

LEARNING BRIEF

WASH system strengthening during the COVID-19 Pandemic: Experiences from the field

Source: [Hygiene Hub](#)

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Introduction

This learning brief will explore experiences of water, sanitation and hygiene (WASH) system strengthening during the COVID-19 pandemic, through drawing on content from Hygiene Hub [case studies](#) and discussions with Hygiene Behaviour Change Coalition (HBCC) partners, as well as evidence and practice from numerous WASH and health stakeholders. We explore the different types of system strengthening activities implemented, common challenges encountered and key lessons and action points, before reflecting on cross-cutting challenges and lessons. This document, although drawing on WASH systems thinking, focusses primarily on water and hygiene. We also include two case studies from Amref and WaterAid which provide in-depth examples of system strengthening activities.

There are numerous roadmaps which can be followed when conducting WASH system strengthening. Activities are explored using an adapted version of WaterAid's WASH system framework (image 1). For building block frameworks, there is a focus on examining all blocks to ascertain where the strengths and weaknesses lie, so that we can identify the block (s) with the greatest potential for improvement. When reading this brief it is crucial that we don't lose sight of the larger picture, as all blocks must be functional across all levels to achieve a strong WASH system.

We have incorporated institutional arrangements and capacity with co-ordination and integration. Before reading this brief, we recommend that you read our [resource](#) which outlines the basics of system strengthening. You can also view WaterAid's [System Strengthening Toolkit](#) for more insight.

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What system strengthening activities were implemented throughout the pandemic?

In this section, we explore the various system strengthening activities implemented throughout the pandemic from 2020-2023, with a focus on hygiene behaviour change but also the wider WASH portfolio and vaccines, which were central to the COVID-19 response.

2.1 Government leadership

Lesson 1: Global health is a shared responsibility, which necessitates trusted, effective and efficient government leadership during design and delivery of disease outbreak responses.

From the outset, effective and efficient [government leadership](#) is critical to ensure appropriate, context-specific and durable strategies to achieve WASH systems which are inclusive, well-financed, responsive and adaptive. Strong government leadership also ensures that programmes are aligned with national policy and regulation. It is also crucial that citizens [trust](#) governments during outbreaks; trust influences the degree to which citizens embrace information, adhere to guidelines and engage with health systems, as well as influencing risk perceptions.

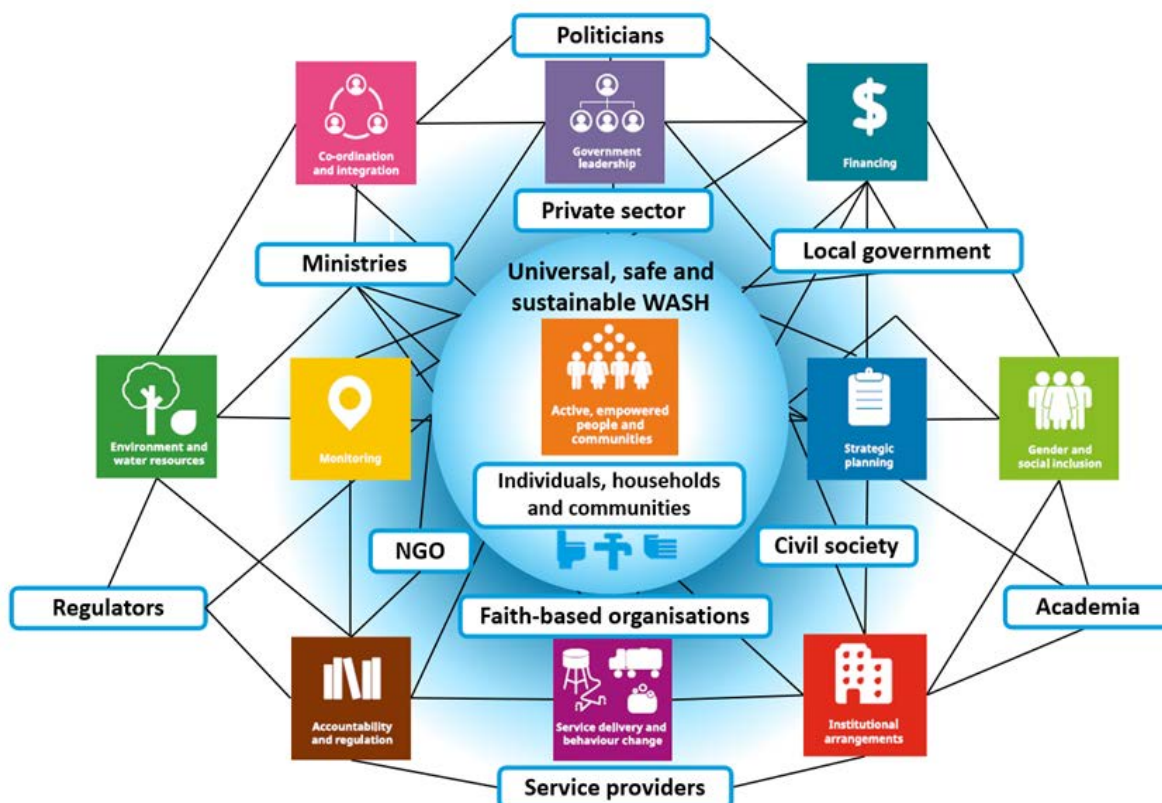


Image 1: WaterAid's WASH system framework. Source: WaterAid

The pandemic presented numerous challenges, including – mistrust in government, which created barriers to health seeking behaviour and adherence to guidelines. Others grappled with governments under prioritising COVID-19 due to more pressing demands e.g., natural disasters and conflict. Government transitions, diversities between actors, cumbersome bureaucratic processes, unsystematic collaboration and insufficient data management and warning system capacities, also hindered responses.

Governments positively led responses based on evidence and guidance from the World Health Organisation (WHO), what they were seeing and hearing on the ground and interactions with other governmental counterparts. Hygiene behaviour strategies commonly included – mask wearing, hand hygiene (HH), physical distancing, vaccine uptake, and cross border efforts (e.g., hygiene infrastructure at border crossings and movement restrictions). Some governments were more stringent on certain preventative behaviours than others, depending on policies (e.g., mask wearing). The following provides national and international level insights into government led action with a range of stakeholders.

National

In Kenya, Nigeria, and Uganda, PSI (Population Services International) co-developed together with the Ministry of Health (MoH), the [COVID-19 Vaccine Facility Locator](#) - an application which enables users to identify where vaccines are being distributed locally, including information on opening times and FAQs (see image 2). The intervention is aimed at 18–55-year-olds in urban and peri-urban areas and the application was formally launched in March 2023. Sustainability and government leadership were central to the design and delivery of the interface, which was achieved by co-designing the application with national governments from inception. Doing so enabled operationalization of existing structures and systems, such as weekly MoH vaccine distribution meetings in Kenya. In addition to strengthening sustainability, this ensured that the application was effective and up-to date. The interface has been designed to maximise adaptability for other immunization programmes and PSI plan to fully transfer the technology to national governments. In Kenya, the limited national consumer digital health strategy caused considerable delays, as did the decline in the sense of urgency around COVID-19 – particularly in Uganda, which faced competing threats like Ebola.

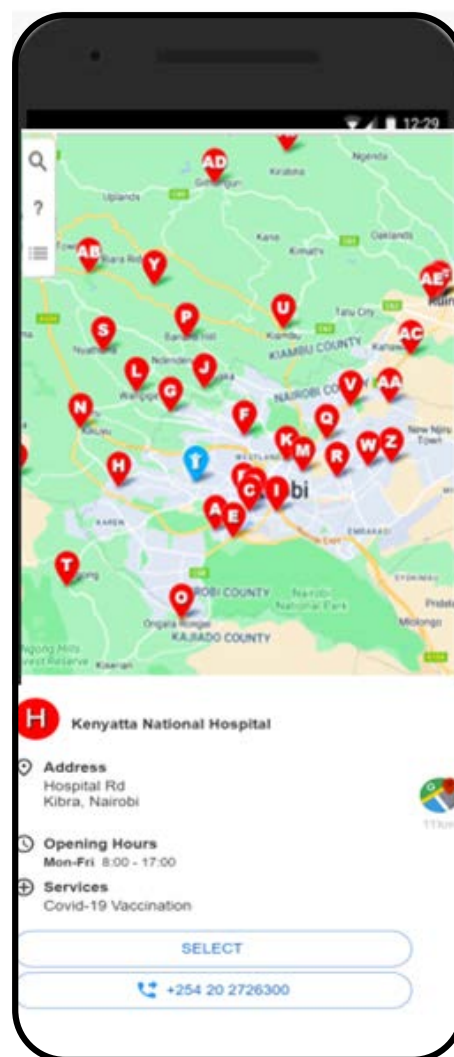




Image 2: Screenshot from the COVID-19 Vaccine Facility Locator.
Source: PSI

International

 The GIZ UNICEF [international learning exchange \(ILE\)](#) programme aims to facilitate cross-country learning and political engagement for WASH in schools (WinS). The WinS network is a global inter-agency network (including NGOs, development partners, UN agencies and universities) which aims to harmonize activities to support Ministry of Education (MoE) to strengthen WinS services. ILE was launched in 2012 and currently runs across 46 countries in Asia and Africa, having launched in Africa in March 2023. Workshops engaging multiple actors from across government, NGOs and education service delivery actors occur annually, with countries taking turns to host. Host countries welcome members from MoE and national Technical Working Groups (TWGs), as well as Joint Monitoring Programme (JMP) representatives. Workshops, school visits and informal discussions encourage learning and inspire countries to adapt and implement ideas in their own context.

 The ILE network proved invaluable during the pandemic; workshops were adapted for remote delivery, providing a platform for cross-country exchange of learning and information as the pandemic quickly unravelled. GIZ, UNESCO and members of the WinS Global Network also harnessed the ILE to deliver a remote [WinS ILE](#) workshop in June 2021, to support 14 governments across the East Asia and Pacific region as they began reopening schools. Through presentations from WASH experts, breakout country consultations and group discussions, the following building blocks were identified as problem areas: policy, strategy and planning, monitoring, financing and institutional arrangements and capacity. Specific recommendations included installing handwashing facilities at school entrances; establishing the water capacity and addressing shortages through launching community projects or suggesting children to bring bottles of water to school; training school staff on WinS and COVID-19 and establishing a monitoring team. The WinS Network are planning an online ILE event during Stockholm World Water Week in August 2023, which will explore findings from a recent review of the ILE model by UNICEF.



Action Point 1

- **Empower government leaders to own, champion and lead by example investments in WASH including behaviour change to ensure public risks are mitigated through immediate and long-term interventions at the national, regional, and global level. This includes placing an emphasis on co-designing programmes with governments and investing time and money in accurately ascertaining capacity. Monitor the degree of civilian trust and support governments to strengthen trust where applicable.**



2.2 Co-ordination and integration / institutional arrangements and capacity

Lesson 2: Outbreak responses require harmonised, cross-sectoral approaches which unite a range of actors under a shared vision, enabling actors to play to their strengths and mount integrated hygiene behaviour programmes.

[Strong coordination and integration / institutional arrangements and capacity](#) are central in mounting an effective outbreak response. This typically includes the integration of WASH into existing government programmes and the alignment of agencies behind united goals, strategies and policies, as well as there being necessary institutional capacity with clear roles and responsibilities.

Common challenges during the pandemic included evolving priorities, budgets and commitments of different parties, particularly during humanitarian crises, elections, and political unrest. Power dynamics within ministries also presented challenges, as did undefined roles and responsibilities and fragmentation, driven by insufficient frameworks and accountability measures. Programmes were also hindered by inadequate coordination of stakeholders, impacting timelines and effectiveness.

Despite these challenges, actors formed novel partnerships, drawing on each other's expertise and institutional capacities to mount integrated programmes. Below we explore several examples of strengthening activities.



WSUP, Amref and PSI are members of the Kenyan Media Collaboration Technical Working Group (TWG), where they share effective engagement strategies, synergise activities and share learning. Whilst the TWG were largely effective, they were hindered by dynamics within ministries, especially government transitions and reshuffles, which impacted priorities and working dynamics, causing delays.





Amref addressed fragmentation in the Kenyan MoH through supporting formation of a COVID-19 Task Force, which could also be harnessed for future outbreaks. Collaborating with the Ministry's Environmental Health Group, they mapped WASH actors and coordinated a multi-sectoral workforce, including MoE, Ministry of Gender and Labour and the State Department of Social Protection members. The Task Force successfully developed standardized training and materials for COVID-19 behaviour change interventions targeting people who may be vulnerable in 11 counties, as well as facilitating cross-departmental learning and strengthening alignment of COVID-19 activities with government priorities.



In July 2020, Nepal's MoH responded to the COVID-19 pandemic by scaling up their ['Hygiene Promotion Through Routine Immunization'](#) programme, piloted in 2016. With support from WaterAid and USAID, they quickly scaled up the programme nationwide and integrated key COVID-19 preventative behaviours. The programme mobilised 23,000

community health workers to deliver COVID-19 behaviour change communication, including reactive promotional materials, to new mothers / guardians during their 5+ routine health centre visits in the first 15 months of infants' lives. Additionally, the government launched a multi-partner media campaign and implemented touch-free hand washing infrastructure in 300+ health centres supported by WaterAid. The interventions embedded [Behaviour Centred Design \(BCD\) theory](#) and successfully reached 382,455 new mothers in 2020, further increasing their reach in 2022-2023, through their mass media campaign which reached some 10 million people. Despite the logistical issues caused by national lockdowns because WaterAid co-designed the behaviour change materials with the government, the intervention also strengthened their capacity to design and implement interventions in future outbreaks.

 The pandemic also inspired novel public-private partnerships; in Burundi, [UNICEF](#) partnered with one of the largest national soap factories to address inflated soap prices. Over half of the Burundi's 12 million population live on less than US\$0.90 per day and a standard bar of soap is 300 Burundian francs (BIF) or USD 0.16. Through government VAT reductions and financial contributions from UNICEF, the partnership provided 20 million bars of soap at half the usual price nationally. Feedback via UNICEF's U-report platform found that 83% of respondents said the soap was available in their communities, and 92% had purchased it between 150 and 167 BIF per bar of soap. More broadly, support from the local government and communication campaigns kept consumers abreast of the price and discouraged vendors from hoarding and increasing prices.

 Amref is involved with the [National Business Compact on Coronavirus \(NBCC\)](#), which was launched days after the pandemic was announced, to support the governments of Kenya, Uganda and Tanzania to respond. The coalition built on existing relationships and trust, working with national governments to unite multisectoral public and private actors across several key thematic working groups, including media, hygiene infrastructure and coordination. The coalition mobilised funds and provided training on Infection Protection and Control (IPC) and community engagement to community health workers and school children, plus distribution of 1000s of public handwashing stations in market and transport hubs.



Action Point 2

- **Prioritise inclusive collaboration and integration through forming multi-sectoral partnerships. Ensure key stakeholders are included, priorities and capacities are mapped, and that structures and processes are in place to strengthen accountability and transparency. Use existing public health programmes as an entry point where possible.**

2.3 Financing

Lesson 3: Robust, adaptable financing is essential in mounting effective hygiene behaviour programmes and because each context has unique financing systems, capacity and challenges, there is no silver bullet. The process requires considerable investment in preparation and planning.

[Strong financing](#), characterized by accurate costing plans, fiscal decentralization, private sector investment, flexible funding, district channelling of external funds and accurate lifecycle costing, is fundamental from the outset of any outbreak response, including COVID-19.

Finance strengthening efforts encountered various challenges, including unreliable external support, characterized by inflexible, “stop-start” funding and misaligned donor priorities, favouring short-term efforts over long-term strengthening activities. Similarly, there were competing priorities, impacting investment in WASH generally, with government WASH expenditure also proving difficult to track, due to fragmented [budget coding practices](#). Efforts were also hindered by inadequate financial accountability, costing challenges (in terms of tools and technical capacity) and economic challenges e.g., inflation and fuel crises.


Actors overcame challenges through forming novel partnerships, diverting funds to COVID-19 programmes, strengthening national capacities and designing tools to optimize available funds. Below we explore examples of finance strengthening interventions.



Image 3: [Hand Hygiene for All Initiative](#). Source: WHO



In November 2020, the WHO and UNICEF launched the [Hand Hygiene for All Initiative \(HH4A\)](#), which includes WaterAid, Global Handwashing Partnership, World Bank Group, and the Hygiene Hub. The initiative aims to accelerate progress towards the SDG goal of HH for all by 2030. Initially, their financing activities included highlighting financing gaps via the [GLAAS initiative](#), producing cost-estimates for achieving WASH standards in healthcare facilities and households, alongside a tool for [country-specific costing](#). They also published a [handbook](#) which illustrates the economic case for WASH investments to Finance Ministers and convened three [Finance Ministers' Meetings](#) to discuss reforms. Currently there is a focus on supporting countries to develop costed HH road maps, to strengthen advocacy and financing efforts (see the case study on pg. 9).

 In the Philippines, general operational and maintenance (O&M) costs of facilities are the responsibility of the MOOE (Maintenance and Other Operational Expenses), which sits within budget lines of schools and can be used for maintenance, however it is difficult to accurately cost O&M of WASH facilities and activities. These costing gaps became increasingly challenging during the pandemic, when there was an unprecedented demand on WinS. In response, GIZ launched the [O&M mobile app](#) in 2021. The application enables schools to input context-specific details (e.g., number of school days per year, number of toilets and classrooms, with the cost of locally available materials), to produce an annual budget estimate which complies with global recommendations from the WHO and UNICEF. The budget [details](#) the annual cost per student and school, as well as the quantity of tools and materials required per annum. This information is vital to developing the School Improvement Plan and Annual Implementation Plan, supporting mobilisation of resources from stakeholders and ultimately identifying areas for cost cutting.


 In partnership with Unilever, FCDO developed a £100 million investment plan for the COVID-19 response focusing on hygiene, which included formation of the Hygiene Behaviour Change Coalition (HBCC). HBCC programmes were implemented in more than 25 countries, mobilizing more than 30 organizations including UN, I/NGOs, Academia, Civil Society and Governments, reaching over [1.2 billion](#) people across Asia and Africa. The financing modality between the UK Government and Unilever not only helped deliver the COVID-19 hygiene response, but also demonstrated how the government and private sector can co-finance programmes with diverse partners in public health emergencies.



Image 4: [O&M mobile app](#).

Source: Fit for School



Action Point 3

- Invest in the preparatory phase, to ensure there is clarity on rationale, objectives and scope of WASH finance strategies. Safeguard finance strategies by presenting a combination of policy actions that, together as a package, aim to ensure the financial sustainability of hygiene behaviour and WASH programmes. Establish financing modalities which enable scaling of programmes through diverse partnerships.

Case study 1: WaterAid's experience in supporting developing and costing national Hand Hygiene for All roadmap in Ethiopia

Context:

92% of households, 42% of healthcare facilities and 84% of primary schools in Ethiopia lack basic handwashing facilities with water and soap. Of those without access, 80% are considered vulnerable and reside in rural areas. Moreover, prior to this intervention, there was no separate government hygiene budget and allocations were insufficient.

Intervention:

The COVID-19 pandemic heightened the need for Ethiopia to strengthen hygiene financing and Ethiopia is now among the first countries globally to develop a fully costed roadmap for achieving universal hand hygiene access by 2030. Government of Ethiopia with the support from WaterAid, used tools from WaterAid and WHO/UNICEF global tools to cost hygiene-related activities (e.g., Behaviour change activities and HH hardware – facilities etc) and develop comprehensive costed plans which the government can use over the next 10 years. The process consisted of 1) consultation sessions with core partners, including WaterAid, UNICEF and WHO, 2) ministerial lobby-



Image 5: Community in Ethiopia using a tap stand built by WaterAid. Source: WaterAid

ing to ensure MoH ownership and cross-ministerial collaboration, 3) development of roadmap documentation and costing sessions to establish conceptual framework, aims, indicators and activities 4) consultations with Ministers and officials for feedback and endorsement, 5) launching and dissemination. Now that the costed roadmap has been achieved, they are moving on to developing their resource mobilisation strategy.

Challenges:

1) because HH4A is a new initiative and hand hygiene was not considered as a standard programme prior, it took time to reach a consensus as a Technical Working Group. However, the discussions leading up to the consensus meant experts were engaged in the rest of the process putting hand hygiene as entry points to work on the wider hygiene agenda 2) inadequate WASH coverage, causing delays in behaviour change programmes 3) high rates of poverty, impacting communities' willingness and ability to pay for handwashing facilities.

Lessons learned:

The roadmap development process demonstrated the importance of 1) government leadership, collaborative partnership between government and stakeholders and long-term commitment 2) having a dedicated team 3) seizing opportunities to increase political will 4) systems thinking 5) having a behaviour change centric roadmap 6) embedding system strengthening activities within existing structures 7) establishing clear roles and responsibilities of all parties, including households, healthcare facilities and schools, 8) use of detailed costing tools make precise estimates and 9) ensuring early preparation of targets, materials, unit cost etc and involvement of a wide range of stakeholders.



2.4 Environment and water resources

Lesson 4: Whilst timely, mass implementation of water sources and hand hygiene infrastructure is undeniably important, the long-term sustainability and resilience of such hardware and software should never be overlooked.

[Environment and water resources](#) are a crucial during any infectious disease outbreak which typically introduce unparalleled WASH demand. In a durable system, there would be coordinated management of water resources, including protection and management policies. Robust systems also include water resource threat monitoring which feeds into resilience planning, and ample infrastructure and supplies to support behaviour change interventions.

Efforts to strengthen environment and water resources were hindered by climatic variations, market and financial challenges. For instance, there was a lack of effective procurement processes due to market and financial failings (e.g., inflation and lockdowns restricting functional markets) causing implementation delays. The financial viability of utilities was also overlooked and there was a hesitancy towards simple, low-cost infrastructure, given the unknown magnitude and timeframe of the pandemic.

Actors overcame challenges through partnering with national governments and utilities to implement low-cost hand hygiene infrastructure, provide free water and strengthen operation and maintenance (O&M).



[WaterAid](#) partnered with six country governments and private organisations to install 2,700 large-scale permanent and semi-permanent hand washing facilities. From the outset, community caretakers were mobilised and received O&M training and a clear O&M plan. With support from WaterAid, caretakers addressed drainage issues associated with the large tank size and high usage rates of hand washing facilities by ensuring a soak away and or channelling to a vegetable patch, a trough for animal drinking, or to an existing drain. Caretakers and local partners developed a simple trouble shooting guide to support timely diagnosis, with local procurement of spare parts where possible. The system is set up to last 3-5 years and whilst caretakers receive incentives for partaking in the day-long O&M training, arrangement of incentives (if any) are the responsibility of local institutions thereafter. Consequently, all these efforts provided a supportive environment for hand hygiene behaviours. Moreover, WEDC/ WaterAid [Accessibility and Safety audits](#) were conducted and a long-term functionality monitoring system has been established to monitor sustainability. Despite these efforts, follow-up functionality surveys conducted a year later reported disappointing results. In many cases the more complex hands-free tap technology was replaced with simple, sustainable taps. Repeated engagement was required with duty bearers to recognise shortcomings and define roles and responsibilities which has now led to improved functionality rates.



Image 6: GIZ Fit for School Programme – Handwashing facilities. Source: [GIZ](#)

GIZ's Fit for School programme has worked intensively on supporting modelling and management of low-cost handwashing facility designs, with many outlets facilitating the daily routine handwashing activities in schools – a component which became increasingly important during the pandemic. The low-cost design is simple, uses local materials and provides an enabling environment for students which is fun, interactive and stimulates usage. The programme also includes designing capacity strengthening and toolkits for addressing specific issues, such as gender segregated toilets, as well as supporting efforts to address menstrual health and hygiene in schools. See the following [case study](#) for a more detailed overview of the low-cost handwashing design in the Philippines.

During the pandemic, the Nigerian government pledged to supply the public with free water services to address unprecedented demand. HELVETAS supported this initiative through monitoring water service providers to ensure that they upheld their commitment. Whilst efforts such as these are undeniably important during outbreaks, it is important to recognize potential negative impacts on the financial and sustainable viability of utilities.



Image 7: GIZ Fit for School Programme – Handwashing facilities. Source: [GIZ](#)



Action Point 4

- Prioritise sustainability through strengthening O&M, local markets, governance and accountability mechanisms. Include government, regulators, utilities, communities and other stakeholders in water and hand hygiene infrastructure plans and strengthen [technical](#) and [financial viability](#). Strengthen climate change resilience through supporting local monitoring and analysis of seasonality and water source data.





2.5 Policy, strategy and planning


Lesson 5: Harnessing existing strategies and policies can improve the efficiency and sustainability of WASH responses – foster what has worked rather than reinventing the wheel. Incorporating renewed capacity assessments is essential when planning and implementing appropriate hygiene behaviour programmes which meet local needs.

[Strong policy, strategy and planning](#) which ensures universal access to sustainable and resilient WASH services and hygiene behaviours is essential. To achieve this, thorough formative research which aligns programmes with the needs of affected populations is key.

Strengthening efforts were hindered by numerous challenges including a lack of defined [roles and responsibilities](#), ever-evolving priorities and budget re-allocations and insufficient stock of key supplies e.g. soap and vaccines. Despite this, actors and governments successfully collaborated to harness existing policies and strategies and developed appropriate WASH and behaviour change programmes.

 Amref teamed up with Unilever to support the Kenyan government with their County Investment Development Plans (CIDP), formed every 1-2 years. Aside from strengthening capacity, the process allowed Amref to advocate for increased WASH budgets and highlighting gaps. Throughout, they found that without consistent follow-up, money was often re-allocated to different priority areas. This challenge was particularly prominent during the initial phase of the pandemic, characterised by changing priorities and budgets. Amref also provided technical and facilitative support in lobbying for the Kenyan community health bill, which includes a legal framework for fair remuneration of community health workers, central to WASH and behaviour change programmes. They also lobbied for prioritization of WASH in-country investment plans. The national community health bill has been submitted to the National House Business Committee of the Senate of Kenya and is awaiting Senate discussion and approval – the process had been delayed by a change in regime.

 GIZ play a supportive role with Ministry of Education, and there is an emphasis on developing close relations with governments – which became increasingly important during the pandemic. These relations are achieved through having a staff member on a longstanding secondment in each country's MoE and situating GIZ offices on government premises. During strategic planning, GIZ focus on ensuring governments have absorptive capacity, particularly financial, and that programmes are scalable. Capacity is gauged through modelling, followed by a 3–4-week appraisal which is led by an external consultant and involves interviewing MoE, MoH and NGO members. Thereafter, GIZ develop management support tools based on recommendations and guidance documents from WHO, UNICEF and UNESCO and national policies and guidelines, to ensure applicability in each country context. Finally, these tools are presented to the MoE for further review and joint exploration of suitable interventions.

 During the pandemic, GIZ also focused on supporting schools to meet the unprecedented challenges of maintaining education provision. Recognising that schools were overwhelmed with the need to adjust to distance learning and the level of administrative orders and information related to COVID-19 management, GIZ worked closely with MoE to develop management support tools in the form of checklists and information, education and communication (IEC) materials which incorporated global and national policies and guidelines into clear actionable formats for day-to-day operations of school-level implementers. Documents were also discussed within the WinS network and the WHO Technical Advisory Group of Experts on Educational Institutions and COVID-19.



Action Point 5

- **Focus on assessing local capacity (especially absorptive) and follow up to ensure that implementation aligns with agreed strategy, plans and budgets. Keep tools and processes simple and ensure hygiene behaviour interventions are locally led and aligned with national and international guidelines. Ensure appropriate policies and strategies are in place to strengthen design, implementation and evaluation of hygiene behaviour change programmes.**

↩ 2.6 Gender and inclusion

Lesson 6: There is a wide range of populations and contexts which may be more vulnerable to COVID-19 and each situation is unique – hence, gender and inclusion must be embedded from the get-go.

WASH and hygiene behaviour change programmes must be equitable and respond to the specific needs of different types of populations, including groups who may be more vulnerable to COVID-19, such as [women](#), [older people and people with disabilities](#), [minority groups](#), [indigenous populations](#), [people with pre-existing conditions and care givers](#). [Effective and accountable gender and inclusion](#) necessitates actively involving these key populations in decision-making, having group members occupy leadership positions and collecting disaggregated data. For further information on inclusion, see our resource on [defining vulnerability](#) and our [learning brief](#) on identifying who may be vulnerable.

Challenges to strengthening gender and inclusion were largely related to prioritisation and accessibility. There was inadequate prioritisation from actors and donors, marked by insufficient engagement with populations who may be vulnerable, potentially due to assumptions that the pandemic would be short lived. Actors also experienced challenges in accessing populations who may be vulnerable, finding accessible locations and designing and implementing programmes which reached groups affected by the digital divide. As the pandemic progressed and the stark inequities became ever-more apparent, actors began focusing on strengthening the inclusivity of programmes – see below for some examples.



Amref launched a [disability mainstreaming project](#) in Kenya, which entailed organizing an independent program to map people with disabilities (PWDs). They collaborated with experts in government and NGOs, as well as affected populations to map gaps and develop appropriate interventions. One of the gaps identified by the Kenya Society for the Blind (KSB) was an absence of COVID-19 IEC materials for people with visual disabilities. To address this, Amref worked with KSB to design COVID-19 behaviour change communication and training materials in braille, which were distributed by Community health Volunteers (CHVs). The programme also produced material in simple pictorial formats for those with cognitive disabilities, disability-friendly video assets that were aired on Signs TV (broadcasting disability-specific content) with sign language interpretation. Sign language interpreters were also engaged across all PWDs-trainings in response to the translation needs of those with hearing impairments. One major challenge was that Amref were dependent on government registers to access people who may be vulnerable, and it became evident that there were significant registration gaps. Amref addressed this by collaborating directly with communities and Organisations for People with Disabilities (OPD) to ensure they had an up-to-date register of PWD. They also provided capacity strengthening on COVID-19 hygiene behaviour change communication. Additionally, they conducted capacity strengthening with facilitators from OPDs and teachers at schools for PWDs.

During the pandemic, WSUP supported “Kayayei” in Ghana – female porters working in the transport sector. Through working with representative groups, WSUP delivered skills training on COVID-19 preventative behaviours, including HH and mask use. WSUP also strengthened relations with OPDs and broadened their focus from people with visual disabilities. Through engaging representative organisations, they launched working groups where they engage PWDs in the design process, as well as arranging visits to schools for PWDs.

Finally, WaterAid conducted small scale studies on inclusion, infrastructure [Accessibility and Safety Audits](#) and developed inclusive hygiene infrastructure. For instance, in Tanzania, WaterAid collaborated with the University of Dar es Salaam to develop inclusive HH facilities – including HH facilities with hands-free taps, varying heights and ramps. The facilities were placed in health facilities, bus facilities and markets and used locally available parts. Despite these efforts, organizational reflections concluded that their first phase COVID-19 response was not as inclusive as it could have been – reflecting a trend witnessed across the sector. In response, they conducted accessibility audits for all of the different designed facilities, readjusted the design part of the rehabilitation and only implemented inclusive handwashing facilities in the second phase of the HBCC2 programme. They have also developed longitudinal monitoring and auditing tools and Standard Operating Procedures (SOPs).



Image 8: WaterAid’s inclusive handwashing facilities. Source: [WHO](#)



Action Point 6

- Ensure that equity and inclusion is embedded from the start and individuals and or groups who may be vulnerable to COVID-19 are actively engaged throughout the programme cycle to achieve tailored hygiene behaviour responses.

2.7 Active, empowered people and communities

Lesson 7: Active, empowered people and communities are essential in achieving sustained hygiene behaviour change as well as promoting community support and accountability to ensure programmes are sustainable and meet local needs.

Empowered communities are central to any WASH system. Programmes should empower communities, including marginalised groups, to demand their human right to WASH services and behaviour change and actively engage in the project cycle, to ensure that services meet their needs. For an in-depth exploration of community engagement in COVID-19 response programming, see our resources on [community engagement](#), [developing materials](#) and [choosing delivery channels](#).

The pandemic presented numerous challenges associated with remote engagement, like overcoming the digital divide, effectively using social media and ensuring mass and digital media was accessible and engaging. Others experienced difficulties engaging certain groups, with strategies proving ineffective in certain populations. Competing priorities, myths and misconceptions, vaccine hesitancy and message fatigue all contributed to awareness-action gap due to limited adherence, complacency and disrespect of government policies.

Despite this, actors successfully mobilised and empowered populations through community engagement, capacity strengthening and making the right choice the easy one. Subsequently, preventative behaviours were enacted and promoted by societies and communities united to support one another, vocalise their needs and demand change.

Many organisations focused on community engagement; WSUP initially engaged populations through social media, without investing in exploring different communication channels. When they engaged populations in the second phase, they discovered that interpersonal communication and radio were considered more trustworthy than social media. Changing their delivery channel also overcame the challenge of ascertaining which influencer would be appropriate for particular demographic groups. They now promote hygiene behaviours face-to-face or via radio trucks, as well novel methods like distributing vaccine promotion calendars in Ghanaian hair salons and stickers on buses. Other innovative approaches include [Welthungerhilfe's Corona Comic](#), which is available in 20 languages and targets adolescents – a group which organizations typically struggled engaging. The comic conveys key COVID-19 preventative behaviours, including how to effectively wash your hands and celebrates positive behaviours.



Image 9: Cars with speakerphones accompanied by drama groups. Source: [Hygiene Hub](#)

Save the Children's engagement focused on addressing misinformation through face-to-face focus group discussions (FGDs) and using community perception trackers. Tracking and responding to community perceptions played a major role in Oxfam and ACF's COVID-19 response in [Lebanon](#) and [Zimbabwe](#) respectively, and more broadly by the [Collective Service](#). For Oxfam, proactive listening and engagement with communities provided a more accurate picture of "real-time" perceptions and the team adapted approaches to disseminate information and raise awareness of preventative behaviours. Interventions entailed regular videos and voice notes through WhatsApp, information sessions, the appointment of community COVID-19 focal points and supporting Syrian refugees with registration and access to mobile vaccine clinics. Meanwhile, UNICEF mobilised cars with loudspeakers accompanied by 'drama groups' dressed in costumes, to promote preventative behaviours, engage children and overcome one of the greatest challenges – fear.

In Indonesia, routine immunization including COVID-19 is a pre-requisite for teaching in schools. GIZ adapted their Massive Open Online Course (MOOC) to include pandemic preparedness and response, supported with effective management of WinS in Indonesia and the Philippines, which includes a component on COVID-19 preventative behaviours and vaccines. During development, the main challenge was ensuring the self-directed material was engaging enough – they addressed this through incorporating videos, surveys and forums. The MOOC has been accessed by some 65,000-teaching staff so far and a recent evaluation survey with 26,000 people found that 79.3% rated the course as 'excellent'.

To date, Amref have trained over 60,000 community health volunteers (CHVs) across 10 counties in Kenya through the [Leap mHealth learning platform](#), a phone-based learning platform to facilitate remote training of CHVs on COVID-19. The platform uses two key mobile phone technologies, simple text messages and Interactive Voice Recordings (IVR) to provide CHVs with information and two-way dialogue about COVID-19. Used in the past to deliver tuberculosis and malaria programmes, the platform equipped CHVs with COVID-19 knowledge and enabled peer-to-peer learning to promote hygiene preventative behaviours in communities.



Action Point 7

- To empower communities to adhere to hygiene preventative behaviours and overcome COVID-19 fatigue, community engagement approaches must be informed by thorough pre-existing and or new research which includes evaluation of trusted and appropriate delivery channels. Hygiene behaviour campaigns must be tailored to local populations and use multiple channels to disseminate creative, nuanced and positive messages that promote community spirit and collective action.

Case study 2: Amref's experience Strengthening Capacities of Local Demand and Supply Actors for Hygiene in Kenya

Context:

The project was conducted in rural and peri-urban in communities six Kenyan counties, characterised by inadequate WASH standards (20% lack access to basic hygiene and sanitation), exacerbated by rapid urbanization.

Design:

The department of Public Health and Sanitation and Trade and Cooperatives led the project. During design, they engaged local WASH actors to identify challenges in hygiene promotion and access to supplies. Next, they mapped WASH access to determine study settings and to shape the development of demand and supply strategy for hygiene.

Intervention:

Capacity strengthening targeted a) 240 hygiene promoters on creating infrastructure demand through health and hygiene promotion and b) 180 local artisans (e.g., plumbers) on meeting growing supply demands. Artisans learnt how to design and build handwashing facilities for households and institutions for single or multiple users. They also learnt about behaviour

change theories. Hygiene promoter training included learning about appropriate HH facilities for different contexts and persuasive marketing. In both groups, the roles of actors were defined, and participants were introduced to government officers in their jurisdiction. Hygiene promoters conducted one-to-one community engagement (e.g., households, schools, local businesses), providing information on purchasing handwashing facilities, including costing, and linked interested parties with artisans. The intervention used a self-financing model and facilities were designed to be low-cost and use local materials.



Image 10: Well building demonstration.

[Source: Amref](#)

Monitoring:

Community health volunteers (CHVs) conducted monthly data collection using the Ministry of Health's paper-based tool and reports were shared with supervisors, who collated data and shared it with the Kenyan Health Information Unit for cleaning and entry into the District Health Information System.

Successes:

Collaboration between actors and opportunities (skill development and sharing) for local youth and women, resulting in economic empowerment.

Challenges:

Limited ability of households/institutions to pay for infrastructure due to competing financial obligations. In response, hygiene promoters encouraged service users to harness local financing mechanisms (e.g., women's groups and local artisans) and government officers advocated for hygiene funding. Finally, the DHIS2 does not collect data aligned with the JMP, so Amref are working with UNICEF and the MoH to address this.

↶ 2.8 Service delivery and behaviour change

Lesson 8: Knowledge alone does not enable sustainable behaviour change. It is a dynamic and iterative process that needs to address determinants of behaviour and interventions need to be community led based on capability, opportunity and motivation.

Effective [service delivery and behaviour change](#) is key in ensuring that COVID-19 preventative behaviours are adopted. Effective responses are characterized by ample coverage and post-implementation support, institutional and community capacity strengthening and the use of multiple, tailored touch points.

One of the most significant challenges was that responses typically prioritized hardware over behaviour change, contributing to the awareness-action gap. Even when behaviour change interventions were implemented, they were not always tailored, and theory based. There was also a misconception that because SARS-CoV-2 was a novel pathogen, we had to reinvent the wheel. Moreover, long-term investments in financial and human resource were typically lacking. Gaps in water access due to water scarcity and or insufficient durable water infrastructure also impeded HH interventions. Market access and affordability of soap was also an issue.

Actors overcame these challenges through collaborating closely with other actors and adopting novel approaches to service delivery and behaviour change interventions. See below for some examples.

- 🗣 In Colombia, UNICEF launched a [hygiene promotion programme](#) during the pandemic which targeted refugees and IDPs and consisted of 1) increasing access to and use of hygiene products 2) disseminating key messages 3) ensuring information is accurate and current and 4) seeking feedback from the IDPs and refugees as the pandemic evolved. Throughout, there



Image 11: A woman hand washing whilst collecting her family hygiene kit. Source: [Hygiene Hub](#)

was an emphasis on mounting a progressive and flexible response which was tailored to the populations needs. Communication with affected populations was central to the programme which involved conducting detailed needs assessments in different territories, co-designing messaging, adapting communication channels and materials to local contexts (e.g., using local animals from different territories as a point of reference for illustrating physical distancing measures – “stay two chigüiros apart”) and actively engaging leaders of indigenous groups.



Image 12: Hygiene promotion messages on bread packaging. Source: [Hygiene Hub](#)



Image 13: WaterAid’s Handwashing on Wheels. Source: [Hygiene Hub](#)

WaterAid Bangladesh addressed gaps in public handwashing facilities and behaviour reminders in Dhaka, through launching [Handwashing on Wheels](#); a mobile handwashing unit for daily commuters. The units visited key public places and strengthened behaviour change, through providing access to hygiene facilities. Health promoters attracted users with speakers and tablets displaying COVID-19 awareness messages.

In Syria, Save the Children collaborated with an organization who deliver daily bundles of bread to incorporate hygiene promotion messages on the packaging.



Action Point 8

- Prioritise the behaviour change dimension of WASH interventions through implementing tailored, immediate to long-term interventions which are embedded in [behavioural frameworks](#). This includes investing resources to identify which behavioural determinants to target and how.

2.9 Monitoring

Lesson 9: Disease outbreak responses need government-owned monitoring systems which collect reliable, trusted, and timely data aligned with national and global standards. This will achieve sustainable, adaptable systems which support evidence-based learning and accountability.

Robust [monitoring](#) systems are vital to any disease outbreak response, as they support coordinated planning, adaptability, evidence-based decision making, accountability and community empowerment. Monitoring should begin prior to implementation, continue after programme completion and demonstrate learning.

Challenges included difficulties attributing engagement to behaviour change (exacerbated by remote data collection methods), scalability and sustainability. Short-sighted responses (at least initially) prioritised acute responses over implementing sustainable monitoring systems, culminating in inadequate data, impeding responses. Moreover, numerous novel frameworks and information synthesis tools, coupled with a desire to use the latest tools, resulted one-off data collection exercises with different baselines, feeding into isolated systems. Whilst the development of institutionalized frameworks, embedded in existing government structures, is key in enhancing sustainability, it is a long, resources intensive process which requires sustained political will and close collaboration with numerous actors. Similarly, updating national indicators to align with international standards requires coordination and buy-in and from all stakeholders, making it time consuming.

Actors overcame challenges through collaborating with local actors, strengthening local capacity, developing improved indicators and creative, community-led data collection systems. See below for some examples.



UNICEF supported the Indonesian government to launch [3M](#), a national COVID-19 monitoring system. The monitoring system harnessed a network of 30,000 volunteers (rewarded with mobile credit) who were trained via WhatsApp to collect data on hand hygiene (HH), mask usage and physical distancing behaviours. Volunteers conducted anonymous structured observations at key locations (e.g., mosques and markets), which entailed completing a short survey on the behaviours of the first ten people entering the location and whether there was an enabling environment e.g., sufficient HH infrastructure and physical distancing measures in place. Monitoring data illustrated low rates of HH, which the government addressed through improving handwashing infrastructure.



WaterAid conducted [mid-term rapid assessments](#) in 8 countries midway through the pandemic to assess the ongoing effect of their hygiene programmes and identify changes needed for future programmes. During the second phase of their HBCC2 response, they expanded baseline and endline evaluations to include assessments of enacted behaviours (including hygiene behaviour and vaccination) and functionality of public handwashing facilities. WaterAid also conduct 'Post-Implementation Monitoring Surveys' (PIMS) to understand the extent to which service delivery and behaviour change

interventions continue to deliver benefits post-implementation. PIMS include questions on water point functionality, reliability, perceived water quality, how water supplies are managed, availability of external technical and financial support and availability. The surveys are conducted every 5 years (the length of their country programme strategy cycle), typically at the mid-point of the strategic cycle or at the end point, to ensure results are used to adapt strategies or plan new ones. They also look back at a representative sample of the work they have done up to 10 years earlier. The IRC also conduct similar sustainability checks.



Action Point 9

- Ensure that monitoring systems are integrated into national structures and provide local capacity strengthening if required. If indicators do not align with national standards (including disaggregation), work with governments, JMP and UNICEF to update them. Integrate quality validation measures and where possible, avoid self-reported data. Depending on whether quality or coverage are priority, involve communities in data collection to strengthen coverage and adherence (at potential detriment to the quality). Generate evidence to inform current and future programmes and assess effectiveness.



2.10 Accountability and regulation

Lesson 10: It is essential that WASH and hygiene behaviour programmes are accountable to affected populations, governments and donors, and that programmes align with national and international regulations.

[Accountability and regulation](#) are characterised by mutual accountability from governments and actors, institutionalised accountability mechanisms which harness feedback to inform programmes, accountability of duty bearers to civil society and operationalisation of national WASH guidelines.

Challenges included corruption, inadequate accountability in fragile contexts, insufficient resource management and [mistrust](#) among key national stakeholders. Moreover, because inadequate regulation and accountability is typically due to political representation and judicial processes, it can be difficult to address. Some programmes were also unresponsive to certain communities (e.g., informal settlements), resulting in inequitable responses. Everchanging government priorities and regulations and unclear roles and responsibilities also hindered programmes, as did the short-sighted approach to the pandemic.

Actors strengthened accountability and regulation through investing in formative research, designing creative and accessible remote solutions, aligning programmes with government regulations, and implementing novel tools to strengthen accountability. See below for some examples.



Formative research is key in ensuring that programmes are responsive to the needs of affected populations – a central component of accountability. BBC Media Action conduct formative research to understand barriers and drivers of behaviour and they pre-test all content to ensure it resonates with audiences. During the HBCC project, they conducted annual reviews which

culminated in learning briefs to aid future research. Feedback mechanisms are crucial in promoting accountability and participation; during their project with [Afghan refugees](#), World Vision introduced in-person helpdesks at hygiene kit distribution sites, phone hotlines and complaints boxes. Others arranged forums where key stakeholders could be consulted and engaged throughout the programme cycle. Some organizations relied on informal mechanisms with feedback collected via anecdotal evidence from staff delivering interventions, or from FGDs during specific projects or communicate with the education sector on a top-level basis.

It is also important to strengthen accountability mechanisms for O&M of facilities; for instance, WaterAid used the 'Who Does What' tool to agree roles and responsibilities for O&M of hand-washing facilities e.g., whose job is it to clean? Whose job is it to purchase soap? Whose job is it to do repairs? This tool illustrates that accountability can be straightforward, quick, and practical.

Accountability and regulation to governments is also crucial. GIZ had to adapt their vaccine hesitancy survey in response to changing government guidelines, shifting to a general survey on routine immunization and adapting their campaign to align with the national programme. Similarly, when it became clear that COVID-19 was less of government priority with the cases and death rates subsiding at the national and global level, they adapted their MOOC for teachers to be on pandemic preparedness and IPC more generally. As illustrated, a strong system requires a driver from government to make them align.

Accountability and regulation to donors is also important; the WHO in partnership with UNICEF and WaterAid developed the [Hygiene Acceleration Framework Tool \(HHAFT\)](#) as part of the HH4A initiative. The tool tracks the process that governments have undergone to develop and implement plans and assesses the quality using a common framework. So far 12 countries have adapted the tool - the dashboard can be viewed [here](#). The tool identifies challenges, opportunities and priority actions for driving progress and investment towards universal HH. In addition to the tool, the WHO have commissioned several systematic reviews on HH behaviour to underpin recommendations for forthcoming guidelines.



Image 14: HAAFT dashboard of global progress. Source: [HH4A](#)

Action Point 10

- Ensure that accountability and regulation are embedded in organisational processes from the get-go. This includes using [accountability frameworks](#), regulatory frameworks and capacity strengthening regulatory actors and includes ensuring accountability for sustainability. Strengthen accountability to affected populations through inclusive feedback structures and promoting two-way communication, with a focus on engaging people who may be more vulnerable to COVID-19.

3

Cross-cutting challenges and recommendations

Below, we synthesise cross-cutting challenges and make clear recommendations for how to address them when designing and implementing WASH system strengthening activities for hygiene behaviour programmes.

1. Short-term outlook

Misalignment between acute outbreak response and long-term outlook, resulting in unsustainable responses - a tendency for actors and donors to prioritise timely, short-term responses over focusing on sustainability and resilience, impeding system strengthening efforts across the WASH system and contributing to the lack of system strengthening visibility in general.

Recommendation:

Broaden efforts to focus on building sustainable, government-led programmes with resilience to future outbreaks and climate change, embedded in a systems approach. Where possible, draw on existing structures (including local business and service providers) and strategies and harness local staff and community volunteers to increase reach, sustainability and local ownership.

2. Awareness-action gap

Vaccine hesitancy and COVID-19 fatigue, fuelled by misinformation, inadequately designed behaviour change interventions and challenges associated with remote engagement, feeding into overarching issue of behavioural intention-action gaps, as well as insufficient engagement of youths.

Recommendation:

Embed interventions in [behaviour change theories](#), invest in using pre-existing data sets and conducting formative research, use multiple channels and deliver interventions at a high frequency and intensity, include positive motivational content/assets supported by engaging activities, and tailor to specific groups and contexts. Use a mix of face to face and low-cost learning platforms to reach wider populations and ensure material is engaging through using videos, radio, TV, interactive voice recordings (IVR) or WhatsApp peer-to-peer learning groups. Always ensure that interventions and communication channels are tailored to specific populations.

3. Financing

Numerous financing challenges, including unreliable and inflexible donor funding, a lack of prioritisation and funding for the WASH and more specifically for hygiene as a standalone, insufficient capacity and over complex costing tools, as well as a tendency for funds to be reallocated without close follow-up.

Recommendation:

The cylindrical, context-specific nature of system strengthening requires an adaptive approach and flexible funding - advocate for flexible donor funding and investment in hygiene as an equal to water and sanitation in WASH or more. Support mobilisation of government funds. Focus on assessing financial capacity, building technical financing skills and implementing simple financing tools.

4. External context

External challenges, including climate change, economic crises, political dynamics and humanitarian crises, causing logistical challenges, market variations in prices and availability of key basic needs commodities and shifting priorities and budgets.

Recommendation:

Continue focusing on building sustainable and resilient systems, integrate COVID-19 efforts with other parallel emergencies, provide capacity strengthening on using epidemiological, climate change and market monitoring data.

5. Monitoring and evaluation

Lack of harmonised monitoring and technical capacity – an excess of novel monitoring tools and frameworks, resulting in a lack of harmonised efforts and generalisable data. Additionally, not all national indicators comply with JMP and the process of updating them is convoluted and lengthy. Finally, there is a lack of local data management capacity (data collection and analysis) in some settings.

Recommendation:

JMP and other relevant stakeholders should develop and support countries to achieve harmonised monitoring systems which require relatively low technical capacity and collect disaggregated data, as well as implementing cross-country learning initiatives to deliver capacity strengthening. For hygiene, JMP should consider introducing feasible indicators beyond facilities as these proxy outputs do not necessarily reflect behaviour.

6. Shared vision

Lack of collective goal and vision amongst governments, actors and affected communities, all with different priorities and budgets, being driven by inadequate stakeholder coordination.

Recommendation:

Harness the 10 building blocks of the WASH system frameworks presented by WaterAid to develop a collective goal and vision amongst all stakeholders. Ensure a diverse range of stakeholders, including groups who might be particularly vulnerable to COVID-19. Systems thinking puts people on the same page, but strengthening approaches must balance agility and practicality – the need for long-term strategic planning with the need to implement change quickly.

7. Unsustainable infrastructure

Installing and maintaining sustainable hygiene infrastructure, due to inadequate O&M training and SOPs, a lack of clear roles and responsibilities, inadequate water supply and a desire for expensive or temporary infrastructure.

Recommendation:

Develop clear roles and responsibilities supported at the local and national level with an O&M plan, obtain buy-in from utilities and local artisans and provide capacity strengthening to respond to demand, draw on local resources/markets and use permanent or semi-permanent infrastructure.

8. Inclusion

Inclusion is not being prioritised in a compelling way, especially those with limited access to remote communication channels, infrastructure and markets.

Recommendation:

Inclusion structures must be embedded in programme design, including initial mapping and needs assessments, and key groups must be engaged throughout, including in design of infrastructure and accessibility audits must be conducted to ensure that infrastructure is inclusive. Disaggregated data must be collected, and representative groups should be engaged to reach populations with appropriate interventions.

9. Coordination and collaboration

Numerous coordination and collaboration challenges within and between governments and key actors, including navigating power balances and political dynamics, inadequate prioritisation of wider collaborations through sector/cluster and taskforce meetings, a lack of clear roles and responsibilities, in

part due to absence of clear guidelines and SOPs and competing priorities and budgets.

Recommendation:

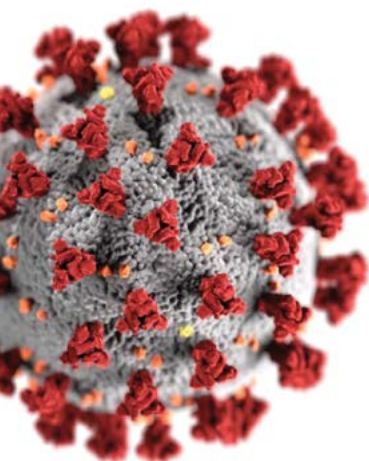
Focussed efforts and structures like TWGs are key to building rapport with a diverse range of stakeholders to develop guidelines and SOPs which clearly outline roles and responsibilities. To achieve efficient TWGs, ensure working groups embed structural processes (e.g., elect leader) and encourage engagement with other key collaborative groups, such as sectors/clusters and taskforces. Encourage joint sector reviews and monitoring. Additionally, support engagement with cross-country learning and focus on obtaining buy-in from government.

10. Government leadership

Challenges of strengthening government leadership, including delays due to bureaucratic processes and review of materials, stretched capacities and SOPs/guidelines, aligning priorities and navigating playing a facilitative role, but also expressing expert opinions when you believe that mistakes are being made.

Recommendation:

To achieve long-term change, sustainability and local ownership, national governments and organisations need to be in the driving seat – international actors should play a facilitative role, supporting national actors to identify weaknesses and solutions which harness local systems and actors. Gauging absorptive capacity is also vital – programmes must be realistic and align with local capacities.



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