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WASH Fact Sheet FS/01/2022

The Status of Hand Hygiene Facilities in Public Spaces in South Asia

SUMMARY

Access to adequate hand hygiene facilities (HHFs), including a reliable supply of water and soap, is paramount to ensure that daily hand hygiene can be practiced in public places. With COVID-19, public spaces have become an important location for the water, sanitation, and hygiene (WASH) sector to engage in when it comes to key moments for hand hygiene. However, the nature of public places means that clear ownership for the functionality of public hand hygiene facilities can be a challenge, one that requires new partnerships with line ministries (such as transportation) and urban councils, as well as new monitoring tools.

This fact sheet reports the findings of an online survey among WASH sector professionals in South Asia to gain insight into the state of hand hygiene facilities deployed in public spaces in response to the COVID-19 outbreak. The survey was completed by 193 people working in the WASH sector in six South Asian countries. Three insights from this survey stand out:

- A large share of the facilities is not fully functional within a year of installation.
- Providing access to disadvantaged groups is a major challenge.
- The monitoring of hand hygiene facilities in public places is non-existent or piecemeal.

The results from this survey are the first step towards understanding the nature of hand hygiene in public places in South Asia. The success of recent efforts to provide facilities for hand hygiene is encouraging, though further research and attention to the enabling environment is needed in the region to ensure sustainability of the facilities and their use. Further questions remain on how best to promote hand hygiene in public places and how to ensure functionality and monitoring.

Background

Public spaces have an important role in ensuring the highest standards of public health. In the context of COVID-19 as well as other respiratory and diarrheal diseases, hand hygiene with soap is critical wherever people meet and touch surfaces. WHO released interim guidance on 1 April 2020, recommending that all Member States make hand hygiene facilities obligatory in front of public and private commercial buildings, as well as at all transport hubs. However, the provision and promotion of hand hygiene services in such settings can be neglected. Responsibilities for provision, as well as the consequences of their absence, can be unclear (OHCHR, 2019).

The advancement of hand hygiene in public spaces depends on both the availability of hand hygiene facilities, their proper functioning and maintenance as well as their widespread and correct use by individuals (JMP, 2021). In the South Asia region, hundreds of thousands of hand hygiene stations have been deployed since March 2020 in public places such as in front of schools and health care facilities, in workplaces, markets, places of worship and public transportation hubs according to UNICEF country offices and water, sanitation, and hygiene (WASH) sector partners. The provision, operation and maintenance (O&M) of hand hygiene stations were delivered alongside behaviour-change programming to promote uptake.

Yet, there is a lack of information on the current state of these public hand hygiene facilities. Hand hygiene stations in public places is a relatively new area of work for WASH actors and this note documents some initial learning based on a short survey. The objective of the survey was to explore the current state of permanent or semipermanent hand hygiene facilities in public places and buildings in South Asia.

BOX 1.

DEFINING PUBLIC SPACES

"multifunctional areas for social interaction and inclusion, human health and well-being, economic exchange and cultural expression […], and that are designed and managed to ensure human development and build peaceful, inclusive and participatory societies, as well as to promote living together, connectivity and social inclusion".

New Urban Agenda adopted by the UN General Assembly in 2016

Methodology

The survey was completed by 193 people working in the WASH sector in six countries in South Asia. Most responses were submitted by NGOs. Most organizations answered the survey based on their knowledge of the national level. The responses are based on their knowledge of the sector and their own observations. The key limitation of the survey is the subjective nature of the responses. The survey focuses on the sustainability of hardware and did not include the related behaviour change programming that was implemented alongside construction and placement of hand hygiene facilities.

Table 1: Number of respondents per type of organization

Type of organization	*%*
NGO	*52*
UN Agency (or equivalent)	*23*
Government	*17*
Private business	*8*

Story

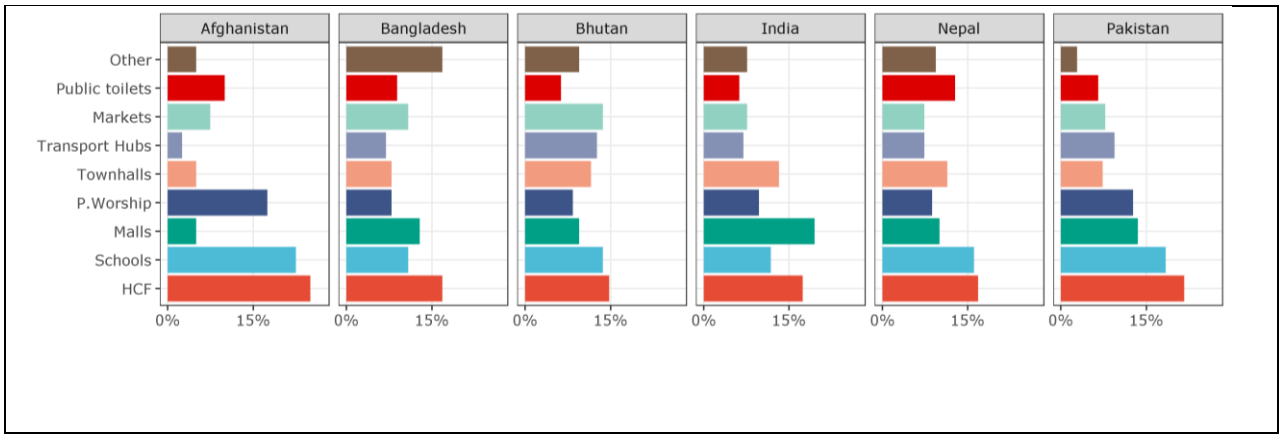
Responses to the survey questions are presented below, while common findings are presented in the conclusion.

Public spaces where hand hygiene facilities have been deployed over the past 12 months

Respondents were asked which public spaces have been prioritized with regard to the deployment of hand hygiene facilities over the past 12 months (see **Figure 1**). In all countries surveyed the deployment of HHF at the entrance of institutions, such as schools and health care facilities have been prioritized. HHF have also been installed in commercial malls and places of worship (P. Worship). Traditional markets, transport hubs and public toilets were not prioritized in any of the countries. The large share of "other" in Bangladesh mostly concerns the entrance of refugee camps. To note, no supporting evidence was provided, such as

government policies or plans, to back up this observation.

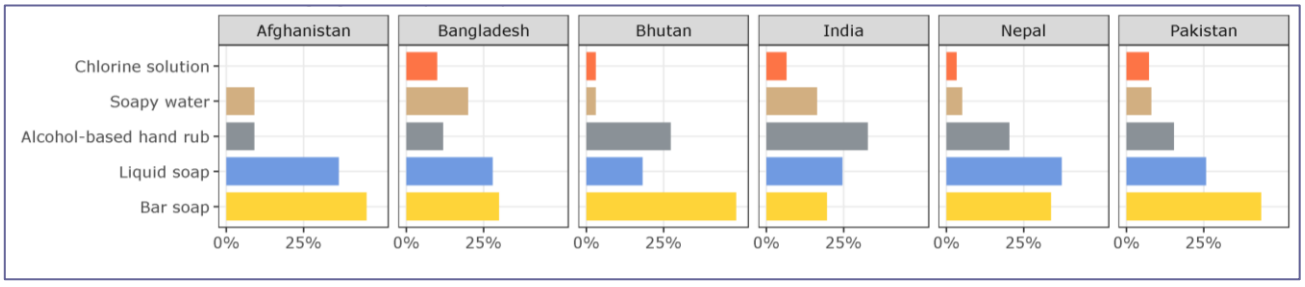
Figure 1: Perception of the public spaces prioritized for the deployment of hand hygiene facilities over the past 12 months



Type of cleansing agents commonly chosen for hand hygiene facilities in public spaces

Respondents were asked what type of cleansing agents are commonly chosen for hand hygiene facilities in public spaces (see **Figure 2**). HHF in public spaces are most often equipped with bar soap, expect for India and Nepal (where alcohol-based hand rub (ABHR) and liquid soap are respectively the most common cleansing agents). Soapy water is reported to be common in Bangladesh and India and hardly used in Bhutan or Nepal. A chlorine solution is used only rarely in any of the reporting countries.

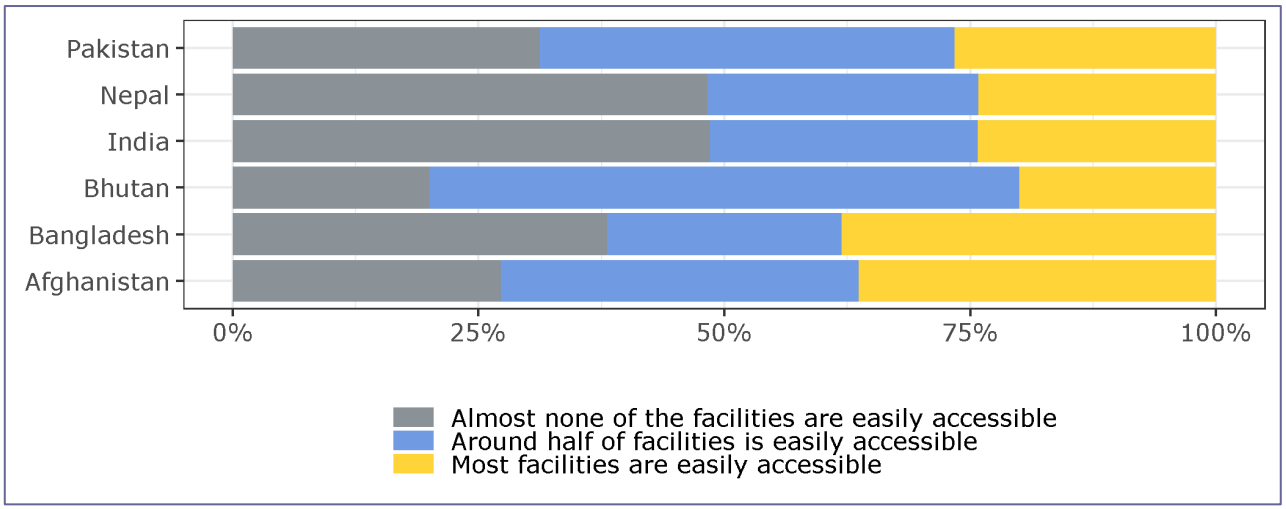
Figure 2: Perception of the types of cleansing agents commonly chosen for hand hygiene facilities in public spaces



Accessibility of hand hygiene facilities in public spaces for disadvantaged groups

Respondents were asked to what extent are hand hygiene facilities in public spaces easily accessible for disadvantaged groups (see **Figure 3**). In public spaces countries find it challenging to provide access to hand hygiene facilities for disadvantaged groups (such as persons with disabilities, older people (often with limited mobility) or young children).

Figure 3: Perception of the extent to which hand hygiene facilities in public spaces are easily accessible for disadvantaged groups



BOX 2.

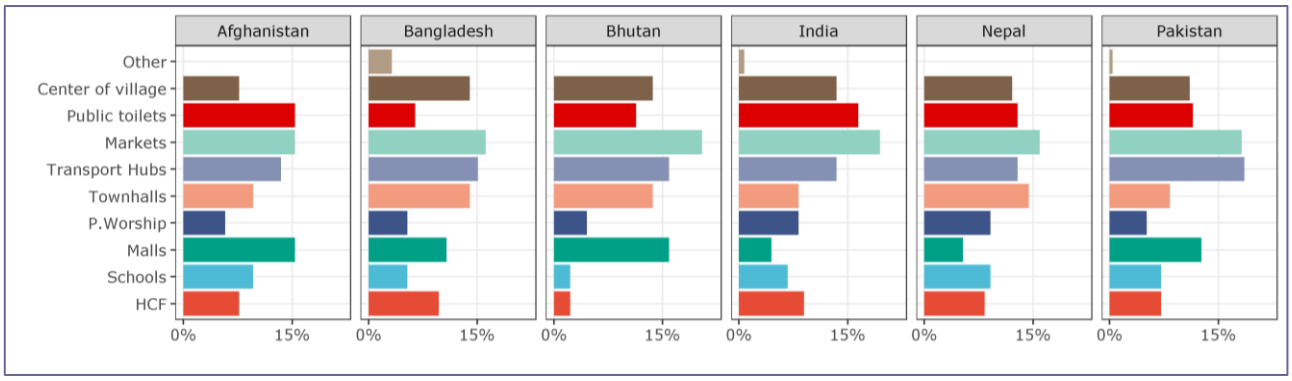
PROGRAMME GUIDANCE: EQUALITY

Hand hygiene facilities in public spaces must be accessible for all including children, older people, and persons with disabilities. It is paramount to ensure that basins, taps, and soap are within reach of persons with disabilities, as well as children. Facilities must also be made available for street workers, homeless people, migrating and floating populations. The quantity of the hand hygiene facilities should be based on the number of users to encourage use and reduce waiting time (JMP, 2021). Queuing could be particularly challenging for older people and others with a mobility impairment. Hand hygiene facilities should be designed and located in consultation with rights holder organizations.

Public spaces where O&M of hand hygiene facilities is most challenging

Respondents were asked to select the public spaces where the operation and maintenance (O&M) of hand hygiene facilities is most challenging (see **Figure 4**). Locations where responsibility is not clearly assigned to an entity or individual (such as a dedicated caretaker) are often the spaces where O&M is most challenging. Except for places of worship, schools, and HCF, O&M is a challenge in most public spaces i.e., malls, public toilets, markets and transport hubs. O&M arrangements are likely to vary between the same type of setting. For example, responsibility may be clearly assigned in some schools but not all.

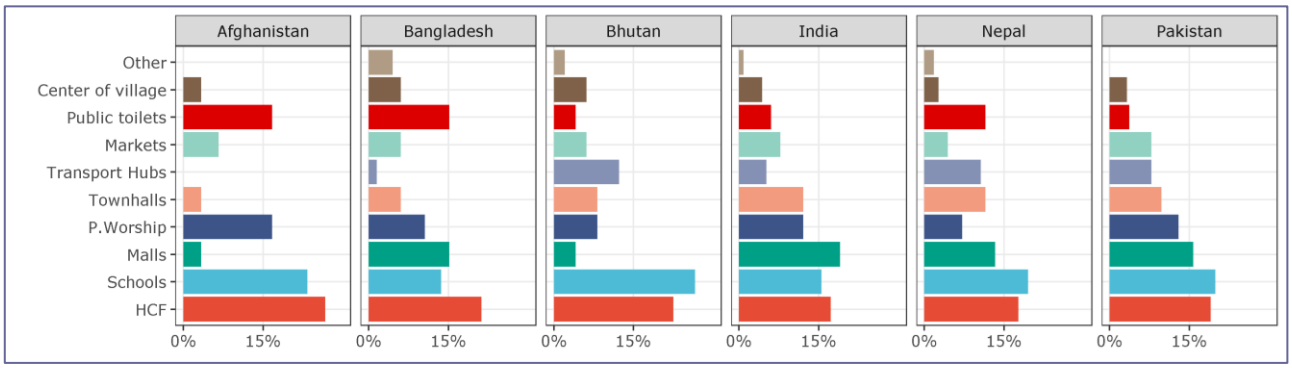
Figure 4: Perception of the public spaces where the O&M of hand hygiene facilities is most challenging



Responsibility assigned for the O&M of hand hygiene facilities

Respondents were asked to select the public spaces where the responsibility for the O&M of hand hygiene facilities is clearly assigned to an individual or entity (see **Figure 5**). Sustainable operation and maintenance of HHFs in public spaces is one of the key issues: in some survey locations, hand hygiene stations have been handed over to relevant stakeholders, while others remain unassigned and risk losing functionality. As noted above, O&M arrangements are likely to vary between the same type of setting.

Figure 5: Perception of the public spaces where the responsibility for O&M of hand hygiene facilities is clearly assigned to an individual or entity



BOX 3.

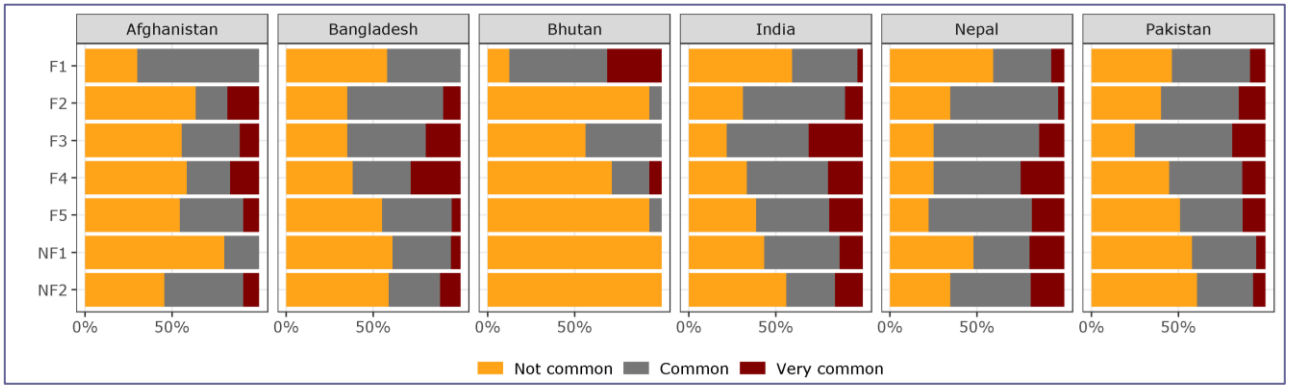
PROGRAMME GUIDANCE: O&M

O&M refers to replacing consumables (e.g., ABHR solution, soap, water), minor and capital repairs to the facility, cleaning facilities, and the eventual replacement of facilities. The HHF should be made of locally available and durable materials that do not corrode or degrade quickly and allow for easy regular cleaning/ disinfecting. A supply of spare parts is needed that could be replaced as and when required. Good examples of hand hygiene facilities corresponding to those requirements can be found in the UNICEF Fact Sheet Handwashing Stations and Supplies for the COVID-19 (UNICEF,2020) and the COVID-19 Handwashing with Soap Facilities: Compendium of Indicative Layouts, Designs and Cost Estimates (UNICEF India, 2020). The survey shows that water refilling was reportedly a challenge where there is no regular water supply system. Water saving or storage capacity should be considered for sustainability.

Prevalence of each functionality type

Of all the hand hygiene facilities that have been deployed in public spaces over the past 12 months, respondents were asked to indicate how prevalent they think functionality is on that day (see **Figure 6**). In all countries, WASH sector partners observe a large range of functionality types. Within countries, there is no agreement on the prevalence of each functionality type. However, the low percentage of "fully functional" facilities in all countries (except Bhutan) suggests that challenges with maintenance and design are widespread. Bhutan is the only country where the WASH sector partners indicate HHFs in public spaces are rarely abandoned.

Figure 6: Perception of the functionality of all the hand hygiene facilities (taking a snapshot today) deployed in public spaces over the past 12 months

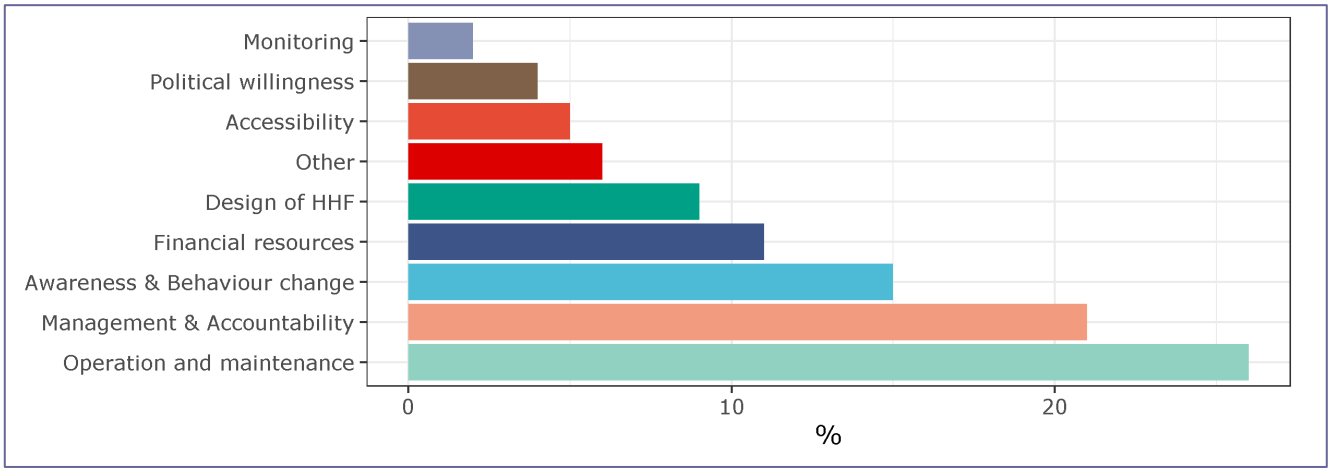


Functionality type
F1 **=** Fully functional. The facility works as intended and facilitates effective hand hygiene, and encourages use
F2 **=** Functional but poorly designed
F3 **=** Functional but poorly maintained
F4 **=** Functional, but currently water and/or consumables are not available.
F5 **=** Functional, but water and/or consumables have not been available for a long time. Facility has been abandoned
NF1 **=** Non-functional due to recent mechanical failure
NF2 **=** Facility has been abandoned. Non-functional due to long-time mechanical failure

Main challenges with the functionality or accessibility of hand hygiene facilities in public spaces

If there are challenges with the functionality or accessibility of hand hygiene facilities in public spaces, respondents were asked what the main causes of such challenges are (see **Figure 7**). WASH sector partners indicate that O&M, management & accountability, behaviour change, and financial resources contribute significantly to the poor status of hand hygiene facilities. **Figure 7** presents responses to open questions which have been aggregated into the categories shown in the graph. In reality, many categories actually overlap or are strongly associated (such as political willingness and financial resources). As many of the challenges are interrelated this suggests that constraints are multidimensional (e.g., political willingness effects financing effects O&M). Most respondents are assumed to have focused on direct causes (like O&M) and less on indirect causes (political willingness).

Figure 7: Main causes of any challenges with the functionality or accessibility of hand hygiene facilities in public spaces



BOX 4.

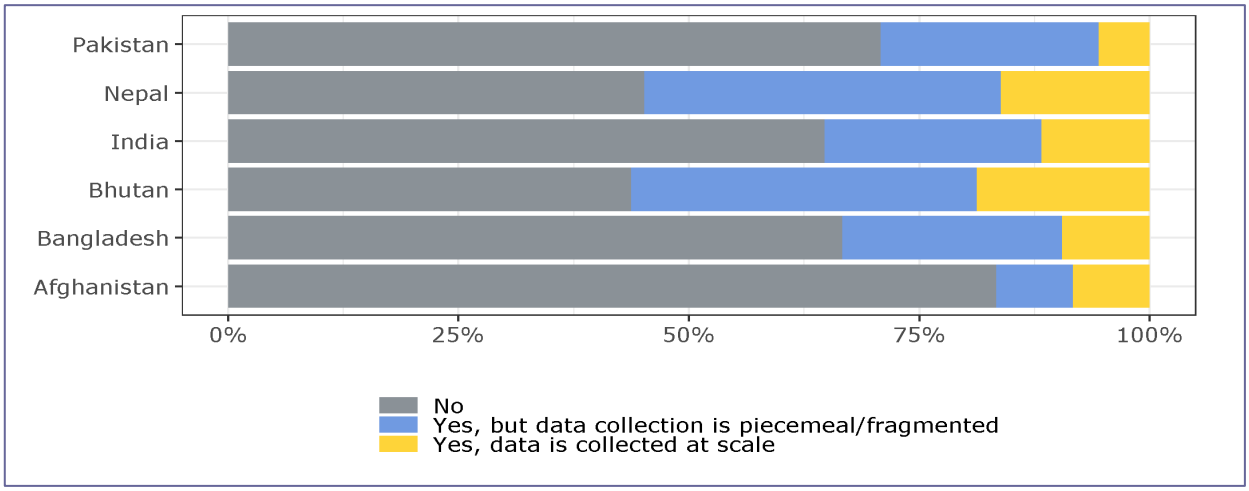
PROGRAMME GUIDANCE: FUNCTIONALITY

Functionality refers to the HHF being fully functional in design and equipped with consumables throughout the full time it is used (water and cleansing agent or ABHR), which varies by location (fully public 24/7 or public throughout opening hours in malls, etc.). Tap issues, problems with the soap dispenser or the water reservoir, the water flow, the drainage system of the HHF, etc. result in limited or non-functionality (JMP, 2021). Those responsible for the public HHFs (such as line ministries) are accountable to maintain demand, allocate budget for O&M, as well as repair and maintain facilities. They may need training on newer technologies to ensure they are aware of the implications for daily and long-term management. A costed plan outlining role, responsibilities, required resources and funding sources for the lifecycle costing of the HHFs may be a useful management tool.

Data collection on the status of hand hygiene facilities in public spaces

Respondents were asked whether the WASH sector in their country/region collect data on the status of hand hygiene facilities in public spaces (see **Figure 8**). WASH sector partners indicate that monitoring of HHF in public facilities is non-existent or piecemeal. Data is most likely to be collected at scale in Bhutan and Nepal. In most cases there is no monitoring at scale in public places.

Figure 8: Perception of whether the WASH sector in each country collects data on the status of hand hygiene facilities in public spaces



BOX 5.

PROGRAMME GUIDANCE MONITORING

Globally, there are no harmonized measurements of hand hygiene in public places. User feedback on the quality and acceptability of hand hygiene services is not generally monitored. The most common measurement is the spot-check on the availability of soap and water (JMP, 2021). Alongside monitoring the facilities functionality, monitoring of use is also important. Structured observation of hand hygiene is considered the most reliable method for assessing practices (duration of hand washing, use of proper technique, see Maulit et al. 2013; GHP, 2020). Yet self-reported hand hygiene behaviour practices are still frequently used to do this. A better understanding of when people wash their hands in public spaces is important (i.e., whether it is still at the five critical times traditionally promoted by the WASH sector or COVID-19 related times). Challenges, such as the non-validity of self-reported COVID-19 protective behaviours (Hansen et al 2021) and monitoring hand hygiene compliance, make it difficult to assess the effectiveness of interventions that can be taken to scale.

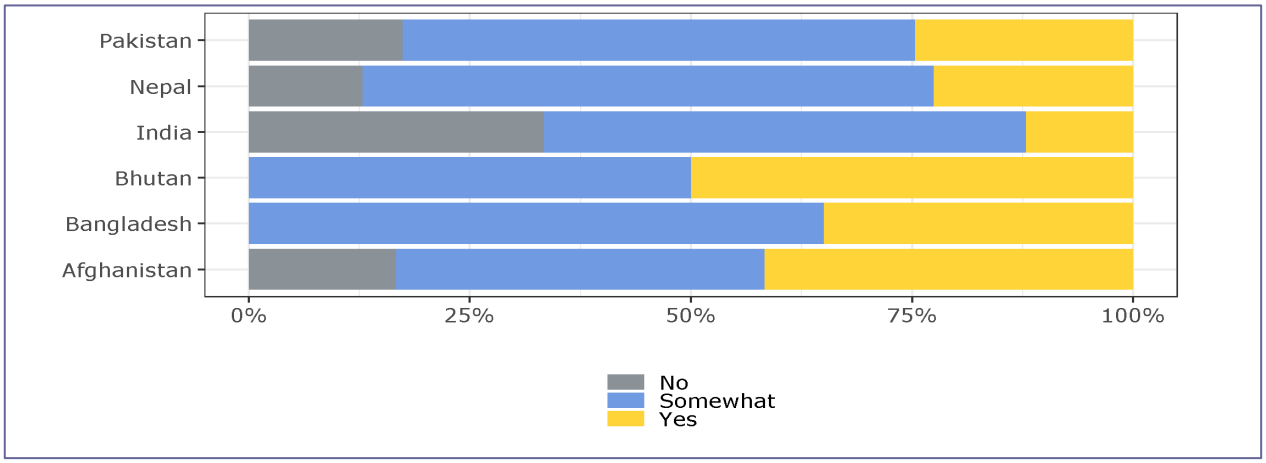
Level of insight in the coverage and gaps of hand hygiene facilities in public spaces

Respondents were asked whether the WASH sector in their country/region have a good insight in the coverage and gaps of hand hygiene in public spaces (see **Figure 9**). Even without proper monitoring, WASH partners indicate that they do have a good understanding of the existing gaps. This suggests that more accurate monitoring data is not required to start addressing the problems. The lack of good monitoring data is not among the main causes of the poor status of hand hygiene facilities.

Conclusions

The Special Rapporteur has highlighted the vital relevance of public spaces such as streets, markets and transport in enabling people to access their rights to water and sanitation. These services should be available, accessible, affordable, safe, acceptable and maintain the dignity of the user. Similarly, hand hygiene facilities must be available in places where they can be used by all people, at all times in accordance with these principles (JMP 2021, adapted from OHCHR, 2019).

Figure 9: Perception of whether the WASH sector in each country has a good insight into the coverage and gaps of hand hygiene facilities in public spaces



Facilities should be suitably located within the public space and designed to be accessed safely and securely. During the COVID-19 pandemic, all countries in UNICEF's South Asia region have deployed HHF in public places including in newer settings (for WASH actors at least) such as commercial malls and places of worship.

The results from this survey are the first steps towards investigating the location, functionality, O&M and monitoring of hand hygiene in public places in South Asia. Further research and evidence are still needed, particularly in relation to O&M. The success of recent efforts to provide facilities for hand hygiene is encouraging though it is clear, that an enabling environment is required to sustain both the facilities and the practice in public places. Given the novelty of HHF in certain public spaces it is understandable that the corresponding enabling environment is still being built. In support of this, multisectoral stakeholders in the region are currently developing country roadmaps to improve hand hygiene and guide actions to strengthen the enabling environment, under the Hand Hygiene For All initiative.

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About the Authors

Nicole Klaesener-Metzner, WASH specialist, UNICEF ROSA

Peter van Maanen and Sue Cavill, WASH consultants, UNICEF ROSA.

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United Nations Children's Fund
3 United Nations Plaza, New York, NY 10017, USA
For more information, please contact: WASH@unicef.org

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