

## Editorial: Systems strengthening and human rights as entry points for WASH

### INTRODUCTION

This special issue explores two frameworks for progressing structural change that supports safe, universal and equitable water, sanitation and hygiene (WASH): systems strengthening and the human rights to water and sanitation. As such, it elaborates and defines the intersection between these two areas. Whilst inherently interconnected, the two also represent different entry points for change, with opportunity for increased intentional integration to improve progress towards Sustainable Development Goal 6: Clean water and sanitation.

Systems strengthening is widely recognised as foundational for ensuring equitable access to sustainable WASH services in low- and middle-income countries, leaving no-one behind. Systems strengthening requires clear sector policy and strategy, effective institutional arrangements, sufficient sector financing, integration of environmental and water resources concerns, regular cycles of planning, monitoring and review and capacity development across the sector.

The human rights to water and sanitation articulate governments' obligation to progress realisation of the right of all people to enjoy access to these basic services. Research and practice in this domain encompass two areas of focus: empowering people to claim their rights, and supporting and advocating for governments at all levels to act.

In this editorial we provide an overview of the ways in which the special issue papers draw on systems strengthening strategies or human rights approaches and principles, including accountability as an interlinking concept across human rights and systems strengthening. We identify opportunity for further integration of the two approaches, including for those applying systems strengthening to engage more deeply with the human rights framework. We note the potential for greater focus in both approaches on critical resource management and climate resilience considerations. We also identify opportunity for both practitioners and researchers to strengthen knowledge and understanding of their relevant disciplinary foundations in governance, management and legal studies, to avoid partial and uncritical use of the terms and approaches.

The special issue encouraged contributions from practice-based and emerging academic writers. It piloted a mentoring scheme to support newer authors to navigate academic writing and peer review processes. We hope that others build on this experience towards facilitating inclusive authorship and incorporation of diverse forms of knowledge to WASH scholarship.

### SYSTEMS STRENGTHENING ENTRY POINTS

Two papers provide insights about addressing WASH systems as a whole. *Kimbugwe et al. (2022)*, examine monitoring of the overall system as a crucial aspect of systems strengthening, arguing the importance of this process to support the system to evolve. They apply an empowerment evaluation approach with system actors to self-assess the barriers and bottlenecks to WASH sustainability and inclusion in Cambodia and Uganda. This participatory system analysis and monitoring is argued to equip WASH actors to apply systems thinking and course-correct their own work. *Huggett et al. (2022)* focus specifically on gender equality, disability and social inclusion (GEDSI) in the context of strengthening WASH systems, pointing to the need to address both self-belief of disadvantaged groups as well as shift wider norms and attitudes which present structural barriers to empowerment. Their review of field approaches in Cambodia and Timor-Leste describes how to address systemic normative and attitudinal barriers which prevent equality and inclusion.

Policy and strategy is a key dimension of the WASH system, providing a broad entry point for systemic change. *Bikram & Mishra (2022)* describe a policy-level state-wide initiative in India that leveraged a national policy commitment to improve WASH in government-run elementary schools. Their paper describes key elements of this initiative, including an embedded management information system (MIS) across more than 100,000 schools and champion-led transformation where well-advanced schools served as 'learning labs' for other schools. *Ardhianie et al. (2022)* focus on the city of Jakarta, Indonesia, examining sector strategy, policy and monitoring. They highlight the importance of analysis of demand and supply and suggest ways in which evidence of key

---

This is an Open Access article distributed under the terms of the Creative Commons Attribution Licence (CC BY 4.0), which permits copying, adaptation and redistribution, provided the original work is properly cited (<http://creativecommons.org/licenses/by/4.0/>).

drivers, pressures, status, impacts, and responses can inform a system-wide understanding of the problem and solutions. *Zisa et al. (2022)* discuss the use of social art to encourage handwashing in five Latin American countries. Except for one country, this intervention, among other factors, has increased the proportion of the population handwashing with soap. Elements of the Social Art for Behavioural Change (SABC) have also been adopted to encourage monthly tariff payment in Guanajuato, Mexico. *VanRiper et al. (2022)* paper makes the case for container-based sanitation forming part of wider city-wide inclusive sanitation strategy. They provide evidence related to user demand, outcomes and worker experiences in Haiti as the basis to advocate for public sector investment in container-based sanitation as a viable strategy for meeting sanitation needs in densely populated, low-resource environments. *Chouhan et al. (2022)* discuss the factors that contributed to improvements in WASH in schools in Odisha, India, including the importance of multi-layered stakeholder coordination and tracking of key WASH indicators. Using Social Network Analysis (SNA), the authors found that ‘community representatives’ had the highest overall influence, followed by teachers and headmasters and cluster level coordinators. Community level stakeholders played a vital role in the program’s bottom-up approach.

As water, sanitation and hygiene commonly bridge multiple ministries and agencies, institutional arrangements are a critical aspect of WASH systems strengthening. *Dhoba (2022)* describe national WASH sector coordination in Zimbabwe. Focusing on the National Action Committee mandated with sector coordination, they assert the importance of legal clarity, procedural adherence, and administrative capacity to address ongoing coordination challenges. They emphasise the importance of national leadership to ensure the multiple actors involved in WASH can effectively deliver on their roles. In contrast to this, *Coultas et al. (2022)* have a sole focus at subnational level. Their study explores experiences across three local governments in East Africa towards strengthening sanitation governance, noting the importance of political will, identifying stakeholder motivations, easy-to-use monitoring and reporting systems and documentation of processes and commitments to hold decision-makers to account. Effective regulatory mechanisms are a necessary part of functioning institutional frameworks, and these are explored by *Mbogo et al. (2022)* in relation to faecal sludge management in Kenya. They describe a diagnostic, consensus-based tool to support sector stakeholders to evaluate the quality and adequacy of policy in guiding equity, targeting of resources, quality of service, financial considerations and institutional roles and responsibilities. *Saxena et al. (2022)*, also focus on institutional arrangements for faecal sludge management, specifically in relation to how such services can be designed to span urban and surrounding rural areas in Odisha, India. The model included a data-led situational assessment, model development, stakeholder consultation, legal formalization of urban-rural partnership, and capacity building.

The area of finance was covered by *Michaels et al. (2022)*, who discuss inequalities in access to water provided by private enterprises in rural areas in Cambodia. Their analysis demonstrates the complexity of reaching all poor households, which includes the need for additional household subsidies and improved marketing and socialisation of services. A wider question is how to incentivise service providers to reach all.

In addition to the papers by *Kimbugwe et al. (2022)*, *Coultas et al. (2022)* and *Bikram & Mishra (2022)*, noted above, planning and monitoring was also considered by *Ceaser et al. (2022)*. They explore monitoring as an entry point to strengthen WASH systems in Uganda, Cambodia, PNG and Myanmar. Their premise is that government service level monitoring processes and data use are vital for effective decision making and accountability. Their analysis highlights the impact of system strengthening activities on data coordination, timely and relevant data availability and data use to inform decision making in WASH service delivery. They articulate a vision for progressive realisation of ‘data-based accountability culture’. *Bikram & Mishra (2022)* also focus on the collection and use of data, highlighting how ICT-based tools generated evidence and informed planning to improve school-based WASH in Uttar Pradesh, India.

Finally, capacity building is a fundamental tenet of WASH systems strengthening approaches, and was described in four papers. *Nhim & McLoughlin (2022)* share insights from an innovative leadership program in Cambodia, providing evidence of its effectiveness by comparing with other leaders. They also describe changes in leaders’ capacity, skills and perceptions of leadership and factors influencing their effectiveness in promoting sanitation. *Yusuf et al. (2022)* describe processes to support government capacity building and community empowerment at local level in Nigeria. They point out the challenges of implementing partnerships to achieve the desired changes, which included non-discriminatory spaces for participation of communities. *Leal et al. (2022)* evaluate how a Massive Open Online Course (MOOC) can be utilized to increase knowledge and skills to strengthen WASH systems.

They compare different models, demonstrating that a providing structured support and blended-learning arrangement had respectively higher completion rates compared with a self-paced stand-alone course.

While connections between WASH, environment and water resources was not a central focus for any of the papers, we wish to emphasise this critical component of systems strengthening, particularly in the face of climate change and its impact on the water cycle and resources on which WASH services depend. A number of sanitation-focused papers did note the links between sanitation and clean, healthy environments (e.g. [VanRiper et al. 2022](#); [Saxena et al 2022](#); [Mbogo et al. 2022](#)). In addition, [Ardhianie et al. \(2022\)](#) focus on the importance of supply and demand analysis – including links to available water resources – as critical for water services planning. [Hepworth et al. \(2022\)](#) highlight the smaller number of papers discussing accountability issues on water resources or agricultural water management as compared to WASH, arguing that more discussion on accountability across sectors is required given they are highly interlinked and affected by climate change. Given the foundational nature of environment and water resources for WASH service availability and sustainability, we hope to see further work on this area in future systems strengthening initiatives.

## HUMAN RIGHTS ENTRY POINTS

Human rights were often mentioned across the papers in this special issue, however mostly with respect to the outcomes sought – realizing the human rights to water and sanitation – rather than as the entry point for change. By human rights outcomes, we refer to water and sanitation services that are available when needed, accessible, affordable, acceptable and ensure quality and safety. By human rights as an entry point, we mean approaches drawing directly on human rights principles (non-discrimination and equality, access to information and transparency, participation, accountability, sustainability), approaches that specifically operationalize the human rights legal framework, and approaches that place citizen-state relations centrally.

There were exceptions however, with two papers specifically focused on human rights-based approaches to drive change. [Gosling et al. \(2022\)](#) critically reflect on WaterAid's human rights-based approach in Nepal, Ghana, Mali, and Burkina Faso, finding that a specific focus on the human rights framework created awareness for duty-bearers about their responsibilities, and for rights-holders about their entitlements. The approach was described to contribute to increased WASH budgets and prioritisation of WASH funding at the local level, a stronger base for citizen demand and mobilisations, integration of the most marginalized in policy and strategy, and increased openness of officials to sit together with citizens. An interesting finding was that explicit constitutional recognition of water and sanitation as a human right is more beneficial from an advocacy standpoint when compared with an implicit or interpretive recognition. [Masiangoako et al. \(2022\)](#) analyse two strategies for claiming the human right to water in South Africa – protest and litigation. They identify benefits in combining approaches, with litigation best employed alongside complementary strategies such as community mobilisation and protest. They also describe how water rights can be claimed in tandem with other rights such as housing, exploring how case study communities indirectly gained access to water services by employing legal tools of land expropriation and provincial intervention. This article resonates with the situation in low-middle income countries where the human right to water is recognized constitutionally, but is challenging to implement, and highlights the importance of litigation and protest in holding local governance systems accountable.

Other papers explored WASH from the perspective of specific human rights principles. [Yusuf et al. \(2022\)](#) focus on the principle of participation, exploring participatory processes employed in WASH programs across two local government areas in Nigeria. They connect participation to collaborative models whereby international non-government organisations work in partnership with local government authorities. Key findings include the importance of engaging with power dynamics to facilitate effective participatory spaces that are non-discriminatory and account for political, socio-economic and cultural differences. As previously mentioned, [Huggett et al. \(2022\)](#) highlight the importance of changes at both individual/self-empowerment and enabling environment levels in pursuit of equality and non-discrimination. [Hepworth et al. \(2022\)](#), [Ceaser et al. \(2022\)](#), [Dickin et al. \(2022\)](#) and [Coultas et al. \(2022\)](#) all address the principle of accountability, as described further below. The human rights principles of transparency and access to information are given relatively less focus in included papers. The principle of sustainability is addressed as it relates to continuity of services, though without consideration of its environmental aspects as noted above.

## ACCOUNTABILITY AS AN INTERLINKING CONCEPT FOR RIGHTS AND SYSTEMS

Accountability was dealt with in four papers. It is a concept that is common to both WASH systems strengthening approaches and human rights. *Hepworth et al. (2022)* place this concept centrally in their review of global evidence on accountability and advocacy interventions in the water sector, with the aim of improving practice, policy and research related to strengthening WASH systems. They provide a detailed theory of change for how such interventions achieve outcomes and the factors that shape performance. *Dickin et al. (2022)* argue for the importance of accountability between multisectoral stakeholders at national level, known as mutual accountability. Findings from across five countries, namely Bangladesh, Indonesia, Kenya, Peru and Somalia, demonstrate the nascent status of mutual accountability in the WASH sector. Multistakeholder platforms existed, primarily supporting coordination and communication, and in the future, these could serve as a foundation mutual accountability. *Ceaser et al. (2022)* also discuss the importance of accountability in the context of service delivery monitoring approaches, as such systems facilitate mechanisms to hold decision-makers to account. Lastly, *Coultas et al. (2022)* describe efforts to support local leadership and note the importance of making commitments publicly to ensure commitments were held and served to strengthened sanitation governance.

## INTEGRATION OF HUMAN RIGHTS AND SYSTEMS STRENGTHENING APPROACHES

In concluding this editorial, we present four key points for the WASH sector to consider in relation to the practical application of human rights and systems strengthening.

Firstly, human rights provide a globally recognized normative framework which offers guidance, standards and direction for development. There is significant further opportunity for systems strengthening to engage more deeply with this framework by supporting its operationalization and enhancing the capacity of duty bearers to fulfil their roles.

Secondly, there is opportunity for both systems strengthening and human rights proponents to engage more with critical sustainability considerations related to resource management and climate resilience. The recently declared human right to a clean, healthy and sustainable environment (Resolution 48/13, October 2021) may prompt stronger connections, with potential to both support advocacy for WASH and to drive a stronger environmental sustainability orientation within WASH work. The resolution mentions key considerations related to WASH including environmental degradation, impacts of climate change and pollution of water, asserting the state's role to protect the environment and ensure water resources management.

Thirdly, as noted above, accountability has an important and critical place in both human rights and systems strengthening approaches. However, the area of accountability remains under-researched, and is rarely a central focus of WASH implementation practice. Further efforts to bring it into both thinking and practice are needed, along with the requisite funding to enable this focus.

Fourthly, given the historical dominance of technical and technocratic approaches to improving WASH outcomes, there is more for the WASH sector to learn about the respective disciplinary fields of systems strengthening – namely governance and management – and human rights, which are based on legal studies. Often the language of human rights or systems is used loosely by practitioners and researchers alike, without accompanying depth of knowledge on the nuances of each area. We hope that this special issue can provide a foundation for deeper appreciation of the underlying concepts such that they can inform and underpin more effective research and practice, towards the ultimate end of improving universal access to water, sanitation and hygiene.

### Guest Editors

#### Professor Juliet Willetts

Institute for Sustainable Futures, University of Technology Sydney, Sydney, Australia

#### Dr. Naomi Carrard

Institute for Sustainable Futures, University of Technology Sydney, Sydney, Australia

#### Dr. Mohamad Mova Al'Afghani

Center for Regulation, Policy and Governance (CRPG), Universitas Ibn Khaldun Bogor, Bogor, Indonesia

## REFERENCES

- Ardhianie, N., Daniel, D., Purwanto, P. & Kismartini, K. 2022 Jakarta water supply provision strategy based on supply and demand analysis. *H2Open Journal* 5 (2), 221–233. <https://doi.org/10.2166/h2oj.2022.076>.
- Bikram, K. & Mishra, R. M. 2022 Evidenced transformations: using data to demonstrate improvement in school-based access to water, sanitation and hygiene in Uttar Pradesh, India. *H2Open Journal* 5 (2), 264–274. <https://doi.org/10.2166/h2oj.2022.060>.
- Ceaser, K., Tim, D., Fraser, G., Ellen, G., Sokhadeva, C. & Benjamin, K. 2022 Strengthening country-led water and sanitation services monitoring and data use for decision-making: lessons from WaterAid experience in four countries. *H2Open Journal* 5 (2), 348–364. <https://doi.org/10.2166/h2oj.2022.028>.
- Chouhan, N. S., Nielsen, M. O., Singh, P., Manchikanti, S., Pandey, V., Walters, J. P. & Kadyan, K. 2022 A systems approach to improving access to water, sanitation, and hygiene (WASH) in schools in Odisha, India. *H2Open Journal* 5 (3), 395–411. <https://doi.org/10.2166/h2oj.2022.044>.
- Coultas, M., Chanza, M. M., Iyer, R., Karangwa, L., Kariuki, J. E., Kosugi, H., Meeuwissen, T. T., Mwendu, E., Myers, J., Son, P. & Ssemwanga, D. K. 2022 Galvanising and fostering sub-national government leadership for area-wide sanitation programming. *H2Open Journal* 5 (1), 1–10. <https://doi.org/10.2166/h2oj.2022.022>.
- Dhoba, L. 2022 Strengthening water, sanitation and hygiene governance: a critical review of Zimbabwe's WASH sector institutional arrangements. *H2Open Journal* 5 (2), 248–263. <https://doi.org/10.2166/h2oj.2022.063>.
- Dickin, S., Syed, A., Qowamuna, N., Njoroge, G., Liera, C., Al'Afghani, M. M., Chowdhury, S., Sanchez, Z., Salad, A. M., Winterford, K., Uijtewaal, E., Roaf, V., Butterworth, J. & Willetts, J. 2022 Assessing mutual accountability to strengthen national WASH systems and achieve the SDG targets for water and sanitation. *H2Open Journal* 5 (2), 166–179. <https://doi.org/10.2166/h2oj.2022.032>.
- Gosling, L., Rai, T., Obani, P., Traore, M. A., Ouangre, L., Aliu, F. & Shah, S. K. 2022 Analysis of experience using human rights to accelerate WASH access in four countries. *H2Open Journal* 5 (2), 234–247. <https://doi.org/10.2166/h2oj.2022.073>.
- Hepworth, N. D., Brewer, T., Brown, B. D., Atela, M., Katomero, J., Kones, J. & Gashaw, M. 2022 Accountability and advocacy interventions in the water sector: a global evidence review. *H2Open Journal* 5 (2), 307–322. <https://doi.org/10.2166/h2oj.2022.062>.
- Huggett, C., Da Costa Cruz, L., Goff, F., Pheng, P. & Ton, D. 2022 Beyond inclusion: practical lessons on striving for gender and disability transformational changes in WASH systems in Cambodia and Timor-Leste. *H2Open Journal* 5 (1), 26–42. <https://doi.org/10.2166/h2oj.2022.039>.
- Kimbugwe, C., Sou, S., Crichton-Smith, H. & Goff, F. 2022 Practical system approaches to realise the human rights to water and sanitation: results and lessons from Uganda and Cambodia. *H2Open Journal* 5 (1), 69–83. <https://doi.org/10.2166/h2oj.2022.040>.
- Leal, A., Saleh, A. & Verhoeven, J. 2022 E-learning for WASH systems strengthening: lessons from a capacity-building platform. *H2Open Journal* 5 (2), 379–394. <https://doi.org/10.2166/h2oj.2022.066>.
- Masiangoako, T., Khunou, K. & Potter, A. 2022 Fighting for water in South Africa: public participation, water rights claiming and strengthening governance. *H2Open Journal* 5 (1), 98–114. <https://doi.org/10.2166/h2oj.2022.023>.
- Mbogo, H. N., Home, P. G., Raude, J. M. & Mwangi, R. W. 2022 Scorecard diagnostic tool for the enabling regulatory environment of faecal sludge management. *H2Open Journal* 5 (2), 333–347. <https://doi.org/10.2166/h2oj.2022.070>.
- Michaels, T., Suong, C., Chi, C., Morm, L., Mab, P. & Denis, J. 2022 Increasing access to piped water for poor households: an analysis of water connection subsidy projects implemented by the GRET. *H2Open Journal* h2oj2022024. <https://doi.org/10.2166/h2oj.2022.024>.
- Nhim, T. & McLoughlin, C. 2022 Local leadership development and WASH system strengthening: insights from Cambodia. *H2Open Journal* 5 (3), 469–489. <https://doi.org/10.2166/h2oj.2022.129>.
- Saxena, S., Chouhan, N. S., Mojumdar, S., Nielsen, M. O., Manchikanti, S., Mukherjee, A., Agarwal, N., Rani, M., Dutta, A., Vignesh, R. & Walters, J. P. 2022 Bridging the rural-urban divide in sanitation with a cluster-based approach to faecal sludge management: a case study from Dhenkanal district in Odisha, India. *H2Open Journal* 5 (4), 549–566. <https://doi.org/10.2166/h2oj.2022.054>.
- Sarah Dickin, Abu Syed, Nishrin Qowamuna, George Njoroge, Carla Liera, Mohamad Mova Al'Afghani, Sidratun Chowdhury, Zoraida Sanchez, Abdulwahab Moalin Salad, Keren Winterford, Erma Uijtewaal, Virginia Roaf, John Butterworth, Juliet Willetts; Assessing mutual accountability to strengthen national WASH systems and achieve the SDG targets for water and sanitation. *H2Open Journal* 1 June 2022; 5 (2): 166–179. doi: <https://doi.org/10.2166/h2oj.2022.032>
- VanRiper, F., Russel, K. C., Tillias, D., Tilt, J. & Laporte, J. 2022 Container-based sanitation in urban Haiti: how can it improve human rights as a component of citywide inclusive sanitation? *H2Open Journal* 5 (1), 135–152. <https://doi.org/10.2166/h2oj.2022.037>.
- Yusuf, T. S., Murray, A. & Okereke, C. 2022 Working with local governments to increase access to WASH services: a case of WaterAid's participatory approaches in Nigeria. *H2Open Journal* 5 (3), 424–437. <https://doi.org/10.2166/h2oj.2022.061>.
- Zisa, A., Nilsson, K., Mirza, R. & Vachon, T. 2022 Achieving handwashing with Social Art for Behaviour Change: the experience of the Lazos de Agua programme in Latin America. *H2Open Journal* 5 (2), 323–332. <https://doi.org/10.2166/h2oj.2022.029>.