# THE CASE FOR SDG 6 IN A POST-COVID WORLD

How targeted investment in water and sanitation can boost resilience







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## Summary



Safe, adequate water and sanitation are essential for preventing illnesses and disease that can affect people's quality of life and their ability to contribute to societies and economies as they would otherwise wish to. COVID-19 has confirmed the vital importance of water, sanitation and hygiene (WASH) and their role in supporting resilience. At the height of the crisis, while respiratory hygiene was deemed critical in stemming transmission of the virus, handwashing with soap was also vital, especially in healthcare settings. In the longer term, where the re-opening of public spaces (such as schools and businesses) became a priority, handwashing and hygiene – made possible via adequate water supply and sanitation services – were prerequisites for a return to normal life.

#### WASH as a foundation for the SDGs

Not all societies were affected by COVID-19 in the same way. In developing countries and fragile contexts, disease control and prevention were severely compromised, especially in locations where WASH services were lacking. Water and sanitation are not only fundamental requirements of a resilient, functioning society, they are also human rights, recognised by the United Nations (UN) General Assembly.<sup>1</sup>

The pledge to 'leave no one behind' was also recognised in UN Sustainable Development Goal 6 (SDG 6) which calls for universal and equitable access to safe and affordable drinking water, and adequate, equitable sanitation and hygiene for all. SDG 6 has been shown to be critical for achieving many other SDGs – across health, education, poverty, and more. An underlying lack of WASH resilience is also a significant concern for many businesses, exposing them to vulnerability and inhibiting economic growth. As a crucial part of the global economic system, businesses must work with a range of stakeholders to highlight risks to economies and the societies they impact.

Hygiene and handwashing with soap, enabled by reliable water and sanitation services, are indispensable foundations for building resilience to a range of societal stresses and hazards.

## A wake-up call for WASH?

It could be assumed that COVID-19 and the threat of future health crises might have been a wake-up call, renewing commitment to SDG 6 through bold, new and targeted funding for WASH, but figures indicate this has not been the case. Investment is still lacking, despite the fact that WASH has proven its value in manifold ways: improving resilience during the COVID-19 pandemic, strengthening preparedness for future pandemics, and driving a multitude of wider socioeconomic benefits for day-to-day life.<sup>2</sup> During the 2020-2022 peak of COVID-19, humanitarian WASH needs were never more than 30% funded and in 2023, only 8.6% of funding needs have been met.<sup>3</sup>

The results of this chronic underfunding are clear: a UN/World Health Organization (WHO) 2022 analysis of WASH across 121 countries shows that only 45% of countries are on track to achieve drinking water coverage and only 25% are on track for sanitation targets. We do not have to wait for the next pandemic to realise the consequences of this failure – we are now seeing significant outbreaks of cholera in areas where water and sanitation infrastructure has been eroded by underinvestment. This includes places facing instability like Syria (due to conflict and further exacerbated by the recent devastating earthquake) and Lebanon (due to economic collapse), but also places like Malawi where progress towards SDG 6 has long been lacking.

In some areas, we are going backwards – past progress on cholera reduction has been lost.<sup>6</sup> COVID-19 should have been the moment to identify and redouble investment in places with (a) poor performance on SDG 6 and (b) increased potential for disease outbreaks based on endemic disease prevalence or increased public health risks; but this has not been the case.<sup>7</sup>

The share of total Overseas Development Assistance (ODA) disbursements – humanitarian and longer-term

development – allocated to WASH from all donors stagnated around 4% between 2010 and 2019<sup>8</sup> and aid for water and sanitation decreased by 5.6% between 2017 and 2020.<sup>9</sup>

## Making the case for renewed commitment

Unilever, Oxfam and their partners are key players in this space – Unilever as a business leader with a century-long history of working in hygiene and Oxfam as a leading non-government organisation (NGO) working in WASH in disaster response and building resilience of vulnerable communities.

Building on a long history of partnership in water and hygiene, Unilever and Oxfam have launched joint research in the lead-up to the UN Conference on Water 2023. This research focuses on the ways increased investment in sustainable WASH access can help to improve preparedness towards future pandemics, thereby minimising the global economic and societal impact of future disease outbreaks.

This has been done via interviews and surveys with different stakeholders across a range of contexts, including fragile and conflict-affected, and draws particularly on Oxfam and Unilever's own experiences in responding to COVID-19 in Bangladesh.

This paper summarises that research and concludes that a renewed commitment is needed by

governments to create an enabling environment for businesses and NGOs to contribute towards achieving the vision of SDG 6. This enabling environment must be one of strong, coordinated national plans and policies for long-term investment in sustainable WASH services and behaviour change programmes.

There is a need for professional, integrated, reliable and well-maintained water and sanitation systems alongside public health approaches that create effective, lasting behaviour change in communities. In the course of this research and beyond, Unilever and Oxfam have seen that that businesses, NGOs and other local partners can only go so far towards realising SDG 6 if sustainable WASH systems and effective behaviour change measures do not exist.

Without radical investment that considers the unique vulnerabilities of communities impacted by climate, conflict and deepening inequality, investments in WASH will not suffice to reduce people's exposure to the threats of future pandemics. And without this consideration, other stakeholders – businesses and NGOs and their partners, which can include local governments, civil society and small and mediumsized enterprises – will struggle to contribute to building resilient water and sanitation systems and to supporting effective behaviour change. Subsequently, this will hamper global efforts towards fair, resilient, flourishing societies and economies in which responsible business can also thrive.



Unilever and Oxfam call on leaders to urgently commit to a resilient future by reaffirming their commitment to SDG 6 through bold, new, long-term funding for systems-level water and sanitation services accompanied by effective hygiene behaviour change, with adaptive funding conditions. A radical increase in funding will enable businesses to work in partnership with governments and other segments of society, including civil society, to redouble progress towards SDG 6.

## 1. Introduction

## The link between water, sanitation and hygiene (WASH) and resilience

The COVID-19 pandemic was a new global challenge that emerged in a world of rising crises. Like climate change, it tested resilience on many different levels and across systems – economic, public health and social protection. Countries' preparedness for, and resilience to, the impacts of the pandemic were influenced by countless factors, but hand hygiene, enabled by robust water and sanitation infrastructure and services, received unprecedented recognition as one of the core basic needs for human survival and resilience. In many places, decades of under-resourcing of water and sanitation systems and society-level hygiene behaviour change seriously exacerbated both health and socioeconomic outcomes – with sustainable WASH being a major contributing factor for disease prevention.

The UN Sustainable Development Goal 6 (SDG 6), which calls for universal and equitable access to safe and affordable drinking water and adequate, equitable sanitation and hygiene for all, argues that WASH underpins poverty and hunger reduction, economic growth and environmental sustainability.

Water and sanitation infrastructure also underpins system-wide resilience in an economy, improving a country's ability to adapt and mitigate the risks of both health emergencies and climate change. Remove sustainable WASH provision from the equation and efforts to move ahead with other socioeconomic priorities become much more difficult, particularly in times of stress.

The segments of society at greatest risk of contracting infectious diseases in future are those that lack these basic services: in 2020, 26% of the global population lacked safely managed drinking water, 46% of the global population lacked safely managed sanitation, and 29% of the global population did not have access at home to a handwashing facility with soap and water. 12

### Why investment in WASH makes sense

In the longer term, societal level resilience is an important outcome of WASH investment. In the context of the COVID-19 pandemic, in locations where there was a lack of WASH resilience, health outcomes were poorer. Low access to water and sanitation services has been shown to increase the probability of having a high lower respiratory infection (LRI) mortality. If Improving infrastructure resilience, particularly in water and sanitation, can have broad, economy-wide benefits through reducing the impact of high-risk events. If Effective hygiene behaviour is also imperative for improving health outcomes and societal resilience – for example, simply providing access to clean water and soap does not automatically mean that hand hygiene will improve, and even knowledge of handwashing does not necessarily translate to action. Good behaviours around water use and solid waste management also contribute significantly to reducing epidemic risk factors and longer-term resilience against waterborne diseases.

Studies have shown that investments in comprehensive packages of water and sanitation services have significant benefits for global health. The Disability Adjusted Life Year (DALY) is the primary metric used by the World Health Organization (WHO) to assess the global burden of disease and combines the burden of mortality and morbidity (non-fatal health problems) into a single number. One DALY represents the loss of the equivalent of one year of full health, where people are not able or empowered to contribute fully to society in the way they would choose. It is estimated that globally, over 31.9 million DALYs were lost between the start of the COVID-19 pandemic in January 2020 and 30th April 2021. The associated economic losses were \$579 bn in the same period. Previous studies have found that improving water and sanitation at a global level is one of the most cost-effective ways of averting DALYs: The cost of averting one DALY through hygiene promotion

Without sustainable WASH provision, efforts to move ahead with other socioeconomic priorities are more difficult.
The most vulnerable segments of society are those that lack basic services. In 2020:



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of the global population did not have access at home to a handwashing facility with soap and water (including handwashing) is just \$3.35<sup>19</sup>, and disinfection of drinking water costs \$20 per DALY averted.<sup>20</sup> In contrast, for example, the cost-effectiveness of healthcare interventions is very different and can be very poor, sometimes costing thousands of dollars per DALY averted.<sup>21</sup> Prioritising WASH interventions can therefore be one of the most cost-effective ways of creating a healthier, resilient society with greater productive years overall.

Understanding the business perspective

Businesses themselves value resilience as a major asset to improve people's health and well-being. Resilience enables businesses to continue to deliver goods and services, contributing to a healthy, economically viable society. An underlying lack of WASH resilience is thus a significant concern for many businesses, exposing them to vulnerability and inhibiting economic growth.

Investment in WASH can be an effective means of achieving transformative economic growth in the wake of COVID-19. WHO estimates that the total economic losses from lower/middle income countries associated with inadequate WASH services amount to \$260 bn annually – which is on average 1.5% of GDP.<sup>22</sup>

A joint study by WaterAid, Diageo, Gap Inc., HSBC, Twinings and Ekaterra (then part of Unilever) found that investing in WASH reduced staff absences by 21%, reduced business medical incidents by 22% and increased overall productivity by 1%. The study also identified a return on investment (ROI) of \$5.11 for every \$1 invested in WASH during the project period, rising to a projected \$15.59 within 10 years.<sup>23</sup>

This ROI can have a multiplier effect on the economy, leading to increases in wages, consumption and creating additional economic opportunities. During the acute phase of a pandemic, WASH investment can help tackle unemployment rates by boosting short term health outcomes; in the longer term, it can drive healthier, more productive, more resilient workforces which leads in turn to more sustainable economic growth and further investment.

Gender equity is also improved when women can access safe and appropriate water and sanitation facilities, while also reducing the time burden for WASH activities that is disproportionately shouldered by women.<sup>24</sup>

During COVID-19, the business case for investing in WASH became clear. Mitigating the spread of the virus through investment in WASH facilities across offices, factories and supplier sites enabled companies to stabilise their supply chain – by reducing disruption to workforce health, productivity and livelihoods.

The resulting cost savings and supply security are of benefit to both producers and consumers and will in turn increase economic efficiency.<sup>25</sup> In the longer term, investing in WASH in the supply chain represents an investment into market security and economic resilience, due to the multiplier effect of increased wages, consumption and additional economic opportunities.

However, even where businesses are investing in their own supply chains, increased government investment in public WASH services is necessary to support the communities in and around supply chains, so employees have access to clean water and sanitation in their homes and neighbourhoods.

As we will see below in the Bangladesh case, this wider WASH resilience is particularly important as so many people are employed in the informal sector, without direct access to employer sites, but still integral to the functioning of the global economy.

Leading estimates have shown that universal WASH also offers excellent value for money in achieving a range of other SDGs. Spending \$1 on WASH leads to an estimated \$45 worth of social, economic and environmental benefit through reduction in child malnutrition (SDG2.2), <sup>26</sup> where inadequate WASH leads to approximately 50% of all malnutrition cases. <sup>27</sup> And \$1 spent on WASH leads to \$2 worth of progress towards climate change adaptation, because of the resilience to climate risk that comes from clean water and better hygiene. <sup>28</sup>

Poor quality water and sanitation services result in huge economic losses - but investing in WASH can help drive transformative economic growth.



Total economic losses from lower/middle income countries associated with inadequate WASH services amounts to

\$260 BN ANNUALLY



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## \$5.11 FOR EVERY \$1 INVESTED IN WASH

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## 2. The bold investment needed to boost resilience



The implementation of ambitious targets, including the required human capacity, institution building and infrastructure to realise safely managed WASH, demands ambitious levels of funding, and WASH plans are largely underfunded.<sup>29</sup>

## Risks of underinvestment for the most vulnerable

Growing risks and hazards – particularly related to climate change and health crises – will disproportionately affect the most vulnerable and intensify the negative impact of underinvestment in WASH.

In light of this, and knowing that reliable WASH brings significant benefits, countries must put clear national WASH plans in place and commit public finances to support institutions, infrastructure and services to create the enabling environment needed to scale up SDG 6. Worsening socioeconomic and health inequities are not only making safely managed water and sanitation more important, but also more complex, costly and demanding; it therefore becomes even more crucial to understand the risks of underinvestment and opportunities for investment in WASH.

'Safely managed' WASH takes account of accessibility, availability and quality of drinking water and sanitation infrastructure, as well as a focus on hygiene behaviour as a critical element of resilience.

For water and sanitation, this means being accessible on the premises whenever needed – i.e., that services must be resilient, sustainable and available to everyone. For hygiene behaviour change, this means efforts are effective, locally applicable, and sustained even outside key crisis moments.

The global impact of COVID-19 should have been a turning point representing a radical and long-term increase in the quantity and quality of investment in WASH, particularly in terms of Overseas Development Assistance (ODA). This was sadly not the case. WHO/UN Water's Global Analysis and Assessment of Sanitation and Drinking-Water Report 2022 (GLAAS)

Report 2022), <sup>30</sup> the Gaps in WASH in Humanitarian Response: 2021 Update (2021 Gap Analysis) <sup>31</sup> by Tufts University with support from Oxfam, the Global WASH Cluster (GWC), ELRHA<sup>32</sup> and others, and the tracking of the investments into humanitarian WASH appeals from the UN Financial Tracking Service (FTS), <sup>33</sup> all suggest that the world has not taken COVID-19 as the wake-up call needed in terms of investment in WASH or commitment to achieving SDG 6.

### Funding gaps at the time of greatest need

During the crucial COVID-19 peak of 2020-2022, global humanitarian funding needs were never met by more than 56% of the total in any given year, dropping to a current 9.2% in 2023 despite a negligible increase in overall need – a clear indication that multi-year, predictable funding focused on long-term solutions to crises is simply not the global humanitarian approach. For WASH specifically, the situation is even worse – WASH funding appeals during the COVID-19 peak were never more than 30% funded, and today in 2023 only 8.6% of funding needs have so far been met.<sup>34</sup>

The 2021 Gap Analysis – the most comprehensive global data collection of its kind – gathered input from across 35 countries and over 2,400 WASH practitioners and people affected by crises. Its 'cardinal and cross-cutting conclusion' is that people affected by crises 'demand stronger delivery of services so they can have greater access to adequate quality water, sanitation, hygiene and solid waste management', and that this crucial gap exists within a humanitarian sector characterised by inadequate funding.<sup>35</sup>

Beyond humanitarian funding, it is also clear that public spending on WASH needs to be increased through greater national government allocations. UNICEF's analysis of national budgets in Eastern

and Southern Africa shows that in many places, government expenditure on WASH is not only very low in relation to overall national spend, but also as a percentage of GDP<sup>36</sup> – from 0.1% of GDP in Malawi<sup>37</sup> to 0.6% of GDP in Kenya<sup>38</sup> in recent years.

However even where national government spending must be increased, inequalities inherent within the global system have left many low- and middle-income countries without the vital resources to ensure SDG 6, and ODA is needed to deliver not only short-term relief but the long-term goal to build back better in fragile contexts. Most countries have insufficient financial resources to implement their own national plans, and although ODA has increased modestly, it is nowhere near enough.

The GLAAS Report 2022 across 121 countries shows that over 75% countries have insufficient funding for national WASH plans even where national government WASH budgets have increased at an average rate of 5% per year between 2018/2019 and 2021/2022.<sup>39</sup>

The world's WASH systems were not sufficiently prepared for the impact of the COVID-19 pandemic. Although we know this in hindsight, it is vital that we learn from this to improve preparedness for future risks. Ahead of the pandemic, investment in WASH actually fell in 2019-2020<sup>40</sup> and generally shows plateauing or declining investment globally since 2018.<sup>41</sup> The share of total ODA disbursements (humanitarian and longer-term development) allocated towards WASH from all donors stagnated around 4% between 2010 and 2019<sup>42</sup> and aid for water and sanitation decreased by 5.6% between 2017 and 2020.<sup>43</sup>

The impact of this chronic underinvestment on progress towards SDG 6 is also clear in the GLAAS findings<sup>44</sup> coming out of the COVID-19 crisis:

- Only 45% of countries are on track to achieve drinking water coverage.
- Only 25% are on track for sanitation targets.

This overwhelming complacency is taking place when financing should be ramped up. According to a recent study by the Organization for Economic Cooperation and Development (OECD), the total capital cost of meeting water supply, sanitation, and hygiene SDGs by 2030 (targets 6.1 and 6.2) is an estimated \$114 bn per year, around three times the current investment levels.<sup>45</sup>

#### The failures of short-sightedness

Even additional investments in WASH from global humanitarian donors during and after COVID-19 were clearly still insufficient to meet global needs, hovering between 20-30% of funding needs met. And they were also not long-term enough to allow for sustainable, systems-level solutions.

The international donor community rightly responded with a rapid release of funds to support water and

sanitation facilities and campaigns on safe COVID-19 hygiene practices, including handwashing. Oxfam and Unilever themselves worked together under the Unilever and UK Government's Foreign, Commonwealth & Development Office (FCDO) Hygiene & Behaviour Change Coalition (HBCC) to provide water and sanitation equipment and handwashing messages to combat COVID-19 in highly fragile contexts (see page 11, Bangladesh case study).

However, most humanitarian donors provide largely short-term funding for WASH, as demonstrated by Oxfam's experience in delivering global programmes in protracted crises<sup>46 47</sup> and the unmistakable and abrupt drop in humanitarian funding commitments that occurs after each yearly cycle.<sup>48</sup> Most humanitarian donors only have funding cycles of 12-18 months, using short-term funding for long-term crises; the OECD makes clear short-term finance can 'increase costs, decrease efficiency, and pose challenges to creating links between humanitarian action and development programming.'<sup>49</sup>

This need for broader, longer-term WASH funding was further exposed during COVID-19, with emergency funding taking place in contexts that often lacked resilient national water and sanitation systems and embedded behaviour change. The notable increase in cholera outbreaks over the last two years makes clear that lasting global resilience has not been built as a result of investments made during the pandemic.<sup>50</sup>

#### Specific needs in fragile contexts

In many of the fragile and conflict-affected contexts in which Oxfam works, where severe risks and hazards are tragically commonplace, there is a particularly high need for investment in sustainable WASH systems, including hygiene behaviour change. The rexample, Oxfam has found in its programmes across the arid and semi-arid lands (ASALs) of East Africa, as well as conflict-affected contexts, that population fluctuations due to climate or conflict-induced migration mean that systems are often overused and resources over-exploited. Lack of water and pasture leads to migration that causes localised conflicts over resources. This heightens the need for resilient, adaptive systems that can flex and expand to accommodate population movement and growth.

In fragile contexts, the funding situation can be even more challenging where investments tend to not only be short term but dependent on conditionalities due to the sensitive political context. In Syria, donor restrictions on long-term system interventions means donors are not willing to invest in sustainable WASH through infrastructure, only emergency WASH. And this is not just a concern for contexts currently categorised as fragile – according to UNICEF, by 2030, 80% of the world's poorest people will reside in 'fragile' states, many of which are off-track to reach SDG 6.

Failing to find effective means to sustainably raise WASH service levels in fragile contexts may mean failing to meet the WASH SDGs.<sup>52</sup>

## A holistic approach: the imperative for hygiene behaviour change

It is essential that investments into water and sanitation infrastructure go hand in hand with hygiene promotion activities. Numerous studies have found that while access to water and sanitation systems and products are essential, the right knowledge and behaviours are crucial to ensure better hygiene as an outcome. Indeed, this is why programmes such as Mum's Magic Hands, a handwashing behaviour change approach jointly developed by Oxfam and Unilever's Lifebuoy soap brand, were created.<sup>53</sup>

There is frequently a knowledge-practice gap where people are aware of and/or report that they

practise certain handwashing behaviours, while observed handwashing practices are very different – this makes it even more critical to understand the behavioural motivators for handwashing and design interventions accordingly.<sup>54</sup>

While handwashing behaviour in particular came into the spotlight during COVID-19, anecdotal evidence provided in surveys and interviews in this study suggested that handwashing behaviours are now frequently reverting back to pre-COVID times, or worse. WHO estimates that of the total investment needed to achieve full coverage of basic WASH services in public health facilities in Least Developed Countries (LDC) by 2030 (from 2021), an estimated \$845 m (just over 10%) of this would be required for hygiene.

It is vital that governments work with the public and private sector to establish the financing and resourcing required to enable a national culture of hand hygiene.



## WASH funding: a snapshot

#### **ODA ALLOCATED TOWARDS WASH**



The world's WASH systems were not sufficiently prepared for the future risk of the COVID-19 pandemic



Investment in WASH fell in 2019-2020 and generally shows plateauing or declining investment globally since 2018



Between 2010 and 2019, the share of total ODA disbursements allocated towards WASH from all donors

## **STAGNATED AT AROUND 4%**



Between 2017 and 2020, aid for water and sanitation

**DECREASED BY 5.6%** 

#### **GLOBAL HUMANITARIAN FUNDING**



Most humanitarian donors have funding cycles of only

**12-18 MONTHS** 

Overall humanitarian funding was never more than



met during the COVID-19 peak of 2020-2022

**IT DROPPED TO 9.2%** in 2023

WASH needs were never more than



funded during the COVID-19 peak of 2020-2022

**ONLY 8.6%** of funding needs have been met in 2023

#### **IMPACT OF UNDERINVESTMENT**

80%

of the world's poorest people will reside in 'fragile' states by 2030, many of which are off track to reach SDG 6 The impact of this chronic underinvestment on progress towards SDG 6 is also clear coming out of the COVID-19 crisis:



of countries are on track to achieve drinking water coverage



are on track for sanitation targets

## 3. Resilience, WASH and COVID-19 – the example of Bangladesh



Resilience is a key consideration in Bangladesh. The country's considerable advancements in access to WASH in recent years are now threatened by a range of setbacks – from climate and weather-related hazards, to water quality issues and poor hygiene behaviours.

Bangladesh's climate vulnerability is amplified as it is the world's largest delta with low and flat topography, and is home to one of the largest refugee camps in the world – where over 1 million Rohingya refugees remain in semi-permanent shelters. The country's infrastructure is poorly adapted to the impacts of climate change.<sup>55</sup>

As the graphic below indicates, in 2017 many of Bangladesh's WASH indicators were below target for achieving SDG 6, particularly around sanitation and hygiene, and progress has been regularly threatened by disasters and crises:<sup>56</sup>



97% of rural and urban populations had at least basic access to drinking water



Sanitation

47% of rural and 51% of urban populations had at least basic access to sanitation facilities



26% of rural and 51% of urban populations had basic access to hygiene facilities Despite these figures, prior to COVID-19 Bangladesh was seen to be a remarkable story of poverty reduction and development and had reached middle income status, on track to graduate from the UN's LDC list in 2026.<sup>57</sup>

However in order to achieve this, according to the World Bank, Bangladesh needs to 'create jobs and employment opportunities through a competitive business environment, increase human capital and build a skilled labour force, build efficient infrastructure and attract private investment'.58

It is inherent (as noted by the World Bank) that addressing vulnerability, building a strong and dynamic economy, and improving risk and resilience to future shocks must also take place.

### An overview of the funding situation

- Development assistance for WASH has been increasing: Bangladesh has had a steady increase in ODA for WASH since 2018.<sup>59</sup> However, like all other sectors, there was a drop in investment at the height of COVID-19 from \$339 m in 2019 to \$274 m in 2020.<sup>60</sup> When it comes to the allocation of the WASH budget, the Government of Bangladesh has made a significant increase of 11.6% from 2007-08 (\$0.31 bn) to 2019-20 (\$1.28 bn)<sup>61</sup> and yet only 4% of ODA is allocated to WASH.<sup>62</sup>
- Humanitarian WASH gaps: As of 2023 the UN and its partners require \$79 m in humanitarian funding to meet the WASH needs alone of 1.2 million people in Cox's Bazar refugee camp, the island of Bhasan Char, and neighbouring communities;63 this appeal for funds is currently only funded at 1.1%.64

- Overall SDG 6 financing: In 2017, Bangladesh published its SDGs Financing Strategy: Bangladesh Perspective, a pioneering study on the country's additional financing needs for achieving the SDGs. The study highlighted that \$11.8 bn (2015-16 constant prices) would be needed in additional funds to achieve SDG 6.55
- Between 2011-2020, Bangladesh's water and sanitation sector received a combined investment of \$4.06 bn but 56.5% of this was given in the form of ODA loans, which will affect Bangladesh's overall debt and ongoing financial resilience. ODA loans are increasingly the predominant method of funding WASH services adding globally to the very real concern of unpayable debt.

## COVID-19: a test of social and economic resilience

Bangladesh's resilience during the COVID-19 pandemic was broadly tested. Not only did the pandemic cause enormous suffering, putting strain on health and economic systems, but resilience was tested further by severe monsoon floods in 2020 and 2021 leading to landslides.

The flooding in 2020 severely reduced WASH service provision, affecting 5.5 million people across the country, and complicated the response and compounding impacts of the COVID-19 pandemic. 
It was estimated that nine months of WASH service disruption during the period in Bangladesh equated to around \$217 m in lost benefits, again underlining the significant economic and societal cost of underinvestment in WASH. 
<sup>69</sup>

A post disaster needs assessment (PDNA) published in July 2020 recorded huge devastation to sanitation infrastructure – 90% of affected regions reported water supply disruption and 93% reported sanitation service disruption. To It would cost \$259 m to restore basic WASH services that were damaged. For millions impacted by the flooding, particularly those displaced, maintaining safe hygiene and practising social distance at this critical time in the country's COVID-19 response was nigh on impossible? while access to healthcare remained extremely limited.

During Unilever's own efforts to install handwashing stations in certain districts, the company realised that entirely new water lines would need to be installed before the new handwashing facilities could be used. The Even where 100% sanitation coverage was achieved (where the level of open defecation is less than 1%), there were challenges to handwashing that could have been avoided by having improved sanitation infrastructure in place. It became clear to Unilever that providing access to a reliable

supply of soap was not sufficient; it would need to be accompanied by a sustainable water supply and improved sanitation infrastructure. Within its own operations in Bangladesh, Unilever quickly prioritised providing hygiene products (soap, sanitisers, facemasks, etc.) for employees to use at work and at home, and ensured access to water and sanitation facilities in the workplace. The result of this effort was that the company's operations in Bangladesh ran full time during the pandemic and were able to continue to provide resilient livelihoods for its workers.

In Bangladesh, the lack of WASH services, impacted by decades of underinvestment in durable, sustainable water supply and sanitation, took place within a wider lens of lack of economic resilience. This underlying lack of system resilience was exposed during COVID-19, creating not only negative health outcomes, but negative economic outcomes. Almost 20 million informal workers in Bangladesh lost their jobs during the pandemic, which compounded the existing food insecurity and precarious livelihoods faced by millions.<sup>74</sup>

UNICEF estimated that the average income of households in Bangladesh could fall by 19% during the crisis, 75 while another UNICEF study found that daily incomes of low-income households in Bangladesh almost immediately fell by 76% once lockdown was introduced in March 2020.76

#### Examples of the WASH response

At the onset of COVID-19, Oxfam and other research participants prioritised ensuring communities' access to safe drinking water and sanitation facilities, as well as improving hygiene practices in line with COVID-19 guidelines. Based on its long experience of working on public hand hygiene campaigns, in January 2020 Unilever's Lifebuoy soap brand was one of the first businesses in Bangladesh to start a mass hygiene communication campaign. Covering more than 60% of the soap market in Bangladesh, Lifebuoy was a recognised and trusted brand well equipped to quickly raise awareness of handwashing as a first line of defence against COVID-19. For the first time ever, Lifebuoy promoted the use of any soap brand, not just its own, in its communications - to highlight to the public that washing hands with any soap would protect them. For both its own ongoing response in Bangladesh and work via local partners and coalitions, Unilever prioritised providing access to handwashing facilities – both soap and handwashing stations - and coupled this with clear messages on the importance of effective handwashing and hygiene behaviours.

During the COVID-19 pandemic, public-private partnerships between companies, NGOs and government were established to have greater

impact and reach. For example, in response to the pandemic, Unilever and FCDO joined forces to form the HBCC to limit the spread of the virus in low- and middle-income countries.<sup>77</sup>

Between March 2020 and December 2021, this public-private partnership reached more than 1.2 billion people across 78 countries with behaviour-change messaging, hygiene products and access to training and education.

In Bangladesh, four partners (BRAC, the International Rescue Committee, Save the Children and UNICEF) worked via the HBCC to change behaviour at scale and create an enabling environment for hygiene behaviours.

The huge scope and the quick deployment of the HBCC programme would not have been possible without the close collaboration of the public and private sectors to help slow the spread of the virus in vulnerable countries.

In this type of collaboration, working with the private sector allowed the development sector to respond quickly, in this case benefitting from the immediate brand recognition of popular hand hygiene products.

Companies benefited from NGOs' long-term understanding of the complexities and accountabilities of humanitarian response and long-term relationships with local partners.

## Lessons from the experience



Resilience must be rooted in government action: Through the experiences in Bangladesh, it was shown that even during an unprecedented global health crisis where WASH impacts were clear, the primary mandate for investment in and coordination of resilient infrastructure and accessible public services still sits with governments. Business can only play a role in supporting that vision.

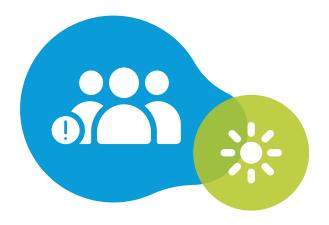


The basics are still lacking: The Government of Bangladesh has clearly taken its need to invest in WASH seriously, with a clear national plan that is mostly funded by Bangladesh itself. However, lack of access to running water and poor sanitation across the country remained a significant barrier to both development organisations and the private sector's attempts to support the COVID-19 response. Despite robust plans in place, it is a huge challenge to acquire sufficient ODA funding for government intervention where national budgets are under-resourced.



More/better/targeted climate resilient WASH infrastructure is needed: Resilient WASH means not only providing services, but services that are durable and sustainable to withstand the impacts of climate change. Severe monsoon floods happening in tandem with COVID-19 demonstrated that services must be robust. Insufficient investment in climate-resilient WASH poses a threat to health, impact livelihoods and overall economy.

## 4. Learning from experiences



Major vulnerabilities related to climate change and health crises will have a greater impact on populations who lack access to sustainable water and sanitation services and effective hygiene approaches.

#### Interconnected vulnerabilities

Widespread threats to social, economic and governance systems will result in a range of different intersecting vulnerabilities across different contexts.

Even within those communities with poor access to WASH solutions, not all people are affected equally. Women and girls suffer disproportionately; the distances they are made to walk to collect water in remote areas significantly increase safety and protection risks, and lack of access to basic services creates huge risks for menstrual health and hygiene. The time spent, primarily by women, on water collection and other WASH-related domestic tasks reduces women's ability to access education, employment, leisure, and political engagement opportunities, a further detriment to both their wellbeing and ability to overcome poverty.

Poorer households that do not have access to suitable healthcare facilities will also disproportionately be affected by an increased disease burden, as increasing water scarcity drives greater exposure to contaminated waters and less water for sanitation. In this way climate change itself will contribute to increasing incidences of diarrhoea and other waterborne diseases. <sup>80</sup> The vast majority of people affected by lack of WASH services are employed in the informal sector <sup>81</sup> which makes up nearly 83% of employment in Africa <sup>82</sup> and includes a high proportion of women. <sup>83</sup>

### The importance of long-term solutions

While solutions like portable handwashing stations are in themselves essential for mitigating the impacts of epidemic diseases like COVID-19 in the short-term, more sustainable solutions are required to achieve SDG 6 by ensuring availability and sustainable management of water and sanitation for all.

Pandemic preparedness is hugely affected by people's sustained access to reliable water and sanitation

services and effective hygiene behaviour approaches, so ongoing investment in sustainable water and sanitation infrastructure and long-term, consistent hygiene behaviour change interventions should be a priority. It is not surprising that two of the top global findings from the 2021 Gap Analysis across over 2,400 WASH practitioners and people in crisis were the need for more WASH funding and for more coordination and collaboration, including stronger governance.84 These WASH needs exist within a complex, interconnected society, the strength of which is only as good as the weakest part of this chain. Every type of stakeholder is affected by and plays a valuable role in the resilience of this system, including businesses, who are themselves important stakeholders and users of WASH infrastructure.

Businesses such as Unilever who have extensive supply chains and consumer products also have a stake in ensuring sustainable access to water, sanitation, and market demand for hygiene products and information. The imperative to act collectively to enhance resilience on a wider scale has never been greater.

More resources are clearly needed. But how can international donors and governments more effectively target increased investment to ensure it creates sustainable infrastructure and sustained hygiene behaviour change?

Water and sanitation infrastructure must be designed with future resilience in mind, and with clear governance models to ensure sustainable operation and maintenance (08M) plans; robust, climateresilient construction; and holistic approaches that combine infrastructure, services, community engagement and behaviour change. UN Water and WHO analysis makes clear that those countries better performing against their national WASH plans

are the countries that have sustained recovery of 08M costs from tariffs paid, competent authorities that carry out key regulatory functions, and human and financial resources in place to implement their WASH plans. Be Unsurprisingly, this analysis aligns with 0xfam's experience of what is needed to ensure resilient, functioning water and sanitation systems in even the most vulnerable of contexts.

## Building in strong and effective governance

The process toward effective, transparent governance, though far from easy or straightforward, recognises that long-term, sustainable solutions require building trust between government, private sector, and local communities, who each have a unique role to play. All over the world, Oxfam has seen first-hand where strong public institutions and national government commitments have helped create the right institutional context to sustain long-term delivery of water and sanitation. Uganda, which hosts over 1.4 million refugees, 87 is currently implementing the Comprehensive Refugee Response Framework (CRRF),88 a key part of the UN's Global Compact on Refugees.89 Under the CRRF, as well as Uganda's National Development Plan III<sup>90</sup> and the Water Sector Plan, 91 Uganda has transitioned the management of water service delivery in communities hosting refugees from humanitarian agencies to Uganda's state-owned water utilities. This has allowed Oxfam to effectively hand over WASH systems serving 46,000 people, to Ugandan government actors (Ministry of Water and Environment, water utilities) who can sustain the systems going forward.

Strong and effective governance models are also key to ensuring the ongoing 08M of water and sanitation infrastructure through financial sustainability and transparency. Well-financed 08M is essential to keep water flowing and sanitation infrastructure functioning for communities, but is often lacking – in Nepal for instance, where only 25% of water supply systems are functioning well, 92 or in Kenya, where two thirds of rural water systems in the ASALs remain severely dysfunctional within 3-5 years of construction. 93 08M plans must be funded sustainably and be supported by governments' leadership, accountability, and regulation 94 as part of their mandate to provide basic services.

In the Ugandan example, Oxfam was able to collaborate with partners and work with communities to agree an affordable tariff to pay for water and to cost a comprehensive 0SM plan before construction even started. In Nepal, Oxfam is collaborating closely with government, private sector, and communities to build a model wherein a water management board is accountable for 0SM of schemes, and made sustainable through regular tariff collection from the community alongside public investment by local government. This is underpinned by a partnership with the Nepalese government's national Department

of Water Supply and Sewerage Management (DWSSM) as well as the Ministry of Water Supply, leveraging further government funds and enabling potential national replication of the model. In Kenya, Oxfam is working closely with the Turkana County government in the ASALs to explore how bundling rural water systems, potentially outsourcing their maintenance to private sector professionals, and crucially aligning financing towards sufficient investment in O&M would be a more cost-efficient approach to keeping water flowing for hard-to-reach communities in this country. 96

## Preparing for future risks

Adaptable, well-maintained infrastructure is even more necessary as the overwhelming impact of climate change is already affecting water scarcity in the most vulnerable places in the world. By 2025 half of the world's population could be living in water stressed areas, 97 and already about 4 billion people, representing nearly two-thirds of the global population, experience severe water scarcity during at least one month of the year.98 The World Bank has found the Middle East and North Africa (MENA) region has the greatest expected economic losses from climate-related water scarcity, estimated at 6-14% of GDP by 2050.99 Increasingly prolonged and frequent droughts in places like the ASALs of Kenya and Uganda are leading to population movements and increased competition over depleting water sources.<sup>100</sup> Any water infrastructure in particular must be designed and built with water scarcity and climatic changes in mind, with the ability to adapt the infrastructure in response to migration and change in water sources.

### Coupling infrastructure with behaviour change

Just as sustainable water and sanitation infrastructure is necessary to sustain effective hygiene behaviours, 101 hygiene behaviour change initiatives themselves must also be embedded in collaborative, systemic approaches — including in schools and early education contexts where children learn lifelong behaviours. Again, there is a clear role for government here.

The 2021 Gap Analysis found 'weak hygiene practice and knowledge' to be one of the most frequently mentioned WASH gaps by both practitioners and people affected by crises worldwide and the most frequently cited gap in the analysis' literature review. Collaboration with governments when designing hygiene behaviour change initiatives is key to ensuring they are sustained in the long-term and can complement, and in turn shape, government strategies. <sup>103</sup>

The COVID-19 Hygiene Hub, funded by the UK Government and the Gates' Foundation, brings together technical experts from around the world to share advice and lessons learned from the pandemic on the most effective approach to hygiene behaviour change; the clear role for NGO-government collaboration and the importance of working alongside governments on long-term hygiene behaviour change messaging were clear learnings not only from COVID-19 but other diseases as well.<sup>104</sup>

## Fit for purpose: flexible, adaptive funding

In addition to emphasising the role for national and local governments, all these approaches also represent a clear path for ODA to be used more efficiently to explore and leverage better approaches to achieving sustainable water and sanitation infrastructure and sustained hygiene behaviour change – building towards that enabling environment needed for all other investment. Of course, there will always be extremely vulnerable places where external financial support is needed for the foreseeable future – but even there we can go much further in planning more relevant strategies that ensure funding is used as effectively as possible.

This means ODA budgeting requirements must allow for adaptive management of WASH projects that enables NGOs and their partners to adjust in real time to community feedback and changing policies, needs and dynamics on the ground, learning and improving from unexpected situations. This was a key learning from Oxfam's experience leading the four-year UK Aid funded SWIFT Consortium for Sustainable Water, Sanitation & Hygiene in Fragile Contexts in Kenya and the Democratic Republic of Congo – to achieve sustainable, resilient WASH outcomes, programmes must be given the space, trust, and time to adapt to real time changes in the situation on the ground. Complex, long-term challenges with iterative solutions require funding that is not only flexible, but long-term and predictable, to truly address the root causes of fragility and systemic failures. 105 Ultimately, building resilient systems relies on governments playing their part – both national governments and international donor governments. Populations in fragile contexts have the right to safe water and sanitation, and this right should not be forfeited where systems are unstable or disrupted.

Businesses are able to provide services where markets operate and systems can function; but the scale of solutions requires innovative ODA financing, and creative operations to achieve reliable and safe WASH. In such contexts, the private sector needs to partner with NGOs to deliver ambitious systems within and guided by a strong national government framework of sound plans and policies to help achieve an enabling environment in the long term.

## Lessons from the private sector

The unique role of the private sector in WASH responses also became apparent during the COVID-19

response. Several proactive steps were taken by the private sector to protect their own value chains in the early stages and throughout the pandemic, mitigating the spread of the virus. This provided additional lessons for the future in terms of resilience.

With the most immediate and pressing risks being to people's lives and livelihoods, and with companies' core responsibility to and influence over their own value chains, many businesses quickly took steps to protect their own staff: ensuring access to facilities both on-site and in wider communities, putting in place additional hygiene and safety measures, taking steps to enable home working or providing safe transport options for those unable to work from home.

Companies with existing WASH programmes in parts of their value chains were well placed to leverage those existing activities – such as access to handwashing and sanitation products and facilities, factory standards around hygiene and so on – to support the COVID-19 response.

Anecdotal evidence collected in this research suggests that the companies and brands that did best during COVID-19 – the ones that were able to remain open and operating at near or above normal capacity – were those that made disproportionately large investments in protecting their workers, through the provision of hygiene products, cleaning agents and personal protective equipment.

In a time of fear, it was reported that in some contexts many workers felt safer and more protected within their work premises than they would have done at home or in the community.

## The importance of cross-sector collaboration

What we have learned from our experiences is that businesses, NGOs, and local partners cannot act alone. Ambition shown by increased government investment and ODA is needed to spur business action and create an enabling environment where private and development sector investment can be effective and sustained.

Progress cannot be made where policy and funding actions are insufficient, and the actions of businesses and NGOs cannot fill these gaps on their own. Both before and during COVID-19, it is clear that businesses have a critical role to play in achieving SDG 6 globally. It is also clear however that businesses need resilient settings for their operations to continue to deliver services and wider benefits.

Despite the clear benefits of WASH investment, partners cannot make progress without an enabling environment and public investment by both national governments and donor governments (ODA) – in the form of policies, frameworks and strategies with the requisite funding to ensure that progress is made at the trajectory that is needed.

## 5. The bold action needed on SDG 6



Unilever and Oxfam would like to see a renewed commitment to SDG 6 to safeguard resilience, demonstrated through an increase in funding that is flexible, long-term, and focused on systems-level, sustainable solutions. The importance of SDG 6 for achieving all the other SDGs cannot be ignored – across health, education, poverty, and more, this renewed commitment is pivotal to driving progress towards a fairer, equal and safer world.

Recommendations to national leaders, donor governments and international institutions (UN, donors)

## A focus on long-term, predictable, adaptive funding for systems-level WASH and to close the chronic gaps in financing – particularly ODA

- We call on Finance Ministers, Health Ministers, and Ministers of Water of all national governments
  to build and invest in coordinated national WASH plans and policies, alongside effective hygiene
  behaviour change programmes, to safeguard against future pandemics and other health crises
  and contribute to healthy populations.
- Donor countries should recognise their role and play their part in unlocking economic benefits and
  promoting economic resilience by increasing long-term, flexible and more predictable funding to
  WASH programmes, in line with national plans of recipient countries. This is particularly important
  where low- and middle-income countries are at great risk of WASH underinvestment but do not
  themselves have the revenues to put plans into action.
- Development donors must acknowledge that programming for resilience means allowing for longterm commitments to adaptive programming, reducing constraints so that frequent, quality data collection can inform changes to programming where risks arise and contexts change. Donors must be prepared to take on some of the risks, particularly in complex, fragile environments.
- All donors should understand that resilient WASH means robust, transparently governed, and
  climate-resilient water and sanitation infrastructure that will be more costly to fund at the outset.
  They should provide flexible, multi-year funding particularly working within the nexus of
  humanitarian and development approaches and look beyond programme costs per beneficiary
  to focus on robust system level programmes, where sustainably funded 08M plans and political
  and economic engagement will ensure sustainability.
- Donors must coordinate with national recipient governments and local actors to embed longterm, locally relevant hygiene behaviour change programming, recognising hygiene practices as an essential pillar to sustainable and effective WASH responses.

### Recommendations to businesses

## Improved collaboration and accountability with a wider group of stakeholders, making the case for WASH and resilience

- Businesses should invest in providing safely managed water and sanitation facilities and resources, complemented by effective hygiene behaviour approaches, within their operations, and support this in their supply chains and local communities.
- Get better at sharing: The business case for investing in WASH should be more proactively understood, articulated and disclosed to drive wider collective action. Where possible, this should be rooted in lived experiences: Work with other partners, including NGOs and community groups, to understand and highlight the interactions between resilience and WASH at local level to make the case for SDG 6. The risks of inaction, to businesses, economies and societies, must also be articulated.
- The private sector should systematically recognise and proactively highlight the gaps where investment from other donors is needed to bolster companies' own actions.
- Companies should join with other partners (including NGOs) to bring their experiences and intelligence to strategy forums and public-private partnerships.
- The private sector should use its market power and business experience to tailor products and services to better reach customers in locations vulnerable to health crises.

#### Recommendations to NGOs

## Making the case for robust systems-level WASH and supporting the localisation agenda

- The development sector should be a facilitator between communities, businesses and governments in ensuring communities' voices are heard and sustainable systems are created to meet their current and anticipated needs.
- The development sector must strongly advocate for the localisation agenda as a critical component of strengthening resilience. Local stakeholders, including water user committees, civil society and local governments, will increasingly need support to be empowered to develop solutions and design and implement resilient WASH systems. This includes documenting local experiences and amplifying the voices of vulnerable communities to advocate for robust systems-level interventions in response to a rapidly changing and risk-prone world.
- NGOs should more comprehensively engage with the private sector on research and advocacy to
  extend the case for SDG 6 to different stakeholders with different motivations. While the case
  for improving WASH services and resilience to future pandemics is a moral one, NGOs should
  also become more comfortable with using business/investment-focused language to bring
  others on board.

## 6. Notes

- 1. The Human Right to Water and Sanitation was recognised by the UN Assembly through Resolution 64/292 on 28 July 2010
- 2. Howard, G. et al. (2020). Covid-19: urgent action, critical reflections and future relevance of 'WaSH': lessons for current and future pandemics. Journal of Water and Health, 18(5). https://pubmed.ncbi.nlm.nih.gov/33095188/
- 3. UNOCHA Appeals and Response Plans 2023. Retrieved 13 March 2023 from <a href="https://fts.unocha.org/appeals/overview/2023">https://fts.unocha.org/appeals/overview/2023</a>
- 4. UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water. GLAAS Report (2022). Strong systems and sound investments: evidence on and key insights into accelerating progress on sanitation, drinking-water and hygiene. Retrieved from <a href="https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522\_13">https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522\_13</a>, page XII
- 5. Stoddard, A. et al. Slipping Away? A Review of Humanitarian Capabilities in Cholera Response. Humanitarian Rapid Research Initiative (HRRI). Retrieved from <a href="https://www.humanitarianoutcomes.org/cholera\_response\_2\_23">https://www.humanitarianoutcomes.org/cholera\_response\_2\_23</a>
- 6. Ibid.
- 7. Ibid.
- 8. Aujean, S. and Métayer, S. (2021). Improving overseas aid for WASH: practical steps for European policymakers and donors. Retrieved from WaterAid blog: <a href="https://washmatters.wateraid.org/blog/improving-overseas-aid-for-wash-practical-steps-for-european-policymakers-and-donors">https://washmatters.wateraid.org/blog/improving-overseas-aid-for-wash-practical-steps-for-european-policymakers-and-donors</a>
- 9. UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water. GLAAS Report (2022). Strong systems and sound investments: evidence on and key insights into accelerating progress on sanitation, drinking-water and hygiene. Retrieved from <a href="https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522">https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522</a> 13, page XIII
- 10. Widely referenced, including:
  - a. Casey, V. et al. (WaterAid 2016). How does WASH help people to adapt to climate change? Retrieved from <a href="https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/How%20does%20WASH%20help%20">https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/How%20does%20WASH%20help%20</a> people%20to%20adapt%20to%20climate%20change 0.pdf;
  - b. and CEO Water Mandate (n.d). Water is Resilience: Call for Collective Action on Water Access. Retrieved from <a href="https://ceowatermandate.org/resilience/covid-wash-cta/">https://ceowatermandate.org/resilience/covid-wash-cta/</a>
- 11. WaterAid and Vivid Economics (n.d.). Mission Critical: Invest in water, sanitation and hygiene for a healthy and green economic recovery. Retrieved from <a href="https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf">https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf</a>
- 12. WHO/UNICEF 2020 Joint Monitoring Report. Progress on Household Drinking Water Supply, Sanitation and Hygiene. Retrieved from <a href="https://www.unwater.org/publications/who/unicef-joint-monitoring-program-water-supply-sanitation-and-hygiene-jmp-progress-0">https://www.unwater.org/publications/who/unicef-joint-monitoring-program-water-supply-sanitation-and-hygiene-jmp-progress-0</a>
- 13. Marcos-Garcia, P. et al. (2021). Science of the Total Environment, Vol. 791. COVID-19 pandemic in Africa: Is it time for water, sanitation and hygiene to climb up the ladder of global priorities? Retrieved from <a href="https://www.sciencedirect.com/science/article/pii/S0048969721033234">https://www.sciencedirect.com/science/article/pii/S0048969721033234</a>
- 14. WaterAid and Vivid Economics (n.d.). Mission Critical: Invest in water, sanitation and hygiene for a healthy and green economic recovery. Retrieved from <a href="https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf">https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf</a>
- 15. Global Handwashing Partnership (2021). Hand Hygiene Research Summary. Retrieved from <a href="https://globalhandwashing.org/wp-content/uploads/2022/04/2021-Hand-Hygiene-Research-Summary\_en.pdf">https://globalhandwashing.org/wp-content/uploads/2022/04/2021-Hand-Hygiene-Research-Summary\_en.pdf</a>
- 16. OECD (2020). Environmental health and strengthening resilience to pandemics. Retrieved from <a href="https://www.oecd.org/coronavirus/policy-responses/environmental-health-and-strengthening-resilience-to-pandemics-73784e04/">https://www.oecd.org/coronavirus/policy-responses/environmental-health-and-strengthening-resilience-to-pandemics-73784e04/</a>
- 17. WHO's Global Health Observatory. Retrieved from <a href="https://www.who.int/data/gho/indicator-metadata-registry/">https://www.who.int/data/gho/indicator-metadata-registry/</a> <a href="mailto:imr-details/158">imr-details/158</a>

- 18. Fan, C.Y. et al. (2021). Journal of the Formosan Medical Association (JFMA). Estimating the global burden of COVID-19 with disability-adjusted life years and value of statistical life metrics
- 19. Walker, D.G. et al. (2010). WHO guide for standardization of economic evaluations of immunizations programmes. Vaccine, 2010; 28(11): 2356-59
- 20. Haller, L. et al. (2007). J. Water Health, 5(4): 467-80. Estimating the costs and health benefits of water and sanitation improvements at global level. Retrieved from <a href="https://pubmed.ncbi.nlm.nih.gov/17878561/">https://pubmed.ncbi.nlm.nih.gov/17878561/</a>
- 21. Daroudi, R. et al. (2021). Cost Eff Resour Alloc 19(1):7. Cost per DALY averted in low, middle- and high-income countries: evidence from the global burden of disease study to estimate the cost-effectiveness thresholds. Retrieved from <a href="https://pubmed.ncbi.nlm.nih.gov/33541364/">https://pubmed.ncbi.nlm.nih.gov/33541364/</a>
- 22. The UN World Water Development Report on 'Valuing Water' (2021). Retrieved from <a href="https://www.unesco.org/reports/wwdr/2021/en/node/24">https://www.unesco.org/reports/wwdr/2021/en/node/24</a>
- 23. Loftus, R. and WaterAid UK (n.d.). Boosting business: why investing in water, sanitation and hygiene pays off: tea estate in Kenya. Retrieved from <a href="https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/boosting-business-why-investing-in-water-sanitation-and-hygiene-in-kenyas-tea-estates-pays-off.pdf">https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/boosting-business-why-investing-in-water-sanitation-and-hygiene-in-kenyas-tea-estates-pays-off.pdf</a>
- 24. WaterAid and Vivid Economics (n.d.). Mission Critical: Invest in water, sanitation and hygiene for a healthy and green economic recovery. Retrieved from <a href="https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf">https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf</a>
- 25. Wash4work.org. Business case. Retrieved from <a href="https://wash4work.org/business-case/#1503338036585-2b7b5df7-93c6">https://wash4work.org/business-case/#1503338036585-2b7b5df7-93c6</a>
- 26. WaterAid and Vivid Economics (n.d.). Mission Critical: Invest in water, sanitation and hygiene for a healthy and green economic recovery. Retrieved from <a href="https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-critica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-yecolgica.pdf">https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-critica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-yecolgica.pdf</a>
- 27. WaterAid (n.d.). Undernutrition and water, sanitation and hygiene. Retrieved from <a href="https://washmatters.wateraid.org/publications/undernutrition-and-water-sanitation-and-hygiene">https://washmatters.wateraid.org/publications/undernutrition-and-water-sanitation-and-hygiene</a>
- 28. Ibid.
- 29. UN Water. Financing Water and Sanitation: <a href="https://www.unwater.org/water-facts/financing-water-and-sanitation">https://www.unwater.org/water-facts/financing-water-and-sanitation</a> and GLAAS Report (2022): <a href="https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522">https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522</a> 13
- 30. GLAAS Report (2022): <a href="https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-glaas">https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-glaas</a>)-2022-report
- 31. Oxfam, GWC, ELRHA (2021). Gaps in Humanitarian WASH Response: 2021 Update. Retrieved from <a href="https://www.oxfamwash.org/en/innovation/gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf">https://www.oxfamwash.org/en/innovation/gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf</a>
- 32. https://www.elrha.org/
- 33. UNOCHA Appeals and Response Plans 2022. Retrieved from https://fts.unocha.org/appeals/overview/2022
- 34. UNOCHA Appeals and Response Plans 2023. Retrieved 13 March 2023 from <a href="https://fts.unocha.org/appeals/overview/2023">https://fts.unocha.org/appeals/overview/2023</a>
- 35. Oxfam, GWC, ELRHA (2021). Gaps in Humanitarian WASH Response: 2021 Update. Retrieved from <a href="https://www.oxfamwash.org/en/innovation/\_gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf">https://www.oxfamwash.org/en/innovation/\_gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf</a>, page 44
- 36. UNICEF Budget Briefs. Retrieved from <a href="https://www.unicef.org/esa/reports/budget-briefs">https://www.unicef.org/esa/reports/budget-briefs</a>
- 37. UNICEF Malawi (2021). Public Expenditure Review in the Water, Sanitation, and Hygiene Sector (WASH) of Malawi. Retrieved from https://www.unicef.org/esa/media/9771/file/UNICEF-Malawi-WASH-PER-brief-2021-22.pdf
- 38. KIPPRA Policy Brief No. 66/2018-2019. Retrieved from <a href="https://www.unicef.org/esa/media/3356/file/UNICEF-Kenya-2018-WASH-Budget-Brief.pdf">https://www.unicef.org/esa/media/3356/file/UNICEF-Kenya-2018-WASH-Budget-Brief.pdf</a>
- 39. GLAAS Report (2022): <a href="https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-(glaas)-2022-report">https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-(glaas)-2022-report</a>, page XII-XIII
- 40. Development Initiatives (2021). Aid data 2019-2020: Analysis of trends before and during Covid. Retrieved from <a href="https://devinit.org/resources/aid-data-2019-2020-analysis-trends-before-during-Covid/#e89fbf95">https://devinit.org/resources/aid-data-2019-2020-analysis-trends-before-during-Covid/#e89fbf95</a>, page 15
- 41. Development Initiatives (2023). Tracking aid and other international development finance in real time. Retrieved from https://devinit.org/data/tracking-aid-international-development-real-time/

- 42. Aujean, S. and Métayer, S. (2021). Improving overseas aid for WASH: practical steps for European policymakers and donors. Retrieved from WaterAid blog: <a href="https://washmatters.wateraid.org/blog/improving-overseas-aid-for-wash-practical-steps-for-european-policymakers-and-donors">https://washmatters.wateraid.org/blog/improving-overseas-aid-for-wash-practical-steps-for-european-policymakers-and-donors</a>
- 43. GLAAS Report (2022): <a href="https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522">https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng.pdf?sfvrsn=f6b6f522</a> 13, page XIII
- 44. GLAAS Report (2022): https://apps.who.int/iris/bitstream/handle/10665/365297/9789240065031-eng. pdf?sfvrsn=f6b6f522 13, page XII
- 45. Hutton, G. and Varughese, M. (2016). The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene. Retrieved from <a href="https://documentsl.worldbank.org/curated/en/415441467988938343/pdf/103171-PUB-Box394556B-PUBLIC-EPI-K8543-ADD-SERIES.pdf">https://documentsl.worldbank.org/curated/en/415441467988938343/pdf/103171-PUB-Box394556B-PUBLIC-EPI-K8543-ADD-SERIES.pdf</a>
- 46. Oxfam Discussion Paper (2019). The humanitarian-development-peace nexus: What does it mean for multi-mandated organizations? Retrieved from <a href="https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620820/dp-humanitarian-development-peace-nexus-260619-en.">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620820/dp-humanitarian-development-peace-nexus-260619-en.</a> pdf;jsessionid=9F1DBD098791AE34000A0E8E50E5CA87?sequence=1, page 11
- 47. Tillett, W. et al. (2020). Applying WASH Systems Approaches in Fragile Contexts. Retrieved from <a href="https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str\_Fragile-Contexts\_Final.pdf">https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str\_Fragile-Contexts\_Final.pdf</a>
- 48. UNOCHA Appeals and Response Plans 2023. Retrieved from <a href="https://fts.unocha.org/appeals/overview/2023">https://fts.unocha.org/appeals/overview/2023</a>
- 49. 'World Humanitarian Summit, Putting Policy into Practice Multi-year funding' <a href="https://www.oecd.org/development/humanitarian-donors/">https://www.oecd.org/development/humanitarian-donors/</a>. Accessed 14 March 2023
- 50. Stoddard, A. et al. Slipping Away? A Review of Humanitarian Capabilities in Cholera Response. Humanitarian Rapid Research Initiative (HRRI). Retrieved from <a href="https://www.humanitarianoutcomes.org/cholera">https://www.humanitarianoutcomes.org/cholera</a> response 2 23
- 51. Tillett, W. et al. (2020). Applying WASH Systems Approaches in Fragile Contexts. Retrieved from <a href="https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str\_Fragile-Contexts\_Final.pdf">https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str\_Fragile-Contexts\_Final.pdf</a>
- 52. Ibid. Page II
- 53. https://www.mumsmagichands.org/
- 54. Oxfam WEDC Poster. Using Emotional Motivators to Promote Handwashing with Soap (HWWS) in Emergencies.

  Retrieved from https://www.mumsmagichands.org/documents/365/MMH WEDC Poster Oxfam 2017 PRINT.pdf
- 55. Asian Development Bank (2021). Bangladesh Climate and Disaster Risk Atlas. Hazards Volume I. Retrieved from: <a href="https://reliefweb.int/report/bangladesh/bangladesh-climate-and-disaster-risk-atlas-hazards-volume-i-december-2021">https://reliefweb.int/report/bangladesh/bangladesh-climate-and-disaster-risk-atlas-hazards-volume-i-december-2021</a>
- 56. WHO and UNICEF Joint Monitoring Programme (2019). Progress on household drinking water, sanitation and hygiene 2000-2017. Retrieved from <a href="https://washdata.org/sites/default/files/documents/reports/2019-07/jmp-2019-wash-households.pdf">https://washdata.org/sites/default/files/documents/reports/2019-07/jmp-2019-wash-households.pdf</a>
- 57. The World Bank in Bangladesh. Country overview: https://www.worldbank.org/en/country/bangladesh/overview
- 58. Ibid.
- 59. Data only available to 2020
- 60. UN Water. SDG 6 snapshot in Bangladesh: <a href="https://sdg6data.org/en/country-or-area/Bangladesh">https://sdg6data.org/en/country-or-area/Bangladesh</a>, figure 6a.1
- 61. International Centre for Climate Change and Development (ICCAD) (2021). WASH and climate: Policy and financing (dis)connects in Bangladesh. Retrieved from <a href="https://www.icccad.net/wp-content/uploads/2021/05/WASH-and-Climate-Policy-and-financing-disconnects-in-Bangladesh-31-March-2021.pdf">https://www.icccad.net/wp-content/uploads/2021/05/WASH-and-Climate-Policy-and-financing-disconnects-in-Bangladesh-31-March-2021.pdf</a>
- 62. Sanitation and Water for All (2021). Bangladesh profile: <a href="https://www.sanitationandwaterforall.org/sites/default/files/2021-10/CB">https://www.sanitationandwaterforall.org/sites/default/files/2021-10/CB</a> Profile Bangladesh.pdf
- 63. Rohingya Humanitarian Crisis Joint Response Plan (2023). Retrieved from <a href="https://reporting.unhcr.org/document/4378#ga=2.268128397.2075473653.1679333479-1035814771.1678883119">https://reporting.unhcr.org/document/4378#ga=2.268128397.2075473653.1679333479-1035814771.1678883119</a>
- 64. Rohingya Humanitarian Crisis Joint Response Plan (2023). Retrieved 20 March 2023 from <a href="https://fts.unocha.org/appeals/1143/summary">https://fts.unocha.org/appeals/1143/summary</a>
- 65. General Economics Division, Government of Bangladesh (2017). SDG Financing Strategy Bangladesh Perspective. Retrieved from <a href="https://pksf.org.bd/wp-content/uploads/2018/11/2.-SDGs-Financing-Strategy-Bangladesh-Perspective.pdf">https://pksf.org.bd/wp-content/uploads/2018/11/2.-SDGs-Financing-Strategy-Bangladesh-Perspective.pdf</a>

- 66. Aid Atlas. Bangladesh profile: <a href="https://aid-atlas.org/profile/all/bangladesh/water-supply-sanitation/2011-2020?usdType=usd">https://aid-atlas.org/profile/all/bangladesh/water-supply-sanitation/2011-2020?usdType=usd</a> commitment
- 67. Aujean, S. and Métayer, S. (2021). Improving overseas aid for WASH: practical steps for European policymakers and donors. Retrieved from WaterAid blog: <a href="https://washmatters.wateraid.org/blog/improving-overseas-aid-for-wash-practical-steps-for-european-policymakers-and-donors">https://washmatters.wateraid.org/blog/improving-overseas-aid-for-wash-practical-steps-for-european-policymakers-and-donors</a>
- 68. UNOCHA (2020). Bangladesh monsoon flooding 2020: anticipatory action pilot. Retrieved from <a href="https://www.unocha.org/our-work/humanitarian-financing/anticipatory-action/summary-bangladesh-pilot">https://www.unocha.org/our-work/humanitarian-financing/anticipatory-action/summary-bangladesh-pilot</a>
- 69. WaterAid and Vivid Economics (n.d.). Mission Critical: Invest in water, sanitation and hygiene for a healthy and green economic recovery. Retrieved from <a href="https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf">https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/misin-crtica-invertir-en-agua-saneamiento-e-higiene-para-una-recuperacin-econmica-saludable-y-ecolgica.pdf</a>
- 70. Needs Assessment Working Group, Bangladesh (2020). Coordinated Preliminary Impact and Needs Assessment: Monsoon Floods 2020. Retrieved from <a href="https://reliefweb.int/report/bangladesh/bangladesh-monsoon-floods-2020-coordinated-preliminary-impact-and-needs-assessment">https://reliefweb.int/report/bangladesh/bangladesh-monsoon-floods-2020-coordinated-preliminary-impact-and-needs-assessment</a>
- 71. WaterAid and Vivid Economics (2021). Mission critical: invest in water, sanitation and hygiene for a healthy green recovery. Retrieved from <a href="https://washmatters.wateraid.org/publications/mission-critical-invest-water-sanitation-hygiene-healthy-green-recovery">https://washmatters.wateraid.org/publications/mission-critical-invest-water-sanitation-hygiene-healthy-green-recovery</a>
- 72. Needs Assessment Working Group, Bangladesh (2020). Coordinated Preliminary Impact and Needs Assessment: Monsoon Floods 2020. Retrieved from <a href="https://reliefweb.int/report/bangladesh/bangladesh-monsoon-floods-2020-coordinated-preliminary-impact-and-needs-assessment">https://reliefweb.int/report/bangladesh/bangladesh-monsoon-floods-2020-coordinated-preliminary-impact-and-needs-assessment</a>
- 73. Noted as part of the qualitative interviews that formed part of the research.
- 74. Gautam, S. et al. (2022). Geosystems and Geoenvironment. Volume 1, issue 1. Analysis of the health, economic and environmental impacts of COVID-19: The Bangladesh perspective. Retrieved from https://www.sciencedirect.com/science/article/pii/S277288382100011X
- 75. UNICEF Report (2020). Tackling the COVID-19 social and economic crisis in Bangladesh. Retrieved from <a href="https://www.unicef.org/bangladesh/media/5256/file">https://www.unicef.org/bangladesh/media/5256/file</a>
- 76. UN Policy Brief (2020). The impact of COVID-19 on children. Retrieved from <a href="https://unsdg.un.org/sites/default/files/2020-04/160420">https://unsdg.un.org/sites/default/files/2020-04/160420</a> Covid Children Policy Brief.pdf
- 77. Unilever (n.d.). The Hygiene Behaviour Change Coalition (HBCC). Retrieved from <a href="https://www.unilever.com/news/">https://www.unilever.com/news/</a> hygiene-behaviour-change-coalition/
- 78. UNICEF (2022). FACT SHEET: Menstrual health and hygiene management still out of reach for many. Retrieved from <a href="https://www.unicef.org/press-releases/fact-sheet-menstrual-health-and-hygiene-management-still-out-reach-many">https://www.unicef.org/press-releases/fact-sheet-menstrual-health-and-hygiene-management-still-out-reach-many</a>
- 79. Rost, L. (2018). How improving access to water can help reduce care work. Retrieved from Oxfam Views & Voices: <a href="https://views-voices.oxfam.org.uk/2018/03/access-water-care-work/">https://views-voices.oxfam.org.uk/2018/03/access-water-care-work/</a>
- 80. World Bank Group (2016). High and Dry: Climate Change, Water and the Economy. Retrieved from <a href="http://hdl.handle.net/10986/23665">http://hdl.handle.net/10986/23665</a>, page 15
- 81. Water Supply & Sanitation Collaborative Council (WSSCC) Briefing Note (2017). Water, Sanitation and Hygiene in the Informal Sector. Retrieved from <a href="https://www.wsscc.org/sites/default/files/uploads/2017/04/Womens-Access-to-Sanitation-and-Hygiene-in-the-Informal-Sector-Briefing-Note.pdf">https://www.wsscc.org/sites/default/files/uploads/2017/04/Womens-Access-to-Sanitation-and-Hygiene-in-the-Informal-Sector-Briefing-Note.pdf</a>
- 82. International Labour Organization (2022). Informal Economy in Africa: Which Way Forward? Making Policy Responsive, Inclusive and Sustainable. Retrieved from <a href="https://www.ilo.org/africa/events-and-meetings/">https://www.ilo.org/africa/events-and-meetings/</a> WCMS 842674/lang--en/index.htm
- 83. WSSCC Briefing Note (2017). Water, Sanitation and Hygiene in the Informal Sector. Retrieved from <a href="https://www.wsscc.org/sites/default/files/uploads/2017/04/Womens-Access-to-Sanitation-and-Hygiene-in-the-Informal-Sector-Briefing-Note.pdf">https://www.wsscc.org/sites/default/files/uploads/2017/04/Womens-Access-to-Sanitation-and-Hygiene-in-the-Informal-Sector-Briefing-Note.pdf</a>
- 84. Oxfam, GWC, ELRHA (2021). Gaps in Humanitarian WASH Response: 2021 Update. Retrieved from <a href="https://www.oxfamwash.org/en/innovation/gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf">https://www.oxfamwash.org/en/innovation/gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf</a>, page 9
- 85. Oxfam Case Study (2019). Water supply systems in Nepal: How to build better, more sustainable services.

  Retrieved from <a href="https://policy-practice.oxfam.org/resources/water-supply-systems-in-nepal-how-to-build-better-more-sustainable-services-620844/">https://policy-practice.oxfam.org/resources/water-supply-systems-in-nepal-how-to-build-better-more-sustainable-services-620844/</a>

- 86. GLAAS Report (2022): <a href="https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-(glaas)-2022-report">https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-(glaas)-2022-report</a>, page XII
- 87. UNOCHA Country Overview Uganda. Retrieved from <a href="https://www.unocha.org/southern-and-eastern-africa-rosea/uganda">https://www.unocha.org/southern-and-eastern-africa-rosea/uganda</a>
- 88. UNHCR Briefing Note (2017). Comprehensive Refugee Response Framework –Uganda. Retrieved from <a href="https://data.unhcr.org/en/documents/download/63267#:~:text=The%20CRRF%20in%20Uganda%20encompasses,Self%2Dreliance%2C%20Expanded%20Solution%20and">https://data.unhcr.org/en/documents/download/63267#:~:text=The%20CRRF%20in%20Uganda%20encompasses,Self%2Dreliance%2C%20Expanded%20Solution%20and</a>
- 89. UN (2018). The Global Compact on Refugees. Retrieved from <a href="https://www.unhcr.org/uk/the-global-compact-on-refugees.html">https://www.unhcr.org/uk/the-global-compact-on-refugees.html</a>
- 90. Uganda National Planning Authority (2020). Third National Development Plan (NDPIII) 2020/21 2024/25. Retrieved from http://library.health.go.ug/sites/default/files/resources/Third%20National%20 Development%20Plan%20III%2C%202020-21-2024-25.pdf
- 91. IEc Investment Plan for the Water and Environment Sector, Uganda (2018-2030). Retrieved from <a href="https://www.mwe.go.ug/sites/default/files/library/Water%20and%20Environment%20Sector%20">https://www.mwe.go.ug/sites/default/files/library/Water%20and%20Environment%20Sector%20</a> Investment%20Plan%20%202018.pdf
- 92. Oxfam Case Study (2019). Water supply systems in Nepal: How to build better, more sustainable services. Retrieved from <a href="https://policy-practice.oxfam.org/resources/water-supply-systems-in-nepal-how-to-build-better-more-sustainable-services-620844/">https://policy-practice.oxfam.org/resources/water-supply-systems-in-nepal-how-to-build-better-more-sustainable-services-620844/</a>
- 93. Oxfam Briefing Note (2020-21). Market based maintenance for sustainable water supply. Retrieved from <a href="https://www.oxfamwash.org/en/innovation/\_future/Kenya%20private%20sector%20maintenance%20innovation%20project.pdf">https://www.oxfamwash.org/en/innovation/\_future/Kenya%20private%20sector%20maintenance%20innovation%20project.pdf</a>
- 94. Tillett, W. et al. (2020). Applying WASH Systems Approaches in Fragile Contexts. Retrieved from <a href="https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str">https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str</a> Fragile-Contexts\_Final.pdf, page IV-V
- 95. World Water Week Session (n.d.). Retrieved from <a href="https://www.worldwaterweek.org/event/9702-when-water-isnt-free-sustainable-wash-systems-in-nepal">https://www.worldwaterweek.org/event/9702-when-water-isnt-free-sustainable-wash-systems-in-nepal</a>
- 96. Oxfam Briefing Note (2020-21). Market based maintenance for sustainable water supply. Retrieved from <a href="https://www.oxfamwash.org/en/innovation/\_future/Kenya%20private%20sector%20maintenance%20">https://www.oxfamwash.org/en/innovation/\_future/Kenya%20private%20sector%20maintenance%20</a> innovation%20project.pdf
- 97. UNICEF Briefing (n.d.). Water Scarcity. Retrieved from <a href="https://www.unicef.org/wash/water-scarcity">https://www.unicef.org/wash/water-scarcity</a>
- 98. Mekonnen, M. and Hoekstra A.Y. (2016). Science Advances, vol. 2, no. 2. Four billion people facing severe water scarcity. Retrieved from <a href="https://www.science.org/doi/10.1126/sciadv.1500323">https://www.science.org/doi/10.1126/sciadv.1500323</a>
- 99. The World Bank Group (2017). Beyond Scarcity: Water Security in the Middle East and North Africa. Retrieved from <a href="https://www.worldbank.org/en/topic/water/publication/beyond-scarcity-water-security-in-the-middle-east-and-north-africa">https://www.worldbank.org/en/topic/water/publication/beyond-scarcity-water-security-in-the-middle-east-and-north-africa</a>
- 100. Uganda Country Programming Paper. Consolidating the Path to Resilience and Sustainability 2019-2024. Retrieved from <a href="https://icpald.org/wp-content/uploads/2019/10/CPP-UGANDA.pdf">https://icpald.org/wp-content/uploads/2019/10/CPP-UGANDA.pdf</a>, page 12
- 101. Hygiene Hub (n.d.). Summary report: Fostering a new generation of effective hygiene initiatives built on experience during outbreak responses. Retrieved from <a href="https://resources.hygienehub.info/en/articles/4766036-summary-report-fostering-a-new-generation-of-effective-hygiene-initiatives-built-on-experiences-during-outbreak-responses">https://resources.hygiene-initiatives-built-on-experiences-during-outbreak-responses</a>
- 102. Oxfam, GWC, ELRHA (2021). Gaps in Humanitarian WASH Response: 2021 Update. Retrieved from <a href="https://www.oxfamwash.org/en/innovation/gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf">https://www.oxfamwash.org/en/innovation/gap-analysis/Wash-Gap-Analysis-Discussion-2021.pdf</a>, page 29
- 103. Hygiene Hub (n.d.). Summary report: Fostering a new generation of effective hygiene initiatives built on experience during outbreak responses. Retrieved from <a href="https://resources.hygienehub.info/en/articles/4766036-summary-report-fostering-a-new-generation-of-effective-hygiene-initiatives-built-on-experiences-during-outbreak-responses">https://resources.hygiene-initiatives-built-on-experiences-during-outbreak-responses</a>

104. lbid.

105. Tillett, W. et al. (2020). Applying WASH Systems Approaches in Fragile Contexts. Retrieved from <a href="https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str">https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str</a> Fragile-Contexts\_ Final.pdf, page II



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Cover photo: Fatema (40) is a shop owner in Shombhugonj Bazar. She and other users are glad for the addition of a public toilet as previously there were no WASH facilities. She said, "We had no place to go, and being a woman, I faced health issues in the need of a separate hygienic toilet in our area". This is one of the PWD Livelihood Initiatives for the sustainable operation and maintenance of WASH Blocks at Shombhugonj Bazar supported by Oxfam. Mymensingh, Bangladesh

Credit: Fabeha Monir/Oxfam

Photo page 9: "I was personally moved when I saw that on our site we had the privilege of having such beautiful handwashing kits; even in the city of Kalemie it never existed but here in the Kisalaba site we have this luxury. These hand washers allow us to avoid water-borne diseases, such as diarrhoea and cholera. Nowadays children wash their hands every time when they have played, they wash themselves after class, they wash themselves. In short it has become a habit for them to wash [their] hands regularly," declares Nombe, who washes her hands with her eldest daughter, before taking the daily meal. Tanganyika, DRC, 2021.

Credit: Arlette Bashizi/Oxfam

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