Water, Sanitation and Hygiene Follow-up Assessment
Monsoon Season (August - October 2018)
Camp 12, Ukhia Upazila, Cox's Bazar District, Bangladesh

WASH Sector Cox's Bazar

Overview & Methodology

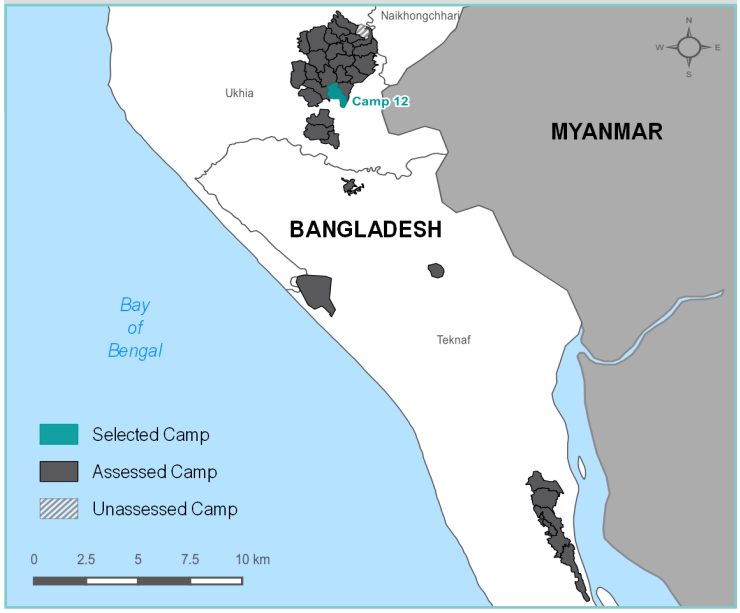
Since August 2017, an estimated 727,000 Rohingya refugees have arrived in Bangladesh's Cox's Bazar District from Myanmar, bringing the total number residing in Bangladesh to approximately 921,000.[1] The unplanned and spontaneous nature of the post-August Rohingya refugee camps have combined with high 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 assessment in the framework of the Cox's Bazar WASH Sector with UNICEF support, which established a baseline for WASH conditions and perceptions amongst Rohingya refugee communities in Cox's Bazar District. Between August and October 2018, REACH undertook this follow-up assessment, taking the form of a household survey covering 33 out of the 34 Inter Sector Coordination Group-recognised camps, with Kutupalong RC the only exception due to ongoing security concerns. Due to issues surrounding access, enumerators were able to access some of the camps only intermittently between 12 and 26 September 2018.

This follow-up assessment aims to understand changing WASH conditions across the Rohingya refugee camps since April 2018, and where possible understand the impact of the monsoon season, to inform priority areas and types of humanitarian programming. Results of this follow-up assessment are generalizable at the camp level with a 95% confidence level and a 10% margin of error. The method of identifying heads of households as primary respondents in the baseline survey resulted in a low proportion of female respondents. To address this limitation, this follow-up survey required enumerators to interview refugees of the same gender only. As a result, menstrual hygiene indicators are not included in camp-level factsheets, due to an insufficient number of females having been interviewed to yield generalizable results, however these indicators are included in the all-camp summary factsheet. **This factsheet presents an analysis of data collected within Camp 12, where 101 households were surveyed,[2] as well as an indicator comparison table displaying changes in WASH conditions between the baseline and follow-up assessments.**

Enumerator training took place prior to the start of data collection, including sessions on testing for residual chlorine run by the Centre for Disease Control, as well as Prevention of Sexual Exploitation and Abuse (PSEA) run by UNHCR. Support for questionnaire translation from English to Rohingya language and enumerator language training was provided by Translators Without Borders.

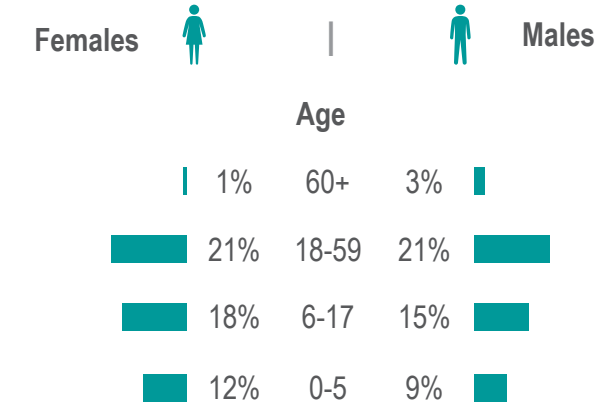
As part of this assessment, 33 camp-level factsheets and one all-camps summary factsheet display key findings from the survey. All REACH products, including those related to the baseline assessment, are available on the REACH Resource Centre. In addition, all datasets are available on Humanitarian Data Exchange, while all factsheets and maps are available on HumanitarianResponse.



Demographics

Population in camp (individuals)[3]	21,922
Population in camp (families)[3]	4,855
Average age of respondent	35
Average household size	5

Composition of surveyed households



40% of respondents were female

20% of heads of households were female

53% of households with at least one child under 5 years old

% of households reporting different levels of overall satisfaction with water, sanitation and hygiene

Very satisfied	10%
Satisfied	71%
Unsatisfied	19%
Very unsatisfied	0%

[1]Inter Sector Coordination Group Situation Report Data Summary (27 September, 2018). See: https://bit.ly/2D36vx5

[2]Please note that 8 surveys from Camp 12 contained water container measurement outliers and were excluded from data analysis, to avoid skewing data. This had a marginal effect on the margin of error for Camp 12 (95/10.07).

[3]Due to relocations of refugees to extension camps occurring at the time of assessment, population numbers for Camp 4 Extension and Camp 20 Extension were derived from the UNHCR Family Counting August 15, 2018 dataset, while population numbers for the remaining 31 camps surveyed were derived from the July 15, 2018 dataset. This assessment considers a household a 'family' as defined in the UNHCR Family Counting dataset.

For more information, please contact REACH:
bangladesh@reach-initiative.org

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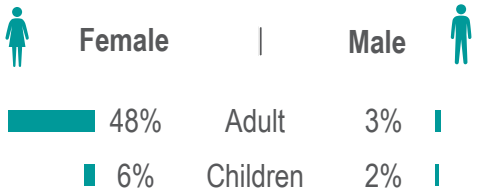
Water

Water access

% of households reporting primary water sources for drinking water[4]

Primary drinking water sources	
✓ **Improved water sources**	**100%**
Tubewells/boreholes/handpump	81%
Tapstand	18%
Protected dugwell	0%
Protected spring	0%
Cart with small tank/drum	0%
Tanker truck	0%
Water tank	1%
Rainwater collection	0%
Bottled water	0%
x **Unimproved water sources**	**0%**
Unprotected dugwell	0%
Unprotected spring	0%
Surface water	0%

% of households reporting household members that normally collect water



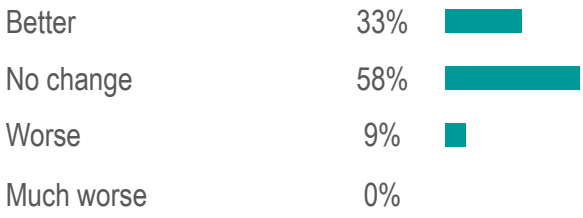
9% of households reported total water collection time (combined travel and waiting) as more than 30 minutes[5,6]

29% of households reported problems with accessing water

% of households reporting different problems with accessing water[7]

1	Source is too far away	20%
2	Path to water source is too steep	18%
3	Long wait time	9%

% of households reporting changes in access to water compared to before the monsoon season



Water collection and storage

Average amount of water collected by households[8]

	Drinking water	Non-drinking water	All domestic water
Average litres collected per person, per day for each household	4L	5L	9L

62% of households reported collecting at least 15 litres of water for all domestic uses per person, per day[9]

88% of households reported collecting at least 3 litres of drinking water per person, per day[10]

% of containers within households that were:

Covered: **98%** Clean: **99%** Covered AND clean: **98%**

[4]Cox's Bazar WASH Sector considers 'improved' water sources as listed
[5]There were no significant differences in responses from females and males
[6]SDG JMP standard for combined travel time to/waiting time at water source: 30 minutes or less: See: https://bit.ly/2ONrjQg
[7]Respondents could select multiple options
[8]Respondents were asked to present all water containers used to collect water the day prior to the survey, then identified which containers are used for drinking water, non-drinking water, or both. All containers were measured with tape measures to determine approximate volume.
[9]SPHERE minimum standard for all domestic water: 15 litres/person/day See: https://bit.ly/UKcX1Z
[10]SPHERE minimum standard for drinking water: 2.5 - 3 litres/person/day: See: https://bit.ly/UKcX1Z

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% of households reporting using types of containers used for all domestic water[11,12]

1	Aluminium pitcher	98%
2	Bucket	78%
3	Plastic jerrycan	15%

% of households reporting duration of all domestic water storage within the household

Less than one day	83%
1-2 days	17%
3-4 days	0%
5 days or more	0%

% of containers tested for chlorine returning chlorine residual (c/r) values[13]

3 c/r	2 c/r	1.5 c/r	1 c/r	.6 c/r	.3 c/r	0.1 c/r	0.0 c/r
0%	0%	0%	0%	0%	0%	2%	98%

15% of households reported witnessing someone treating water with chlorine the last time they were at a waterpoint[14]

44% of households reported normally treating water before drinking

% of households reporting using types of water treatments[11,15]

1	Aquatabs	38%
2	Cloth filters	10%
3	Household filters	1%

% of households reporting reasons for not using aquatabs[16]

1	Supply of aquatabs ran out	68%
2	Never received aquatabs	42%
3	Don't know how to use aquatabs	3%

Coping strategies

2% of households reported facing problems accessing water in the month prior to data collection

% of households reporting employing different coping strategies to compensate for water insufficiency in the month prior to data collection[11,17]

1	Use a source that is further away	2%
2	Use an unsafe water source	1%
3	Use untreated water for drinking	0%

Sanitation

Defecation and latrines

% of households reporting different household members normally defecating in different spaces

Places of defecation	Females ≥5	Males ≥5	Children <5
Communal/public latrines	62%	64%	35%
At facilities (e.g. school, clinic)	0%	0%	0%
Single household latrine (self-made)	1%	0%	0%
Single household latrine (non-self made)	9%	9%	0%
Shared household latrine (self-made)	12%	12%	2%
Shared household latrine (non-self made)	16%	15%	0%
Open defecation	0%	0%	57%
Bucket	0%	0%	6%
Other	0%	0%	0%

78% of households reported presence of soap the last time they were at the latrine

% of households reporting women and men facing problems with accessing latrines

Women 35% | 25% Men

[11]Respondents could select multiple options
[12]Three most common types of water containers for all domestic purposes are shown
[13]Enumerators tested water for chlorine with pool testers in containers where respondents reported using the container for collecting drinking water. 145 out of 267 total water containers were tested for chlorine across within Camp 12
[14]This indicator relates to an initiative in camps where volunteers or staff assist people put chlorine in their water containers when at a waterpoint
[15]Three most common types of water treatments used are shown
[16]This question was asked when respondents reported not using aquatabs. Three most common reasons for not using aquatabs are shown
[17]Three most common strategies to compensate for water insufficiency are shown

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% of households reporting women and men facing types of problems accessing latrines[18,19]

	Women		Men	
1	Too many people	33%	Too many people	22%
2	Unclean	17%	Unclean	13%
3	No gender separation	13%	No lighting	7%

28% of households reported at least one member feeling unsafe when using latrines

% of households reporting different family members feeling unsafe when using latrines

Female		Male
4%	Elderly	4%
20%	Adults	14%
8%	Children	6%

% of households reporting changes in access to latrines compared to before the monsoon season

Much better	0%
Better	31%
No change	59%
Worse	10%
Much worse	0%

Environmental sanitation

11% of households reported stagnant water gathering around the household following heavy rain

% of households reporting spaces used for disposing of domestic waste[20]

1	Designated open area	51%
2	Communal pit	40%
3	Household/street bin	5%

% of households reporting employing different methods for disposing of children's faeces[21,22]

Methods	
✓ **Safe methods**	**33%**
Collected, rinsed and disposed in latrine	27%
Collected and disposed in latrine (not rinsed)	6%
x **Unsafe methods**	**31%**
Collected, rinsed and disposed in the shelter	0%
Collected and disposed in an open area	27%
Disposed with other garbage	2%
Buried it	0%
Open defecation	2%

Hygiene

Soap and handwashing

% of households reporting possession of soap for handwashing[23]

Yes (enumerator did see soap): **89%** Yes (enumerator did not see soap): **9%** No: **2%**

25% of households reported facing challenges with accessing soap

% of households reporting facing different problems with accessing soap[24]

1	Insufficient soap is provided in distributions	23%
2	Soap is too expensive	9%
3	Insufficient soap in available in markets	1%

51% of households were able to identify at least three critical handwashing times[25]

[18]Respondents could select multiple options
[19]Top three most common problems with accessing latrines are shown
[20]Top three most common locations for disposing of domestic waste are shown
[21]Only households with at least one child under 5 were asked where they dispose of children's faeces. Global WASH Cluster standard: collecting and disposing of children's faeces in a latrine (rinsed and non-rinsed) is considered safe. See: https://bit.ly/2ACcRCf
[22]Only households reporting having at least one child under 5 were asked about disposing of child faeces; data shown relates to the proportion of all surveyed households and therefore does not equal 100
[23]Respondents were asked to present soap to enumerators
[24]Top three most common problems with accessing soap are shown
[25]Global WASH Cluster standard: the 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/changing a child's nappy/cleaning a child's bottom. See: https://bit.ly/2ACcRCf

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% of households identifying different times when someone should wash their hands[26]

Before eating	97%	When hands look dirty	40%
After defecation	87%	Before feeding children	37%
After eating	74%	When hands feel dirty, sticky, oily	27%
Before prayer	55%	After handling child faeces	18%
Before cooking/ meal preparation	46%	Before breastfeeding	8%

% of households reporting methods for handwashing

Soap and water	97%
Water only	3%
Water and ash	0%

Bathing

% of households reporting women and men using types of bathing facilities

Women		Men
44%	Communal bathing facility	16%
2%	Tubewell platform	82%
54%	Makeshift space in shelter	1%
0%	No designated spot	0%

% of households reporting durations to walk to and from bathing facilities normally used

>30 mins	0%
30 mins	0%
20 mins	0%
15 mins	1%
10 mins	25%
≤5 mins	74%

% of households reporting women and men facing problems with accessing bathing facilities

Women 14% | 1% Men

% of households reporting women and men facing types of problems with accessing bathing facilities[26,27]

Women		Men	
8%	Too many people	1 Facility is unclean	1%
5%	Too far away	2 Insufficient water at facility	1%
3%	No lighting	3 Facility is unsafe	1%

% of households reporting different family members feeling unsafe using bathing facilities

Females		Males
0%	Elderly	1%
3%	Adults	3%
1%	Children	0%

% of households reporting changes in access to bathing facilities compared to before the monsoon season

Much better	1%
Better	29%
No change	68%
Worse	2%
Much worse	0%

Laundry

% of households reporting using types of spaces to do laundry

Tubewells	38%
Communal bathing facility	37%
Inside the shelter	26%

[26]Respondents could select multiple options
[27]Top three difficulties with accessing bathing facilities for women and men are shown

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Hygiene distributions

% of households reporting having received a 'full' WASH hygiene kit[28]

In the last month	1%
In the last 3 months	6%
In the last 6 months	8%
In the last year	7%
More than one year ago	3%
Never received	75%

% of households reporting having received a 'top-up' WASH hygiene kit[29]

In the last week	0%
In the last 2 weeks	3%
In the last month	5%
More than 1 month ago	15%
More than 2 months ago	33%
More than 3 months ago	39%
Never received	5%

Hygiene training and demonstrations

61% of households reported having participated in at least one hygiene training or demonstration within two weeks prior to the survey

% of households reporting different hygiene training or demonstrations that households members[30,31]

Have participated in already:			Would like to participate in:	
60%	Hand washing with soap	1	Food hygiene	51%
57%	Cleaning latrines	2	Hand washing with soap	48%
55%	Food hygiene	3	Cleaning latrines	44%

Diarrhoea and cholera/acute water diarrhoea[32]

% of households identifying different diarrhoea prevention methods[31]

Wash hands with soap	98%
Drink only clean water	91%
Eat only safe food	85%
Use latrines	53%
Vaccination	4%

% of households identifying different diarrhoea causes[31]

Dirty water	92%
Dirty food	92%
Dirty hands	67%
Open defecation	44%
Germs	41%

% of households identifying different signs of cholera/ acute watery diarrhoea[31]

Rice watery stools	94%
Stomach pain/cramps	63%
Vomiting	55%
Sunken eyes	38%
Rapid dehydration	30%

[28] 'Full' hygiene kits include non-consumables (i.e. water containers)
[29] 'Top-up' hygiene kits include consumables (i.e. soap, shampoo)
[30] Top three most common hygiene trainings that households have participated in and would like to participate in are shown
[31] Respondents could select multiple options
[32] Acute water diarrhoea is commonly referred to as AWD

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Indicator Comparison Table: Baseline (April 2018) & Follow-up (August - October 2018) Assessments

The following table displays a comparison of findings from the REACH WASH Household Baseline (April 2018) and Monsoon Follow-up (August - October 2018) assessments, showing changes in WASH conditions within Camp 12 in Cox's Bazar District, Bangladesh. The table identifies the recognised WASH monitoring frameworks from which indicators were adopted in designing the assessments, highlighting indicators reportable across muliple frameworks where applicable.

	Monitoring frameworks					REACH WASH Household Data	
Indicators	Cox's Bazar WASH Sector	Global WASH Cluster	Rohingya Response Joint Response Plan	SDG Joint Monitoring Program	SPHERE Indicators	Baseline	Monsoon Follow-up
Water							
% of households with access to an improved[1] water source for drinking	✓	✓	✓	✓	✓	100%	100%
% of households with access to an improved[1] water source for other purposes (i.e. cooking and cleaning)	✓	✓	✓	✓	✓	100%	100%
% of households accessing an adequate/sufficient quantity of water[2,3] - drinking water = 3 litres/person/day - all domestic water = 15 litres/person/day	 ✓ ✓				 ✓ ✓	 - -	 88% 62%
% of households reporting facing problems with accessing water in the month prior to data collection	✓					-	2%
% of households that use improved[1] water sources exceeding 30 minutes collection time[4]				✓	✓	-	9%
% of households reporting being satisfied or very satisfied with access to water	✓				✓	74%	81%
% of households that practice household water treatment	✓	✓			✓	12%	44%

Colour key:
Green = positive change from baseline
Orange = no change from baseline
Red = negative change from baseline
Grey = not assessed in baseline

Footnotes:
[1]Cox's Bazar WASH Sector standard for improved water sources: piped water into settlement site/public tap/standpipe, tubewell/borehole/handpump, protected dugwell, protected spring, rainwater collection, bottled water, cart with small tank/drum, water tank
[2]SPHERE standard for sufficient quantity of water: drinking water = 2.5 - 3 litres/person/day; drinking and non-drinking water combined: 15 litres/person/day.
[3]Water quantity data from the baseline survey is not included in this comparison table due to limitations resulting from the method of estimating water capacity through enumerators' observation of water containers within households. Water quantity data from the follow-up survey is included due to the more reliable method used of enumerators measuring each water container within the household with a tape measure to determine approximate litre capacity of drinking and non-drinking water.
[4]SDG JMP standard for collection time is <30 minutes. Data used to report on this standard from follow-up assessment includes combined travel time to/from the waterpoint plus waiting/queueing time at the waterpoint

Please note: Indicators identified as reportable across multiple monitoring frameworks are worded primarily as per Cox's Bazar WASH Sector indicators, with additional monitoring frameworks containing similar indicators identified in the same row with a tick. For example, the Cox's Bazar WASH Sector water indicator is listed in the table: *% of households with access to an improved water source*. Additional monitoring frameworks have been ticked as they contain indicators that may be reported on by using the same findings from the baseline and/or follow-up surveys, as follows: Global WASH Cluster: *% of households with access to a source of safe water*; SDG Joint Monitoring Program: *the proportion of the population that used improved water sources*; Rohingya Response JRP: *# of targeted people in settlements benefitting from safe water of agreed standards and meeting demand for domestic purposes*; SPHERE: *% of households where only safe water is used for drinking and cooking.* As such, assessment findings may be aggregated to the five listed monitoring frameworks. The same principle applies to all common indicators.

See monitoring frameworks at the following links: Cox's Bazar WASH Sector: https://bit.ly/2xZkzVO | Global WASH Cluster: https://bit.ly/2ACcRCf | Rohingya Response Joint Response Plan 2019: https://bit.ly/2NCSRmI | Sustainable Development Goals Joint Monitoring Program: https://bit.ly/2ONrjQg | SPHERE Indicators: https://bit.ly/UKcX1Z

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Indicators	Monitoring frameworks					REACH WASH Household Data	
	Cox's Bazar WASH Sector	Global WASH Cluster	Rohingya Response Joint Response Plan	SDG Joint Monitoring Program	SPHERE Indicators	Baseline	Monsoon Follow-up
Water (cont.)							
% of households possessing at least one acceptable narrow-necked or covered container for drinking		✓			✓	99%	98%
% of households with appropriate household water storage containers (covered and clean)	✓				✓	-	98%
Sanitation							
% of households in which at least one member practices open defecation - age five and over - under five		 ✓ ✓				 0% 62%	 0% 57%
% of households reporting being satisfied or very satisfied with access to latrines						72%	82%
% of households reporting presence of human faeces around the site/block often or always					✓	11%	20%
% of households reporting disposing of faeces of children under 5 in a safe[5] manner		✓				47%	33%
% of households reporting being satisfied or very satisfied with the solid waste management system around the site/block						84%	97%

Colour key:
Green = positive change from baseline
Orange = no change from baseline
Red = negative change from baseline
Grey = not assessed in baseline

Footnotes:
[5]Global WASH Cluster standard: collecting and disposing of children's faeces in a latrine (rinsed and non-rinsed) is considered safe.

See monitoring frameworks at the following links: Cox's Bazar WASH Sector: https://bit.ly/2xZkzVO | Global WASH Cluster: https://bit.ly/2ACcRCf | Rohingya Response Joint Response Plan 2019: https://bit.ly/2NCSRmI | Sustainable Development Goals Joint Monitoring Program: https://bit.ly/2ONrjQg | SPHERE Indicators: https://bit.ly/UKcX1Z

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Indicators	Monitoring frameworks					REACH WASH Household Data	
	Cox's Bazar WASH Sector	Global WASH Cluster	Rohingya Response Joint Response Plan	SDG Joint Monitoring Program	SPHERE Indicators	Baseline	Monsoon Follow-up
Hygiene							
% of households in which respondent can identify at least 3 of the critical hand washing times[6]		✓	✓		✓	-	51%
% of households reporting possession of soap or rubbing agent or having received soap as part of a distribution	✓	✓	✓			62%	98%
% of households reporting problems with accessing soap						47%	25%
% of households reporting problems with accessing bathing facilities		✓				-	14%
% of households reporting being satisfied or very satisfied with access to bathing facilities					✓	60%	89%
% of households having received a WASH hygiene kit and/or top-up kit and/or a voucher[7]	✓		✓			-	25%
% of households having recently participated in at least one hygiene training or demonstration						50%	61%
% of targeted women, men, boys and girls who are satisfied or very satisfied with the hygiene related information shared			✓			-	96%

Colour key:
Green = positive change from baseline
Orange = no change from baseline
Red = negative change from baseline
Grey = not assessed in baseline

Footnotes:
[6]Global WASH Cluster standard: the six critical times when someone 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/changing a nappy/cleaning a child's bottom.
[7]Respondents were asked when they last received (1) a hygiene kit containing non-consumables (i.e. water container) and (2) a hygiene kit containing consumables (i.e. soap). No questions in relation to vouchers were asked. Refer to page 6 of factsheet for more information.

See monitoring frameworks at the following links: Cox's Bazar WASH Sector: https://bit.ly/2xZkzVO I Global WASH Cluster: https://bit.ly/2ACcRCf I Rohingya Response Joint Response Plan 2019: https://bit.ly/2NCSRmI I Sustainable Development Goals Joint Monitoring Program: https://bit.ly/2ONrjQg I SPHERE Indicators: https://bit.ly/UKcX1Z