There has been sustained interest of agencies working in the humanitarian WASH field to identify tools and approaches that do not create dependency amongst disaster-affected populations but rather empower communities and host nations to design and manage their own solutions and ensure sustainable service delivery. This study sought to identify such development-oriented relief and recovery approaches in WASH through a survey of direct personal and agency experiences in specific humanitarian contexts. Intentional focus on programme sustainability and adherence to established development principles at the outset of relief efforts was reportedly the overarching causal link. This included a strong focus on continued local support and capacity-building, shifting ownership and responsibility to local stakeholders, and incorporating demand-led approaches and sustainable technologies.

Introduction
Humanitarian WASH interventions, whilst critical in saving lives following a conflict-induced or natural disaster, can become protracted over time and lead to a dependency on the provision of WASH services. As a result, there has been sustained interest of agencies working in the humanitarian WASH field to identify tools and approaches that enable them to programme for WASH interventions which do not create dependency amongst disaster-affected populations, but rather empower communities to design and manage their own solutions and ensure sustainable service delivery. Such approaches which aim to contribute to sustainable development during the relief stage are often referred to as development-oriented relief, and those that are carried-out to facilitate preparation for subsequent development and gradual handing over to long-term partners are collectively referred to as recovery.

In late 2014 and early 2015, a Working Group of practitioners representing member agencies of the US-based Accord WASH Alliance\(^1\) conducted a survey to identify development-oriented relief and recovery approaches in WASH. The Working Group explored evidence and practical expression to the concept that sustainable, non-dependent WASH interventions and approaches might indeed be applicable across a much wider range of the relief-to-development continuum than has been historically accepted by aid and donor agencies. The study aspired to pool learning that would assist agencies in planning and implementing programmes that result in affected populations achieving access to WASH services and facilities which are not only effective in the post-emergency and fragile-states context, but also sustainable\(^2\) in the longer term.

Methodology
The study and its results were formed around the collection of direct personal and agency experiences in specific humanitarian contexts. No supposition or hypothesis was held or tested, and no formative research was involved. Experiences were recorded using a common questionnaire-based interview approach, allowing interviewees to give facts and to summarise their own learning from the events to which they related. The questions listed in Box 1 were posed to each interviewee, after which a summary of key lessons learned was then recorded and cross-checked with the respondent.

Analysis of the interview responses focused on identifying and highlighting common learning across the entire set of interview questions. A summary of experiences and recommendations made by survey respondents, rather than a set of conclusions, is offered by the Working Group.
Box 1. Survey questions

Following recording of general background information on location of emergency, dates, and agency involved:

1. What WASH interventions were applied at the beginning of the relief response?
2. How did the WASH intervention or approach change during the transition to development?
3. What was the greatest success (for each example of emergency response)?
4. What was the greatest challenge (for each example of emergency response)?
5. What steps can be taken at the relief stage to make transition to sustainable development easier?

Findings

Landscape of survey responses

The study completed interviews with 28 sector experts representing the first-hand experience of 20 different North American and European humanitarian and development agencies. Survey respondents referenced WASH programmes in 31 distinct emergencies in 23 countries as illustrated in Figures 1 and 2.

![Figure 1. Distribution of emergency type referenced by survey respondents](image1)

![Figure 2. Distribution of world regions referenced by survey respondents](image2)

Frequencies of WASH relief interventions referenced by respondents in specific examples are illustrated in Figure 3. Frequencies of underlying strategies that could be classified as either development-oriented relief or recovery in nature from these examples are illustrated in Figures 4 and 5, respectively.
Figure 3. WASH relief interventions referenced by survey respondents

Figure 4. Development-oriented relief strategies referenced by survey respondents

Figure 5. Recovery strategies referenced by survey respondents
Summary of survey responses
Successful outcomes of the interventions and strategies cited by survey respondents were most frequently defined in terms of sustainability, and could naturally be placed under the categories of functional, institutional, financial and social sustainability, which has also aided analysis of results. Beyond WASH services continuing to function without interruption throughout the relief, recovery, and development stages, some specific outcomes that were identified by respondents to indicate sustainability, and therefore success, were establishment of local ownership and long-term commitment on the part of end-users (for instance, in remaining open defecation free), emergence of self-governed market-based water and sanitation services, expansion of water or sanitation service (such as mechanizing a borehole or extending a water distribution network), and re-orientating the approach or technology used during the relief stage for long-term development. Less frequent, but no less significant, success outcomes included risk reduction and resilience to future crises. Interestingly, only one respondent mentioned positive health impacts and no specific example of environmental sustainability was referenced in connection to programme success.

Although the survey responses attributed successful outcomes to a variety of factors, intentional focus on programme sustainability and adherence to established development principles at the outset of relief efforts was reportedly the over-arching causal link. Relief and recovery approaches that were considered to be successful by the respondents were usually linked to one or more specific factors that enabled some element of sustainability. These factors and related recommendations offered by the survey respondents are summarised in Box 2.

<table>
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<th>Box 2. Factors enabling sustainability of development-oriented relief and recovery interventions and strategies in the WASH sector</th>
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<td><strong>Functional sustainability factors</strong> – Factors leading to functional sustainability included use of appropriate technologies, availability of local skilled labour, ongoing capacity building efforts focused on operation and maintenance, and stability of supply chains. A specific recommendation to monitor ongoing water source capacity to meet demand of service areas as populations transition from relief to development was given.</td>
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<td><strong>Institutional sustainability factors</strong> – Broad sector and cross-sector collaboration at the national level and linkage of local demand to local ownership was cited as leading to institutional sustainability. Multiple respondents recommended that relief agencies build on systems and approaches that existed in the local context prior to the emergency, respecting local and national authorities and taking appropriate steps to ensure long-term capacities (including technical and administrative) are in-place.</td>
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<td><strong>Social sustainability factors</strong> – Respondents suggested cohesiveness of communities impacted by emergencies, community participation in decision-making and relief efforts, and existence of local demand for safe WASH services lead to social sustainability of relief efforts. Multiple recommendations were made to take advantage of natural leaders and utilise demand-generating approaches (such as CLTS) when demand does not already exist as soon as, if not slightly before, it seems appropriate to do so. It was also recommended that relief interventions be aligned with local historical and social norms.</td>
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<td><strong>Financial sustainability factors</strong> – All of the above factors, in addition to the emergence of livelihoods, whether via intentional program outputs or natural progression, were considered to lead to successful engagement of market-based solutions and financial sustainability.</td>
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Survey respondents also identified many characteristics specific to international humanitarian agencies that can have significant influence on the success of relief and recovery efforts. These characteristics and related recommendations are summarised in Box 3.
Box 3. Agency characteristics influencing sustainability of development-oriented relief and recovery interventions and strategies in the WASH sector

- **Global experience and position** – An agency’s collective emergency response and development experience, its in-country presence and relationships prior to a given emergency, and its long-term commitment to a country or region and to relationship-building after relief efforts are concluded were suggested as critical success factors. Respondents recommended that agencies avoid reactive responses and instead opt to pursue strategic approaches, which can encourage a diffuse culture of “long-term” thinking throughout the organisation prior to emergency response.

- **Communication structures** – The necessity of healthy communication across all local, national, and international agencies was a common theme among survey respondents. International agencies that communicate realities from the field to home office and donors in an honest and transparent manner, often by establishing a specific role for managing communication with field staff and donors, were considered to be more successful at transitioning programmes from relief to development. It was recommended that long-term ownership rights, responsibilities, and anticipated timelines be established and clearly communicated with all local, national, and international stakeholders at the outset of relief efforts, and continue to be communicated during recovery. It was also recommended that all assumptions, decisions, and activities during the relief stage be documented in order to facilitate ongoing learning as well as knowledge transfer during the recovery stage.

- **Staffing policies** – Respondents recommended that agencies which are involved in both relief and development efforts encourage mutual respect, cross-learning, and knowledge transfer between relief- and development-focused teams. It was also recommended that experienced WASH development professionals (especially nationals or individuals with in-country experience) be involved in relief efforts.

- **Donor relationships** – Agencies were encouraged to be intentional about extending donor relationships and funding commitments through recovery and into development efforts. This will likely involve co-developing specific objectives, strategies, and measurables in order to foster accountability and trust.

The most persistent and critical challenges that respondents reported facing in their efforts to implement development-oriented relief and recovery WASH programmes were related to context-specific factors that influence sustainability, such as appropriateness of technology and design (functional implications), ability to build lasting capacity and scale-up an approach or solution (functional and institutional implications), ability to foster community ownership and participation (social implications), and ability to recover ongoing lifecycle costs (financial implications). The linkages between these factors are often complex and either difficult to understand or impossible to overcome. Organizational cultures and policies that were restrictive or otherwise uninformed of realities in the field were the second most cited challenge faced by the respondents, followed by lack of communication and coordination between state and international actors during emergency response and lack of funding devoted to recovery and long-term development approaches after the initial response.

**Discussion**

For WASH practitioners who are well-versed in current conversations surrounding sustainability, the findings of this study are neither ground-breaking nor novel. In essence, the summation of all the insights and recommendations provided by the experts surveyed through this initiative points towards making WASH relief and recovery approaches as close to development-minded approaches as possible. The fact that there were no apparent patterns or trends in which combinations of development-oriented relief and recovery strategies, specific interventions, and emergency settings resulted in more successful outcomes is also not surprising. Of the recommendations made by the survey respondents, most were made regardless of relief context, world region, or specific hardware or software intervention. This supports the notion that there is no such thing as a universal, one-case-fits-all approach; that an agency’s underlying philosophies and supporting policies are more important in enabling successful development-oriented relief and recovery than the specific interventions it chooses to employ.

The findings of this study are also supported by a recent report on linking relief and development in the WASH sector (Gensch, 2014), which was coincidentally published by the German WASH Network during the time this study was being developed and conducted. The majority of the key recommendations covered here, except for some of the more nuanced examples, were addressed in some manner in the German WASH Network report, the final chapter of which contains many recommendations for facilitating effective transition from relief to development, strengthening WASH preparedness and resilience in development.
approaches, strengthening collaboration between humanitarian and development actors, and addressing structural and financial barriers. Like this study, the report was written based on input from various sector experts with broad experience and perspective.

Although this study may not result in a significant change in the way the WASH sector will think about development-oriented relief and recovery, it does provide a cross-sectional view of current perspectives of WASH practitioners who are directly involved in implementation of relief and recovery programmes. For the experts who shared their experience in this survey, there was no confusion around what types of development-oriented relief and recovery approaches should be adopted (although actually implementing them in an effective manner is easier said than done). Rather, the fundamental challenge they face is knowing when to employ them in the midst of complex and dynamic environments. One of the key recommendations of this study, which is also supported by the German WASH Network report, is that effort be put into developing a common framework or frameworks that outline critical contextual variables, indicate how these variables might be expected to change over time as populations transition from relief to development, and suggest when certain approaches are appropriate.

Theoretical frameworks have been proposed but have yet to be fully developed or validated across a broad range of typologies. Scott has suggested a number of contextual elements that may influence the extent to which demand-led, or development-oriented, approaches should be taken (Scott, 2013). The findings from this study support the elements of this framework in a general sense, but further work needs to be done to explore its applicability among the various experiences reported by survey respondents. Other frameworks have been proposed for specific interventions such as CLTS (Greaves, 2012) and community-level sanitation (Lia, 2015) in emergency settings which could also be further explored.

Conclusion
The factors and agency characteristics that were reported to lead to sustainable development-oriented relief and recovery programmes by survey respondents in this study are relevant for policy makers, practitioners, and donors involved in humanitarian WASH efforts. Even in the absence of validated frameworks supporting these elements, practitioners can anticipate and observe changes in the nature of demand for WASH services as necessity transitions to convenience. If careful attention is paid to the contextual factors that are likely to influence functional, institutional, social, and financial sustainability of an intervention or strategy and if supporting policies are developed, relief and recovery approaches can be adapted in response such changes in order to ensure availability and sustainable management of water and sanitation for all.

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References

Notes
1. The Accord WASH Alliance serves as a gathering place for member organisations of the Accord Network (http://accordnetwork.org) and other Christian professionals working in the WASH sector. The annual Summit on Excellence in WASH serves as an anchor meeting for the alliance. Throughout the
remainder of the year, activities are coordinated through a Steering Committee that meets regularly and a number of standing Working Groups. More information is available at http://wash.accordnetwork.org.

2. The Working Group’s definition of sustainability in WASH includes functional, institutional, financial, and social elements: functional - ensuring services remain operational in the long-term; institutional - ensuring capable management structures are in place to maintain all aspects of sustainability; financial - ensuring that effective cost recovery methods are put in place; social - ensuring that service types and levels are linked to local demand.

Contact details
Andrew Armstrong is a professionally licensed environmental engineer and programme manager at Water Mission with particular interests in sustainability, effectiveness, and capacity building.

Andrew Armstrong
1150 Kinzer St, Bldng 1605,
N. Charleston, SC 29405-1484 USA
Tel: (+1) 843-769-7395
Email: aarmstrong@watermission.org
www: http://watermission.org/