Haiyan PhATS program: End-line assessment

UNICEF - REACH Initiative
Partner Meeting - Tacloban
07 April 2016
1 - Methodology

2 - Findings

2.1 - Households
- Households characteristics
- Water supply
- Health and hygiene
- Sanitation

2.2 - Schools
- WASH activities
- Water supply
- Health and hygiene
- Sanitation
1 - Methodology
Methodology

The main objective of the assessment is to measure change in sanitation since the baseline amongst households and school in the target area.

The specific objectives are the following:

- Measure change in sanitation knowledge, attitudes and practices at household level, in the Haiyan PhATS program area.
- Measure change in sanitation at school level, in the Haiyan PhATS Program area.
Methodology

This assessment used a mixed-methods approach methodology:

**WASH Assessment at Household and Community Level**
- Quantitative Data: Household Surveys
- Qualitative Data: Community Focus Group Discussions

**WASH in Schools (WinS)**
- Quantitative Data: School Surveys
- Qualitative Data: Student Focus Group Discussions

**Data collection**
- Communities: 15 February - 20 March 2016
- Schools: 15 February - 31 March 2016
A total of 1794 households and 180 schools were assessed as part of the endline survey.
### Methodology - Sample

#### Households survey

<table>
<thead>
<tr>
<th></th>
<th>Capiz</th>
<th>Cebu</th>
<th>Eastern Samar</th>
<th>Iloilo</th>
<th>Leyte</th>
<th>Samar</th>
<th>PhATS Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td>400</td>
<td>380</td>
<td>550</td>
<td>375</td>
<td>950</td>
<td>370</td>
<td>3025</td>
</tr>
<tr>
<td><strong>End-line</strong></td>
<td>244</td>
<td>349</td>
<td>279</td>
<td>400</td>
<td>270</td>
<td>252</td>
<td>1794</td>
</tr>
</tbody>
</table>

The sampling methodology was designed to generate representative data statistically significant at:

- Province level: confidence level of 92% and a margin of error of +/− 7%
- PhATS Area: confidence level of 95% and a margin of error of +/− 3%

#### Schools survey

<table>
<thead>
<tr>
<th></th>
<th>Capiz</th>
<th>Cebu</th>
<th>Eastern Samar</th>
<th>Iloilo</th>
<th>Leyte</th>
<th>Samar</th>
<th>PhATS Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>End-line</strong></td>
<td>31</td>
<td>17</td>
<td>45</td>
<td>11</td>
<td>55</td>
<td>21</td>
<td>180</td>
</tr>
</tbody>
</table>

- Schools in PhATS area: confidence level of 92% and a margin of error of +/− 7%
The graphs and visualisations are showing the finding in the sample alongside the **confidence interval of the findings in the population of interest**.

**PhATS area level graph interpretation**

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Baseline: 6.5%</th>
<th>End-line: 54.2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2</td>
<td>46.5% (4.9, 8.1)</td>
<td>46.5% (4.1, 52)</td>
</tr>
</tbody>
</table>

Pearson's X^2: Rao & Scott adjustment, p-value = 0.003; Valid n baseline: 2954; valid n end-line: 1784.
92% confidence at province level

Province level graph interpretation

Lower bound of confidence interval 92%

Upper bound of confidence interval 92%

Data collection round
Baseline
End-line
2 - Findings
2.1 - Household survey
Population of interest

Area assessed - Rural / Urban

Barangay in rural and urban PhATS area

- 75.9% of households were living in rural area.
50.5% of households were living in coastal barangay.
48.4% of the households in the PhATS project area are living in certified ZOD (Zero Open Defecation) barangays.

ZOD Data UNICEF November 2015
Population of interest

48.4% of the households in the PhATS project area are living in certified ZOD (Zero Open Defecation) barangays.

ZOD Data UNICEF November 2015
Findings - Household characteristics

Distribution of household members and percentage of member by age and sex

- The average household size is **5.1**
- **9.5%** of households have at least one member with disability.
## Findings - Households characteristics

### Households average monthly income by data collection round

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 PHP</td>
<td>4.2% (3.2, 5.2)</td>
<td>2.1% (0, 4.2)</td>
</tr>
<tr>
<td>1 - 3,332 PHP</td>
<td>64.5% (61, 67.9)</td>
<td>54.7% (50.1, 59.4)</td>
</tr>
<tr>
<td>3,333 - 5,000 PHP</td>
<td>19.3% (16.7, 21.9)</td>
<td>27% (24, 29.9)</td>
</tr>
<tr>
<td>5,001 - 8,333 PHP</td>
<td>8% (6, 10.1)</td>
<td>9.3% (7.1, 11.5)</td>
</tr>
<tr>
<td>8,334 - 20,833 PHP</td>
<td>3.2% (1.5, 4.9)</td>
<td>6% (3.3, 8.8)</td>
</tr>
<tr>
<td>More than 20,883 PHP</td>
<td>0.7% (0.1, 1.2)</td>
<td>0.8% (0.2, 1.4)</td>
</tr>
</tbody>
</table>

Pearson's $X^2$: Rao & Scott adjustment, $p$-value=0.003; Valid $n$ baseline: 2954; valid $n$ end-line: 1784

- Increase in proportion of households earning between 3,334 and 5,000 PHP
# Findings - Households characteristics

## Type of housing by data collection round

<table>
<thead>
<tr>
<th>Type of Housing</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber frame</td>
<td>46.1% (42.8, 49.5)</td>
<td>44.2% (40.6, 47.8)</td>
</tr>
<tr>
<td>Timber and concrete</td>
<td>25.1% (22.3, 27.8)</td>
<td>23.9% (20.8, 27.1)</td>
</tr>
<tr>
<td>Hut</td>
<td>14.1% (11.9, 16.2)</td>
<td>14.4% (11.6, 17.2)</td>
</tr>
<tr>
<td>Concrete</td>
<td>10.6% (8.6, 12.7)</td>
<td>16.9% (13.4, 20.5)</td>
</tr>
<tr>
<td>Makeshift shelter</td>
<td>4.1% (2.8, 5.3)</td>
<td>0.5% (0.1)</td>
</tr>
</tbody>
</table>

*Pearson’s $X^2$: Rao & Scott adjustment, p-value=0.000; Valid n baseline: 3024; valid n end-line: 1794*

- **Most common housing type:** timber frame 44.2%.
- **Increase concrete houses:** from 10.6% (8.6;12.7) during the baseline to **16.9% (13.4;20.5)** during the endline.
- **Decrease of households living in makeshift shelters**
Water Supply
### Drinking water

Households accessing improved water source for drinking water by data collection round

<table>
<thead>
<tr>
<th>PhATS area</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>91.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>92.8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>85.6%</td>
<td>86.5%</td>
</tr>
<tr>
<td></td>
<td>87.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>94.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>95.8%</td>
<td>96.7%</td>
</tr>
<tr>
<td></td>
<td>85.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>96.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>95.1%</td>
<td>94.9%</td>
</tr>
<tr>
<td></td>
<td>85.2%</td>
<td>86.2%</td>
</tr>
</tbody>
</table>

Data collection round

- **Baseline**
- **End-line**

92.8% of the population in PhATS project areas are using an **improved drinking water source**.

*Improved drinking water sources include: bottled water; piped water; public tap; protected spring; protected dug well and tube well borehole*
## Drinking water

Households drinking water source by data collection round

<table>
<thead>
<tr>
<th>Improved water source</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottled water</td>
<td>16.7% (13.3, 20)</td>
<td>29.8% (25.4, 34.1)</td>
</tr>
<tr>
<td>Piped water into dwelling (house)</td>
<td>10.9% (8.8, 13.1)</td>
<td>13.3% (10.4, 16.2)</td>
</tr>
<tr>
<td>Piped water to yard or plot</td>
<td>19.7% (16.4, 22.9)</td>
<td>11.1% (8.7, 13.6)</td>
</tr>
<tr>
<td>Public tap or standpipe</td>
<td>11.5% (9.2, 13.8)</td>
<td>11.9% (9.3, 14.5)</td>
</tr>
<tr>
<td>Tube well or borehole</td>
<td>26.4% (22.2, 30.7)</td>
<td>17% (13.2, 20.8)</td>
</tr>
<tr>
<td>Protected dug well</td>
<td>5.8% (4.2, 7.4)</td>
<td>8.8% (5.9, 11.6)</td>
</tr>
<tr>
<td>Protected spring</td>
<td>2.3% (1.4, 3.3)</td>
<td>3.8% (2.1, 5.5)</td>
</tr>
<tr>
<td>Rainwater collection</td>
<td>0.7% (0.2, 1.2)</td>
<td>0.7% (0.1, 1.3)</td>
</tr>
<tr>
<td>Unprotected dug well</td>
<td>3% (2.1, 3.9)</td>
<td>2.4% (1.4, 3.5)</td>
</tr>
<tr>
<td>Unprotected spring</td>
<td>1.8% (1, 2.7)</td>
<td>0.8% (0.2, 1.4)</td>
</tr>
<tr>
<td>12 - Cart with small tank or drum</td>
<td>0.1% (0, 0.2)</td>
<td>0.1% (-0.1, 0.3)</td>
</tr>
<tr>
<td>Tanker-truck</td>
<td>0.4% (0, 0.8)</td>
<td>0% (0, 0.1)</td>
</tr>
<tr>
<td>Surface water</td>
<td>0.4% (0.1, 0.7)</td>
<td>0.2% (0, 0.4)</td>
</tr>
</tbody>
</table>

Pearson’s $X^2$: Rao & Scott adjustment, $p$-value=0.00; Valid n baseline: 3016; valid n end-line: 1794
The two most common sources of drinking water in PhATS project areas are **piped water** and **bottled water**.

**Increase of households using bottled water** for drinking from 16.7% to 29.8% during the endline assessment.

**91.8% households using bottled water have access to another improved water source.**
There is a cost difference between households using bottled water, unimproved water source and improved water source for drinking water.
Households that treat their drinking water by data collection round

Valid n baseline: 3021; valid n end-line: 1794

Decrease of households proportion treating the drinking water
Water treatment

Type of treatment used among households treating their drinking water by data collection round

- Boil: 48.6% (Baseline), 65.0% (End-line)
- Strain it through a cloth: 18.6% (Baseline), 35.7% (End-line)
- Add bleach or chlorine: 5.2% (Baseline), 27.9% (End-line)
- Let it stand and settle: 6.9% (Baseline), 5.2% (End-line)
- Use a water filter (ceramic, sand, etc): 4.3% (Baseline), 5.7% (End-line)
- Do not know: 1.2% (Baseline)

Data collection round
- Baseline: 1167
- End-line: 606

- Increase of water treatment by boiling and filtration with clothes; 88.7% of households using filtration with fabric do not use any other method.
- Decrease water treatment using chlorine or bleach.
- In PhATS Area, 71.4% of households treating their water are using adequate treatment methods.
Other water source of water

Households having a second source for non drinking purposes by data collection round

PhATS area: 43.7% Baseline, 48.9% End-line
Capiz: 31.4% Baseline, 29.0% End-line
Cebu: 53.5% Baseline, 63.6% End-line
Eastern Samar: 44.3% Baseline, 62.0% End-line
Iloilo: 30.5% Baseline, 20.9% End-line
LeYTE: 52.1% Baseline, 50.5% End-line
Samar: 50.5% Baseline, 43.9% End-line

Valid n baseline: 3019; valid n end-line: 1794
### Unsafe water risks

Perception of the respondents on the risk of unsafe water by data collection round

<table>
<thead>
<tr>
<th>Condition</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhoea</td>
<td>90.3%</td>
<td>89.9%</td>
</tr>
<tr>
<td>Sickness (can’t name any specific)</td>
<td>23.3%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Cholera</td>
<td>27.5%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Dengue</td>
<td>18.4%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Soil transmitted helminths (intestinal worms)</td>
<td>8.2%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Typhoid</td>
<td>8.2%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Malaria</td>
<td>6.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Do not know</td>
<td>5.2%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Valid n baseline: 3025; valid n end-line: 1794

- Overall, general increase in the number of answers given by each respondent.
## Summary

### Water Supply

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households accessing improved water source for drinking</td>
<td></td>
</tr>
<tr>
<td>Use of bottle water</td>
<td></td>
</tr>
<tr>
<td>Use of piped water</td>
<td></td>
</tr>
<tr>
<td>Households that treat their drinking water</td>
<td></td>
</tr>
<tr>
<td>Household using another source of water for washing / cleaning</td>
<td></td>
</tr>
<tr>
<td>Perception of the respondents on the risk of unsafe water</td>
<td></td>
</tr>
</tbody>
</table>
Hygiene and Health
Overall, decrease in respondents proportion reporting having received a WASH message.
Type of WASH message among respondent that received a WASH message (by data collection round)

- Personal hygiene (excluding handwashing) 74.2% 75.8%
- Clean and safe water 66.8%
- Hand washing with soap 58.3%
- Solid waste (garbage) disposal 22.8% 38.5%
- Safe disposal of human excreta 20.0% 30.4%
- Environmental & domestic hygiene 0.0% 36.8%

Valid n baseline: 1863; valid n end-line: 1010

Increase in the proportion of respondents that received a message on the topic of Solid waste management, Safe disposal of human excreta, environmental and domestic hygiene and hand-washing.
Origin of the WASH message received by respondents by data collection round

- CBO or NGOs: 74.1% (Baseline) to 75.5% (End-line)
- Health staff: 51.7% (Baseline) to 59.7% (End-line)
- Radio or TV: 12.0% (Baseline) to 28.3% (End-line)

Valid n baseline: 1863; valid n end-line: 1010

Increase in respondent proportion that received WASH messages coming from Radio and TV
# Hand washing

Observed households having a hand washing facility with water and soap at the assessment time (by data collection round)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handwashing facility with Water &amp; Soap</td>
<td>79.9% (77.4, 82.3)</td>
<td>84.7% (82.1, 87.2)</td>
</tr>
<tr>
<td>Handwashing facility with Water without Soap</td>
<td>5.4% (4.3, 6.4)</td>
<td>4.3% (2.4, 6.3)</td>
</tr>
<tr>
<td>Handwashing facility without Water and Soap</td>
<td>4.6% (3.6, 5.6)</td>
<td>4.2% (3, 5.4)</td>
</tr>
<tr>
<td>No Handwashing facility</td>
<td>10.2% (8.1, 12.3)</td>
<td>6.8% (5.2, 8.4)</td>
</tr>
</tbody>
</table>

Pearson’s $X^2$: Rao & Scott adjustment, $p$-value=0.414; Valid $n$ baseline: 2713; valid $n$ end-line: 1658

- No significant differences between baseline and endline.
### Hand washing

Frequency of hand-washing reported by respondents in the last 24 hours by data collection round

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th></th>
<th>End-line</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0 - 2 times</strong></td>
<td>1.4% (0.9, 2)</td>
<td></td>
<td>1.5% (0.7, 2.3)</td>
<td></td>
</tr>
<tr>
<td><strong>3 - 4 times</strong></td>
<td>29.5% (27, 31.9)</td>
<td></td>
<td>18.4% (15.6, 21.1)</td>
<td></td>
</tr>
<tr>
<td><strong>5 - 6 times</strong></td>
<td>33% (30.7, 35.3)</td>
<td></td>
<td>35.8% (31.6, 40)</td>
<td></td>
</tr>
<tr>
<td><strong>7 times and more</strong></td>
<td>36.1% (33.1, 39)</td>
<td></td>
<td>44.3% (40.1, 48.6)</td>
<td></td>
</tr>
</tbody>
</table>

Pearson’s $X^2$: Rao & Scott adjustment, $p$-value=0.000; Valid n baseline: 3025; valid n end-line: 1794

- Increase in reported frequency of handwashing between baseline and end-line.
Hand washing

Respondents hand-washing practices by data collection round

- Before eating: 93.1% (Baseline) vs. 89.3% (End-line)
- After eating: 90.9% (Baseline) vs. 87.8% (End-line)
- After defecation: 74.1% (Baseline) vs. 71.0% (End-line)
- Before cooking or preparing food: 65.3% (Baseline) vs. 64.9% (End-line)
- When your hands look dirty: 53.6% (Baseline) vs. 57.1% (End-line)
- After urination: 41.8% (Baseline) vs. 41.7% (End-line)
- Before feeding a child: 21.7% (Baseline) vs. 21.4% (End-line)
- After cleaning the toilet or potty: 14.6% (Baseline) vs. 13.9% (End-line)
- Before breastfeeding a child: 13.9% (Baseline) vs. 12.9% (End-line)
- After cleaning a child that has defecated or changing a child’s nappy: 9.8% (Baseline) vs. 9.7% (End-line)
- Before praying: 6.0% (Baseline) vs. 2.3% (End-line)

Decrease in respondents proportion reporting washing hands when their hands look dirty.

Valid n baseline: 3022; valid n end-line: 1792
Hand washing

Respondents that mentioned hand washing both before eating and after defecating by data collection round:

- PhATS area: Baseline 63.3%, End-line 73.7%
- Capiz: Baseline 57.3%, End-line 66.0%
- Cebu: Baseline 87.6%, End-line 79.6%
- Eastern Samar: Baseline 76.1%, End-line 79.6%
- Iloilo: Baseline 54.1%, End-line 69.4%
- Leyte: Baseline 56.5%, End-line 78.1%
- Samar: Baseline 58.8%, End-line 68.8%

Valid n baseline: 3022; valid n end-line: 1792

- General increase of reported handwashing before eating and after defecating
- Decrease in Cebu PhATS area.
Households with children under 5 that was sick from diarrhoea during the past 2 weeks by data collection round

- No significant change in proportion of households with a child under 5 sick from diarrhoea during the past 2 weeks in the PhATS area.
- Decrease in proportion of households with a child under 5 sick from diarrhoea in Iloilo.
## Summary

<table>
<thead>
<tr>
<th>HYGIENE AND HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents that received a WASH message during the last 6 months</td>
</tr>
<tr>
<td>Origin of the WASH message received by respondents</td>
</tr>
<tr>
<td>Households having a hand washing with water and soap at the assessment time</td>
</tr>
<tr>
<td>Frequency of hand-washing by respondents</td>
</tr>
<tr>
<td>Importance of handwashing before feeding the children</td>
</tr>
<tr>
<td>Respondents that mentioned hand washing both before eating and after defecating</td>
</tr>
<tr>
<td>Households with children under 5 that was sick from diarrhoea during the past 2 weeks</td>
</tr>
</tbody>
</table>
Solid Waste Disposal
Garbage disposal

Household garbage disposal practices by data collection round

- **Burning**
  - Baseline: 52.7%
  - End-line: 58.2%

- **Garbage collector**
  - Baseline: 34.2%
  - End-line: 32.5%

- **Open pit**
  - Baseline: 17.7%
  - End-line: 12.0%

- **Closed pit**
  - Baseline: 11.3%
  - End-line: 9.1%

- **Communal waste disposal ground**
  - Baseline: 10.0%
  - End-line: 9.7%

- **Dump anywhere**
  - Baseline: 3.4%
  - End-line: 6.1%

**Valid n baseline:** 3025; **valid n end-line:** 1794

- Increase of disposal in open pit
- Decrease of households that reported dumping the garbage anywhere.
Sanitation
# Toilet facilities

## Toilet facility by data collection round

<table>
<thead>
<tr>
<th>Improved sanitation</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flush or pour flush to septic tank</strong></td>
<td>62.6% (59, 66.3)</td>
<td>76.1% (71.9, 80.3)</td>
</tr>
<tr>
<td><strong>Flush or pour flush to pit latrine</strong></td>
<td>17.2% (14.8, 19.5)</td>
<td>10.8% (8.8, 12.8)</td>
</tr>
<tr>
<td><strong>Ventilated Improved Pit (VIP) Latrine</strong></td>
<td>2.4% (1.6, 3.1)</td>
<td>1.7% (1, 2.4)</td>
</tr>
<tr>
<td><strong>Composting toilet</strong></td>
<td>0.5% (-0.2, 1.2)</td>
<td>0.3% (0, 0.5)</td>
</tr>
<tr>
<td><strong>Pit latrine with slab</strong></td>
<td>4.5% (3.4, 5.6)</td>
<td>2.2% (1.3, 3.1)</td>
</tr>
</tbody>
</table>

## Unimproved sanitation

<table>
<thead>
<tr>
<th>Unimproved sanitation</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pit latrine without slab or open pit</strong></td>
<td>2% (1.2, 2.8)</td>
<td>1.1% (0.4, 1.7)</td>
</tr>
<tr>
<td><strong>Hanging toilet or hanging latrine</strong></td>
<td>0.8% (0.2, 1.1)</td>
<td>1.4% (-0.1, 3)</td>
</tr>
<tr>
<td><strong>Bucket (excreta collected from floor in bucket)</strong></td>
<td>0.1% (0, 0.3)</td>
<td>0.2% (-0.1, 0.4)</td>
</tr>
<tr>
<td><strong>Flush or pour flush to elsewhere</strong></td>
<td>0.6% (0.3, 1)</td>
<td>0.8% (0.1, 1.5)</td>
</tr>
<tr>
<td><strong>No facilities bush or field or river or open</strong></td>
<td>9.4% (7.3, 11.5)</td>
<td>5.4% (2.8, 8.1)</td>
</tr>
</tbody>
</table>

*Pearson's $X^2$: Rao & Scott adjustment, p-value=0.000; Valid n baseline: 2985; valid n end-line: 1785*

- Increase of flush toilets to sewer system - Decrease of flush toilets to pit latrines and pit latrines without slab.
- 91.1% of households have access to an improved toilet facility during the end-line
Decrease of households without toilet facilities in Cebu, Eastern Samar, Leyte and Samar.
Toilet facilities

Households that have access to an improved (non-shared) sanitation facility by data collection round

<table>
<thead>
<tr>
<th>Data collection round</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhATS area</td>
<td>76.3%</td>
<td>78.1%</td>
</tr>
<tr>
<td>Capiz</td>
<td>76.0%</td>
<td>78.1%</td>
</tr>
<tr>
<td>Cebu</td>
<td>65.1%</td>
<td>64.2%</td>
</tr>
<tr>
<td>Eastern Samar</td>
<td>62.4%</td>
<td>78.9%</td>
</tr>
<tr>
<td>Iloilo</td>
<td>78.9%</td>
<td>76.4%</td>
</tr>
<tr>
<td>Leyte</td>
<td>78.2%</td>
<td>49.3%</td>
</tr>
<tr>
<td>Samar</td>
<td>78.9%</td>
<td></td>
</tr>
</tbody>
</table>

Valid n baseline: 2846; valid n end-line: 1741

- Increase in the proportion of households that have access to an improved (non-shared) toilet facility in the PhATS area.
Toilet facilities

Households that own an improved sanitation facility by data collection round

- Significant increase in the proportion of households that own an improved toilet facilities in Samar and Leyte.

(Improved toilets facility: Flush to sewer system, Flush to septic tank, Flush to pit latrine, VIP latrine, Pit latrine with slab, Composting toilets)
Toilet facilities

Among households that do not own the toilet facility, main barriers for households to have their own toilets by data collection round:

- **High Cost**: 89.3% (Baseline: 81.6%)
- **No access to supplies or materials**: 33.5% (Baseline: 47.2%)
- **Do not own the house**: 11.4%
- **Lack of Time (to construct)**: 4.9% (Baseline: 15.3%)
- **Don’t know how to build one**: 6.0% (Baseline: 7.3%)
- **No interest**: 3.9% (Baseline: 6.0%)

Valid n baseline: 712; valid n end-line: 289

Data collection round:
- Baseline
- End-line
Households that received information about a zero open defecation (ZOD) program or rewards by data collection round

<table>
<thead>
<tr>
<th>Location</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhATS area</td>
<td>25.9%</td>
<td>51.4%</td>
</tr>
<tr>
<td>Capiz</td>
<td>13.4%</td>
<td>32.2%</td>
</tr>
<tr>
<td>Cebu</td>
<td>40.4%</td>
<td>66.4%</td>
</tr>
<tr>
<td>Eastern Samar</td>
<td>27.8%</td>
<td>49.5%</td>
</tr>
<tr>
<td>Iloilo</td>
<td>30.9%</td>
<td>70.0%</td>
</tr>
<tr>
<td>Leyte</td>
<td>22.0%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Samar</td>
<td>26.3%</td>
<td>49.2%</td>
</tr>
</tbody>
</table>

Valid n baseline: 3025; valid n end-line: 1794

- Increase in proportion of respondents receiving information about ZOD program
Open defecation

Households practicing open defecation by data collection round

Baseline
- No open defecation: 81.6%
- Open defecation: 18.4%

End-line
- No open defecation: 84.8%
- Open defecation: 15.2%

Pearson’s $X^2$: Rao & Scott adjustment, $p$-value=0.164; Valid n baseline: 3000; valid n end-line: 1788

- No change in proportion of households practicing open defecation
Members of households that practice open defecation by data collection round

Baseline
- All household members: 49.5%
- Only some household members: 50.5%

End-line
- All household members: 36.3%
- Only some household members: 63.7%

Pearson's $X^2$: Rao & Scott adjustment, $p$-value = 0.144; Valid n baseline: 547; valid n end-line: 244
Households practicing open defecation by data collection round and by province

- **PhATS area**: 18.4% baseline, 15.2% end-line
- **Capiz**: 18.1% baseline, 8.1% end-line
- **Cebu**: 43.8% baseline, 25.1% end-line
- **Eastern Samar**: 14.6% baseline, 15.4% end-line
- **Iloilo**: 14.4% baseline, 9.7% end-line
- **LeYTE**: 13.0% baseline, 12.3% end-line
- **Samar**: 23.1% baseline, 20.6% end-line

Decrease in proportion of households practicing open defecation in Cebu and Capiz.

Valid n baseline: 3000; valid n end-line: 1788
Open defecation

Households practicing open defecation by households living in ZOD certified barangays

Certified
- No open defecation: 88.7%
- Open defecation: 11.3%

Not certified
- No open defecation: 81.1%
- Open defecation: 18.9%

Pearson's $X^2$: Rao & Scott adjustment, p-value=0.012; Valid n end-line: 1788

Statistic test suggest a difference between ZOD barangays and other barangays for rate of open defecation
Households practicing open defecation (self-reported) by use of improved / unimproved toilet facility (households without toilet excluded)

- Rate of open defecation lower for households using an improved toilet facility.

*Pearson's $X^2$: Rao & Scott adjustment, p-value=0; Valid n end-line: 1655*
Most people in my community believe that defecating in the open is acceptable / I believe that defecating in the open is acceptable

Open defecation

Average from likert scale measurement (strongly agree = 5 to strongly disagree = 1)

OD acceptable in household; $t = -1.0769$, df = 507, p-value = 0.2821 / OD acceptable in community; $t = -2.3426$, df = 507, p-value = 0.01954

- No difference of perceptions at household level.
- Difference of perception in community.
## Open defecation

Perceived rate of open defecation in the community by data collection round

| Category | Baseline | | | End-line | | |
|----------|----------|---------------------------------|---------------------------------|
| 0%       | 9.7% (7.6, 11.9) | | | 27.2% (22.7, 31.6) | | |
| 1-20%    | 55.5% (52, 59.1) | | | 47.6% (43.1, 52) | | |
| 21-40%   | 15.8% (13.6, 18) | | | 9.1% (6.6, 11.6) | | |
| 41-60%   | 10.2% (8.6, 11.8) | | | 6.7% (4.7, 8.8) | | |
| 61-80%   | 7.5% (5, 10.1) | | | 6.7% (4.5, 8.9) | | |
| 81-100%  | 1.2% (0.6, 1.9) | | | 2.7% (0.5, 4.9) | | |

Pearson's $X^2$: Rao & Scott adjustment, $p$-value=0.000; Valid $n$ baseline: 2862; valid $n$ end-line: 1682

- The perceived open defecation rate in the community decreased in between baseline and end-line.
- 27.2% of respondents perceived that there is no open defecation in their community (9.7% during the baseline)
## Open defecation

Main reason perceived for open defecation in the community by data collection round

<table>
<thead>
<tr>
<th>Reason</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>No toilet</td>
<td>94.7%</td>
<td>96.2%</td>
</tr>
<tr>
<td>Toilets are dirty</td>
<td>4.7%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Toilet is far from house</td>
<td>6.1%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Long waiting time</td>
<td>6.5%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Toilets are unsafe</td>
<td>2.8%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Valid n baseline: 3025; valid n end-line: 1794
### Children stool disposal

Stool disposal practise of children under 3 by data collection round

<table>
<thead>
<tr>
<th>Sanitary disposal</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child used toilet</td>
<td>22.1% (18.3, 25.9)</td>
<td>20.2% (15.4, 25)</td>
</tr>
<tr>
<td>Put or rinsed into toilet</td>
<td>8.1% (5.7, 10.5)</td>
<td>9% (3.7, 14.3)</td>
</tr>
<tr>
<td>Buried</td>
<td>17.1% (13.5, 20.6)</td>
<td>16.8% (12.1, 21.5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unsanitary disposal</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put or rinsed into drain or ditch</td>
<td>4.8% (2.8, 6.7)</td>
<td>4.7% (2.3, 7.1)</td>
</tr>
<tr>
<td>Thrown into garbage</td>
<td>37.7% (31.8, 43.6)</td>
<td>38.2% (30.3, 46.1)</td>
</tr>
<tr>
<td>Diaper left on ground</td>
<td>7.3% (5.1, 9.5)</td>
<td>7.5% (4.5, 10.6)</td>
</tr>
<tr>
<td>Not disposed or left on the ground</td>
<td>2.9% (1.4, 4.3)</td>
<td>3.3% (-0.3, 6.9)</td>
</tr>
</tbody>
</table>

Pearson’s $X^2$: Rao & Scott adjustment, p-value=0.999; Valid n baseline: 848; valid n end-line: 445

👀 No changes in stool disposal practice of children under 3
## Summary

| Sanitation                                                                                                                                 |
|--------------------------------------------------------------------------------|--------------------------|
| Households using an improved toilet facility                                   |                          |
| Households that own an improved sanitation facility                           |                          |
| Households that use an improved sanitation facility shared by less by 20 people |                          |
| Households practicing open defecation                                          |                          |
| Households practicing open defecation (self-reported)                          |                          |
| Perception of households practicing open defecation                           |                          |
| Open defecation is acceptable in household                                     |                          |
| Open defecation is acceptable in the community                                 |                          |
| Perceived rate of open defecation in the community                             |                          |
| Households that received information about a zero open defecation (ZOD) program or rewards |                          |
| Households garbage disposal practices                                          |                          |
2.2 - School survey
General
Funds allocated/available for water, sanitation and hygiene related activities in the Maintenance and Other Operations Expenses (MOOE) or School Building Repair and Maintenance Fund (SBRMF) by data collection round.

- **Baseline**: 59.2%
- **End-line**: 63.3%

Pearson's $X^2$: Rao & Scott adjustment, $p$-value=0; Valid n baseline: 245; valid n end-line: 179

- Increase in the proportion of schools with fund allocated for WASH
WASH currently incorporated in the Annual Investment Plan (AIP)/School Improvement Plan (SIP) by data collection round

Baseline

End-line

Pearson's $X^2$: Rao & Scott adjustment, p-value=0; Valid n baseline: 240; valid n end-line: 179

Increase in the proportion of schools incorporating WASH in AIP / SIP
WASH activity in school

Schools where school or Dep. Ed. led any water, sanitation or hygiene activity in the school by data collection round

Baseline

End-line

Pearson’s $X^2$: Rao & Scott adjustment, $p$-value=0; Valid $n$ baseline: 244; valid $n$ end-line: 179

- Increase in the proportion of schools where school or DepEd conducted WASH activities
WASH activity in school

Reported theme of WASH campaign by data collection round

- **Hand washing**: Baseline 59.0%, End-line 89.1%
- **Tooth brushing**: Baseline 55.6%, End-line 72.9%
- **Personal hygiene (excl. handwashing and toothbrushing)**: Baseline 54.7%, End-line 57.4%
- **Use of toilets**: Baseline 19.7%, End-line 30.2%
- **Drinking safe water**: Baseline 17.9%, End-line 27.9%
- **Environmental cleanliness or waste management**: Baseline 0.0%, End-line 25.6%
- **Menstrual hygiene**: Baseline 0.0%, End-line 7.0%

Valid n baseline: 117; valid n end-line: 129

- Increase in diversity of campaign carried out in schools.
- Increase in the proportion of schools where hand washing campaign have been conducted.
Water Supply
**Water supply**

Reported drinking water availability in the school compound by data collection round

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42.4%</td>
<td>59.4%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>55.1%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2.4%</td>
<td>37.2%</td>
</tr>
</tbody>
</table>

Pearson's $X^2$: Rao & Scott adjustment, p-value=0.001; Valid n baseline: 245; valid n end-line: 180

- Increase of water availability in school reported by key informants.
Water supply

Observed availability of water during the assessment by data collection round

Baseline: 0.4% Yes, 57.6% Unable to check, 42.0% No

End-line: 0.0% Yes, 65.6% Unable to check, 34.4% No

Pearson’s $X^2$: Rao & Scott adjustment, p-value=0; Valid n baseline: 245; valid n end-line: 180

Increase in the proportion of schools having water during the assessment time
### Reported issue with accessing drinking water by data collection round

<table>
<thead>
<tr>
<th>Issue</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water quality issues</td>
<td>23.9%</td>
<td>30.6%</td>
</tr>
<tr>
<td>Water only available at set times</td>
<td>10.2%</td>
<td>30.6%</td>
</tr>
<tr>
<td>Damaged infrastructure</td>
<td>13.9%</td>
<td>23.3%</td>
</tr>
<tr>
<td>None</td>
<td>17.1%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Inadequate water yield</td>
<td>16.3%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Expensive water bills</td>
<td>11.8%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Long lines</td>
<td>8.2%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Valid n baseline: 245; valid n end-line: 180

Main drinking water issues reported: quality, availability and damage infrastructure
Hygiene
Hand washing

Reported practice of daily hand washing practice in school by data collection round

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th></th>
<th>End-line</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, all classes (every day)</td>
<td>22.0%</td>
<td></td>
<td>42.9%</td>
<td></td>
</tr>
<tr>
<td>Some classes (every day)</td>
<td>35.1%</td>
<td></td>
<td>26.7%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>57.8%</td>
<td></td>
<td>15.6%</td>
<td></td>
</tr>
</tbody>
</table>

Pearson's $X^2$: Rao & Scott adjustment, p-value=0; Valid n baseline: 245; valid n end-line: 180

Increase in the proportion of schools where daily handwashing practice was reported
## Hand washing

### Type of hand washing facility by data collection round

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap connected to piped water</td>
<td>56.8% (50.4, 63.3)</td>
<td>65.4% (58.8, 72)</td>
</tr>
<tr>
<td>Bucket or container</td>
<td>37.7% (31.4, 44)</td>
<td>22% (16.2, 27.8)</td>
</tr>
<tr>
<td>Locally made</td>
<td>2.2% (0.3, 4.1)</td>
<td>12.6% (8, 17.2)</td>
</tr>
<tr>
<td>Other</td>
<td>3.3% (1, 5.6)</td>
<td>0% (0, 0)</td>
</tr>
</tbody>
</table>

Pearson's $X^2$: Rao & Scott adjustment, $p$-value=0; Valid n baseline: 183; valid n end-line: 159

- Decrease in the proportion of schools having only buckets as hand-washing facility
- Increase in the proportion of schools having locally made facility as hand-washing facility
Hand washing

Observed hand washing facilities available near the toilets dedicated to children by data collection round

- **Baseline**: 39.6% Yes, all
- **Baseline**: 25.3% Some but not all
- **Baseline**: 11.7% No

- **End-line**: 59.4% Yes, all
- **End-line**: 28.9% Some but not all
- **End-line**: 11.7% No

Pearson’s $X^2$: Rao & Scott adjustment, p-value = 0; Valid n baseline: 245; Valid n end-line: 180

- Increase in the proportion of schools where hand-washing facilities near the toilets were observed
Hand washing

Barriers to practice group hand-washing with soap daily by data collection round

- **Shortage of water**: 61.0% (Baseline) to 64.5% (End-line)
- **No group wash facility**: 15.8% (Baseline) to 44.7% (End-line)
- **Soap not available**: 23.7% (Baseline) to 32.1% (End-line)
- **Not enough time**: 14.5% (Baseline) to 22.4% (End-line)
- **School or teachers haven’t thought of it**: 7.5% (Baseline) to 3.9% (End-line)

Valid n baseline: 159; valid n end-line: 76

- Main barrier for hand washing in schools was shortage of water.
- Decrease in the proportion of schools where lack of hand-washing facilities were reported.
Hand washing

Reported water availability at the hand-washing facility by data collection round

Baseline

End-line

How often is water available at the hand-washing facility

1 - Always
2 - Most of the time
3 - Sometimes
4 - Rarely
5 - Never

Pearson’s $X^2$: Rao & Scott adjustment, p-value=0.109; Valid n baseline: 183; valid n end-line: 159

Only 56.6% of the schools have constant access to water
Hand washing

Observed water availability at the hand washing facility by data collection round

Baseline
- Yes, all: 2.9%
- Some only: 33.5%
- No Water: 26.9%
- No hand-washing facilities: 0.6%

End-line
- Yes, all: 55.0%
- Some only: 16.7%
- No Water: 27.8%
- No hand-washing facilities: 0.6%

Pearson’s $X^2$: Rao & Scott adjustment, $p$-value=0; Valid n baseline: 245; valid n end-line: 180

Increase in the proportion of schools where water were available at the hand-washing facilities during the time of the assessment
Hand washing

Observed presence of soap at the hand washing facility by data collection round

Baseline
- Yes, all: 26.1%
- Some only: 35.5%
- No soap: 16.7%
- No hand-washing facilities: 3.3%

End-line
- Yes, all: 48.9%
- Some only: 33.3%
- No soap: 16.7%
- No hand-washing facilities: 1.1%

Presence of soap at the hand washing facility:
- Yes, all
- Some only
- No soap
- No hand-washing facilities

Pearson's $X^2$: Rao & Scott adjustment, p-value=0; Valid n baseline: 245; valid n end-line: 180

Increase in the proportion of schools where soap was observed at the hand-washing facilities
### Hand washing

Reported coping strategy used by children when hand washing facility is not working by data collection round

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t clean hands</td>
<td>52.7% (47.1, 58.2)</td>
<td>25.3% (19.6, 31)</td>
</tr>
<tr>
<td>Bring water from home</td>
<td>14.3% (10.4, 18.2)</td>
<td>29.2% (23.2, 35.2)</td>
</tr>
<tr>
<td>Community provides water for whole school</td>
<td>5.3% (2.8, 7.8)</td>
<td>20.2% (14.9, 25.5)</td>
</tr>
<tr>
<td>Use other water source</td>
<td>16.7% (12.6, 20.9)</td>
<td>5.6% (2.6, 8.6)</td>
</tr>
<tr>
<td>Hand sanitizer or alcohol provided by students</td>
<td>0.8% (-0.2, 1.8)</td>
<td>10.1% (6.1, 14.1)</td>
</tr>
<tr>
<td>Buy bottled water or iced water to wash hands with</td>
<td>3.3% (1.3, 5.3)</td>
<td>2.8% (0.6, 5)</td>
</tr>
<tr>
<td>No problem</td>
<td>1.6% (0.2, 3.1)</td>
<td>3.9% (1.4, 6.5)</td>
</tr>
<tr>
<td>Hand sanitizer or alcohol provided by school or teacher</td>
<td>1.6% (0.2, 3.1)</td>
<td>2.8% (0.6, 5)</td>
</tr>
<tr>
<td>Other</td>
<td>2% (0.5, 3.6)</td>
<td>0% (0, 0)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1.6% (0.2, 3.1)</td>
<td>0% (0, 0)</td>
</tr>
</tbody>
</table>

Pearson’s $X^2$: Rao & Scott adjustment, p-value=0; Valid n baseline: 245; valid n end-line: 178

- Decrease in schools where children are reported not to wash their hands when the hand washing facility is not available.
- Increase in the proportion of schools where community provide water when hand-washing facility is not available.
Tooth brushing

Reported frequency of tooth-brushing daily practice by data collection round

Baseline
- Yes, all classes (every day): 21.2%
- Some classes (every day): 34.3%
- No: 44.5%

End-line
- Yes, all classes (every day): 28.3%
- Some classes (every day): 16.7%
- No: 55.0%

Pearson’s $X^2$: Rao & Scott adjustment, p-value=0; Valid n baseline: 245; valid n end-line: 180

Increase in the proportion of schools where tooth brushing practice were reported to be practice daily
Sanitation
## Sanitation

### Disposal of garbages by data collection round

<table>
<thead>
<tr>
<th>Disposal Method</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrown or Piled inside school premises</td>
<td>29.4% (24.3, 34.5)</td>
<td>34.4% (28.2, 40.7)</td>
</tr>
<tr>
<td>Incinerate</td>
<td>32.2% (27.7, 37.5)</td>
<td>16.7% (11.8, 21.5)</td>
</tr>
<tr>
<td>Buried</td>
<td>22.4% (17.8, 27.1)</td>
<td>20.6% (15.3, 25.8)</td>
</tr>
<tr>
<td>Thrown or Piled outside of school premises</td>
<td>6.9% (4.1, 9.8)</td>
<td>13.3% (8.9, 17.8)</td>
</tr>
<tr>
<td>Collection Service</td>
<td>7.3% (4.4, 10.3)</td>
<td>12.2% (7.9, 16.5)</td>
</tr>
<tr>
<td>Other</td>
<td>1.6% (0.2, 3.1)</td>
<td>2.2% (0.3, 4.2)</td>
</tr>
<tr>
<td>No disposal</td>
<td>0% (0, 0)</td>
<td>0.6% (-0.4, 1.5)</td>
</tr>
</tbody>
</table>

*Pearson’s $X^2$: Rao & Scott adjustment, p-value=0.004; Valid n baseline: 245; valid n end-line: 180*
Sanitation

Male / Female student toilets separated by data collection round

Baseline: 23.6%

End-line: 53.1%

Pearson’s $X^2$: Rao & Scott adjustment, p-value=0; Valid n baseline: 237; valid n end-line: 179

Increase in proportion of the schools where toilets were separated by sex
Sanitation

Number of students per functioning toilet by data collection round

Baseline

End-line

Design-based t-test p-value = 0; Valid n baseline: 237; valid n end-line: 178

Improvement in the ratio of students by functioning toilet facility.
Sanitation

Main toilet facility type by data collection round

<table>
<thead>
<tr>
<th>Improved toilet facility</th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flush or pour flush to piped sewer system</td>
<td>0% (0, 0)</td>
<td>8.9% (5.2, 12.6)</td>
</tr>
<tr>
<td>Flush or pour flush to septic tank</td>
<td>91.4% (88.3, 94.6)</td>
<td>86.1% (81.6, 90.6)</td>
</tr>
<tr>
<td>Flush or pour flush to pit latrine</td>
<td>3.3% (1.3, 5.3)</td>
<td>3.9% (1.4, 6.4)</td>
</tr>
<tr>
<td>Ventilated Improved Pit (VIP) Latrine</td>
<td>1.6% (0.2, 3.1)</td>
<td>0.6% (-0.4, 1.5)</td>
</tr>
<tr>
<td>Pit Latrine With Slab</td>
<td>0.8% (-0.2, 1.8)</td>
<td>0% (0, 0)</td>
</tr>
<tr>
<td>No facilities</td>
<td>2.9% (1, 4.7)</td>
<td>0.6% (-0.4, 1.5)</td>
</tr>
</tbody>
</table>

Pearson's $X^2$: Rao & Scott adjustment, $p$-value=0; Valid n baseline: 245; valid n end-line: 180

- Increase in the proportion of schools where the main toilet facilities were flush to piped sewer system
Main challenges reported to keep toilets clean by data collection round

- Shortage of water for cleaning: 55.1%
- Shortage of cleaning supplies: 55.5%
- Students difficult to mobilise or organise for cleaning: 22.4%
- Lack of adequate budget for staff: 12.2%
- None: 8.2%

Valid n baseline: 245; valid n end-line: 180

- Main challenges for toilet cleaning are shortage of water and cleaning products.
- Decrease in proportion of schools reporting lack of cleaning supplies as main challenge to keep the toilets clean.

REACH humanitan action
Sanitation

Reported coping strategy used by children when toilet broken by data collection round

Baseline

- Go home to use toilets: 3.3%
- Go to toilets nearby to school: 8.6%
- Open Defecate Outside school grounds: 79.4%

End-line

- Go home to use toilets: 7.2%
- Go to toilets nearby to school: 3.6%
- Open Defecate Inside school grounds: 6.5%
- Open Defecate Outside school grounds: 82.7%

Coping strategy used when toilets are not functioning:
- Go home to use toilets
- Go to toilets nearby to school
- Open Defecate Outside school grounds
- Open Defecate Inside school grounds

Pearson's $X^2$: Rao & Scott adjustment, $p$-value=0.155; Valid n baseline: 209; valid n end-line: 139
Sanitation

Key informant reporting children defecating in the open by data collection round

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>End-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17.1%</td>
<td>15.1%</td>
</tr>
<tr>
<td>No</td>
<td>82.9%</td>
<td>84.9%</td>
</tr>
</tbody>
</table>

*Pearson’s $X^2$: Rao & Scott adjustment, p-value=0.571; Valid n baseline: 245; valid n end-line: 179*

- No difference in open defecation reported by the key informant between end-line and baseline.
Thank you