

WASH II Report on QIS data analysis

Findings from the first round 2012-2013

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Abbreviations

ADP	Annual Development Programme
BM	Benchmark
BMGF	Bill and Melinda Gates Foundation
DGIS	Directorate-General for International Cooperation
EKN	Embassy of the Kingdom of the Netherlands
FO	Field Organiser
HH	Household
JFO	Junior Field Organiser
MIS	Management Information System
NP	Non-Poor
P	Poor
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit
QC	Quality Controller
QIS	Qualitative Information System
RSC	Rural Sanitation Centre
SS	School Survey
TW	Tube Well
UP	Ultra-poor
VWC	Village WASH Committee

Executive summary

This report contains the results of the new 25 sub-districts of the BRAC WASH II programme areas at the beginning of the intervention. The data presented in this report was collected with the Qualitative Information System (QIS) from representative sample upazilas from 25 new upazilas of the WASH II programme which started in April 2012. BRAC WASH II, funded by the Embassy of the Kingdom of the Netherlands (EKN) and the Bill & Melinda Gates Foundation (BMGF), is operating in 25 exceptionally challenging new areas (such as wetlands, areas with high water tables, coastal areas with saline intrusion in water supply) with the objective to provide integrated and sustainable water, sanitation and hygiene services to underserved populations and in hard to reach areas. In addition to that, WASH II is continuing activities in 152 upazilas of the WASH I phase to ensure sustainability. The results from the old upazilas are in a separate report¹. QIS makes it possible to collect quantitative data on qualitative aspects, such as participation, gender and behavioural change. QIS uses descriptive scales ranging from level 0 (condition/practice not present) to level 4 (four key programme defined criteria present). In total 14 parameters were measured: household sanitation, hygiene and water safety (7 parameters), management of village WASH committees (VWCs) (2 parameters), school sanitation (4 parameters) and rural sanitation centres (RSCs) (1 parameter).

The representative study consisted of 3722 households in a three-stage cluster sample survey, and 19 schools, 149 VWCs and 73 (RSCs) in a three-stage cluster survey. Households have been classified as ultra-poor (UP), poor (P) and non-poor (NP). All selected households visited were willing to participate in the survey so there were no non-response errors. The sample frame “errors” was higher although not significant. These were due to households moving to other areas and a “lack” of ultra-poor households in some VWC clusters. For example instead of expecting nine or more ultra-poor households in a village WASH cluster only five could be found. These errors were corrected by weighting the data as described in the survey design.

The baseline shows that the best results are for hygiene of girls’ toilets in schools as well as household toilet use at all times. Teams observed that almost three-quarter of the sample (73% and 72%) scored above benchmark for these two parameters respectively. Use by all able to use latrines came third with 70%, but needs to be corrected for those cases where excreta needs to be brought to the latrine, e.g. for babies, infants and sometimes old people and people with a disability. Boys’ toilets scored much lower (at position six out of 14). Menstrual hygiene provisions at school took a middle position (five out of 15). Observed quality and hygiene of household toilets was in the lower group (at position ten) for three reasons: observed faecal soiling, broken water seals and presence of single pits.

As expected in a programme that has recently been set up the institutional scores were at the lower end. Gender equity in VWCs came 12th and administrative performance (including cooperation with local government) came 11th. The 9th and 8th position respectively were

¹Jacimovic, R., Ahmed, M., and Bostoan, K. 2014. WASH I Report on QIS data analysis: findings from the first round 2012-2013. Dhaka: BRAC and The Hague: IRC. Available at: <<http://www.ircwash.org/resources/wash-i-report-qis-data-analysis-findings-first-round>>.

for the presence and performance of student brigades, and the performance of school WASH committees.

Introduction

BRAC WASH II aims for a sustained change – a measurable leap – in personal/family hygiene, sanitation and water safety. However, real changes in practices (such as handwashing with soap, continued use and maintenance of latrines, using safe water sources or keeping water safe from source to mouth) take time to become habitual and do not move at the same speed everywhere.

The programme focuses on sustainably-improved household and school sanitation and hygiene practices, and safe drinking water use. Improvements are community-based and managed. Support comes from about 8,000 programme workers, of whom more than 99% are field-based. The BRAC WASH II programme is jointly funded by the Embassy of the Kingdom of The Netherlands (EKN)/DGIS and the Bill and Melinda Gates Foundation (BMGF), and has the following objectives:

DGIS:

- Targeting 2 million people (sanitation), 4.2 million people (hygiene), and 0.5 million people (water safety) in 20 upazilas (new and hard to reach);
- Ensuring sustainable access to sanitation of 25.9 million people and safe hygiene behaviour of 38.8 million people in 152 upazilas (BRAC WASH I).

BMGF:

- Targeting an estimated 8.9 million households in 152 old and 5 new upazilas;
- Specific focus on sanitation and composting business.

In August 2011, it was agreed between DGIS, BMGF, BRAC, and IRC to treat the BRAC WASH II programme as one single project as far as possible, and to develop one single monitoring system covering the entire project. The monitoring system was developed by IRC during 2012.

1 Methodology

The Qualitative Information System (QIS) quantifies qualitative process and outcome indicators, such as participation and inclusiveness (process) and behavioural changes (outcomes), with the help of progressive scales ('ladders'). Each step on the ladder has a short description, called a mini-scenario, which describes the situation for a particular score. Typically, scores are structured as follows:

- Score 0 indicates a situation in which the condition/practice is not present;
- Score 1 gives the initial step;
- Score 2 adds a second key characteristic to indicate the benchmark situation, or minimal scenario that the programme wants to achieve programme-wide;
- Scores 3 and 4 represent the next two levels. 4 stands for the ideal, which the majority can probably hope to achieve only at the end of the programme.

QIS scales are thus programme-specific and must be developed together with staff with extensive experience so as to capture the field realities. In diagram form, a typical QIS scale looks like Table 1 below:

Table 1 Scaling principles of QIS

DESCRIPTION	QIS Score
IDEAL: all four (key) characters are present	4
Primary + Secondary + Tertiary characteristic present	3
BENCHMARK: Primary + Secondary characteristic present	2
Primary characteristic present	1
No characteristic of condition/practice present	0
Reasons why score high/not high (comment)	

Source: IRC/BRAC, 2012.

The scales for the WASH II programme were jointly developed by BRAC and IRC in a workshop in January 2012. In March they were tested with 40 households. A second testing was done in September with 432 households (144 each for the ultra-poor, poor and non-poor), 36 VWCs, 12 schools and 12 RSCs in four upazilas at the four corners of the country. This resulted in a separate document with the consolidated QIS scales and the verifiable criteria that every characteristic must meet (November 2012). The guidelines were also used in training the implementers of the sample study. Table 2 provides an overview of QIS questions/topics for household (HH), village WASH committee (VWC), school (SS) and rural sanitation centre (RSC) surveys with the respective codes.

Table 2 Parameters measured by QIS scales

Code	Topics (parameters)
HH01	Safe and protected main drinking water source
HH02	Drinking water management from source to cup
HH03	Sanitary and hygienic household latrine
HH04	Use of latrine by different household members
HH05	Consistency of latrine use at day/night time and across seasons
HH06	Handwashing provision after defecation
HH07	Sludge management when latrine pit is full
VWC02	Performance of VWC
VWC03	Women's participation / Gender balanced management
SS01	Sanitary and hygienic school toilets
SS02	Student brigade
SS03	Menstrual hygiene management
SS04	Performance of School WASH Committee
RSC1	Performance of sanitation centre /enterprise

1.1 Implementation

The first monitoring round was implemented at the end of 2012 and the start of 2013 by 30 teams. Each team consists of one male BRAC Quality Controller (QC) and one female Junior Field Organiser/ Field Organiser (JFO/FO). QCs are independent BRAC WASH staff who check the quality of the programme. Female JFO/FOs are the BRAC WASH staff who made it culturally possible to enter the hand pump enclosure, the latrine and the house together with the lady of the house, for observation and demonstration. Both received theoretical and practical training for QIS implementation. The data was collected with smart phones and directly sent to the dataset.

1.2 Sample strategy

For the household survey a three-stage sampling was used with unions as primary sampling unit (PSU) in this survey. At the first stage, fifty unions were selected with a probability proportionate to the number of households (PPS). In the second stage, per selected union, three VWCs were selected again with a probability proportionate to the number of households. In the third or final step, in each of the VWCs, nine households were selected randomly per wealth category (nine from the ultra-poor (UP), nine from the poor (P) and nine from the non-poor (NP) resulting in 27 households per VWC. Due to the PPS sampling at the first two levels the sample is self-weighted, so no sample weights were needed up to the VWC level. However, as the exact same number of samples was taken out of each wealth strata the final 4050 households needed to be weighted according to the real size of the households in each wealth category. In analysis, the data was weighted to represent the real number of UP, P and NP households selected and corrected when not enough households were available for the required sample. The full sample design with calculation is described in Sijbesma et al, 2012².

2 Findings

The findings from the QIS data collection and analysis in this section represent a conventional baseline study for the WASH II area, in which the programme had just started before the data collection. Findings are presented per parameter (of which there are 14 in total), starting from the best QIS scores.

2.1 Completeness of data

On June 11, 2013, a real sample dataset of 8000 households, 300 VWCs, 400 schools and 300 RSCs was extracted. Out of these, data for 3722 households, 149 VWCs, 19 schools and 73 RSCs were collected and analysed. Because some VWCs had a different distribution of NP, P and UP households, not enough households were available for the survey in all wealth categories. This fact was known prior to the survey and was corrected for as planned by weighting the data prior to analysis. The percentage of non-response varied, but was below 3% overall. The number of households for which data was analysed disaggregated by the socio-economic status of the households is presented in Table 3.

² Sijbesma, Chr., Bostoan, K. and Verhagen, J. 2012. QIS Monitoring Guidelines for the Sample Study 2012. Dhaka: BRAC and IRC: The Hague.

Table 3 Number of household data by parameter and socio-economic status (Non-poor, Poor and Ultra-poor)

Code	Parameter (scale)	No. of Households in data analysis			
		NP	P	UP	Total
HH01	Safe & protected drinking water source	1261	1185	1254	3700
HH02	Drinking water management source to cup	1261	1185	1254	3700
HH03	Sanitary and hygienic household latrine	1257	1178	1247	3682
HH04	Use of latrine by household members	1254	1174	1226	3654
HH05	Consistency of latrine use in time/season	1257	1179	1249	3685
HH06	Handwashing provision after defecation	1244	1158	1201	3603
HH07	Sludge management when latrine pit is full	715	677	710	2102)*

*) Only households, whose latrine pit did get filled were asked questions on this topic.

2.2 Household sanitation and hygiene

This section presents the results from the QIS household indicator analysis. The QIS ladders are presented and explained in “Guidelines: QIS Data Form HH” (November 2012). This section presents the results from the best to least good scores for household sanitation and hygiene behaviours (see Table 4).

Table 4 Household scores in round 1 from highest to lowest for 7 behavioural parameters

Scale	Household behaviour measured	Above benchmark	At benchmark	Below benchmark
HH05	Consistent use of latrine	73%	14%	13%
HH04	Use of latrine by HH members	70%	11%	20%
HH01	Safe & protected drink water source	55%	16%	28%
HH02	Safe drinking water management	31%	14%	55%
HH03	Sanitary & hygienic latrine	21%	19%	60%
HH06	Handwashing provision in/at latrine	10%	15%	75%
HH07	Sludge management when pit is full	1%	38%	61%

2.2.1 Consistent use of latrine at day/night and across seasons

The QIS indicator that scored the best is HH05: “Latrine use when?”, which measures consistency of use. Analysis showed that 72% scored above the benchmark, and that the majority (47%) are in the highest category (Table 5).

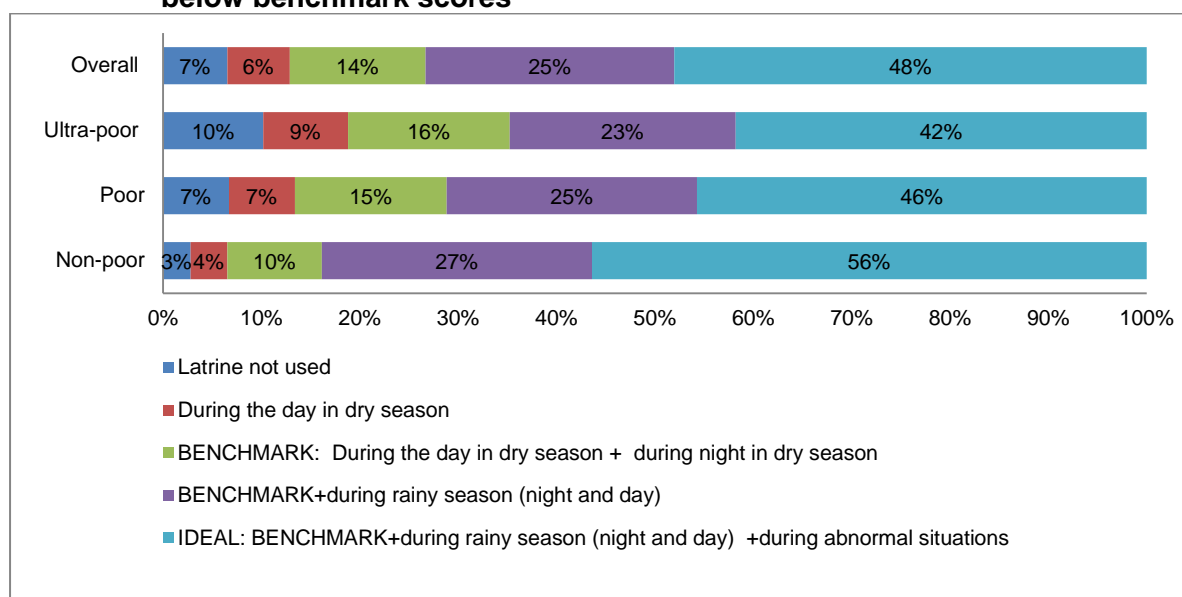
Table 5 Performance on consistency of latrine use at day/night and across seasons by socio-economic class

HH05	IDEAL: (1) During the day during dry season + (2) during night during dry season + (3) during rainy season (night and day) + (4) during abnormal situations	During the day during dry season + (2) during night during dry season + (3) during rainy season (night and day)	BENCHMARK: (1) During the day during dry season + (2) during night during dry season	(1) During the day during dry season	Nobody in the household uses the latrine for defecation and urination	Total
Score	4	3	2	1	0	
NP	56%	27%	10%	4%	3%	100%
P	46%	25%	15%	7%	7%	100%
UP	42%	23%	16%	9%	10%	100%
Overall	48%	25%	14%	6%	7%	100%

Table 5 shows that 47% of households used the latrine during the day and at night in the dry and the wet season as well as during abnormal situations (such as when the path to the latrine is flooded). Another 25% did the same, but not during abnormal situations or have not experienced abnormal situations. The data shows that while 48% of households have adopted toilet use at all times, the results are better for the non-poor households (56%) than the poorer households (46% for P and 42% for UP), a possible reflection of a more secure location and better quality construction of the homesteads of better-off families.

Figure 1 shows that despite having a different socio-economic status there is not much difference between the scores of the poor (P) and the ultra-poor (UP).

Figure 1 Consistency of latrine use at day/night and across seasons: above, at and below benchmark scores



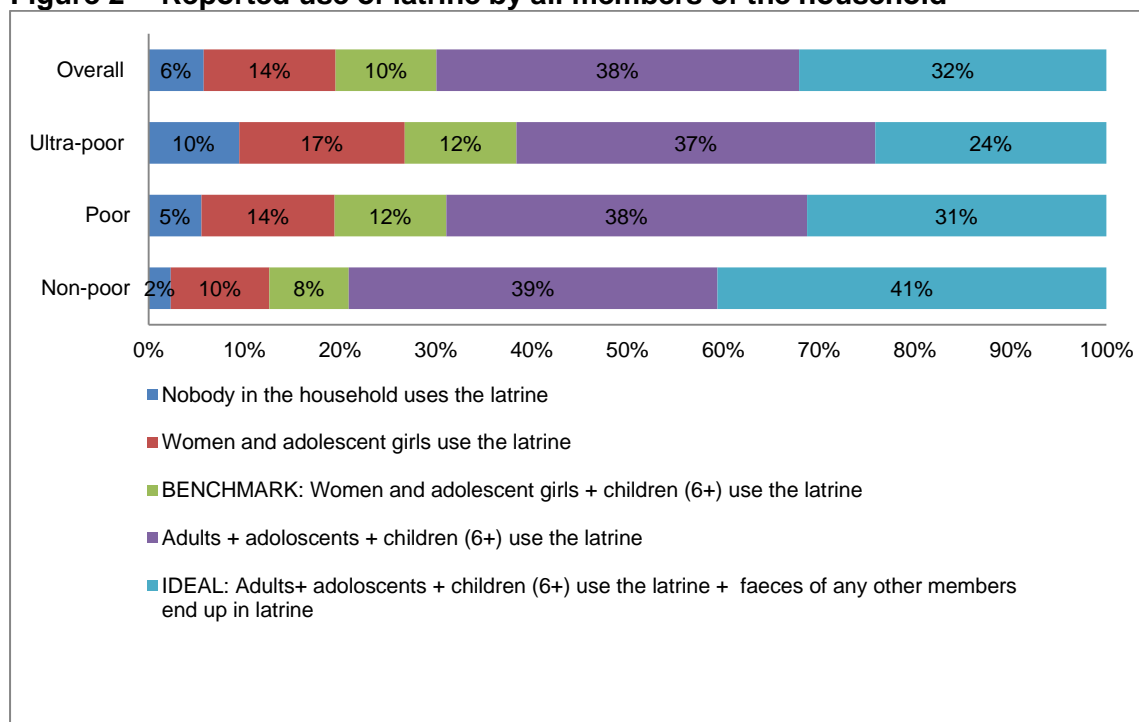
2.2.2 Patterns of latrine use within the household

QIS indicator HH04: "Latrine use by whom?" also scored high. Table 6 gives the distribution of the scores. According to the analysis, 70% of all households scored above benchmark. This means that in these HHs all members use the latrine and that part of the faeces of household members unable to use the latrine by themselves end up in the toilet. To get the precise score of the latter a split is needed for households who score second best because they have infants and/or family members who do not use the toilet due to disability or age, and households who have no such members and therefore really belong in the top group. The correction for disability is done in the QIS in the WASH III area, but household composition data must be made more precise during the next QIS rounds to filter out the households with infants and/or elderly people whose excreta are not put into the latrine. Data also shows the latrine use among the ultra-poor HHs is the worst among the three classes.

Table 6 Latrine use patterns within the household by socio-economic class

HH04	IDEAL: (1) women and adolescent girls + (2) children from age of 6 + (3) men and adolescent boys use the latrine + (4) faeces of any other members end up in toilet	(1) women and adolescent girls + (2) children from age of 6 + (3) men and adolescent boys use the latrine	BENCHMARK: (1) women and adolescent girls + (2) children from age of 6 use the latrine	(1) women and adolescent girls use the latrine	Nobody in the household uses the latrine for defecation and urination	Total
NP	41%	39%	8%	10%	2%	100%
P	31%	38%	12%	14%	5%	100%
UP	24%	37%	12%	17%	10%	100%
Overall	32%	38%	10%	14%	6%	100%

Figure 2 Reported use of latrine by all members of the household



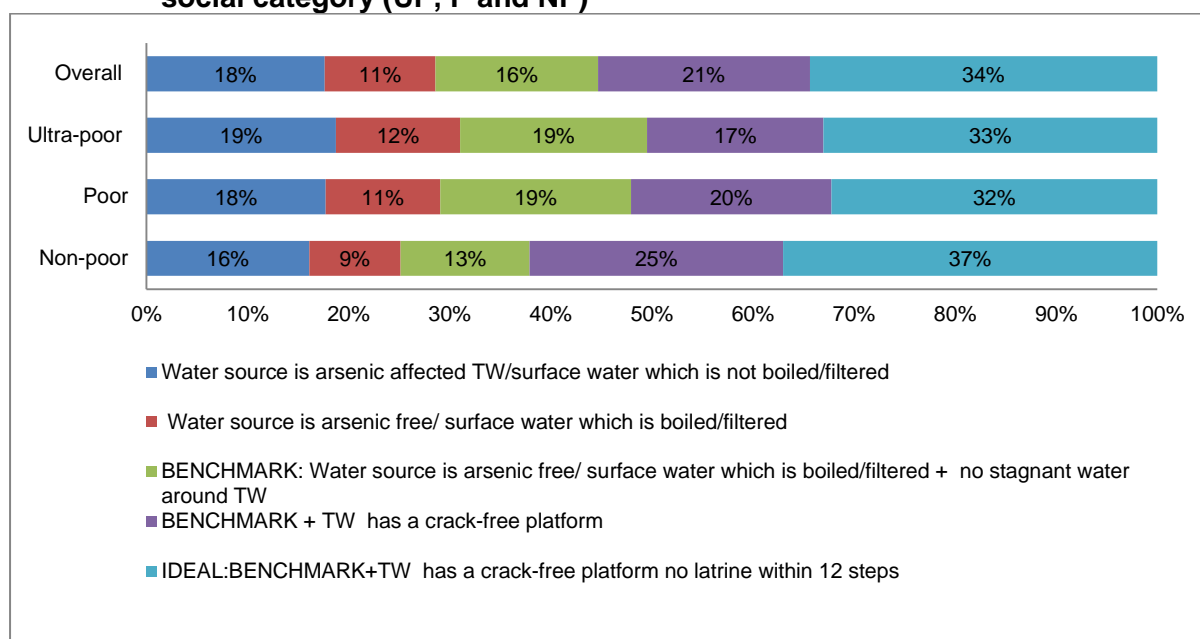
2.2.3 Arsenic-free and protected source of drinking water

On the safe and protected main drinking water source indicator (HH01), results show that there is a higher probability of finding a tube well that has a platform with cracks in poorer households. This finding means a higher risk of bacteriological contamination of drinking water wells for those households. This risk is greater for shallow tube wells than for deep tube wells.

Table 7 Arsenic safety and observed protection of main drinking water source by socio-economic class

HH01	IDEAL: (1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked (2) no stagnant water around tube well (3) tube well has a platform without cracks (4) no latrine within 12 steps	(1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked (2) no stagnant water around tube well (3) tube well has a platform without cracks	BENCHMARK: (1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked (2) no stagnant water around tube well	(1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked	Arsenic tube well or open source without always boiling drinking water	Total
NP	37%	25%	13%	9%	16%	100%
P	32%	20%	19%	11%	18%	100%
UP	33%	17%	19%	12%	19%	100%
Overall	34%	21%	16%	11%	18%	100%

Figure 3 Reported and observed quality of primary source of drinking water per social category (UP, P and NP)



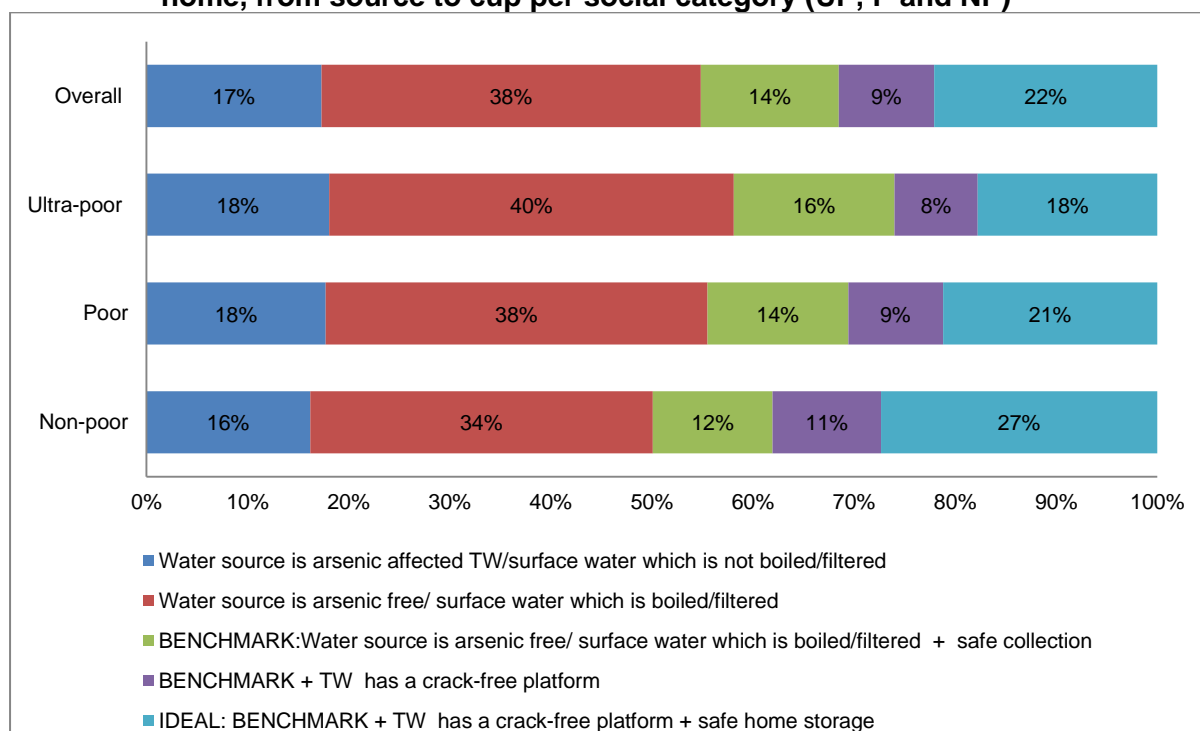
2.2.4 Management of drinking water in the home

For drinking water management from source to cup (scale HH02), one in three households (31%) scored above the benchmark (green scores in the table); another 13% were at benchmark. However, in over half the households (56%) the respondent of the household did not demonstrate a fully safe chain of managing the family's drinking water from source to cup. This indicates that more systematic attention to drinking water chain management is needed in hygiene promotion activities. Wealth-wise, there is no significant difference for scores below benchmark. However, at the ideal situation, there is a difference between the group of NP (27%) as compared to the P (20%) and UP (16%) with this score, indicating that socio-economic status in this parameter goes together with better conditions and practices. This confirms that hygiene promotion can probably make a good impact.

Table 8 Management of drinking water in the home (from source to cup) by socio-economic status

HH02	(1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked + (2) safe collection + (3) tube well has a platform without cracks + (4) safe home storage	(1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked + (2) safe collection + (3) tube well has a platform without cracks	BENCHMARK: (1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked + (2) safe collection	(1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked(1) Water source is tube well that is known to be arsenic free OR is surface water that is filtered and cooked	Arsenic tube well or open source without always boiling drinking water	Total
NP	27%	11%	12%	34%	16%	100%
P	21%	9%	14%	38%	18%	100%
UP	18%	8%	16%	40%	18%	100%
Overall	22%	9%	14%	38%	17%	100%

Figure 4 Observed source and demonstrated management of drinking water in home, from source to cup per social category (UP, P and NP)



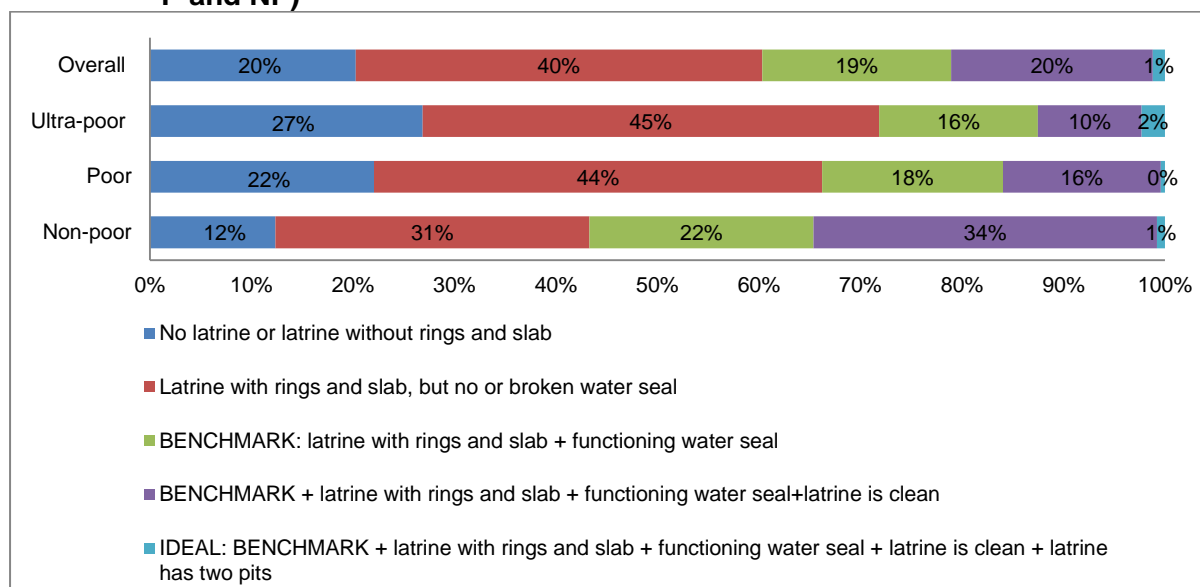
2.2.5 Observed latrine model and faecal cleanliness

For QIS indicator HH03: “Sanitary and hygienic household latrine”, the analysis showed that 21% of households scored above benchmark, while 60% performed below the benchmark. When it comes to latrine maintenance, the ultra-poor and poor scored significantly lower than non-poor households (12% and 16% for UP and P households vs. 35% for NP). These findings show that cleanliness of the latrine needs more attention in hygiene promotion activities for all socio-economic groups, but especially for the UP and P.

Table 9 Observed model (sanitary) and hygienic latrine by socio-economic class

HH03	IDEAL: Latrine with (1) ring and slab + (2) has functioning water seal + (3) no faeces visible in pan, slab, water seal and walls + (4) latrine has two pits	Latrine with (1) rings and slab + (2) has functioning water seal + (3) no faeces visible in pan, slab, water seal and walls	BENCHMARK: latrine with (1) rings and slab + (2) has functioning water seal	Latrine with (1) rings and slab, but no or broken water seal	No latrine or latrine without rings and slab	Total
NP	1%	34%	22%	31%	12%	100%
P	0%	16%	18%	44%	22%	100%
UP	2%	10%	16%	45%	27%	100%
Overall	1%	20%	19%	40%	20%	100%

Figure 5 Observed scores for sanitary and hygienic latrine per social category (UP, P and NP)



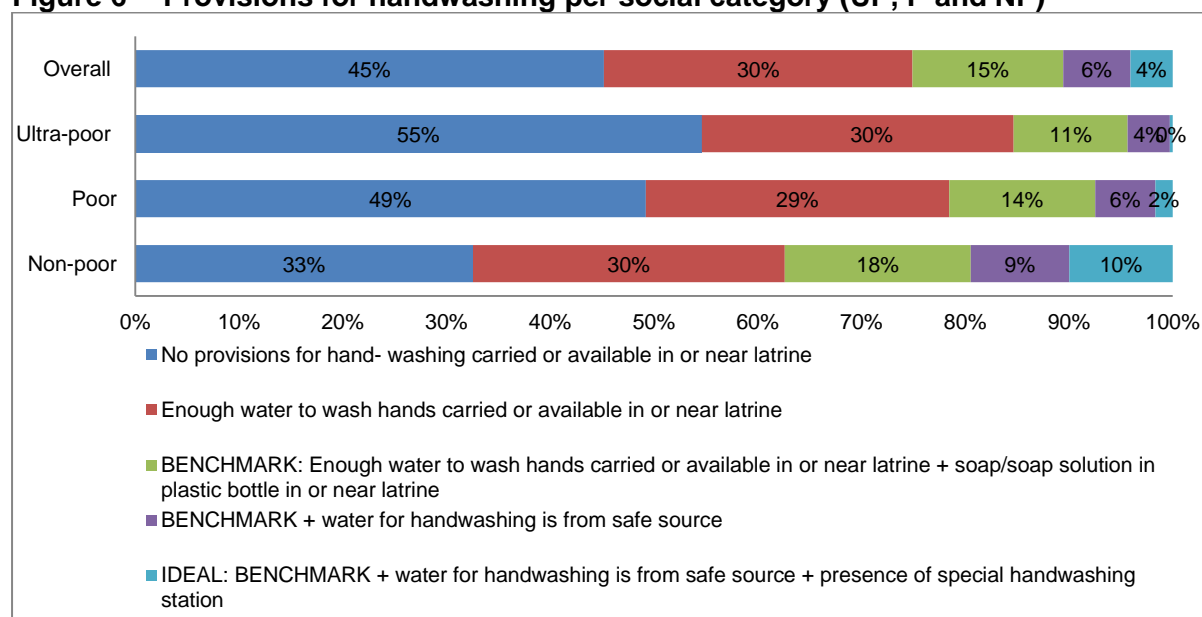
2.2.6 Provisions for washing hands after latrine use

In total, 10% of households scored above and 75% scored below the benchmark for HH06, “Handwashing provision after defecation”. Around 45% of households do not have handwashing facilities in or near the latrine and 30% of households have only water in or near the latrine.

Table 10 Provisions for handwashing after latrine use by socio-economic class

HH06	IDEAL: (1) Enough water to wash hands carried or available in or near latrine + (2) soap/soap solution in plastic bottle at latrine + (3) water for handwashing is from safe source + (4) there is a special handwashing station	(1) Enough water to wash hands carried or available in or near latrine + (2) soap/soap solution in plastic bottle at latrine + (3) water for handwashing is from safe source	BENCHMARK: (1) Enough water to wash hands carried or available in or near latrine + (2) soap/soap solution in plastic bottle at latrine	(1) Enough water to wash hands carried or available in or near latrine	No provisions for handwashing carried or available in or near latrine	Total
NP	10%	9%	18%	30%	33%	100%
P	2%	6%	14%	29%	49%	100%
UP	0%	4%	11%	30%	55%	100%
Overall	4%	6%	15%	30%	45%	100%

Figure 6 Provisions for handwashing per social category (UP, P and NP)



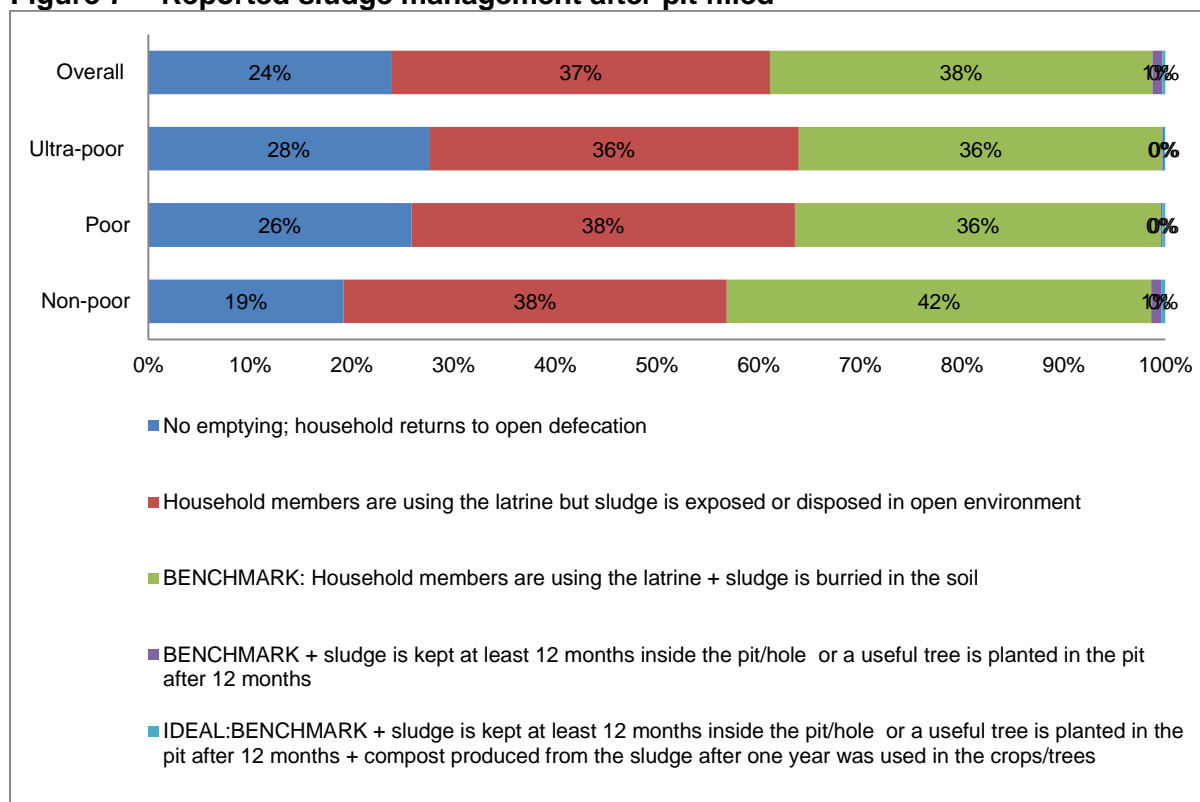
2.2.7 Sludge management when pit is full

Data analysis was done for 2102 households that have already had full pits. A very small number of these households scored above benchmark, 38% scored at the benchmark, while 61% scored below the benchmark. On average almost one quarter of the households whose pit had filled up, have gone back to open defecation (24%). Data on planned management of the pit contents is not reported here because the reliability is probably lower than the actual reported practice.

Table 11 Sludge management when pit is full

HH07	<p>IDEAL: (1) Owners empty full pit or get others to empty it and reuse latrine + (2) after depositing sludge in a hole in garden/field, cover hole (In case of one pit latrine) OR (1) owner makes new latrine over new pit and (2) covers old pit with soil (In case of two pit latrine) + (3) to make compost sludge is kept at least 12 months inside the pit or a useful tree is planted in the pit after 12 months + (4) compost produced from the sludge after one year was used in the crops/trees</p>	<p>(1) Owners empty full pit or get others to empty it and reuse latrine + (2) after depositing sludge in a hole in garden/field, cover hole (In case of one pit latrine) OR (1) owner makes new latrine over new pit and (2) covers old pit with soil (In case of two pit latrine) + (3) to make compost, sludge is kept at least 12 months inside the pit or a useful tree is planted in the pit after 12 months</p>	<p>BENCHMARK: (1) Owners empty full pit or get others to empty it and reuse latrine + (2) after depositing sludge in a hole in garden/field, cover hole (In case of one pit latrine) OR (1) owner makes new latrine over new pit and (2) covers old pit with soil (In case of two pit latrine)</p>	<p>(1) Owners empty full pit or get others to empty it and reuse latrine, but sludge is disposed in open environment OR (1) owner makes new latrine over new pit, but leaves old pit uncovered</p>	<p>No emptying; household returns to open defecation</p>	<p>Total</p>
NP	0%	1%	42%	38%	19%	100%
P	0%	0%	36%	38%	26%	100%
UP	0%	0%	36%	36%	28%	100%
Overall	0%	1%	38%	37%	24%	100%

Figure 7 Reported sludge management after pit filled



2.3 Village WASH Committee

149 village WASH committees (VWC) from the WASH II programme were surveyed. All committees were established in 2012. There were two QIS scales³, which measure the following parameters:

- Administrative performance including cooperation with local government (VWC02); and
- Gender balance in VWC management (VWC03).

2.3.1 Management performance of VWCs

All village WASH committees (VWCs) were established in 2012. Out of the total 149 VWCs, 146 have the original composition of six females and five male members (Table 12).

Table 12 Directions of change in 3 VWCs that changed 6 female/5 male members structure

No. of VWCs with changed composition	No. of current female members	No. of current male members
1	5	5
1	6	4
1	7	4

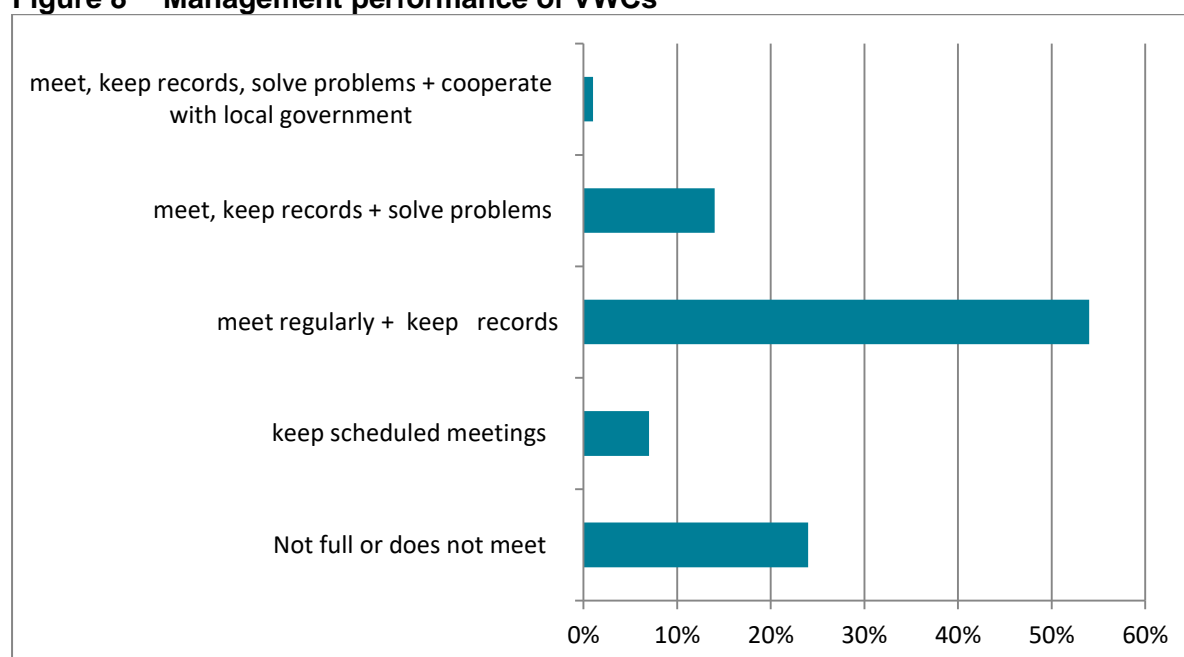
³For more information on QIS ladders see: Guidelines: QIS data form VWC (November 2012).

Table 13 and Figure 8 give the performance of VWCs in terms of keeping scheduled meetings (score 1) plus records (score 2), also solving problems (score 3) and finally cooperating with local government for mobilisation of latrine grants for the ultra-poor (score 4). As the age of a VWC plays an important role in measuring the activity, the performance of a VWC can be measured after a few months of activities.

Table 13 Administrative performance of VWCs

VWC02 Scores	Score Description	Frequency	Percentage %
4	IDEAL: (1) Committee (male and female members) meets every 2 months + (2) maintains list of decisions and meeting minutes + (3) identifies gaps and takes action + (4) mobilizes ADP funds for hard core poor	2	1%
3	(1) Committee (male and female members) meets every 2 months + (2) maintains list of decisions and meeting minutes + (3) identifies gaps and takes action	20	14%
2	BENCHMARK: (1) Committee (male and female members) meets every 2 months + (2) maintains list of decisions and meeting minutes	81	54%
1	(1) Committee (male and female members) meets every 2 months	10	7%
0	No full VWC OR VWC exists but does not meet	36	24%
Total		149	100%

Figure 8 Management performance of VWCs



It was further found that 88 (or 59% of the sampled VWCs) are located in areas where households are mostly ultra-poor and poor (Table 14).

Table 14 VWC performance in areas with mostly poor and ultra-poor vs. non-poor households

VWC02	Mostly poor and ultra-poor households		Mostly non-poor households	
	Score	Frequency	Percentage (%)	Frequency
4	2	2%	0	0%
3	12	14%	8	13%
2	47	53%	34	56%
1	8	9%	2	3%
0	19	22%	17	28%
Total	88	100%	61	100%

2.3.2 Participation of women and gender equity

Apart from the VWC performance indicator, the age of a VWC also plays an important role in measuring gender equity. The participation of women in the VWC can be measured a few months after it started its activities. On women's participation/gender-balanced management (VWC03), only 9% of VWCs have achieved the ideal: women are registered members, attend the meetings, speak out, make decisions together with male members, and do so as a standard procedure. Overall, 10% of all VWCs scored above benchmark, 50% scored at benchmark and 40% below the benchmark (Table 15).

Table 15 Women's participation and gender equity in decision making by VWCs

VWC03 Score ⁴	Score Description	Frequency	Percentage (%)
4	IDEAL: Women registered on VWC + (1) come to the meetings + (2) speak out + (3) influence some decisions in last 1 year + (4) all decisions taken jointly	13	9%
3	Women registered on VWC + (1) come to the meeting + (2) speak out + (3) influence some decisions in last 1 year	2	1%
2	BENCHMARK: Women registered on VWC + (1) come to the meetings + (2) speak out	72	50%
1	Women registered on VWC + (1) come to the meetings	24	16%
0	No women on VWC/women registered, but don't come to the meetings	36	24%
	Total		100%

To give female VWC members the opportunity to report their experience without influence from male members and vice-versa, both sexes were asked to score in separate groups. This did not bring to light any gender bias: there were no significant differences between the scores agreed jointly between male and female VWC members and the separate scores by each group.

⁴ As agreed by female and male sub-groups.

2.4 WASH in Schools

19 schools were surveyed in the BRAC WASH II areas. This section presents the analysis for these schools. Four parameters were analysed for schools:

- Sanitary and hygienic toilets (SS01);
- Performance of student brigades (SS02);
- Provisions for menstrual hygiene management (SS03); and
- Performance of school WASH committees (SS04).

2.4.1 Sanitary and hygienic toilets

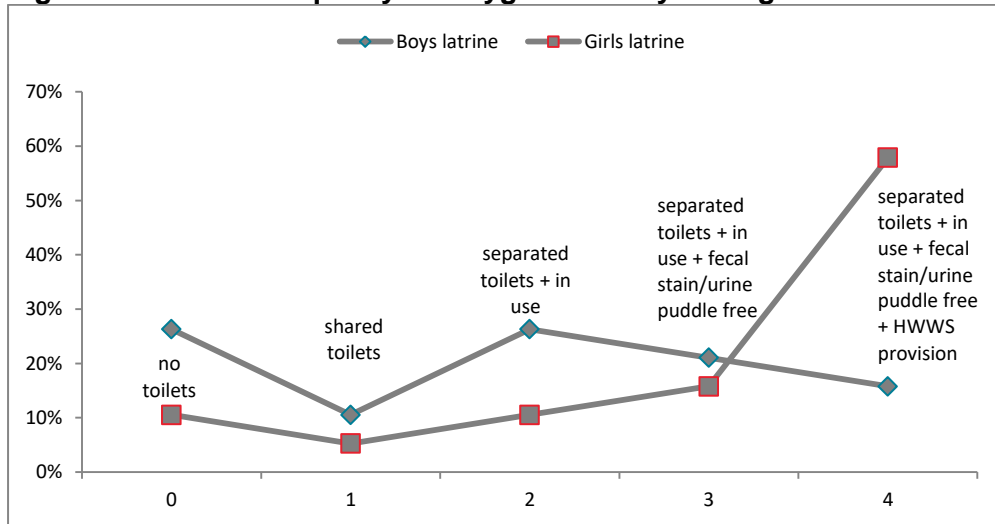
Sanitary and hygienic school latrines (SS01) for girls scored the best among all four QIS school indicators. Girls' toilets (constructed with the support from both the school authority and BRAC WASH) scored significantly higher in comparison with the same indicator for boys' latrines. In the same sample size, almost twice as many girls' latrines scored above the benchmark⁵ in comparison to boys' latrines (73% vs. 37%) as shown in Table 16 and Figure 9. Of the latrines for boys, 26% scored at the benchmark. Thus, girl students manage toilet hygiene considerably better than boy students, which is an important finding for BRAC staff to use in follow-up activities with the student brigades.

⁵Benchmark: separate toilets for boys and girls are present AND always used by students (source: Guidelines QIS Data Form School, November 2012).

Table 16 Sanitary and hygienic school latrines

SS01 Score	Score Description	Boys' latrines			Girls' latrines		
		Frequency	%	Above at & below BM	Frequency	%	Above at & below BM
4	IDEAL: (1) separate toilets for boys and girls are present + (2) boys' latrines are used only for boys + (3) have no faecal matter in pan, water seal, floor or walls, and no puddles of urine (4) provisions for cleaning and hand washing available in the latrine	3	16%	37%	11	57%	73%
3	(1) separate toilets for boys and girls are present + (2) boys' latrines are used only for boys + (3) have no faecal matter in pan, water seal, floor or walls, and no puddles of urine	4	21%		3	16%	
2	BENCHMARK: (1) separate toilets for boys and girls are present + (2) boys' latrines are used only for boys	5	26%	26%	2	11%	11%
1	Toilets are there and are always used by the students, but not separate for boys and girls	2	11%	37%	1	5%	16%
0	No latrine at all or No toilets for boys and girls available in the school OR are not used	5	26%		2	11%	
Total		19	100%	100%	19	100%	100%

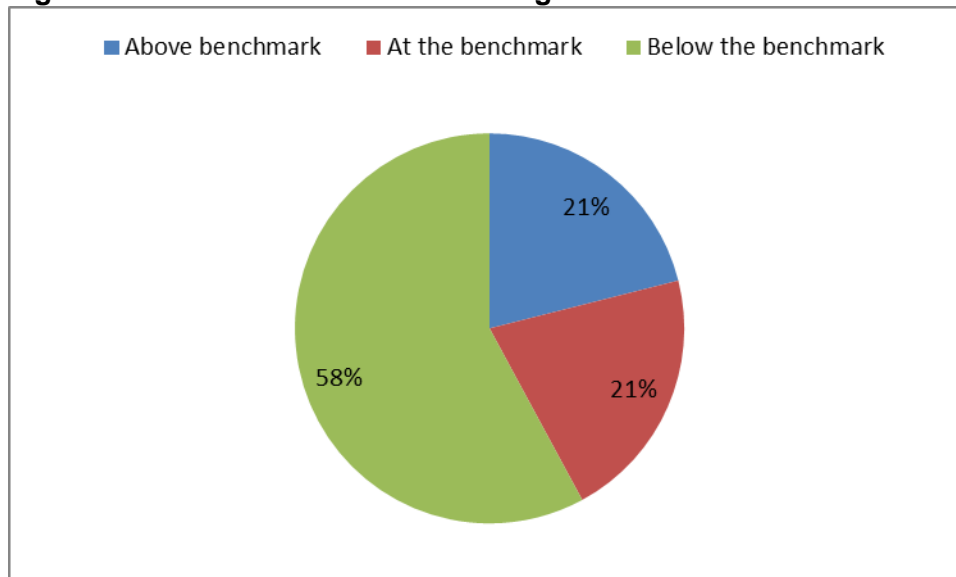
Figure 9 Observed quality and hygiene of boys and girls toilets



2.4.2 Student brigades

The distribution of the scores for the student brigades (scale SS02) is summarized in Table 17. Performance ranges from “no brigade” (score 0) and “a brigade with 12 boys and 12 girls (six per class) (score 1) present” to “brigades have made work plan and monitoring format” (score 2) and “also update the formats” (score 3) to “have solved at least one problem in last year” (score 4). Overall, 21% perform above, 21% at and 58% below the benchmark (Figure 10).

Figure 10 Performance of student brigades



In total 42% of schools have student brigades that have made WASH plans and monitoring formats (scores 2 to 4). Only one school has already solved a problem regarding WASH issues in their school in the first year of performance.

Table 17 Performance of student brigades

SS02 Score	Score description	Frequency	Percentage (%)
4	IDEAL: (1) student brigade with 12 boys and 12 girls have been formed + (2) work plan and monitoring format present + (3) register and work plan updated regularly + (4) school brigade has implemented at least one action/solved at least one problem in the last year	1	5%
3	(1) student brigade with 12 boys and 12 girls have been formed + (2) work plan and monitoring format present + (3) register and work plan updated regularly	3	16%
2	BENCHMARK: (1) student brigade with 12 boys and 12 girls have been formed + (2) work plan and monitoring format present	4	21%
1	(1) student brigade with 12 boys and 12 girls have been formed	7	37%
0	No student brigade in the school	4	21%
	Total	19	100%

2.4.3 Provisions for menstrual hygiene management (SS03)

After several months of the intervention, 52% of schools scored above benchmark, 11% at and 37% below the benchmark for menstrual hygiene management. Given the fact that one third of schools have no facilities for menstrual hygiene management (score 0 – 32%), considerable progress should be expected in the next round of data collection.

Table 18 Provisions for menstrual hygiene management in girls school latrines

SS03 Score	Score description	Frequency	Percentage (%)
4	IDEAL (1) dumping facilities in the latrine and end-disposal provisions are available + (2) water is available within the latrine + (3) napkins are available within the school + (4) girls can use the latrine comfortably (without being observed entering the latrine)	10	52%
3	(1) dumping facilities in the latrine and end-disposal provisions are available + (2) water is available within the latrine + (3) napkins are available within the school	0	0%
2	BENCHMARK: (1) dumping facilities in the latrine and end-disposal provisions are available + (2) water is available within the school	2	11%
1	(1) dumping facilities in the latrine and end-disposal provisions are available in the school	1	5%
0	No facilities for menstrual hygiene management are available in the school	6	32%
	Total	19	100%

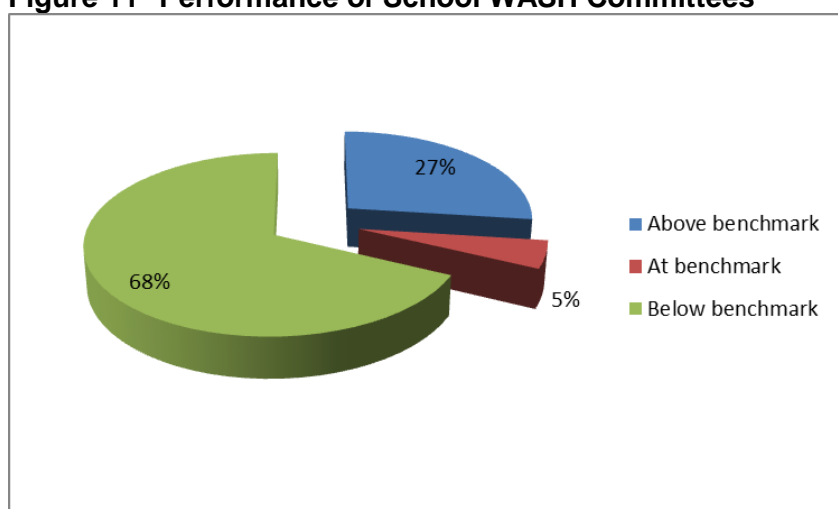
2.4.4 Performance of School WASH Committees (SS04)

Table 19 gives the scoring scale for the management of school WASH committees (SS04) with the division of scores by frequencies and percentages. The data showed that 27% of school WASH committees perform above and 5% perform at the benchmark⁶, while 68% perform below benchmark. Above benchmark implies that besides meeting and keeping records and accounts they also have some funds to maintain school WASH facilities (score 3) and the expenditure is updated on the register (score 4). Below benchmark are schools that have no WASH committee or the committee does not keep records and accounts, which is the programme's minimal behavioural target or benchmark.

Table 19 Performance of school WASH committees

SS04 score	Score description	Frequency	Percentage (%)
4	IDEAL: (1) Committee (male and female members) is functional + (2) has documents and meeting minutes and financial account list + (3) has funds to maintain school WASH provisions which is used (e.g. toilet cleaner, brush, broom etc.) + (4) fund for maintenance of WASH provisions is updated in register	2	11%
3	(1) Committee (male and female members) is functional + (2) has documents and meeting minutes and account list + (3) has funds to maintain school WASH provisions which is used (e.g. toilet cleaner, brush, broom etc.)	3	16%
2	BENCHMARK: (1) Committee (male and female members) is functional + (2) has documents, meeting minutes and financial account list	1	5%
1	(1) Committee (male and female members) is present and functional	6	32%
0	No committee or committee exists, but is not functional	7	36%
Total		19	100%

Figure 11 Performance of School WASH Committees



⁶Benchmark: Committee (male and female members) is functional AND has documents, meeting minutes and financial account list.

2.5 Rural Sanitation Centres (RSCs)

73 Rural Sanitation Centres (RSC) were surveyed in the WASH II area. Analysis shows that among all the RSCs 38% received financial and orientation support from BRAC, 52% received only orientation support, 2% received only financial support and 7% received no support from BRAC.

When it comes to performance, 40% of RSCs perform above, 26% perform at and 35% below the benchmark⁷. After disaggregating RSCs in accordance with type of support received from BRAC, the obtained results are summarized in Table 20.

Table 20 Performance of RSCs with different levels of BRAC support

RSC01 Score	All RSC		Financial and orientation support		Orientation support (only)		Financial support (only)	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
4	2	3%	2	7%	0	0%	0	0%
3	27	37%	14	50%	11	29%	1	50%
2	19	26%	10	36%	9	24%	0	0%
1	15	20%	1	3%	13	34%	1	50%
0	10	14%	1	4%	5	13%	0	0%
Total	73	100%	28	100%	38	100%	2	100%

⁷Benchmark: Sanitation centre/enterprise within reach of union AND has at least three/four types of sanitary products (source: Guidelines - QIS Data Form Rural Sanitation Centre, November 2012).

Table 21 Performance Indicators for Rural Sanitation Centres

*RSC01: PERFORMANCE OF RURAL SANITATION CENTRE/ENTERPRISE	SCORE
IDEAL: (1) Rural Sanitation Centre/enterprise within reach of union + (2) has at least 3 or 4 types of sanitary products + (3) provides other services to customers on their demand + (4) markets goods and services to customers in surrounding areas	4
(1) Rural Sanitation Centre/enterprise within reach of union + (2) has at least 3 or 4 types of sanitary products + (3) provides other services to customers on their demand	3
BENCHMARK: (1) Rural Sanitation Centre/enterprise within reach of union + (2) has at least 3 or 4 types of sanitary products	2
(1) Rural Sanitation Centre/enterprise within reach of union	1
No Rural Sanitation Centre/enterprise within reach of union	0

These baseline data seem to indicate that the RSCs which received training and financial support from BRAC did better than other centres. Looking at the different score levels, RSCs that receive financial and orientation support from BRAC scored higher at level 3. This means that the RSCs are not only easy to reach and offer at least 3-4 products, but that they also provide other services to customers (e.g. transport facilities). At the top level this difference is more prominent as only RSCs that scored this high actually received orientation and financial support from BRAC (see Table 20, score 4).

3 Conclusions and lessons

The analysis shows that the majority of household indicators score below benchmark. This proves BRAC WASH has chosen the areas where the needs are extremely high and a lot still needs to be done in the water, sanitation and hygiene sector.

Table 22 Performance of programme indicators with their QIS benchmark (BM) scores

QIS Indicator	Topic/scale	Above BM	At BM	Below BM
HH01	Safe and protected main drinking water source	55%	16%	28%
HH02	Drinking water management from source to cup	31%	14%	55%
HH03	Sanitary and hygienic household latrine	21%	19%	60%
HH04	Use of latrine by all household members	70%	11%	20%
HH05	Consistency of latrine use at all times	73%	14%	13%
HH06	Handwashing provision after defecation	10%	15%	75%
HH07	Sludge management when latrine pit is full	1%	38%	61%
VWC02	Performance of VWC	15%	54%	31%
VWC03	Women's participation/gender balanced management	10%	50%	40%
SS01 Girls	Sanitary, used and hygienic school toilet	73%	11%	16%
SS01 Boys	Sanitary, used and hygienic school toilet	37%	26%	37%
SS02	Presence & performance of student brigade	21%	21%	58%
SS03	Menstrual hygiene management provisions for girls in school	52%	11%	37%
RSC01	Depends on type of support, see Table 20 above			

The main programme recommendations and possible challenges are summarised below.

3.1 Households

- Most household indicators score below the benchmark with the exception of indicators HH04, HH05 and HH01. In the provision of handwashing after defecation 75% of the households score below benchmark of which 54% of households do not have any provision for handwashing while 30% of the families have only water in or near the latrine.
- In the case of drinking water management from source to cup, 22% of the households could not demonstrate a fully safe chain of managing the family's drinking water from source to cup.

3.2 VWCs

- As all the VWCs were established just a few months before the data collection, it is too early to evaluate their performance. This can only be measured during the next round of QIS monitoring through meeting the time-bound criteria of the QIS ladders.
- The data shows that 69% of the VWCs are functioning actively. In 60% of the VWCs men and women agreed that women attend the VWC meetings and speak out.

3.3 Schools

- Though the sample is very small (19 schools only in the survey area), it can be said that, with the continuation of the WASH II programme the scores will continue to climb.

- Further progress can be made by giving all schools feedback on their comparative QIS scores. Initially, this can be done through a simple data sheet with diagrams for the scores of all sample schools per upazila and then it can be scaled up.
- A subject for special attention in the schools programme is the lower hygiene scores for the boys' toilets. Only 37% of the schools have boys' latrines which are clean and have cleaning and handwashing facilities available, while the percentage is 73% for girls' latrines. The situation can be improved through enhancing the involvement of the student brigades. Only 21% of schools have active student brigades while 32% of schools have active school WASH committees. 37% of schools need to improve the menstrual hygiene facilities.

3.4 Sanitation enterprises (RSC)

- As the programme has just started, the sample size of all RSCs in the survey area was rather small, only 73. The Rural Sanitation Centre (RSC) results showed only RSCs that received financial and orientation support scored high on the QIS scale although the difference is due the sample size and not significant at this stage.
- From the supply and demand study⁸ it has become clear that RSCs will go out of business - particularly in areas where sanitation coverage is reaching saturation point - if they do not diversify. It is important that a sufficient number of producers remain in business to respond to current and future consumer demands. The programme should actively promote or encourage business diversification as no producer will survive solely on producing and selling toilet parts.

⁸Sanitation and Demand Supply in rural Bangladesh: <http://www.ircwash.org/resources/sanitation-demand-and-supply-rural-bangladesh>

