



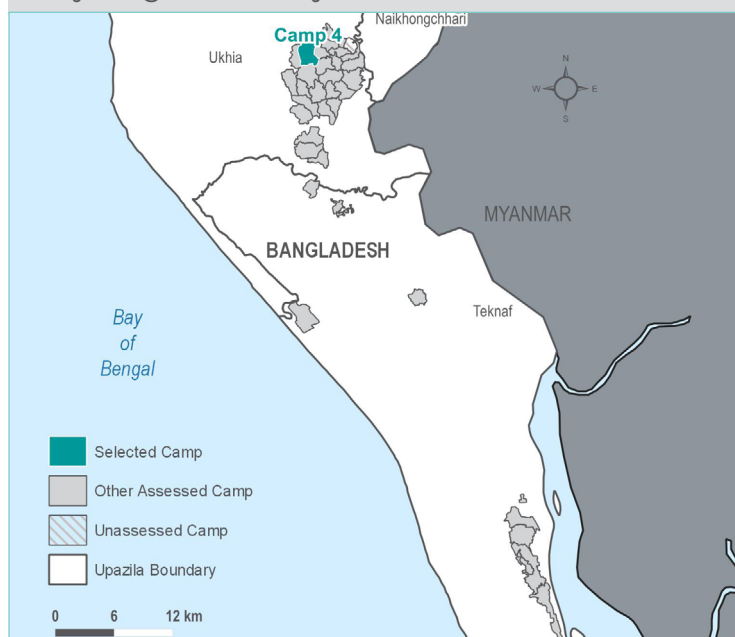
## Background and Methodology

Since August 2017, an estimated 723,000 Rohingya refugees have arrived in Bangladesh's Cox's Bazar District from Myanmar, bringing the total number residing in Bangladesh to approximately 915,000.<sup>1</sup> The unplanned and spontaneous nature of the post-August Rohingya refugee camps have combined with high population densities and challenging environmental conditions to produce a crisis with especially acute water, sanitation and hygiene (WASH) needs.

In April 2018, REACH undertook a WASH household baseline assessment in support of the Cox's Bazar WASH Sector, followed by a second assessment during the monsoon period between August and October 2018. In the dry season between April and May 2019, REACH undertook this follow-up assessment, taking the form of a household survey covering 33 Inter Sector Coordination Group (ISCG)-recognised camps, with Kutupalong Refugee Camp the only exception due to ongoing security concerns. This assessment aims to identify changes to WASH conditions and needs of Rohingya refugees residing in the camps in the second year of the humanitarian response. A key change to this assessment is the inclusion of a range of questions for each individual residing in each surveyed household, aimed at understanding what characterizes households with high levels of WASH needs. In addition, in the Kobo form photos were included for all types of WASH facilities, water containers, waste disposal locations, and soap, which enumerators showed to respondents when asking questions about their households' WASH practices. Results of this assessment are generalizable with a 95% confidence level and a 10% margin of error at the camp level. 50% of enumerators were female (28 out of 56), with all enumerators interviewing refugees of the same gender only. **This factsheet presents an analysis of data collected in Camp 4, where 109 households were surveyed.**

Enumerator training took place prior to the start of data collection. Support for questionnaire translation from English to Rohingya language and enumerator language training was provided by Translators Without Borders.

As part of this assessment, 33 camp-level factsheets (including this one) as well as one response-level factsheet have been produced, displaying key findings from the survey. All REACH products, including those related to the first two assessments, are available on the [REACH Resource Centre](#). In addition, all datasets are available on [Humanitarian Data Exchange](#), while all factsheets and maps are available on [HumanitarianResponse](#). To provide feedback on REACH products, please contact: [bangladesh@reach-initiative.org](mailto:bangladesh@reach-initiative.org)



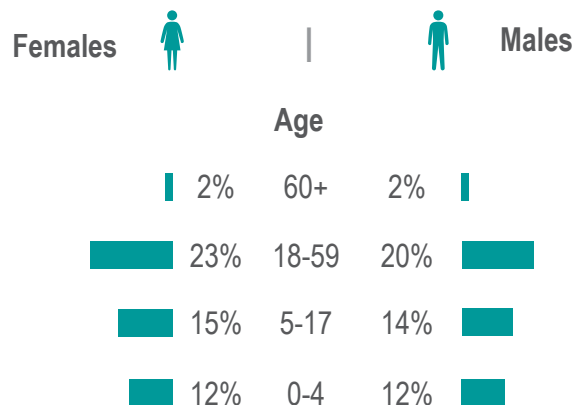
## Demographics

|  |        |
|--|--------|
| Population in camps (individuals) <sup>1</sup> | 32,399 |
| Population in camps (families) <sup>2</sup>    | 7,948  |
| Average age of respondent                      | 34     |
| Average household size                         | 4.9    |



53% of respondents were female

### Composition of surveyed households



15% of heads of household were female



63% of households contained at least one child under 5 years old



24% of households contained at least one person with a disability<sup>3</sup>

### % of households reporting different levels of satisfaction overall with water, sanitation and hygiene within the camp

|                  |     |  |
|------------------|-----|--|
| Very satisfied   | 44% |  |
| Satisfied        | 42% |  |
| Unsatisfied      | 14% |  |
| Very unsatisfied | 0%  |  |

<sup>1</sup> Population numbers in assessed camps were derived from the UNHCR Family Counting Dataset from 30 April 2019

<sup>2</sup> This assessment considers a 'household' a 'family' as defined in the UNHCR Family Counting datasets

<sup>3</sup> The Kobo tool used for this assessment included a loop with disability questions asked by proxy for each individual within the household

## Water


### Water access


% of households reporting accessing primary sources for drinking water and different sources for non-drinking water<sup>4</sup>

| Primary water sources             | Drinking water | Non-drinking water |
|-----------------------------------|----------------|--------------------|
| <b>✓ Improved water sources</b>   | <b>100%</b>    | <b>19%</b>         |
| Tubewells/boreholes/handpump      | 96%            | 17%                |
| Tapstand/piped water              | 4%             | 1%                 |
| Protected dugwell                 | 0%             | 0%                 |
| Protected spring                  | 0%             | 0%                 |
| Water tank                        | 0%             | 1%                 |
| Rainwater collection              | 0%             | 0%                 |
| Bottled water                     | 0%             | 0%                 |
| <b>x Unimproved water sources</b> | <b>0%</b>      | <b>0%</b>          |
| Unprotected dugwell               | 0%             | 0%                 |
| Unprotected spring                | 0%             | 0%                 |
| Surface water                     | 0%             | 0%                 |

% of households reporting different durations to collect water (combined travel and waiting time)

|              |     |             |
|--------------|-----|-------------|
| > 30 mins    | 22% | <div></div> |
| 21 - 30 mins | 31% | <div></div> |
| 16 - 20 mins | 4%  | <div></div> |
| 11 - 15 mins | 34% | <div></div> |
| 6 - 10 mins  | 9%  | <div></div> |

 **78%** of households reported a total water collection time (combined travel and waiting) of less than or equal to 30 minutes<sup>5</sup>

 **53%** of households reporting facing problems accessing or collecting water<sup>6</sup>


% of households reporting facing different problems accessing or collecting water<sup>7,8</sup>


- Source is too far **39%**
- Long wait times at water source **28%**
- Path is too steep **25%**

### Water collection and storage

Average amount of water collected by households<sup>9</sup>


|   | Drinking water | Non-drinking water | All domestic water |
|---|----------------|--------------------|--------------------|
| Average litres collected per person, per day, per household | 13L            | 10L                | 23L                |


 **63%** of households reported collecting at least 15 litres of water for all domestic uses per person, per day<sup>10</sup>

 **82%** of households reported collecting at least 3 litres of drinking water per person, per day<sup>10</sup>

% of households possessing different types of water containers<sup>7</sup>

- Aluminium pitcher **93%**
- Bucket **69%**
- Plastic jerrycan **22%**

 **99%** of households reported normally cleaning their containers

 **91%** of households possessed at least one container that was covered with a lid/plate<sup>11</sup>

% of households reporting different durations of water storage within the household

|                   |     |             |
|-------------------|-----|-------------|
| Less than one day | 84% | <div></div> |
| 1-2 days          | 13% | <div></div> |
| 3-4 days          | 2%  | <div></div> |
| 5 days or more    | 1%  | <div></div> |

<sup>4</sup> Cox's Bazar WASH Sector considers 'improved' water sources as listed. 19% of households reported using a different water source for purposes such as cooking and cleaning, as listed

<sup>5</sup> SDG JMP standard for combined travel time to/waiting time at water source:

30 minutes or less. See: <https://bit.ly/2ONrjQg>

<sup>6</sup> A household is considered to be facing problems if at least one individual within the household was reported as facing problems

<sup>7</sup> Respondents could select multiple options

<sup>8</sup> Only households reporting facing any problems were asked this question. Data for the % of all surveyed households are shown

<sup>9</sup> Respondents were asked to present all water containers used to collect water the day prior to the survey, then identified which containers were used for drinking water, non-drinking water, or both. Containers were measured to determine approximate volume

<sup>10</sup> SPHERE minimum standard for all domestic water: 15 litres/person/day and SPHERE minimum standard for drinking water: 3 litres/person/day  
See: <https://bit.ly/2MJwFvk>

<sup>11</sup> Enumerators observed whether containers were covered/uncovered



## Water treatment



14% of households reported using aquatabs in the seven days prior to data collection

### % of households reporting reasons for not using aquatabs<sup>12,13,14</sup>

- 1 Never received aquatabs 51%
- 2 Supply ran out 17%
- 3 Don't know about about aquatabs 16%



## Sanitation

### Defecation and latrines

#### % of individuals reported as defecating in different spaces, by age and gender<sup>15</sup>

| Places of defecation                     | 0-4    |      | 5-17   |      | 18-59  |      | 60+    |      |
|--|--------|------|--------|------|--------|------|--------|------|
|  | Female | Male | Female | Male | Female | Male | Female | Male |
| Communal/public latrines                 | 19%    | 28%  | 78%    | 67%  | 78%    | 75%  | 78%    | 53%  |
| Single household latrine (self-made)     | 6%     | 0%   | 3%     | 7%   | 4%     | 6%   | 0%     | 0%   |
| Single household latrine (non-self made) | 2%     | 2%   | 3%     | 4%   | 3%     | 4%   | 0%     | 0%   |
| Shared household latrine (self-made)     | 0%     | 0%   | 0%     | 1%   | 0%     | 3%   | 0%     | 7%   |
| Shared household latrine (non-self made) | 5%     | 7%   | 14%    | 20%  | 14%    | 12%  | 22%    | 13%  |
| Potty                                    | 14%    | 16%  | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   |
| Plastic bag                              | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   |
| Bucket                                   | 0%     | 0%   | 1%     | 0%   | 1%     | 0%   | 0%     | 27%  |
| Cloth                                    | 0%     | 7%   | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   |
| Open defecation                          | 54%    | 41%  | 1%     | 1%   | 0%     | 0%   | 0%     | 0%   |
| Other                                    | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   |

#### % of households reporting females and males facing problems accessing or using latrines<sup>16</sup>



Female 46%

47% Male



#### % of households reporting females and males facing different types of problems accessing or using latrines<sup>12,16,17</sup>



Females

Males



- 37% Too many people using latrines 1 Too many people using latrines 35%
- 18% Not clean 2 Not clean 23%
- 18% Bad smell/ many flies 3 Latrine is full 17%

#### % of individuals reported as feeling unsafe accessing or using latrines, by age and gender



Females

Males



|     |       |     |
|-----|-------|-----|
| 56% | 60+   | 17% |
| 17% | 18-59 | 23% |
| 18% | 5-17  | 13% |



6% of respondents reported presence of soap the last time they were at the latrine

## Bathing

#### % of individuals reported as bathing in different spaces, by age and gender<sup>15</sup>

| Bathing spaces                     | 0-4    |      | 5-17   |      | 18-59  |      | 60+    |      |
|------------------------------------|--------|------|--------|------|--------|------|--------|------|
|                                    | Female | Male | Female | Male | Female | Male | Female | Male |
| Communal/public facility           | 6%     | 44%  | 65%    | 7%   | 92%    | 65%  | 67%    | 67%  |
| Tubewell platform                  | 38%    | 17%  | 20%    | 88%  | 0%     | 34%  | 0%     | 0%   |
| Makeshift space inside the shelter | 53%    | 37%  | 15%    | 5%   | 8%     | 1%   | 33%    | 33%  |
| Surface water                      | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   |
| No designated facility             | 3%     | 2%   | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   |
| Other                              | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   | 0%     | 0%   |

<sup>12</sup> Respondents could select multiple options

<sup>13</sup> Three most common reasons for not using aquatabs or PUR sachets are shown

<sup>14</sup> Data for the % of households that do not use aquatabs are shown

<sup>15</sup> All respondents were asked where each individual within the household goes to defecate and bathe

<sup>16</sup> All respondents were asked where each individual within the household faces problems accessing or using latrines. Data for the % of households reporting at least one female member as well as one male member facing problems are shown.

<sup>17</sup> Top three most common problems faced by females and males are shown. Data for the % of all surveyed households are shown

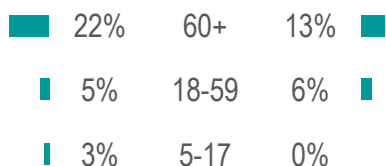


## % of households reporting females and males facing problems accessing or using bathing facilities<sup>18</sup>



17% of households reported the presence of too many people at bathing facilities<sup>19</sup>

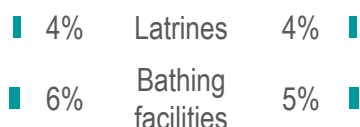
## % of individuals reported as feeling unsafe accessing or using bathing facilities, by age and gender<sup>20</sup>



## Community consultation - sanitation facilities

### % of households reporting:

Having been asked for input on the design and construction of facilities | That their input was taken into account in the design and construction of facilities<sup>21</sup>



## Laundry

### % of households reporting normally using different laundry facilities

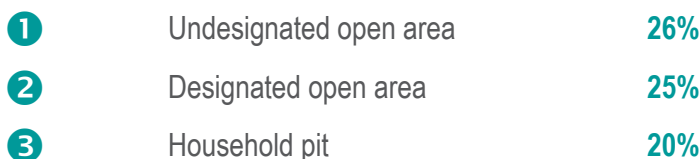


## Environmental sanitation



31% of households reported stagnant water gathering around the household following heavy rain

## % of households reporting different locations used for disposing of domestic waste<sup>22</sup>

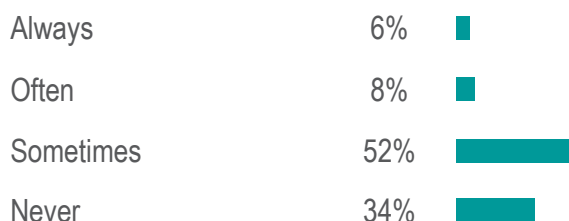


30% of households reported burning their waste<sup>23</sup>

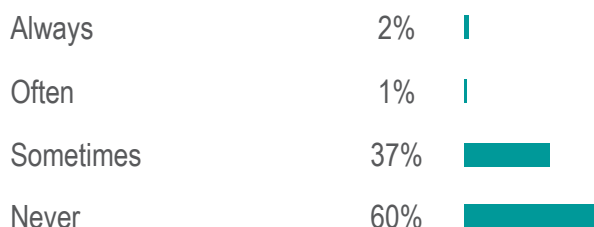


49% of households reported separating domestic waste when disposing of it (i.e. plastics, organics, glass, ash)<sup>24</sup>

## % of households reporting finding solid waste nearby the household (30 meters or less)



## % of households reporting finding faeces nearby the household (30 meters or less)



<sup>18</sup> All respondents were asked if each individual within the household faces problems accessing or using bathing facilities. Data for the % of households reporting at least one female member as well as one male member facing problems are shown

<sup>19</sup> This was the most commonly reported problem, with no major differences between gender or age of respondent

<sup>20</sup> This question was only asked about individuals who were reported as using communal bathing facilities or tubewells. Data for the % of individuals from each age group/gender reported as using any types of bathing facilities are shown

<sup>21</sup> Only households reporting having been asked for input on the design or construction of facilities were asked this question. Data for the % of all surveyed households are shown

<sup>22</sup> Top three most common locations for disposing of domestic waste are shown. Respondents could select multiple options

<sup>23</sup> Households using household bins, household pits, undesignated open areas, or burying rubbish were asked this question. Data for the % of all surveyed households are shown

<sup>24</sup> Only households reporting disposing of waste in household bins, household pits, shared bins, or designated open areas were asked this question. Data for the % of all surveyed households are shown



## % of households with children under five reporting employing different methods for disposing of children's faeces<sup>25,26</sup>

|   |     |
|---|-----|
| ✓ Safe methods                            | 92% |
| Collected and disposed in latrine         | 89% |
| Children always use sanitation facilities | 3%  |
| X Unsafe methods                          | 19% |
| Collected and disposed inside the shelter | 0%  |
| Collected and disposed in an open area    | 11% |
| Disposed with other garbage               | 4%  |
| Bury it                                   | 4%  |
| Nothing is done with it (open defecation) | 0%  |

## Hygiene

### Handwashing and soap

#### % of households reporting possession of soap for handwashing

Yes (enumerator did see soap): **72%** Yes (enumerator did not see soap): **20%** No: **8%**



**100%** of households that did possess soap reported this was due to the household running out<sup>27</sup>



**90%** of respondents reported washing their hands with soap the day prior to the survey



**82%** of respondents were able to identify at least three critical handwashing times<sup>28</sup>

#### % of respondents reporting washing their hands with soap at different times in the day prior to the survey<sup>28</sup>

|                          |            |                                      |            |
|--------------------------|------------|--------------------------------------|------------|
| Before eating:           | <b>99%</b> | Before cooking/<br>meal preparation: | <b>62%</b> |
| After defecation:        | <b>94%</b> | Before breastfeeding:                | <b>2%</b>  |
| Before feeding children: | <b>17%</b> | After handling child faeces:         | <b>20%</b> |
| When hands felt dirty:   | <b>15%</b> | Before prayer:                       | <b>11%</b> |
| When hands looked dirty: | <b>14%</b> |                                      |            |

## Hygiene training and demonstrations



**36%** of households reported member(s) having participated in at least one hygiene activity within the two weeks prior to data collection

#### % of households reporting different hygiene activities that households members<sup>29</sup>

| Have participated in already <sup>30</sup> |                       | Would like to participate in              |
|--|-----------------------|---|
| <b>22%</b>                                 | Food hygiene          | <b>1</b> Use of aquatabs <b>50%</b>       |
| <b>22%</b>                                 | Child handwashing     | <b>2</b> Handwashing with soap <b>48%</b> |
| <b>20%</b>                                 | Handwashing with soap | <b>3</b> Food hygiene <b>44%</b>          |

<sup>25</sup> Global WASH Cluster standard: collecting and disposing of children's faeces in a latrine and children using latrines is considered safe. See: <https://bit.ly/2Zi56rR>

<sup>26</sup> Respondents could select multiple options

<sup>27</sup> This was the most common reason for households not possessing soap. Data for the % of households that did not possess soap are shown

<sup>28</sup> Global WASH Cluster standard: six critical times when people should wash their hands are: (1) before eating, (2) before cooking, (3) after defecation, (4) before breastfeeding, (5) before feeding children, and (6) after handling a child's stool/hanging a child's nappy/cleaning a child's bottom. See: <https://bit.ly/2Zi56rR>

<sup>29</sup> Three most common types of hygiene activities that households have participated in or would like to participate in are shown. Data for the % of all surveyed households are shown

<sup>30</sup> Types of hygiene activities presented here relate to those which households reported participating in within two weeks prior to data collection