs, the Rural Water Supply and Sanitation Agency (RUWASSA) and the Borno State Environmental Protection Agency (BOSEPA) to address the identified gaps and challenges, with a focus on regular water quality monitoring, complete water point mapping and surveying, and longer-term support to water user committees on operation and maintenance. Finally, Action Against Hunger has an advocacy project including exchange visits between WASH Boards to support local government’s role in supporting and overseeing WASH services in Yobe.

At the resource level, Action Against Hunger is finalizing a groundwater assessment with the objectives to develop a comprehensive monitoring plan for groundwater in Northeastern Nigeria to support sustainable groundwater abstraction in the longer term. This was developed in response to the findings of the functionality study (several dry boreholes (affecting 4 out of 13 hand pumps in table above) and bilateral discussion with an international donor. The assessment consists of the compilation of all data sources into a GIS system, an analysis of the geology and development of a simplistic conception model, and the development of monitoring plan.

²Using the nine building block framework used by IRC.
THE “ECONOMIC APPROACH”: LIFE-CYCLE COSTING IN A FRAGILE CONTEXT DEMOCRATIC REPUBLIC OF THE CONGO

DRC is a fragile state: vast, poor, and socio-politically unstable, where rapid-onset crises compound chronic developmental issues. It is more often a site of emergency interventions than development work. While strong national and local WASH systems are a long way off, the need for WASH services is immediate and ongoing. In this context, the DRC WASH Consortium (2013–2019) was led by Concern Worldwide with ACF, ACTED, CRS, Solidarités International, and funded by UK Aid, benefitting 656,000 people in 612 communities across 7 provinces. The Consortium worked to strengthen different parts of the WASH system – local and national government, private sector, and other actors – while emphasising working with communities systems to be as self-sufficient as possible. This self-sufficiency focus was designed to build long-term community leadership with minimal external support.

THE “ECONOMIC APPROACH” FOR 3 LEVELS OF FINANCIAL SELF-SUFFICIENCY

The “Economic Approach” was developed as a way for WASH Management Committees to take ownership of their WASH services, by preparing them to take on the ongoing technical and management costs of maintaining their water point. These costs were presented as 3 defined levels of financial self-sufficiency: Level 1, covering ongoing operations and minor maintenance of the water point; Level 2 which factors in future major repair costs; and Level 3 which also prepares for full rehabilitation of the water point at the end of its life-cycle.

BUSINESS PLANS BALANCING COSTS WITH REVENUES

WASH Management Committees developed business plans with strategies for revenue streams to cover these costs. Most collected contributions from households – fixed monthly fees, or payments on volume of water used. Often, they chose to offer exemptions to the most vulnerable households. Many committees also set up small commercial activities to support the management of the water point, creating additional revenue without overburdening household finances. In all cases, they measured their success against the 3 Levels of financial self-sufficiency at the centre of the Economic Approach.

LIFE-CYCLE COSTING SUSTAINING SERVICES

When the approach was designed, there was no precedent in DRC showing whether life-cycle costing would work in such a fragile context. However, a full two thirds of communities supported by the Consortium reached financial self-sufficiency. Others had revenue streams in place but hadn’t yet reached a defined level of financial self-sufficiency. This result was even stronger in communities which diversified revenue sources, and undiminished when communities offered exemptions from payments for the most vulnerable. Analysis showed similar results irrespective of community demographic composition or economic status. This suggests that the approach of promoting self-reliance was appropriate to the levels of vulnerability present and to communities’ coping mechanisms. Results also seem promising in the longer term. Revisiting a sample of communities two years after the intervention showed 89% of water points were still in use, and most were still managed by a committee collecting funds.
STRENGTHENING SYSTEMS IN A FRAGILE CONTEXT

Working in a fragile state, the DRC WASH Consortium found systems we could build and strengthen in communities. Development actors, even in fragile contexts, can successfully design and implement WASH interventions to focus on longer-term services and not only short-term achievements. Adopting the life-cycle cost approach, or variations of it, is feasible even in a fragile context like rural DRC, and shows an example of how development actors can work towards longer-term services by strengthening systems.
STRENGTHENING WASH SYSTEMS IN SOMALILAND: AN EXAMPLE FROM WELTHUNGERHILFE’S SUSTAINABLE SERVICES INITIATIVE

CONTEXT/ RATIONALE
The Republic of Somaliland is a self-declared state, internationally considered to be an autonomous region of Somalia, with a population of around 4 million. It is semi-arid, drought prone, and is recovering from a civil war, which ran from 1988–1991. It is environmentally and economically fragile, with the Somaliland shilling often affected by inflation. Somaliland is relatively more secure than its conflict-affected neighbour (Somalia), however the sector is relatively ‘projectised’ and ‘humanitarian’ in nature, with sector coordination falling within the wider Somalia WASH Cluster, and with cyclical humanitarian responses to droughts, which undermine longer-term strategic planning and development activities in the WASH sector.

The capacity and recurrent budgets of the Ministry of Water Development (MoWRD) and Ministry of Health Development (MoHD) is very low, particularly at the regional and district levels. Water-related policy and governance legislation has, for over a decade, promoted decentralisation, however in the water sector, this been slow to materialise. In the context of relatively limited government capacity and other contextual factors, NGOs and development partners, have become accustomed to designing and delivering programmes directly themselves, often with only tokenistic involvement of central and local government structures. This, and the projectized approach to WASH programming, is failing to build and strengthen the systems that are needed to move Somaliland from cyclical humanitarian responses, to longer-term development programming, and sustainability of services.

AIM OF THE PROJECT/INTERVENTION:
As part of a wider (global) initiative of WHH, WHH introduced the Sustainable Services Initiative (SSI)1 to Somaliland in 2019. The objectives of this are to strengthen and evolve the programming that WHH does in Somaliland to maximise the sustainability prospects they have, and, to help WHH to have a more catalytic impact on strengthening sustainability of WASH services across the country, by engaging in broader systems strengthening.

THE INTERVENTION:
To kick this off, WHH’s technical partner, Aguaconsult, undertook an in–country mission in April 2019. This included a participatory review of WHH Somaliland’s project activities, leading to a series of recommendations on how they could adapt their programming.

In this first visit, a sector–level workshop was also held, which sought to engage key stakeholders on discussing sustainability issues, review the status of the WASH system (through a building block analysis process), and to identify actions that should be undertaken (some of which to be supported by WHH) to address areas of systemic weakness.

A second in–country visit was undertaken in February 2020, which included national and regional–level systems strengthening workshops. In the national workshop, the systemic gaps identified in the 2019 workshop were re-appraised, progress to past workshop actions reviewed, and new actions identified. One key outcome of this workshop was the agreement to establish a sector–level Systems Strengthening Task Force – a sub-group of the Sector Working Group– to be led by MoWRD (with close support from WHH and other actors like UNICEF and CARE), who would be mandated to operationalise and report–back on the agreed workshop outcomes. Another was to ‘pilot decentralisation’ and regional–level systems strengthening in two of the five regions, with WHH offering to support the process in Awdal, and CARE supporting Togdheer, and for these ‘pilot’ regions to allow testing of wider frameworks developed at national level (e.g. monitoring frameworks) before upscaling.

Figure 1: Building block scores for various regions in Somaliland (scoring done by participants)

<table>
<thead>
<tr>
<th>Region</th>
<th>Institutions</th>
<th>Finance</th>
<th>SDM Infrastructure</th>
<th>Regulation &amp; Accountability</th>
<th>Monitoring</th>
<th>Water Resources Management</th>
<th>Planning</th>
<th>Learning &amp; Adaptation</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>Marodijeh</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>Awdall</td>
<td>9</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

1Available data suggests that access to improved water sources stands at just 42% (22.5% in rural areas) (MoPND 2016), and a Somaliland–wide survey of water points by FAO/SWALIM found functionality rates of rural water schemes of around 50%.

2The Sustainable Services Initiative (SSI) is an internal initiative of Welthungerhilfe (WHH), supported technically by the German Toilet Organisation and Aguaconsult. It seeks to strengthen WHH’s capacity to implement sustainable WASH programming, and also aims to contribute to the global sector debate on systems strengthening. It provided funding for the development of this fragility paper.

3These included, for example: developing a more meaningful relationship with government at national and regional levels, and involving them across the programme cycle, seeking to institutionalise project activities and structures within government–recognised structures (such as linking hygiene promoters to local health centers), and making the capacity development package provided to small town water supply service providers more comprehensive, covering aspects such as financial management, accountability, and non–revenue water management.
A regional-level workshop was also held in Awdal Region, to review the strength of the system at that level, identify actions to strengthen it, and discuss how some of the national-level systems strengthening action points could be operationalised at the regional level.

A summary of the agreed outcomes of the 2020 workshops is presented below:

### NATIONAL LEVEL AGREED OUTCOMES

- Deepen decentralisation through functional/fiscal transfer, and using 1-2 regions as 'testing grounds'
- Establish a ‘Systems Strengthening Task Force’, and create online library of key documents
- Develop WASH services (and infrastructure) ongoing monitoring framework, with process for ongoing updating the asset inventory
- Register all water service providers, strengthen mechanisms for ongoing support, and for service regulation

### REGIONAL LEVEL AGREED OUTCOMES

- Establishing MoWRD-led WASH coordination and learning platform, with strong linkage to national working group
- Strengthening functional capacity of MoWRD (and MoHD) at regional level to fulfil their defined mandates
- Establishing and operationalising post-project ongoing monitoring process
- KPI setting, capacity building, regulation and performance monitoring of all urban water service providers in region
- Legally registering and ongoing building capacity for rural water committees

Following these workshops, WHH identified the clear need to take a collaborative approach, developing strategic partnerships, to help the government and wider sector to drive forward these actions. A series of meetings were held with key sector-level stakeholders, such as UNICEF, CARE, MoWRD and MOH. Follow-up meetings were held wherein these external agencies supported MoWRD and MOH focal persons to present these outcomes to their Ministers, to ensure wider (political) buy-in not only for the strengthening of the system, but also for the decentralisation that operationalising these outcomes would require.

### THE RESULTS:

Whilst there have already been significant shifts in the modus operandi of WHH WASH programming in Somaliland, following recommendations of the first visit, it is still very early in the process to talk of ‘results’ regarding the national and regional level systems strengthening work. However, at this early stage, the process has already helped broaden the perspectives of many stakeholders in the WASH sector in Somaliland (on sustainability issues), gained the interest of the (Somaliland) WASH Cluster, and has significant interest from and backing from MoWRD at the national and regional levels.

### LESSONS LEARNED:

- No single entity (e.g. WHH) can address all systemic issues. Strategic partnerships with influential sector actors (in this case CARE and UNICEF) are essential to have a consolidated voice to Government. Undertaking joint analysis and co-defining action plans with such partners helps align organisations behind a common vision.

**Figure 2:** Sector participants in a systems strengthening workshop in Hargeisa in February 2020, identifying priority actions to strengthen different ‘building blocks’ (credit –Will Tillett)

- Institutional (government) commitment key, but in a fragile context with weak capacity and regularly changing Ministers, the success and progress can be down to individual personalities in Government, which is vulnerable to risks of staff turnover.
- Fragility and periodic humanitarian activities can cause discontinuity in longer-term efforts.
- Institutionalising the systems Task Force as a sub-group reporting to the WASH Cluster is strategic to strengthen humanitarian-development nexus. The linkage will likely also help in the future process of trying to align NGO actors to emerging government-led processes, such as a sector-wide monitoring framework.
- Undertaking systems analysis in fragile contexts reveals a huge number of issues, which can be overwhelming! There is a need to prioritise issues, and distil to a number of manageable actions within a first year, and identify ‘low hanging fruits’
- Advocating for decentralisation, particularly in resource-poor settings, and particularly decentralisation of water-related functions especially in a water-scarce country, can be challenging.

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1 In this case, there had just been a nationwide water point asset inventory survey undertaken, so it was timely to use the question of ‘how to update this data through monitoring?’ as an entry point to for systems strengthening, focussing on the ‘monitoring’ building block, which is very weak in Somaliland.
STRUCTURING, PLANNING AND MANAGEMENT OF THE WATER SECTOR IN ITURI, DR CONGO

AUTHORS: HARALD VAN DER HOEK, LIEVEN PEETERS

DRINKING WATER MANAGEMENT IS NEGATIVELY IMPACTED BY FRAGILITY

The Province of Ituri, since 2015 recognised as a separate Province in DR Congo, is characterised by several aspects of fragility: a weak central government, nascent decentralisation combined with limited resources and capacities, a multiplicity of laws and institutions with often overlapping and sometimes conflicting mandates, weak or absent financial institutions, frequent flaring up of violence, internal and cross-border population displacements and since 2018, the Ebola epidemic. In this context, civil society and faith-based organisations have taken up a key role in basic service provision and the defence of the population’s rights. For more than 30 years, Join For Water and its local partner NGO CIDRI have been constructing piped water supply systems and supported their Community based Management Committees (CMCs), thus providing sustained access to more than 500,000 people. The CMCs are autonomous structures, whose members are accountable to and elected by the community, that manage the operation and maintenance of the water supply systems, some of them for more than 30 years.

THE SAGE PROCESS AS AN ANSWER

The CMCs have played a tremendous part in the maintenance and functionality of water systems in a very difficult context with initial support from CIDRI, but often needing permanent support to improve and professionalise the management of their water systems. The newly installed SAGE platform is a means to provide this support and stimulate exchange and learning between CMCs. SAGE as an umbrella organisation composed of CMCs that on one hand supports them in professional management and on the other hand represents them in the water sector group. Support is given to the CMCs in financial and technical management and a warehouse is operated and managed for committees to buy spare parts. In December 2015 a new national water law was approved, which provides for the first time a comprehensive legislative reference and lays down the rules of responsibility for the public service of water and sanitation and the transfer of water supply services to the provincial and local administration. Its principles now offer clarity on the roles of all stakeholders, how to bring the CMCs into compliance, by applying for a civil society organisation status, and provides a legal context on how to establish and recognise this SAGE platform.

Representation in the water sector group has been important to not only influence provincial decision making, since the sector group ultimately answers to the governor, but discuss issues relating to governance and sustainability beyond the direct programme with different and important stakeholders.

ASSESSMENT, SECTOR STRUCTURING, CAPACITY BUILDING

The EU-funded SAGE project implemented in Ituri by Join For Water and CIDRI between 2014 and 2019 aimed at creating the umbrella organisation SAGE for the CMCs and the provincial water sector group composed of provincial and local authorities, state services, international and national NGOs, civil society and faith-based organisations, and media, who would design and oversee the implementation of the provincial WASH strategy. At the beginning of this process, an assessment of all drinking water points in the whole Province was executed by CIDRI with help from Join For Water and supervised by the WASH sector group, and served as an instrument for identifying priorities in capacity support to CMCs and to develop the Provincial WASH sector plan. This WASH sector plan for the Ituri Province is the first of its kind in DR Congo and provides strategic orientations for decision makers to improve sustainable, inclusive access to drinking water.

CMCs’ technical, financial and administrative capacities were strengthened, and a reference manual was developed that helps them and their umbrella SAGE to improve management. To improve the water service, a professionalisation fund was set up within SAGE, to which CMCs could submit their own proposals. During the project, two new piped water supply systems were built in areas where high population pressure had brought severe difficulties for the proper functioning of existing water supply schemes. The most common investment was to construct a kiosk, hosting a number of taps, operated by an individual working on commission.

*CIDRI = Centre d’Initiation au Développement Rural en Ituri*

*The national water law allows for community management of water supply systems on the condition that the committees apply to be recognised as civil society organisations, having statutes, internal regulations, general assembly and governing board*

*This was mainly set up to access infrastructure investments, e.g. the construction of water kiosks that allow for partnerships with private operators, who manage those kiosks by selling water at a tariff determined by the CMC, but can further increase their income by selling other consumables.*
A multi-stakeholder approach was used, and a steering committee was put in place, uniting representatives of provincial and local authorities, deconcentrated state services, civil society, church and media.

**UNINTENDED EFFECTS**
The new water law foresees for CMCs to develop their own constitution and legal structures. During their existence several CMCs were dependent of other legal entities, such as faith-based organisations, and this new situation created the dilemma for them to either go fully independent or stay linked with these entities (whom often also showed a rather protective response, because for them the management of a drinking water scheme is a profitable business).

The population itself, led by the CMCs united in SAGE showed real ownership and determination when obstacles would occur. Coordinating under this representative umbrella not only helps in coordination but gives them a legal platform to participate and influence provincial discussions. For example, when exemptions for import of materials delayed and disputes over ownership of water sources occurred, they put pressure on the provincial Governor to overturn this situation.

As the process evolved the interaction and engagement created new dynamics and brought actors closer together. This change of mentality of the actors is perhaps the most promising result, on which other actions in the future can be built.

Interest among CMCs for the professionalisation fund was high, but not all projects could be awarded. This created disappointment and extra efforts were needed to ensure the engagement of all CMCs.

**LESSONS LEARNED**
The collaboration between different type of actors in the WASH sector group was a rather new experience in this context. At the starting point there was a certain level of mistrust towards authorities, who had a reputation of being notoriously corrupt, but as the process evolved the interaction and engagement created new dynamics and brought actors closer together. This change of mentality of the actors, either being CMCs joining SAGE or different stakeholders united in the WASH sector group, overcoming mistrust from the past and building mutual respect and willingness to cooperate, is perhaps the most promising result, on which other actions in the future can be built.

Most CMCs took the initiative to reorganise according to the new law, even if they had affiliated with other legal entities in the past. Other CMCs remained cautious and opted to monitor the evolution before making a final choice.

A process focussing only on structuring of the water sector would have been too theoretical and abstract for the CMCs. Therefore, the investments in infrastructure alongside the other steps taken motivated the CMCs to fully participate in the process and the creation of the SAGE.

The creation of SAGE is a long process which is not yet finished. Although the structure exists and its constitution has been legally registered, it cannot yet function fully autonomously. Support, regressive over time, by a third organisation will still be necessary.
GENERAL CONTEXT
Madagascar has been plagued by political and resulting economic crises since its independence. This has led to the destruction of its socio-economic-political fabric. The situation was exacerbated by two consecutive coups in the early 2000s. Although there are some improvements since 2010, politics are dominated by an urban elite fending for its own interest instead of alleviating the plight of the population, corruption is rampant and environmental degradation occurs at alarming rates. Madagascar is among the poorest countries in the world with 75% of the population living on less than $1.90 per day (in purchasing power parity). The country’s human capital index ranking is among the lowest worldwide and Madagascar has the world’s fourth highest rate of chronic malnutrition (World Bank, 2019). By 2030, Madagascar may be one of four fragile countries, where the extreme poor will be mostly concentrated, the other three being Nigeria, DR Congo and Tanzania (OECD, 2018). Madagascar is one of the African countries most severely affected by climate change impacts and experiences an average of 3 cyclones per year (World Bank, 2019).

Although legislation and policies have been put in place during the last 20 years, the decentralisation process is hardly advancing. Bearing the responsibility for providing access to drinking water and sanitation services, municipalities have scant resources to execute their tasks. The development of the private sector and public services continues to be hampered by the strong involvement of the urban elite in the actions of already weak state institutions. Small and medium enterprises face multiple challenges that are particularly hard to overcome because of their size. Among these challenges are a lack of assets or asset destruction, a lack of infrastructure, macroeconomic instability, weak public institutions, complex land ownership rights, corruption, and security. SMEs also have trouble accessing credit. Local authorities and institutions face difficulties in mobilising financing and domestic resources leaving them chronically underfunded. This is further complicated by low levels of absorption capacity at their level (OECD, 2018).

THE WASH SECTOR
According to the 2017 JMP report, in 2015, basic access to drinking water was 51%, below the Sub-Saharan average of 55%. For sanitation the situation was even bleaker, over the last 15 years open defecation rate has been on the increase. Access to basic sanitation was less than 17% in urban areas in 2015, 70% of diseases in Madagascar come from consumption of unsuitable water and lack of hygiene. As a result, there are 3.5 million missed school days a year. A recent World Bank study (October 2019) showed that $174 million are lost annually because of the lack of adequate sanitation services.

TAMATAVE AND ITS SANITATION SITUATION
Tamatave is Madagascar’s second city, with a population of more than 300,000. Join For Water started its activities in 2006 by improving the access to hygienic family latrines for disadvantaged households. It is not only a matter of building toilets but of working on the whole FSM chain – access to the toilet, disposal of excreta and treatment before returning to the natural environment – and this issue translates into a sanitary challenge for the city. Tamatave having sandy soil and a high groundwater table, deep pits are not an option and toilets need to be emptied frequently, and rather than dumping its faecal sludge the city must treat it. The treatment is important because 50% of the population (for lack of service from the drinking water system) draws on the groundwater not only for its domestic activities but also for its drinking water.

In Tamatave the density of the habitat represents a challenge to carry out emptying. Drainage trucks often cannot access latrines (especially the ‘tinetes’ = buried oil barrels) because of the narrow lanes and distance to roads in some areas of the city. In these cases, it is observed that households out of necessity ended up burying the sludge in yards. These practices are disastrous from a health and environmental point of view because the superficial disposal without treatment is at risk of dispersion by heavy rains.

EMPTYING SERVICE AND TREATMENT PLANT
FSM was confronted with two main challenges:

- **Socioeconomic:** The main objective was to create an emptying service also accessible to the low income families. Due to the extreme and chronic poverty, the financial resources of most clients are limited. Also the institutional and legal constraints for using an emptying service is low (no legal framework from the local government and therefore the traditional emptying (meaning emptying in own garden) is tolerated). There is also a cultural taboo around sludge and its visible handling (most traditional emptying is done in a hidden way).

- **Technical:** disordered urbanisation, urban density and narrow and poorly maintained roads sometimes make it difficult to access family latrines of different and often defective types. Sludge is often undigested and difficult to extract.

During a two-year action–research phase Join For Water tested different alternatives to offer an adapted and affordable service: for example a rickshaw and wheel cart with a gulper hand pump and collection points for 15 gallon containers was not viable; the service that seemed to be the most sensible is a combination of manual emptying and hand/mechanical pumping with mechanised transport (depending on accessibility, a motor cultivator with a 1 T trailer or a tractor with a 5 T trailer or a 4 m3 slurry tanker are used.) Considering the cultural sensibility a lot of effort was put into promotion and visualisation of the service showing the professional behaviour of the emptying operators (adapted equipment and protective clothing).
After the test phase, Join For Water helped to incubate a local entrepreneur (constructor of toilets) to set up the private emptying service, Clean Impact, between 2016 and 2018 with the ambition of achieving universal access to the service and innovation by proposing a solution for all the milestones of the sector – whatever the type of habitat and latrines – and as part of an experimental approach with CNEAGR to develop a simple and low-cost treatment technique, planted humification beds, that can potentially receive 8% of the city’s sludge. The city council participated in the treatment technology choice and the design of the emptying service and facilitated the process, provided office space for Clean Impact and the land for the treatment plant. This was largely due to the personal interest of the local Director of Urbanisation. Twenty years before, the local authority had been running a sludge service directly, which they were not able to maintain. Therefore there was an interest in setting up a private service since the city council did not want to run the service by themselves. The local government is owner of the treatment plant and the approved emptying service provider pays an annual fee (1000 €) for its use, which allows the technical department of Tamatave to follow up the emptying service. Join For Water invested in emptying and transport equipment and construction of the treatment plant. At first, the equipment was loaned to Clean Impact (the company had to set aside depreciation costs), but when in 2018 Join For Water closed its activities in Madagascar the assets were transferred to the company.

Clean Impact collected after 2 years of activity around 700 m³ of sludge per year serving 12,500 people, and obtained a profit margin of 3% showing vulnerability to operational perturbations and external shocks: half of the clients are low income families and the emptying service is one of the first activities that will be cancelled when in need for money. Since the service does not have the capacity to serve the whole population and the local government has not been able to develop a legal framework, traditional emptying is still tolerated.

To improve rentability Join For Water added in 2019 a slurry tanker to the equipment in order to be able to serve bigger clients and to assure a continuing activity and income. This has increased the collected sludge volume by +57% (from 700 m³ to 1100 m³ in 2019) and resulted in a profit margin of 6.3%. The city council has handed over the management of the treatment plant to Clean Impact, that has interest to ensure the quality of the sludge to protect the plants. The sludge emptying service is regulated on 3 levels: the company is authorised by the regional government to work in Tamatave; an environmental permit from the national environmental organisation for the local authority and a service delegation contract between the city council and the company. Treated sludge sample analysis showed a diminution of helminth eggs: disinfection is on average 85% on all layers of humus (after 2 years or 2/3 of planned treatment period) and volume reduction is 82–87%. A further rest for 6 months outside the beds assures a safe use in agriculture. However cultural resistance for its use remains high. Actually, the treatment basins are not yet filled (filling is at a much slower rate than planned – transformation in the basins is much higher than estimated) but the end product will be used in the parks and green areas of the city. There has also been contact with a nearby soap factory (using palm oil from their own palm plantation) for the treated sludge to be used as fertiliser. However, they ask for a safety certification that no institute delivers in Madagascar (since the treatment plant is the first of its kind in Madagascar the legal framework is not yet developed).

LESSONS LEARNED

The market for FSM exists for all types of latrines, and a profitable operation can be built, though many challenges remain:

» Management of Clean Impact needs to be further strengthened;
» Regulation is lacking (latrine type, emptying conditions, treatment) and, if put in place, local authorities need to be assisted in implementing;
» Subsidy is needed for the lowest class, which is most difficult and expensive to serve: this has been achieved using standardised tariffs: the low income families have a 20% discount for emptying 200 l (equivalent to a “tinette”) although in reality the emptying cost is estimated as double of the normal fee of 24 euros. On the other hand, investments were made to enhance productivity in emptying for the bigger customers allowing the real cost to be a lot lower than the normal fee charged. This has allowed to assure access to the service for the low income families (around 50% of the actual clients). Clean Impact could be tempted to increase its profit margins by abandoning its service to low income families. However, besides its own commitment to serve these families, it is also conditioned in their agreement with the city council which monitors compliance;
» Initial investment is a constraint for start-ups and they have trouble accessing credit, thus needing external support. By incubating a new enterprise, it is protected from initial financial risks and by incorporating depreciation in the business model, it can replant a equipment in the future. Extending this pilot to the rest of Tamatave would require considerable investment again in emptying and transport equipment, and treatment facilities. It is not realistic to assume that Clean Impact or local authorities would have the resources to invest and external support would be necessary;
» Local authorities are chronically underfunded and have insufficient technical capacities to operate the treatment plant. Its lease to Clean Impact, has improved the management of the treatment plant and provided the necessary funding to the local authorities to monitor Clean Impact’s performance;
» Clean Impact’s long-term presence and financial sustainability with a significant volume of business and market share might be ensured by:
» A project linking it to the city council for the collection of solid waste increasing Clean Impact’s revenue. The city council will then have to reflect on how to finance this new sector and lay the foundations of a municipal tax that will lead to investments for liquid and solid sanitation to increase impact in the sanitation of the city;
» The operator could market a watertight pit latrine that would facilitate hygienic emptying;
» Extra investment in equipment (for emptying service) and treatment capacity;
» Acceptance of local government and potential users of biosolids produced in the treatment plant to be developed to increase revenue for Clean Impact.
SUSTAINABLE SANITATION FOR DISPLACED AND HOST POPULATIONS IN MYANMAR

CONTEXT/RATIONALE:
Faecal Sludge Management (FSM) service provision only exists in the two main cities of Yangon and Mandalay; this has left people in townships across the country reliant on concretelined pits or septic tanks. In two areas, Waingmaw and Myitiyina, the sanitation situation was an issue for two populations – Internally Displaced People (IDPs) living in long term camps, and people in Myitiyina and Waingmaw townships. Following set-up of the camps, NGOs had established a sustainable sanitation system of desludging, recognising the long-term nature of the camp. However, this service was only available to those living in the camps and, by nature, was free of charge and therefore reliant on short-term donor funding. This difference in service offering caused tensions between IDPs and the township.

Oxfam assessed the sanitation needs, both immediate and future, in the two townships looking at the needs of households, businesses, schools and health centres. It was found that desludging services were required by 90% of the population in Waingmaw and 75% in Myitiyina. The extent of the needs was based on an average sludge accumulation rate of 40 litres per person per year. This would mean that the Township Development Authority (TDA) would have to deslodge over 2,000 truckloads per month and almost six per day. In contrast, the TDA had one functional 7m³ truck which undertook up to four trips per day, making current capacity around one third of the future demand requirement – all requiring safe disposed.

Neither population had access to an inclusive sustainable system that could grow with the population demands over the next ten years. Oxfam decided to explore a programme that looked at an affordable and expanded sanitation service providing faecal sludge management to both populations. The need to engage with the TDA was the initial priority, to enable their buy-in and agreement to take ownership of the planning and service provision for the future. Using the demand needs and economic analysis, Oxfam held discussions with the TDA to share with them the potential in running an affordable system, generating revenue whilst incorporating health and safety policies, proper waste disposal and efficient operations.

The approaches planned would represent an innovation in the context of Myanmar, where no State authorities currently have such systems and where such approaches have not previously been used.

THE INTERVENTION:
A significant portion of the programme involved advocacy and influencing of the TDA to prioritise investments in sanitation, managing an efficient and safe service at an affordable price. To demonstrate the potential, an exposure visit was arranged to a municipality in Bangkok that had set up and managed a provisional sanitation service. The trip was a success.

The advocacy work undertaken was based on analysis that Oxfam and Ernst and Young provided, having collected information on immediate and future needs, the economic profiles of those that would use the service and the cost benefit analysis of a functioning and safe sanitation service. The ambition was to develop a sanitation service delivery model based on commercial approaches, cost reflective tariffs and targeted subsidies to ensure inclusion.

To achieve this, several issues were identified. Firstly, how to effectively support the construction of a treatment plant for safe disposal of the faecal waste, which had traditionally been dumped in areas outside the township. Budgets by TDAs were created on a yearly basis and so a modular plan was developed that allowed for expansion and construction to be implemented in stages. Secondly, understanding the skill set and needs across the TDA meant technical support was required. A desludging technical working group was established with the municipality and WASH cluster (UNICEF), also involving all NGOs delivering desludging services to IDP camps. This group provided technical support and momentum to the plans and ensured that needs across the two contexts were balanced. Thirdly, a tiered pricing system was discussed and agreed that considered the economic status and potential of the different users. This pricing acknowledged the difference between pits and septic tanks, households and businesses, and provided a subsidy model for the poorest.

THE RESULTS:
Progress to date has shown that in Myitkyina it is financially viable to run an improved and sustainable service. Practical changes that do not require a new budget, such as health and safety and Standard Operating Procedures (SOPs) have already been implemented.

Health and safety training for desludging workers was jointly organised with the TDA and included participation from several other government departments (including Occupational Health). This has led to a shift in how workers carry out desludging, with protective equipment now being worn and good practice protocols mostly followed. To formalise such practices, a workshop on the SOPs was held with the municipality and Ministry of Health where they were guided to self-create FSM guidance, which does not currently exist for any municipalities in Myanmar but that is common practice in other countries. Additionally, a feedback system has been introduced whereby households receiving desludging services from the TDA complete a feedback card including questions on price, professionalism and safety, and leave it in a sealed box on the desludging truck for later review.

The advocacy work raised the importance of sanitation within the TDA. As a result, various aspects of the system were understood and therefore adopted. This included understanding the market and financing mechanisms for an affordable and economically sound service, and professionalising the process including the role of regulation and accountability and planning within the budgetary cycles.
Despite the increase in importance, the pricing model has not changed. This is largely due to individuals benefiting from the status quo. However, despite this, Myitkyina is likely the most advanced township in Myanmar now in relation to awareness and thinking on FSM issues, and sets an example for other townships.

LESSONS LEARNT:
FSM services for IDPs and the township has increased in importance and is now seen as a priority area requiring investment and change. This shift is the result of a long and trusted relationship between the TDA and Oxfam, and the support of the technical committee run by UNICEF. The analysis provided the basis for discussions, showing that FSM could be profitable and affordable, safely managed, inclusive and sustainable.

Understanding and working with the different motivations of the stakeholders was important. For the TDA, the motivation in revenue generation while ensuring an inclusive service was of interest. For the people that ran the service, the approach increased the respect they received as the service was more reliable and it guaranteed a safer working environment.

Working with partners from Ernst and Young as well as NGOs and UNICEF helped to keep momentum in the project and provide the technical evidence and support for the plans. Working with Ernst and Young specifically gave gravitas to the economic analysis that was presented to the TDA. Working with UNICEF provided the project a boost both technically and in reach by broadening out the discussions beyond one organisation to a wider group.

The exposure visit to Bangkok was particularly effective as an advocacy and influencing tool – this showed the TDA what was possible, demonstrating the ambition. Advocacy was also a key component of the approach as sustainability rested in the TDA’s ability and willingness to lead and own the outcomes.

The programme, however, did not manage to unpick all of the vested interests in the service as it stood. Financial sustainability and success do require transparency and accountable budgeting, though a number of different people and groups currently benefit from the status quo and the time and dedication needed to address and reform this was beyond the life of the programme as funded. This challenge is a key hurdle to achieving the ambition of an affordable, inclusive, revenue generating and safe FSM service.

A final lesson of the process was to understand the levels within which budget decisions were taken, since the TDA are reliant upon those higher up in power to allocate budgets. Advocacy and influencing of these actors was, and will continue to be, key to ensuring that investment is allocated for improvements, such as for the treatment plant and additional disposal trucks.
Globally there are 20.4 M refugees within UNHCR’s mandate and the majority (78%) are in protracted situations of five years or more with some displacements lasting over forty years. Recognizing this reality UNHCR and its partners are looking to shift as quickly as possible from humanitarian relief to development programming. This approach is in alignment with the Global Compact for Refugees and Comprehensive Refugee Response Framework which has objectives of easing pressure on the host communities and enhancing refugee self-reliance. Within the WASH sector this shift requires reevaluating the service delivery models that are applied. During acute emergency phases UNHCR and partners focus on providing life-saving support—often through costly and temporary infrastructure or services (e.g. water trucking, community latrines), targeting sphere standards, and working through international NGOs and donors. As time passes the objective is to evolve to cost effective and sustainable services linked to durable infrastructure and higher service levels (e.g. national standards) provided through locally appropriate service delivery models. Considerable achievements in making the transition from humanitarian to development programming have been made in Uganda.

In the last three years over one million refugees have fled to Uganda, making it the third largest refugee-hosting country in the world. The Government of Uganda has been very progressive in its response to these challenges and in March 2017, issued a declaration reaffirming Uganda’s commitment to promote refugee self-reliance and inclusion in the country’s development planning. This represents a fundamental shift in approach to service delivery to refugee settlements, linking the traditional humanitarian response to long-term development. For WASH this means transitioning from the conventional service delivery approach to one that includes the governance and institutional structures and operating policies and procedures used by the Ugandan water authorities. The aim of this transition is to ensure that the basic human rights to water and sanitation are met for refugees and individuals in the communities that host them, while at the same time understanding the right to work and pay for additional quantity of water for productive uses.

**ALTERNATIVE SERVICE DELIVERY MODELS FOR REFUGEE SETTLEMENTS:**

WASH services in refugee camps and settlements are currently managed by UNHCR and its partners, but under this approach will be transitioned to the either the National Water and Sewerage Corporation or one of the 6 Umbrella Authorities for Water and Sanitation. Both the NWSC and the Umbrella Authorities operate under a performance contract with the Ministry of Water and Environment (MWE), receiving technical and financial support from MWE. Financial support comes in the form of subsidies to expand coverage, particularly in areas with underdeveloped commercial markets. The table summarizes the

<table>
<thead>
<tr>
<th>UMBRELLA AUTHORITIES</th>
<th>NWSC</th>
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<tbody>
<tr>
<td><strong>FORM</strong></td>
<td>private companies</td>
</tr>
<tr>
<td><strong>GOVERNANCE</strong></td>
<td>General Assembly (of scheme members) appoints 11-member Executive Committee responsible for management oversight of the company.</td>
</tr>
<tr>
<td><strong>OPERATIONAL FRAMEWORK</strong></td>
<td>Combination of direct management of schemes and management contracting to Private Operators. Organizational Structure includes a Secretariat responsible for management functions and scheme / branch offices that are responsible for daily system operation.</td>
</tr>
<tr>
<td><strong>ASSET OWNERSHIP</strong></td>
<td>MWE owns infrastructure and gives custodianship of the assets to UAs</td>
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2. ibid
key differences in the two service delivery models. The decision on which Authority will take control of service delivery of a specific settlement is done through a collaborative process with the MWE.

The first phase of the transfer process involves mapping the key stakeholders, clarifying their roles and responsibilities, delineating the geographic area to be transferred (i.e. “gazetting”), and carrying out a comprehensive assessment of the physical infrastructure and operational performance to understand the investment requirements. The second phase consists of: upgrading infrastructure, training and capacity building of the Water Authority staff, and gradual handover of operations. It is expected that this phase will be the longest, with the duration dependent on each context. During the third phase the Authority assumes full responsibility of service delivery including legal custody of all assets and responsibility for billing and financial management.

LESSONS LEARNED TO DATE

To date, a complete transfer process has been carried out in Rwamwaja settlement located in Kamwenge District. This settlement hosts 71,707 people or 5% of the refugee population in the country (UNHCR, 2020). The process began in September 2017 and concluded in February 2020 when the NWSC took full custody of the services. A number of important lessons were identified:

- **Political will** is a necessary condition to facilitate this process. Support from the MWE as well as the Prime Minister’s Office and interest on behalf of the Authorities to take over the services.
- **Timeline**: Must follow thorough administrative and technical procedures as well as proper community engagement.
- **Stakeholder Coordination**: Considering range of stakeholders (public /private, humanitarian / development) it is important that roles and responsibilities are clear and coordination and transparency are prioritized.
- **Life-cycle costs**: to be sustainable the full costs of service delivery must be recognized and a financial model established. This requires understanding ability and willingness of users to pay as well as the cost of operating the systems, and any subsidies that will be provided.
- **Participatory Processes**: It is important to engage with refugees and host communities throughout the process and ensure mechanisms for feedback and “consumer voice”.
- ** Continued system strengthening** is needed to facilitate the handover of the 200 water supply systems in the country currently serving refugees. Although work is still underway to transfer ownership of the remaining water schemes to the Uganda Water Authorities, there is promising preliminary results. This work represents an important effort in the triple nexus linking humanitarian responses to development and peace building programming by recognizing the social and economic value of water, while also incorporating concerns for climate change, environmental protection, gender and the needs of the poor and vulnerable.
WATER FOR GOOD: CENTRAL AFRICAN REPUBLIC CASE STUDY

CONTEXT/ RATIONALE

COUNTRY CONTEXT
In the Central African Republic (CAR), fragility fundamentally stems from the lack of development. CAR is considered to be among the poorest countries in the world and ranks 188th out of 189 countries in the Human Development Index (HDI 2017). Since its independence in 1960, CAR has struggled to effectively deploy a state presence in many parts of the country, and has never developed fundamental infrastructure. The vast majority of its citizens have been locked in poverty, facing cyclical political upheaval. In 2012, the most recent civil war descended into an unprecedented conflict that has taken various forms of ethnic, sectarian, and inter-communal violence. There has been a successful transition to a civilian, democratically elected government. However, insecurity and violence continue. Today, nearly half of the country’s population is in need of humanitarian assistance and only 40% of the rural population has access to an improved water source, which is among the most urgent needs. The UNOCHA estimates of water access present an optimistic view, with over 50% of the population having access (UNOCHA 2019); our 18–month in-depth study of water access in one prefecture found that only 7% of the population have access to water services that meet the definition of JMP Basic access on the SDG service ladder (WFG 2019).

This context of low state capacity and extreme underdevelopment hinders effective water and sanitation services, and results in a particularly weak WASH system. The government ministries and agencies are almost entirely dependent on foreign assistance, and therefore struggle to build and sustain capacity. The private sector faces a combination of security risks, an episodic humanitarian supply-driven approach to investment in new water access, few existing water points, and a fragmented supply chain, which together create a prohibitive business environment for local service delivery.

WATER FOR GOOD’S CAPACITIES AND HISTORY IN CAR
Within this context, Water for Good was established in 2004 after a civil conflict, when a foreign-owned for-profit borehole drilling company sought to exit the sector and, instead of selling the business, transferred the assets and local staff to the new non-profit entity that would become Water for Good. Therefore, from the beginning, Water for Good had the capacities and structure of a proxy private water services provider. At that point, Water for Good also provided hand pump maintenance services in a small area on an ad hoc basis. Communities could pay a small monthly fee to local, professional technicians to keep newly drilled wells functioning over the longer-term.

Over time, Water for Good has set out to professionalize and scale both the drilling capacity and the reach of local technicians that provide preventative maintenance services through a circuit-rider maintenance model.1 The drilling operations of Water for Good now have 3 rigs, and recently incubated and spun off a locally-owned for-profit drilling company. In 2011, Water for Good had the capacities and structure that would become Water for Good. Therefore, from the beginning, Water for Good had the capacities and structure of a proxy private water services provider. At that point, Water for Good also provided hand pump maintenance services in a small area on an ad hoc basis. Communities could pay a small monthly fee to local, professional technicians to keep newly drilled wells functioning over the longer-term.

Going forward, Water for Good recognizes the value of its approach to building proxy–private sector service delivery capacity for both drilling and maintenance services because it is financially sustainable and increases capacity. This capacity and the monitoring data can be catalytic for systems-building in the sector, but needs to be more institutionalized with the government and coordinated with the humanitarian sector.

1 Circuit–rider models employ professional technicians to complete routine preventative maintenance and repair services across a network of water points, with predetermined routes, aka ‘circuits’ (RWSN 2019).

2 Interactive map of the maintenance service area with all pumps, last known functionality, and links to visit reports: waterforgood.org/map

WATER FOR GOOD'S MAINTENANCE SERVICES

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<tr>
<th>Cost Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>USA INDIRECT SUPPORT COSTS</td>
<td>5.0%</td>
</tr>
<tr>
<td>CAR INDIRECT SUPPORT COSTS</td>
<td>6.6%</td>
</tr>
<tr>
<td>OTHER DIRECT COSTS</td>
<td>3.2%</td>
</tr>
<tr>
<td>VEHICLE DEPRECIATION</td>
<td>10.7%</td>
</tr>
<tr>
<td>DIR SALARIES</td>
<td>9.2%</td>
</tr>
<tr>
<td>SHIPPING/CUSTOMS</td>
<td>9.2%</td>
</tr>
<tr>
<td>SPARE PARTS</td>
<td>47.5%</td>
</tr>
<tr>
<td>DIR TRAVEL</td>
<td>8.6%</td>
</tr>
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2019 REVENUE

<table>
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<tr>
<th>Revenue Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNITY PAYMENTS</td>
<td>$19,920</td>
</tr>
<tr>
<td>RESTRICTED GRANT FUNDING</td>
<td>$180,844</td>
</tr>
<tr>
<td>WATER FOR GOOD FUNDING</td>
<td>$366,428</td>
</tr>
</tbody>
</table>

RATIONALE

Going forward, Water for Good recognizes the value of its approach to building proxy–private sector service delivery capacity for both drilling and maintenance services because it is financially sustainable and increases capacity. This capacity and the monitoring data can be catalytic for systems-building in the sector, but needs to be more institutionalized with the government and coordinated with the humanitarian sector.
AIM OF THE PROJECT INTERVENTION

Water for Good seeks to strengthen the wider WASH system in CAR for sustainable water services, and to increase access to reliable, basic water services. It is doing this by focusing investment and integration of services with regional government structures in one Focus Region, the prefecture of Mambéré–Kadéï, with a population of just over 461,000 people who predominantly live in rural areas (70%). This approach, focused on district-wide planning, and delivering maintenance services that water users demand, is consistent with the principles of a leading water and sanitation knowledge community, Agenda for Change. The outcomes of our strategy in Mambéré–Kadéï will provide a model for the expansion of services to all by 2030, consistent with UN Sustainable Development Goal 6.1.

THE INTERVENTION

Water for Good is focusing the vast majority of new water infrastructure investment in the prefecture of Mambéré–Kadéï, in order to achieve universal basic access. This data serves as the basis for a collaboratively-developed Prefecture-Wide Plan for water access and services from 2018 – 2030. It will also contribute toward a model for universal and reliable water access that demonstrates what is possible in addressing a complex problem in an extremely low-development, fragile state.

In tandem, Water for Good has been initiating new, more responsive and agile maintenance service models in Mambéré–Kadéï, seeking to improve services, increase demand, and increase local cost-recovery for operations and maintenance services, and has been communicating findings to district and national authorities.

RESULTS

Providing consistent preventative maintenance and professional repair services has not only kept a high level of pump functionality, the electronic data collection method embedded into the program has enabled data-based planning to build more responsive services with adapted financial schemes for communities.

In the focus region of Mambéré–Kadéï, roles and responsibilities of all the different stakeholders have been clarified and ongoing coordination has become more systematic. Water for Good closely cooperates with prefecture authorities to ensure quality services, clear communication, their integral involvement in community training and post-construction monitoring of well-committee management.

LESSONS LEARNED

Years of working in such a fragile environment has taught many lessons. Systemic change can only begin with reliable data to drive planning, financing, and to identify weaknesses that need to be addressed in the realms of legislation, roles of institutions and how humanitarian actors can collaborate.

While seemingly impossible to create a stable service delivery in such a country, the circuit-rider model has brought reliable access to clean water for hundreds of thousands of people even at the height of armed conflicts. The country’s economic environment is unfavorable for the supply chain of spare parts. There have been many attempts to build locally-run procurement systems, but the complex and onerous nature of purchasing parts from international providers has caused these initiatives to fail and cause local artisan repairmen to halt their services. Given this environment, Water for Good’s ongoing financial support, vertical integration of the supply chain with monitoring and services, has proven necessary to keep systems working.

Ongoing presence and working in a very weak WASH sector over the years has revealed how urgent it is to develop a coherent roadmap that can allow the government and development agencies to focus on achieving SDG 6 while providing a development framework for the humanitarian sector to deliver elements of the system, essentially infrastructure and behaviour change campaigns.

The multiple actions that are currently coordinated at a WASH Cluster level are not synonymous with collective action around one common roadmap. Currently, it is rather the emergency sector that has set a standard of fragmented actions that leave little room for development organizations to work collectively, and effectively on a systemic roadmap.

The overall environment of the country, its remoteness and lack of infrastructure will continue to severely affect the sustainability of the WASH sector, and requires development organizations to remain heavily involved at all levels to keep infrastructure from failing over time. Such an environment requires stakeholders to do what they can to involve local actors at all levels in the most practical ways to build in-country knowledge and capacity.
STRENGTHENING WASH SERVICES IN PROTRACTED CRISES: THE YEMEN H2O PROJECT

CONTEXT

The protracted humanitarian crisis in Yemen affects 80% of the population, or 24 million people, who require humanitarian assistance to avert famine and to meet basic needs. Ongoing conflict since March 2015 has caused significant damage to essential infrastructure, including urban water and sewerage systems, and caused a deterioration in rural water/sanitation conditions, contributing to cholera and diphtheria outbreaks. Many government staff, including those who work in water utilities and in sanitation management, have gone unpaid, contributing to poor service provision. Experienced humanitarian actors face significant implementation challenges in this context, where conflict, limited access, and political negotiations can cause significant delays in delivering critical assistance. Humanitarian actors and approaches have dominated the international response for more than five years— avert further loss of life and livelihoods, but largely unable to contribute to the long-term, foundational structures needed for rebuilding and resilience.

H2O Yemen’s Approach: In this context, CARE Yemen challenged itself to think critically about the short- and long-term WASH needs, and to develop a strategy that bridges humanitarian and development approaches. With funding from USAID Yemen, CARE currently implements the H2O Yemen project— addressing WASH service provision and systems strengthening in eight conflict-affected districts within the Governates of Sana’a and Taiz. This project started in late 2018 and will continue through 2022.

The objectives of the H2O Yemen project are to support vulnerable, conflict-affected Yemenis in rural and urban areas to: (1) improve access to safe water, sanitation, and hygiene services; (2) strengthen WASH institutions and service providers to operate and manage WASH systems; and (3) to conduct research and pilot testing of methods to improve cost recovery and water efficiency and conservation. Other anticipated impacts of the project are reduced incidence of cholera and diarrheal disease, and improved reliability and ongoing use of water and sanitation systems.

H2O Yemen aims to incorporate context-appropriate systems strengthening approaches in a protracted crisis. CARE deliberately sequenced the project approach—addressing immediate water and sanitation access needs in the first year; focusing on management and maintenance of water and sanitation systems in year two; and incorporating learning and research elements in year three.

INTERVENTIONS

CARE conducted a scenario analysis to understand WASH partners, at government and private sector level, that were still functional in the unstable context. In Yemen, as in other protected crises, it is both feasible and necessary to incorporate long-term thinking, capacity strengthening of and public and private partners, and strengthen linkages between local authorities and community management structures for improving the reach and resilience of WASH.

In coordination with government officials, local WASH organizations, and private sector utilities, CARE is rehabilitating infrastructure and restoring WASH services in conflict-affected areas, piloting Water Smart Agriculture (WaSA) approaches, increasing hygiene practices, and mapping solid waste management systems. Additionally, CARE is working alongside public service providers to restore and improve maintenance and cost-recovery mechanisms.

Working across partners and stakeholders has proven effective at ensuring systems strengthening. A number of these organizations have been unable to pay staff salaries and supplies since the conflict started. CARE’s engagement has provided a platform to bring different people and organisations together for systems strengthening, whilst also improving relationships and capacity.

CARE is working with local authorities to improve the operational management and payment structures for water systems and securing supply lines. However, in Yemen like many other protracted crises, the ongoing conflict and economic collapse has restricted the ability of many people to pay for services. Therefore, the program encourages payment for minor maintenance and repairs, and has sought alternatives for financial support and livelihood diversification strategies (e.g. income generating activities for women and youth and WaSA). To improve long-term sustainability, CARE also invested in improved water technologies, like solar pumping and water catchment schemes. For sanitation, this has translated into wide-ranging partnerships to improve sewage systems and pipe works, to explore finance mechanisms for household latrines, and to ensure sewage treatment mechanisms are repaired.

*The H2O project under which this Case study is developed is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents in this Case study are the responsibility of CARE International in Yemen and do not necessarily reflect the views of USAID or the United States Government.*
THE RESULTS
In Yemen, local authorities, communities, and the private sector struggle to maintain even the most basic services after the collapse of infrastructure and public institutions. One year into implementation, H2O Yemen has closely coordinated with the General Authority for Rural Water Projects (GARWASP) to rehabilitate six rural water systems, including three solar pumping schemes in Sana’a. This was accompanied by significant capacity building (e.g. budgeting, regular O&M, water quality analysis), and ultimately led to successful hand over of all systems to local water management committees (WMCs). In coordination with other INGOs and local authorities, CARE rehabilitated sewerage systems in urban Taiz to reach more than 8,000 people with improved services—a significant gap in ongoing programming and source of diarrheal disease and cholera cases. CARE will similarly invest in sewerage repairs, spare parts, and capacity building in urban Sana’a moving forward. Water quality analysis was linked to hygiene promotion and cholera prevention efforts in Sana’a, and shock chlorination of water systems was coordinated with the district general authority for rural water supply project (GARWASP). By providing these resources and capacity building, government staff have been able to re-establish basic WASH services.

H2O Yemen supports the WASH supply chain by strategically linking local suppliers with local authorities during system installation. CARE also engages local technical representatives during system setup, which helps to establish a relationship between these actors and provides on-the-job technical training. This approach provides a platform for future maintenance, supports the supply chain, and improves trust in service providers. Addressing financial solvency of the WASH systems means understanding issues with both ability and willingness to pay, but also with subsequent management of payments and funds. CARE integrates financial training for WMCs as essential capacity building, not only to improve the service and ensure maintenance but also to increase customer trust through accountability.

CHALLENGES AND LESSONS LEARNED
CARE continues to adapt to challenges associated with working in a protracted crisis and conflict-afflicted context:

» Ensuring sufficient time and space for relationship and trust building: In Yemen, CARE built off the foundational trust from previous projects, but deepened understanding of power dynamics in a changing context and strengthened relationships, particularly with local authorities, to ensure permitting, access, and confidence to deliver essential aid and work in partnership toward long-term development.

» Significant fluctuations in exchange rates and fuel prices continue to impact project planning, budgeting, and transportation. Adaptability and flexibility on the part of CARE, USAID, and other stakeholders remains key to being effective.

» Insecurity and conflict have caused implementation delays and significant geographic shifts. This required CARE to work in close coordination with other partners, USAID, and government to negotiate and adapt to the evolving context.

» Close coordination with other NGOs revealed a duplication in planned activities for the Taiz urban water network and required CARE to quickly adapt the original project scope and budgets. While challenging in the short-term, this rapid adaptation will ultimately lead to stronger capacity and structures to ensure water and sanitation services.

» The outbreak of COVID-19 in the country also negatively impacted on programmatic engagements with relevant stakeholders and the timeliness of implementing planned project activities. Although this situation reset the operational dynamics in the country, CARE, like many other organizations, had to adapt its operational and implementation modalities accordingly in sync with new rules and protocols put in place by the local authorities.

In many water-scarce settings like Yemen, addressing the critical importance of water for both domestic and productive needs (i.e. how water can add value) is foundational. Investing the time to discuss communities’ opportunities, options, and ambitions that depend on water is necessary to broaden the conversation and to work together towards mutual goals and solutions. Using these best practices, and adaptive management, the H2O Yemen project seeks to not only improve WASH access and practices in the immediate and longer-term, but also to improve livelihoods through broader water security initiatives.

July 2020

“ The construction of the new water tank not only means people now have access to safe, clean water, but also it is a sign that after many years of suffering, the village is starting to be clean and healthy. Before, we used to fetch some water, but it was never enough. Now, we have enough water for our daily chores.” — Beneficiary in Taiz, Yemen
IMPROVED WASH-SECTOR COORDINATION THROUGH A CONCRETE CLTS-GUIDELINE PROCESS IN SOUTH SUDAN

CONTEXT/ RATIONALE
The Republic of South Sudan was established in 2011, and had to commence almost from scratch developing government and other structures for its 12 million people. The progress was inhibited by ethnic and political tensions over time, leaving little resources for government–led interventions in the health and WASH sectors. Though a peace treaty was declared in September 2018 the conflict still impacts the stability of the country. In 2020, South Sudan ranked third in the Fragile States Index of the Fund for Peace.

In Feb 2012 the government declared Community–Led Total Sanitation (CLTS) the official approach to achieve open defecation free environments both in rural and urban areas at a time when the rate of open defecation (OD) was particularly high at 77% nationally. Though there were no binding guidelines and actors who adopted the approach started to implement using different modalities, by 2017 OD rates had already decreased to 63%. However, the need for harmonization was shown for example in challenging environments like urban areas, where an approach with subsidies may stand in opposition to the traditional non–subsidy approach. Several attempts to harmonize how CLTS is implemented nationally have not yet resulted in a clear common approach.

The unrests in 2013 and 2016 have delayed WASH–related processes (like policy development and activities of the national technical working group), led to destruction of existing WASH structures and decreased people’s willingness to invest in WASH infrastructure on land they feel they may have to flee from again. Despite the challenges, the Ministry of Water Resources and Irrigation (MWRI) is highly driven to improve the WASH sector. This is partly motivated by national commitments to international WASH processes, like Sanitation and Water for All (SWA), the African Ministers Council on Water (AMCOW) or AfricaSan.

AIM OF THE PROJECT/ INTERVENTION:
MWRI requested Malteser International to support the development of harmonized and applicable CLTS Guidelines for urban and rural areas. To achieve this goal, strengthening of coordination among WASH actors with government at the lead was perceived as a precondition for the common guideline by the project. The two processes complement each other as finalizing the long–started process of developing the CLTS Guidelines in a participatory, sector–wide, government–led process is again an easy entry point to reignite WASH sector coordination. Both improving coordination and setting national guidelines contribute directly to system strengthening.

THE INTERVENTION:
MWRI supported by Malteser International (MI), UNICEF and GTO conducted two national CLTS Multi–Stakeholder Expert Workshops in 2019 and 2020 in Juba to connect sector stakeholders, exchange knowledge and experiences related to CLTS and, in a participatory manner, develop the National CLTS guidelines. The workshops included a wide representation of governmental and non–governmental stakeholders involved in sanitation interventions in the country.

THE RESULTS:
Through the facilitated expert workshops, it was possible to (re–) create a momentum around CLTS in South Sudan. An active CLTS sub–group to the national Sanitation and Hygiene Technical Working Group (TWG) was established with all relevant offices in place, receiving support from a consultant and led by MWRI. Members comprise of four government entities (MWRI, Ministry of Health, Ministry of Housing and Local Government Board), UN organisations, INGOs, local NGOs and academia. Regular exchange of the sector–wide CLTS TWG maintains connections within the sector and assures that critical aspects like the need for sanitation subsidies in South Sudan are looked at from all perspectives. The workshops and the TWG have generated interest and knowledge about CLTS among concerned government agencies, who have responsibilities in sanitation programme implementation, but may previously have had little involvement.

Unfortunately, the strong restrictions through COVID-19 currently put limits to face-to-face sector interaction and the guideline document is being further consolidated remotely with different stakeholders in different regions of South Sudan. High-level government officials have been involved from the beginning to put WASH on the national agenda. The reignited sector connection and sanitation-relevant policy processes have prepared the ground for further activities, such as developing a monitoring system and joint database to map progress, or rethinking actors’ responsibilities on local levels.

**LESSONS LEARNED:**

With the process at an early stage of implementation for now results have been slow, but steady. In a fragile context like South Sudan with great needs in all areas, political offices and agendas are fast changing and therefore hard to rely on. There is also a need for a certain flexibility to adapt the national guidelines to the local context, as different areas in the country have different levels of fragility. Supporting already highly motivated actors, like MWRI, has been a success factor in maintaining an active process. Furthermore, the involvement of respected sector-wide stakeholders has brought important weight to the process and significantly raised the understanding on potential of CLTS application towards achieving country-wide future sanitation goals. Generally, the common CLTS process as an entry point has been a great success to start a concrete communication and interaction of relevant sector-stakeholders from different levels – ranging from field implementation to policy makers.

One participant from an INGO with long experience in the South Sudanese WASH sector declared that the CLTS coordination process since 2012 had never gone this far as this time.