



## REPORT

# HIGH FIVE PROGRAMS MIDLINE HOUSEHOLD SURVEY

COVERAGE AREA: MAKASSAR

Prepared for



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## PART I

### Background and Research Objectives

#### A. Background

The Indonesian government launched the Community-Based Total Sanitation (CBTS) Program in 2007 to improve hygiene and sanitation practices in households, thereby reducing the incidence of diarrhea, the second leading cause of infant mortality. The program consists of five hygiene and sanitation pillars, namely:

1. Stopping open defecation
2. Washing hands with soap
3. Household safe water treatment and storage
4. Solid waste management
5. Waste water management

The program was focused primarily on rural areas, where the emphasis was on Pillar 1 (stopping open defecation). Through the High Five Program, the Cipta Cara Padu (CCP) Foundation proposed that the program be extended to urban areas, thus contributing to the efforts to improve compliance with the five CBTS pillars in households and communities.

The High Five Program has now been running for 1.5 years in 3 cities, namely, Surabaya, Medan and Makassar. The program is conducted at the city level and the sub-district level. At the city level, The High Five Program advocates the incorporation of CBTS into current policies and AMPL/Sanitation Working Group activities, as well as the integration of CBTS strategies into municipal government development plans. At the sub-district level, The High Five Program operates in three RW (neighborhoods) at a high level of intensity, and in other neighborhoods at a low level of intensity.

It is very important to ensure that the program at every level is on track to achieve the key indicators in respect of intermediate results, particularly those resulting from interventions during the operative period, and that the implementation process is in accordance with participatory principles, and reflects gender equity and environmental considerations. Accordingly, an independent evaluator is required to review the performance of the program and provide recommendations for improving program implementation during its remaining lifetime.

## B. Objectives

The High Five Program focuses on improving hygiene practices at the household and community levels, identifying how many households are aware of children's health, sanitation and hygiene issues, whether that number has increased or decreased when compared with the 2012 baseline survey having regard to The High Five Program objective indicators. Accordingly, this midline survey evaluates:

- a. Program outcomes by comparing the midline survey's findings with those of the baseline survey so as to identify changes as regards:
  - Understanding of the CBTS pillars
  - Perceptions of the CBTS pillars
  - Habits/ behaviors associated with the CBTS pillars
- b. Program implementation so as to identify program effectiveness, efficiency, relevance, and sustainability.
- c. Providing recommendations for better program implementation.

## PART II

### Research Methodology

In general, both primary and secondary data were required for the purposes of this study. However, Polling Center (in accordance with its agreement with High Five Program) collected primary data using the quantitative and qualitative methods.

In the implementation of this study, the collection of primary data in the field was carried out using the quantitative method aimed at respondents from households with children, while the qualitative data was collected using in-depth interviews with stakeholders of the CBTS program being implemented by CCP.

#### A. Survey Method

In order to obtain the data required for this research (as set out in the study objectives), both the quantitative and qualitative methods employed questionnaires.

Data collection in the field in the Makassar area was conducted as follows:

##### Quantitative Data

- Households : 9 to 14 March 2013
- Children : 6 to 10 March 2013

##### Qualitative Data

- Focus Group Discussion (FGD) : 5 March 2013
- In-depth Interviews (IDI) : 8 to 22 March 2013

#### B. Number of respondents

The number of respondents in each category in the Makassar survey area is shown in the following table:

**Table 2.1**  
**Number of Respondent by Respondent Category in Each Area**

<b>Category</b>	<b>Area/Sub-district</b>	<b>Sample Size</b>
Household	Tallo	30 respondents
	Lembo	30 respondents
Elementary School (Sekolah Dasar/SD) Children	SD Tallo Tua 1	6 respondents
	SD Tallo Tua 2	6 respondents
	SD KIP Baraya	6 respondents
	SD Malimongan Baru	6 respondents
	SD Inpres Baraya 2	6 respondents
<b>Total Respondents in Quantitative Study</b>		<b>90 respondents</b>
Focus Group Discussion		1 group from Pokja Kota (Kelompok Kerja Kota – City Working Group)
		1 group from Pokja Kelurahan (Kelompok Kerja Kelurahan – Administrative Village Working Group)
IDI – per respondent category		
High Five Program District Leaders		1 respondent
High Five Program Facilitators		1 respondent
Community Leaders (Sub-district Heads)		2 respondents
Teachers with High Five Program training		2 respondents
Bappeda (Badan Perencanaan Daerah – Local Development Planning Board)		1 respondent
Journalists		1 respondent
Sanitarians		1 respondent
Other Partners: BTKL (Balai Teknik Kesehatan Lingkungan – Technical Unit Environmental Health)		1 respondent
<b>Total Respondents in Qualitative Survey</b>		<b>11 respondents</b>

## C. Sample Selection Technique

### 1. Respondent Households

Respondent households were selected using the simple random sampling method. The objective was to obtain findings that are representative of the population.

In the selected sub-districts in each city, a mapping process was first carried out in respect of households with under-5s, with the approval of local leaders (heads of RT/RW or sub-district heads).

After the population had been mapped, the selection of households was preceded by determining the household interval, that is, by dividing the total number (population) of households with children under 5 with the total respondent target (30 respondents) for each sub-district.

In this way, the caregiver respondents for under-5s to be interviewed were selected.

### 2. Elementary school children in grades 4, 5 and 6

The selected elementary schools were all located in sub-districts where interventions had been effected. Respondents in the child category were selected randomly using the sampling interval technique. A total of 10 children from each school were interviewed, all of whom were from grades 4, 5, and 6. Consequently, the average sample size for each class was 3 children.

To select the children to be interviewed from each class, the interval random sampling method was used based on desk or attendance role sequences.

## Part III

### Findings

#### A. Respondent Profile – Age

The criteria for the selection of respondents for interview during the midline survey were the same as in the case of the previous baseline survey, namely, caregivers of under-5s. During the midline surveys in both Tallo and Lembo, the percentage of female respondents was the same – 100% of the total number of 30 respondents per sub-district. This meant that all of the respondents in Makassar were women, unlike at the time of the baseline survey when there were also male respondents, albeit a small percentage.

As a whole in the city of Makassar, the biggest proportion (43.3%) of respondents interviewed were between 25 and 35, while the second largest age group was 35-45 (23.3%). The percentage in Tallo was almost the same as for Makassar as a whole, However, there were some differences, with the biggest proportion of the respondents interviewed were under 25 (36.7%) – slightly different from the 25-35 age group, which was in second place on 33.3%.

In Lembo sub-district, the results were the same for Makassar as a whole, that is, the biggest proportion of respondents were aged 25-35, while in second place was the 35-45 age group (53.3% and 20%, respectively).

#### B. Respondent Profile – Relationship between Respondent and Household Head

A total of 66.7% of the respondents were the wives of household heads, while 21.7% were the children of household heads. In more detail, in Tallo sub-district 66.7% of respondents said that they were the wife of the household head, while 23.3% were the children of the household head. The remaining 10% were made up of the parents of the household head.

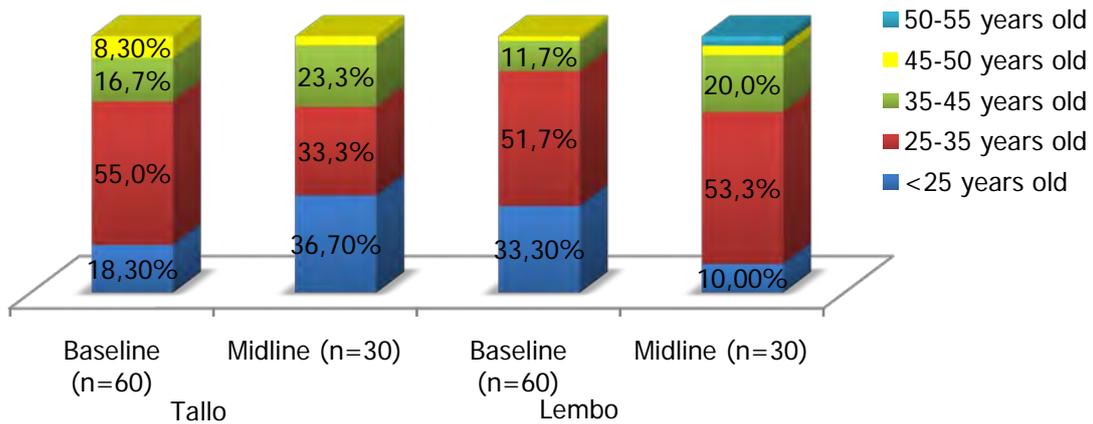
In Lembo sub-district, the responses on respondent status were more varied. As in Tallo, the majority of respondents were the wives of households heads (66.7%), while in second place were the children of household heads (20%). Meanwhile, 6.7% were the parents of household heads and 3.3% were households and 3.3% caregivers.

#### C. Respondent Profile – Number of Under-5s per Household

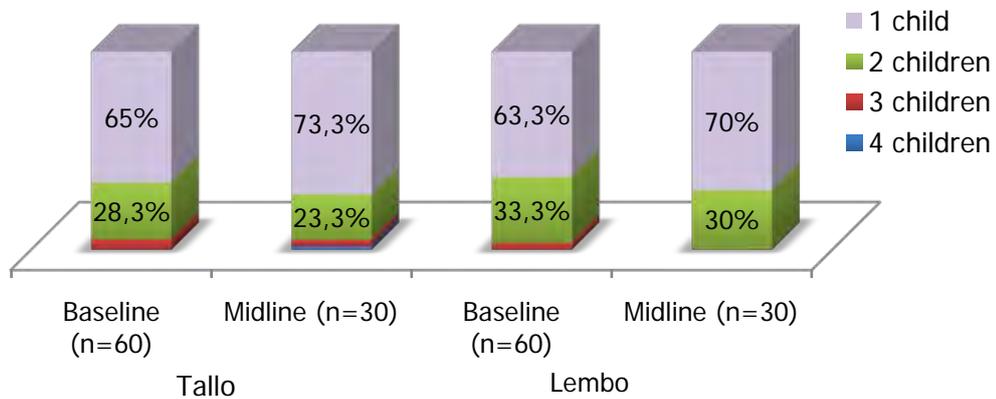
Overall, in the two sub-districts in which interviews held, the majority of respondents lived with 1 under-5 at home (71.7%), while 26.7% of respondents had 2 under-5s in the house. The results were similar for both Tallo and Lembo, with the majority of respondents living with one under-5 (73.3% and 70% respectively). The remaining

22.3% of respondents in Tallo living with 2 under-5s, while 3.3% living with 3 under-5s. In Lembo, 30% lived with 2 under-5s in the home.

**Figure 3.1.**  
**Respondent Age Groups**



**Figure 3.2**  
**Number of Under-5s per Household**

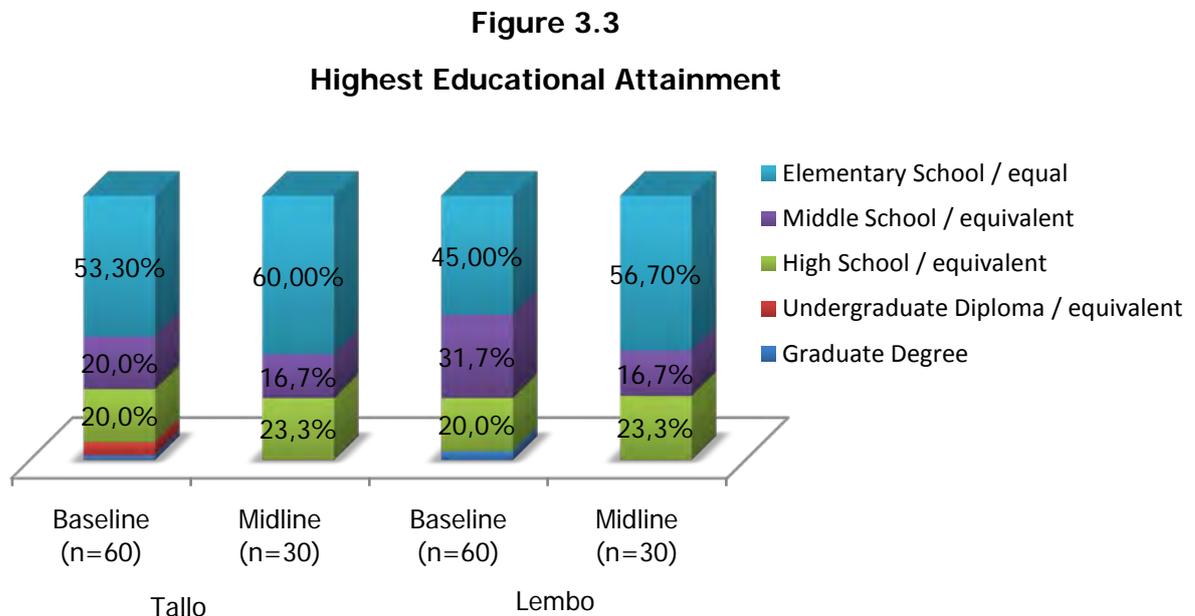


#### D. Respondent Profile – Education

As regards the educational background of the respondents in Makassar, an overall majority (58.3%) had graduated from elementary school (or equivalent), while only 23.3% had graduated from high school (or equivalent). The remainder (16.7%) had graduated from junior high school (or equivalent).

The results for Tallo were similar to the results for Makassar overall, with 60% of respondents having graduated from elementary school (or equivalent), and 23.3% having done so from high school (or equivalent).

Figure 3.3 below shows the education attainments of the interviewed respondents in percentage terms and compares these with the findings of the baseline survey.



### E. Respondent Profile – Socioeconomic Class

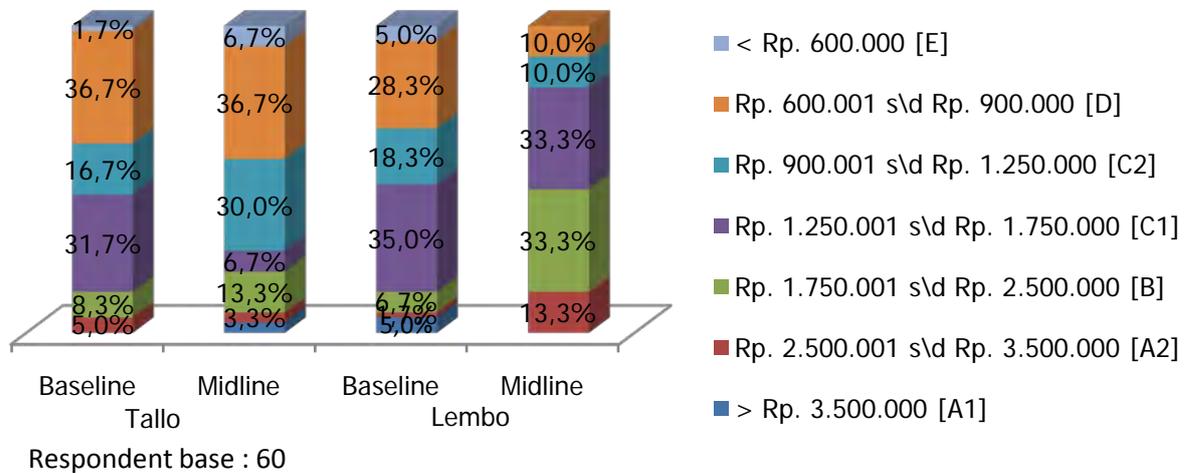
Overall, the midline survey in Makassar found that socioeconomic status was more balanced, with socioeconomic classes B (average monthly expenditure of Rp 1,750,001 – Rp 2,500,000) and D (average monthly expenditure of Rp 600,001 – Rp 900,000) accounting for the same percentages – 23.3%. Next came socioeconomic class C1 (average monthly expenditure of Rp 1,250,001 – Rp 1,750,000) and C2 (average monthly expenditure of Rp 900,001 – Rp 1,250,000), each of which also had the same percentages – 20%. By sub-district, in Tallo the biggest proportion of respondents (36.7%) were in socioeconomic class D (average monthly expenditure of Rp 600,001 – Rp 900,000), while in second place on 30% was socioeconomic class C2 (average monthly expenditure of Rp 900,001 – Rp 1,250,000).

Things were rather different in Lembo, where the distribution of percentages were almost the same. The largest socioeconomic classes were B and C1, both on 33.3%, while in second place on 13.3% was socioeconomic class A2 (average monthly expenditure of Rp 2,500,001 – Rp 3,500,000).

The socioeconomic classes of the respondents in each sub-district are as shown below:

**Figure 3.4**

**Average Household Expenditure Per Month**



Staying on the issue of socioeconomic class, the following is a description of the home ownership situation, and observations concerning the homes occupied by respondents.

The majority of the 60 respondents in Makassar (68.3%) said that they owned the homes they currently occupy, while 18.3% said that they were renting. The remaining respondents were living in homes owned by family members (11.7%) and official residences (1.7%). By sub-district, in Tallo the majority (63.3%) owned their own homes, while in second place on 16.7% each were rented homes and homes owned by family members. In Lembo, the figures were almost the same with 73.3% of respondents occupying their own homes, and 20% occupying rented homes.

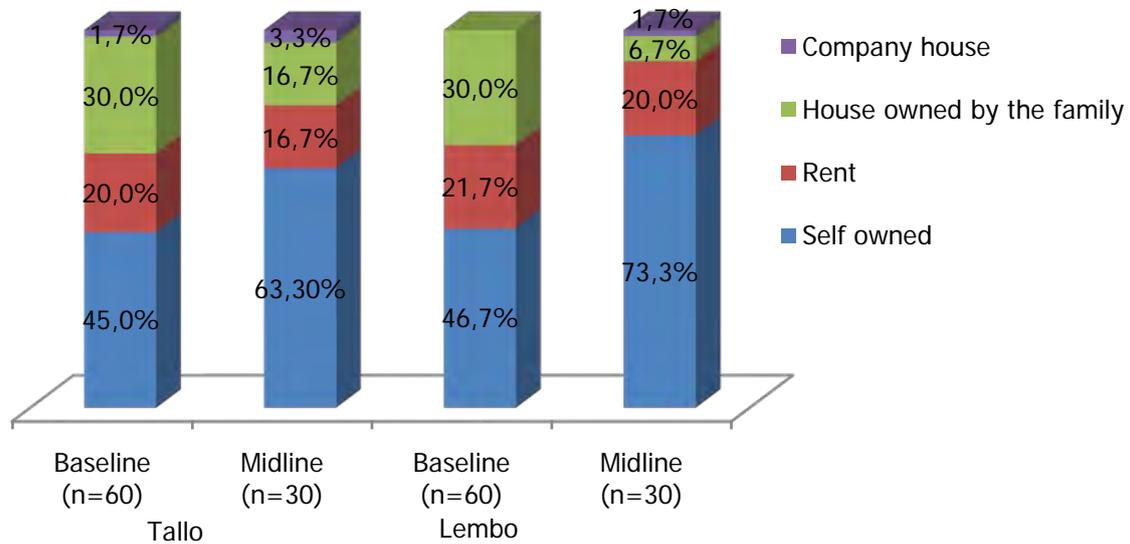
As regards the condition of the respondents' houses, the biggest proportion of homes in Makassar as a whole (40%) used timber for flooring, while in second place was ceramic tiles (33.3%). In Lembo, the most common type of flooring was ceramic tiles (50%), while in second place was cement (33.3%).

As regards the roofs of the respondents' homes, all of the respondents, both in Tallo and Lembo, had galvanized iron roofs (100%).

As regards walls, the biggest proportion of respondents in Makassar (41.7%) used galvanized iron sheets (41.7%), while in second place was cement walls (35%). By sub-district, in Tallo the majority of respondents had galvanized iron walls (60%), while next came cement and brick walls (both on 16.7%). By contrast in Lembo, the biggest proportion of respondents had cement walls (23.3%).

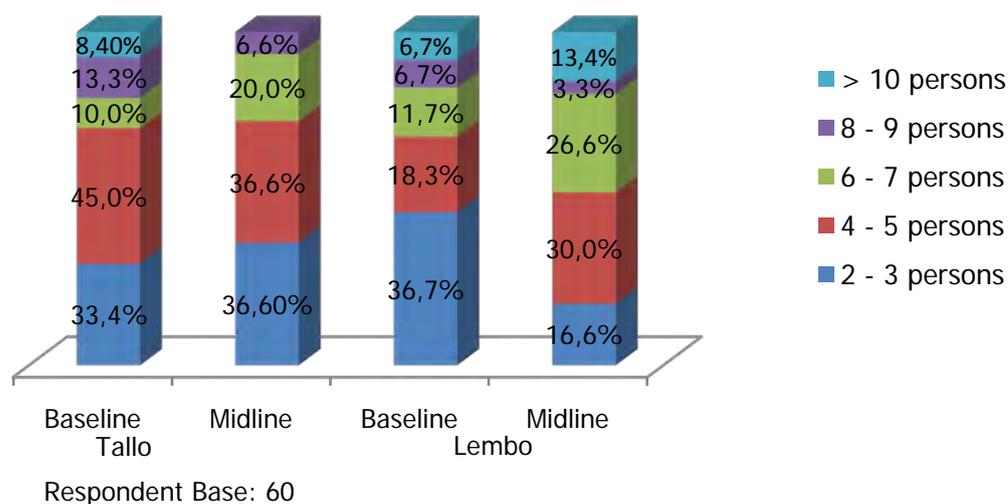
The following chart shows the situation as regards home ownership status in the survey areas in Makassar:

**Figure 3.5**  
**Home Ownership Status**



In general, the respondents at the time of the midline survey did not only live in nuclear family units (husband-wife-child). However, the responses were quite evenly spread so that no response was dominant. The biggest proportion was respondents who lived with 4-5 other people besides under-5s (33.4%), followed by those who lived with 2-3 other people (31.6%). By sub-district, there is also no dominant response group. In Tallo, the two response groups with the biggest percentages are respondents who live with 2-3 people other than under-5s, and those who live with 4-5 people other than under-5s (36.6% in each case). Meanwhile in Lembo, a total of 30% of total respondents live with 4-5 other people in the home, while 26.6% live with 6-7 other people besides under-5s in the home.

The following graph shows the number of people living with respondents (other than under-5s) in the two sub-districts of Makassar, and presents a comparison with the findings of the baseline survey.

**Figure 3.6**
**Number of Persons Over Age of 5 Living in Home**

**F. Respondent Profile Summary**

A summary of the characteristics of the respondents in each of the sub-districts surveyed in Makassar (Tallo and Lembo) is shown in the following table:

**Tabel 3.1**
**Respondent Profile Summary**

Characteristic	Tallo	Lembo
<b>Age (Majority)</b>	36.7% >25 years old	53.3% 25 – 35 years old
<b>Education (Majority)</b>	60% elementary school graduates	56.7% elementary school graduates
<b>Number of under-5s (Majority)</b>	73.3% 1 under-5 23.3% 2 under-5	90% 1 under-5 10% 2 under-5
<b>SES (Majority)</b>	53.3% B 33.3% C1	53.3% B 16.7% A2
<b>Home Ownership (Majority)</b>	56.7% owner occupied	43.3% renting

### **Tallo**

The respondents in Tallo were generally (36.7%) homemakers (caregivers to under-5s) of between the ages of 25 and 35 who had graduated from junior high school or equivalent (60% of total respondents). They occupied their own homes (56.7%) and 53.3% had an average monthly expenditure of between Rp 1,750,001 and Rp 2,500,000, while 33.3% had an average monthly expenditure of between Rp 1,250,001 and Rp 1,750,000. The majority of respondents in Tallo lived with one under-5.

The respondents in Tallo did not only live in nuclear families, but rather 36.6% of them lived with 2-3 other people besides under-5s, while 36.6% lived with 4-5 other people besides under-5s.

### **Lembo**

The majority of respondents in Lembo (53.3%) were homemakers (caregivers to under-5s) of between the ages of 25 and 35 who had graduated from elementary school or equivalent (56.7% of total respondents). The majority of respondents (90%) lived with 1 under-5s in the home, while only 10% lived with 2 under-5s. The majority of the respondents (53.3%) belonged to socioeconomic class B (average expenditure of Rp 1,750,001 – Rp 2,500,000), while 16.7% were in socioeconomic class A2, with an average monthly expenditure of Rp 2,500,001 to Rp 3,500,000).

Unlike Tallo, where the majority of respondents said they owned their own houses, in Lembo the biggest proportion of respondents (43.3%) said that they occupied rented homes. They did not live just in nuclear families, but also lived with other people over the age of 5. The biggest proportion, 30%, lived with 4-5 people over the age of 5 in their home.

The following discussion of the findings is based on the strategic objectives of High Five Program (as explained in Part I of this survey).

## Part IV

### Program Implementation

#### A. Effectiveness

##### a. Outcome Comparison

On the level of involvement of the public, private sector and community in developing and implementing plans to improve water availability, and sanitation and hygiene practices (coded as IR1 – program's success indicator).

##### 1. Role of High Five Program in developing partnership strategies as part of the SSK (Strategi Sanitasi Kota - Makassar City Sanitation Strategy)

High Five Program is not considered to have played a meaningful role in the development of partnership strategies between the Makassar Municipal AMPL Working Group in the implementation of the SSK. While there were changes in personnel in the SKPD (Satuan Kerja Perangkat Daerah - Regional Working Units) in the relevant local government agencies, structurally their work processes and activities remained the same. It was acknowledged by the City Working Group (during the group discussion) that activities had to be somewhat delayed as people were busy with other things. High Five Program coordinated with the relevant agencies to inform them of what had been done in the High Five Program sub-districts. However, this did not always extend to the forging of partnerships with the SKPDs.

*"... In the Education Agency it wasn't clear ... however, there appeared to be with the Health Agency and Bappeda ..."* (City Working Group – Education Agency)

Bappeda, as the institution responsible for serving as coordinator, regularly did so with High Five Program.

*"... We called all of the relevant agencies, like the Health Agency, Sanitation Agency, Community Empowerment Board, Environment Agency, Municipal Water Company, Building Agency, academia, NGOs, and members of the House of Representatives. Bappeda frequently acted as the coordinator of these bodies ..."* (Bappeda)

*"... there was an SSK familiarization event, we went through it chapter by chapter – health, clean water ..."* (Bappeda)

##### 1. Replication of High Five Program Sub-district by local governments and/or Nongovernmental Organizations (NGOs)

During the focus group discussion, the Makassar Municipal AMPL Working Group said that it was very much in favor of program replication so that more than 2 sub-districts would be reached. However, no official meeting was held or proposals submitted.

*"... Every time there's a meeting, this proposal emerges. There have also recently been proposals for workshops ..."* (City Working Group)

*"... 50% of the total number of sub-districts in Makassar or be prioritized for those areas with poor sanitation ..."* (City Working Group)

The Sub-district CBTS Working Groups said that people in neighboring sub-districts had asked to be taught about what High Five Program was doing in the High Five Program sub-districts. Further, it was stated that there would be good chances for the replication of the program. The reason this had not been done to date was that it was felt that the High Five Program needs to be fine-tuned in their own sub-districts first so that it would be better able to help other sub-districts.

*"... We had considered how we could provide examples to other sub-districts, but this is still at the preparation stage ..."* (Sub-District Working Group)

*"... What we mean is that we should fix up our own areas first so that we can then bring it to other areas ..."* (Sub-District Working Group)

The community leaders who were interviewed (the heads of Lembo and Tallo sub-districts) also said that there were plans to replicate High Five Program.

*"... To the best of my knowledge, sub-districts Rappokalling and Wala Walayap lan to do so ..."* (Head of Lembo Sub-district)

*"... not yet, it's still at the planning stage. So far, it only Lembo and Tallo that are involved in Makassar ..."* (Head of Lembo sub-district)

*"... Lots, in Tallo district we have Rappokalling and Buloa, Kaluku and Bodoa, they also have sanitation plans as many of the residents there are not locals but rather newcomers who have built their houses along the coast ..."* (Head of Tallo Sub-district)

The things that it was believed would encourage others to replicate the High Five Program sub-districts were: (i) the activities could be directly put into practice by the residents; and (ii) the program help improve environment health, as evidenced by a decline in the incidence of diarrhea and Dengue fever.

The sub-district heads were also very pleased with the changes that had taken place in people's behavior, not only adults but also children. As a result, High Five Program was considered to be effective in changing mindsets and behavior through intensive socialization efforts.

*"... I've seen elementary school kids washing their hands before eating and doing other things. Their mindsets have been changed by their parents and teachers so that they're now a bit cleaner ..."*

*"... in addition, defecation must be in the right place, not in the open. Usually during voluntary cleanup drives we used to find feces in the drains ..."* (Head of Tallo Sub-district)

*"... Because people weren't embarrassed about open defecation. kids would do it in the drains and adults would cover themselves up with a sarong, although only at night. So, this socialization process has, in essence, made people embarrassed to practice open defecation ..."* (Head of Lembo Sub-district)

Nevertheless, the Sub-district CBTS Working Groups also said there were constraints that could hamper the replication of High Five Program, including:

- ✓ The sanitation and hygiene problems in other sub-districts were possibly different from in the High Five Program sub-districts. Consequently, the High Five Program would need to be adjusted if it were to be successfully replicated.
- ✓ The members of the Sub-district Working Groups were willing to help, but said they lack confidence to teach people about the program in other sub-districts as residents of these other sub-districts might doubt their capacity and credibility. Accordingly, they said the people from "outside the sub-district" would still need to be involved (i.e., the Makassar High Five Program team).

*"... Given social conditions (in the target sub-districts) ... for example, we could approach people here as they already know us. But in other sub-districts we would have to approach them first, get to know the area so that we would be accepted ..."*  
(Sub-District Working Group)

## 2. Level of financial support from private sector and community partners

The fact that the residents of the High Five Program sub-districts underwent changes in mindset and behavior in the end encouraged them to be work hard to fund the construction of their sanitation and hygiene facilities.

*"... My experience was ... he said I'm embarrassed, I have a drop toilet, it leaks, people can see my behind, he said 'I'm embarrassed. In the end I got some money, so I'll build it myself ...', so in the end 18 households built their own toilets ..."* (Sub-District Working Group)

As regards the construction of even large infrastructure, such as communal septic tanks, synergies developed between High Five Program (for the development of facilities) and the communities in the High Five Program sub-districts.

*"... the communal IPAL (Instalasi Pengolahan Air Limbah – Wastewater Treatment Installation) could not be built as it was the wet season. Thank heavens, after the end of the third month the building of the septic tank was facilitated by High Five. The people only had to buy pipes and the toilets ..."* (Sub-District Working Group)

The community leader respondents also were thankful that residents were willing to pay for the resolution of sanitation and hygiene problems after receiving information and explanations from High Five Program and the members of the Sub-District Working Groups.

*"... In reality, the residents of RW 5 were very eager to work together. I didn't have any authority to intervene. They managed the fees themselves. Thank heavens, everything is still going well ..."* (Head of Tallo Sub-district)

Nevertheless, it was revealed by the members of the Sub-District Working Groups (during the group discussions) that for residents who were very poor, help was needed to finance the construction of facilities, in the same was that help had been provided by other programs. Nevertheless, it was also acknowledged that such programs made people "spoiled" and did not help change their mindsets.

On the duplication of hygienic behavior and improving sanitation through participatory programs at the community level involving stakeholders, social networks and community members (coded as IR2 – program's success indicator).

## 1. Promoting hygiene and sanitation in the schools

According to the Heads of the 2 High Five Program Sub-districts, every state school in the sub-districts had been visited by High Five Program CBTS workers. It was stated that this had benefited both the schools and their students. Consequently, the schools welcomed the program to change the mindsets of the children and to develop physical facilities in the schools.

*"... they held a joint hand washing event. They also helped change the mindsets of the children, washing hands before eating, stopping open defecation..."* (Head of Tallo Sub-district)

*"... For the time being, 3 elementary schools provided access for hand washing in the hope that the children would wash their hands after snacking or playing. This was because observations revealed that conditions in the 2 schools were worrying ... "* (Head of Lembo Sub-district)

*"What High Five has done is to encourage/motivate clean and healthy practices, the consumption of clean and healthy food, how to deal with garbage problems in the schools, how to properly wash hands. But it hasn't done much about physical development. So, a physical development program is needed as this is greatly needed by both students and residents ..."* (Elementary school teacher)

## 2. Media Support for Hygiene and Sanitation

The members of the City Working Group who were present at the group discussion said that the issues of sanitation and hygiene were still not sufficiently communicated to the public at large by the media.

*"... Ok, the media has its own limitations and can't concentrate solely on sanitation ..."* (Makassar FJS)

However, a number of activities related to tree planting and improving the environment along canal banks were undertaken by both government and residents. The same applied to the Green & Clean and the High Five Program. There was a perception among members of the Makassar Municipal AMPL Working Group that in order to increase media attention, it would be necessary to give "tips" or pay "transportation" money to the journalists.

*"... To get it covered, what's important is money ..."* (City Working Group)

*"... When it's news about the lower classes, particularly news about sanitation, which isn't very interesting ..."* (Makassar FJS (Forum Jurnalis Sanitasi – Forum of Journalists for the Sanitation)

In order to secure more media attention, High Five Program was advised to:

- ✓ Continue its activities on an ongoing basis. The program should be extended. This would encourage the media to cover it as they would be impressed with the program's consistency in promoting sanitation and hygiene.
- ✓ Help enhance the capacity of journalists, particularly free-lance journalists.

Other sources who were interviewed separately said that a number of media outlets had environmental columns, which sometimes also covered sanitation and hygiene issues. These sources also wanted to see more media involvement in highlighting sanitation and hygiene issues.

*".... In reality, there are print media outlets that give attention to this issue, like Fajar Harian Pagi Makassar (local newspaper), Unilever (multinational company), they focused on Green & Clean (program). I think it would be good if they highlighted environmental issues so that they become popular and in future have dedicated columns dealing with environmental issues ..."* (Head of Lembo Sub-district)

*"... the media could report that the people of Tallo Sub-district have to live like this because of inadequate sanitation or because the water supply from the Municipal Water Company is a mess, isn't that right? ..."* (Head of Tallo Sub-district)

*"... In order to influence government policy, High Five needs to forge good relations with the media by providing imagination, providing input, providing information. However, High Five doesn't have the right to influence what we write. That's our job. So it would be good if they forge close relations with various media outlets, particularly those that have an interest in environment hygiene and sanitation issues. But they must avoid trying to influence what we write, whether it's good or bad ..."* (FJS Makassar)

Also as regards journalistic support for the CBTS program, members of the public were also empowered to provide reports on sanitation and hygiene in their areas, as well as the behavior of people in these areas.

*"... I feel the role of the media is good. People in this area have also been involved by portraying particular activities so that other people may be made aware, not just people from this sub-district ..."* (Makassar BTKLPP - Balai Teknik Kesehatan Lingkungan-Pengendalian Penyakit – Technical Unit Environmental Health-Diseases Control)

For the journalists in the KJPS, they were aware that the media could play a major role in conveying information to stakeholders and in focusing on hygiene and sanitation programs.

*"... For sure, the media can be very influential as it can provide the government with information that it has a sanitation, health problem in the area ..."* (Makassar FJS)

The next goal for the journalists is the establishment of columns devoted to sanitation and hygiene so as to support these two issues by encouraging both government and residents to participate in resolved related problems.

*"... I myself am obsessed with the idea of setting up a tabloid or other print media outlet that will focus on environmental sanitation and hygiene. If the truth were to be highlighted in a newspaper, the government would have to act. About diarrhea, for example, it would have to act ..."* (Makassar FJS)

Another component of IR2 – the extent to which households understanding the importance of the CBTS pillars – will be discussed in the quantitative report, while the number of households that have adopted positive behaviors and improved their hygiene and sanitation practices will be dealt with in the section on effectiveness.

On the empowerment of communities to ensure sustainable demand and access to safe water, hygiene and sanitation facilities at the household and community levels (coded as IR3 – program’s success indicator).

#### 1. Preparation and collection of proposals by communities/groups/schools

The concept of eliciting proposals from the public was inadequately socialized to the Makassar Municipal AMPL Working Group, and almost all of the members of the Sub-District Working Groups who were present at the group discussions said that they had not been provided with information on the opportunities to be afforded to members of the public to prepare and submit proposals to High Five Program so that they could be forwarded to third parties, such as the local government, private sector organizations, and so forth.

The community leader respondents also felt that they had not been provided with enough information on the submission of proposals. This was because there was ‘clog in communication and coordination’ with High Five Program.

*“... I didn’t know that proposals had been prepared by the deputy chair of the LPM (Lembaga Pemberdayaan Masyarakat – Institute for Community Empowerment) and his volunteers. This was because the lines of communication with High Five were broken ...”*  
(Head of Tallo Sub-district)

As regards the preparation and collecting of proposals, the principal constraints, according to the Sub-District Working Groups, were as follows:

- ✓ Residents (including members of the Sub-District Working Groups) did not have the capacity to make proposals in the absence of prior training.
- ✓ Volunteers were worried that people would assume that the making of a proposal was the same as the proposal being accepted and put into effect. Thus, people needed to be informed that proposals might end up being adjusted or even rejected.

*“... as we weren’t able to prepare proposals, there was no demand to do so ...”* (Sub-District Working Group)

*“... If they were to submit a proposal, there would have to be funds. So the Working Group would then become the target ...”* (Sub-District Working Group)

Information was not provided to the community leaders on the efforts made by the members of the High Five Program Sub-District Working Groups in relation to the preparation of proposals and their distribution to the private sector or other relevant parties. The relevant sub-district heads and district heads had not been provided with information on this issue.

*“... In reality, we at the sub-district level continued to coordinate with High Five. As regards proposals, we continued to operate through the Musrenbang (Musyawarah*

*Perencanaan Pembangunan – Community Discussion on Development Planning) process ..."* (Head of Lembo Sub-district).

## 2. Use of BCC (Behavioral Change Communication) Materials in Socialization Process

Almost all members of the Sub-District Working Groups who were in attendance at the FGD were familiar with and able to identify the BCC materials that were shown. The BCC materials that were used were as follows:

- ✓ Flipcharts
- ✓ Brochures (various types)
- ✓ Media cycle showing how diseases spread
- ✓ High Five Program calendars

Nevertheless, the members of the Sub-District Working Groups said that the BCC materials needed to be smaller so as to be able to carry around (by the volunteers and members of the Working Groups) when conducting socialization/outreach work, while at the same time continuing to comprehensively cover the 5 CBTS pillars.

*"... they would be easier to bring around if they were smaller ..."* (Sub-District Working Group)

*"... it's important that they cover the 5 pillars comprehensively ..."* (Sub-District Working Group)

### **b. Views of stakeholders (community leaders, facilitators, Sub-District Working Groups, High Five Program team, sanitation workers, and teachers)**

In Makassar, the 1.5-year CBTS was assessed by stakeholders as being capable of achieving the set goals. Much had already been achieved, as could be seen by comparing the findings of the baseline survey in 2012 and those of the midline survey in 2013. Among the achievements identified were the following:

1. Volunteers had been taught how to effectively approach the public, namely, by providing examples so as to avoid the impression of "lecturing" and to get all components of society on board.

*"... We practice what we preach so that women know ... how to wash their hands properly. If they do something wrong, then we tell them that what they are doing is good but not yet sufficient. We talk to them like this to avoid giving offense. To make sure they don't get upset ..."* (Sub-District Working Group)

*"... After I perform a demonstration, I set up a garbage disposal site in front of the house, organic and inorganic garbage, I show the women. Some of them understand that if we do it like that then it will be very unsightly, also a lot of flies spreading germs around ..."* (Sub-District Working Group)

*"... High Five didn't deal directly with the local government water company (PDAM). While the program had a clean water component, this was simultaneous, what they*  
*Bringing You The Real Portrait of Indonesia*

*were doing was encouraging the people to be self-reliant ..."* (City Working Group – PDAM)

2. People were taught gradually on an ongoing basis so as to ensure that the High Five Program messages were taken on board by the public socialization and monitoring were conducted routinely, and community activities (prayer meetings, youth groups) were availed of for socialization purposes.

*"... There was always socialization work underway in RW 4. We always conducted monitoring and provided outreach when we were engaged in socialization. We continually provide the people with information on garbage and open defecation when we conduct our socialization meetings ... at the Posyandu (Pos Pelayanan Terpadu – Integrated Services Center) at prayer meetings, at 'arisan' (social gathering often involving informal savings and credit schemes) get together..."* (Sub-District Working Group)

3. Improving the knowledge of Working Group members (through training, provision of visual aids and training on how to use them, such as the disease-spread cycle).

*"... We were taught by High Five about how diseases spread from one person to another, which we then taught to the people. Before this I didn't know anything about the spread of disease, but I've been aware since I joined the CBTS program ..."* (Sub-District Working Group)

4. Empowering women so as to enable them to speak in public so as to influence those around them in Lembo and Tallo sub-districts.

*"... With the presence of High Five , the women were helped to speak in public ... those who lacked the courage originally were, in the end, able to influence people, to become triggers. As they had proved their worth, they became involved in data collection ..."* (City Working Group)

5. Cleaning up garbage that had been piled up in Lembo Sub-district

*"... I saw that in Lembo there was garbage piled up from the outset, in front, in the street. Now all that has changed, the garbage is gone. Before, people used to dump it in the river. Now they put in garbage bags ..."* (City Working Group – LPM)

6. Women have been taught how to purify water, which can then be sold (it is believed that this is one of the reasons that people were willing to participate in the High Five Program).

*"... Some time ago, the High Five showed us how to purify drinking water, like that, the women can sell it as agents. Maybe that's one of the reasons they were interested (in participating in the High Five) ..."* (City Working Group)

7. High Five Program has contributed to enhancing the role of the AMPL Working Group

*"... In my opinion they played quite a major role as they always coordinated with the Working Group members. The essence is how to change behavior. They got involved in drinking water and environmental health so that their role was ..."* (City Working Group)

### c. Challenges and Their Potential to Result in Non-Achievement of Program Objectives

One of the principal challenges faced by High Five Program, according to those members of the City Working Group who were present during the group discussion) was the limited scope of the program (only 2 sub-districts). The Makassar City Working Group also was of the opinion that High Five Program had failed to significantly affect the implementation of the CBTS program in Makassar as its duration was only 1.5 years compared to the dozens of years that the government had been working in the same field. Other points raised by the City Working Group were as follows:

- ✓ High Five Program did not reach the local government water company (PDAM) at all. Collaboration is needed with PDAM so as to expand its distribution area, enhance its capacity.
- ✓ The Health Agency felt that it played a significant role in CBTS.  
*"...After the Health Agency conducted socialization in the school. It was only then that we saw the change, for example, the children became aware of CTPS..."* (City Working Group)
- ✓ Other NGO programs were also mentioned by the City AMPL (Air Minum dan Penyehatan Lingkungan – Working Group on Water and Sanitation), which stated that these also played a role in the development of sanitation and hygiene programs in Makassar. So, this role was not confined to the High Five CBTS program. The same applied to PKK (Pembinaan Kesejahteraan Keluarga - Empowerment Family Welfare) programs (which taught that hands had to be washed under running water).  
*"...We have what they call the IHPP (Integrated Health Promotion Program) program in Makassar..."* (City Working Group)

As regards the replication of High Five Program, a problem was the lack of human resources (including sanitarians) assigned to 4 sub-districts. Consequently, they had difficulties in carrying out all of their duties.

*"... There is only one sanitarian assigned to 4 sub-districts, while at the same time there are all kinds of programs underway. Not just the CBTS program, but also water supervision, food supervision. So we have to find time for 4 sub-districts (Sanitarian at the Rappokalling Puskesmas - Pusat Kesehatan Masyarakat - Community Health Clinic)"*

*"... The first thing is human resources who understand the importance of CBTS, while the second thing is lack of land for building CBTS infrastructure ..."* (Lembo Sub-district Head)

The community leaders who were interviewed for the midline survey also were of the opinion that support for the development of infrastructure would help change mindsets and behavior (in line with the High Five Program's objectives) much more effectively in the High Five Program sub-districts.

*"... The High Five program only changes mindsets and is not accompanied by good channels for the residents ..."* (Tallo Sub-district Head)

One Sub-district Head explained that another challenge faced by the CBTS program in his area was resistance by people who did not like the changes brought about by the program.

*"...Sometimes there are these people who see programs like this as being unnecessary – they were quite happy with life the way it was ..."* (Lembo Sub-district Head)

The partners who worked with High Five Program also felt that a challenge faced when the work partners went into the field to work with residents of the High Five Program sub-districts was breaks in communication between High Five Program, the residents and work partners.

*"... perhaps there were approaches, but these approaches were between individuals alone. Maybe there was socialization, but it wasn't too effective as the High Five people don't come from around here. So, it is difficult for us to help the residents as they don't know us ..."* (Other Partner, BTKL-PP)

#### **d. Steps that Can Be Taken to Prevent the Challenges Resulting in Non-Achievement of Program Objectives**

In order to respond to the challenges (from the perspectives of the stakeholders) described above, there are a number of things that should be done by High Five Program to make sure that the program achieves its objectives:

- ✓ According to the Makassar City AMPL Working Group, High Five Program needs to interact and work together more with other relevant institutions, such as the local government water company (PDAM), the Sanitation Agency, and the sub-districts. More information from High Five Program would help the relevant parties understand what High Five Program is doing and this in the end would influence how they perceive High Five Program's work.

*"... what I mean is that we have been doing this for dozens of years (in the High Five sub-districts), the health agency and others, Ibu (Ms) Nilma of the BPM doesn't appreciate their roles, just High Five, ... no one else ..."* (PDAM)

- ✓ Both the City Working Group and the Sub-District Working Groups were of the opinion that High Five Program allocation of 20% for physical assistance was inadequate (particularly in the case of people with financial difficulties). It was important to bear in mind that the development of infrastructure was also important if people's mindsets and behavior were changed.

*"... The fact that it's only 20% won't be a problem for those who understand. But what Bapak (Mr) Samsudin said earlier, the fact that people have financial problems means that they can't do anything. So we can't force them to do it ..."* (Sub-District Working Group)

*"... While bringing about changes in mindset from not wanting to wanting to do it, we should at the same time improve the facilities, programs should get involved. The facilities aren't there. Now is the time to do it ..."* (Sub-District Working Group)

- ✓ The target areas should be expanded and the existing successful program replicated using innovative ideas and a pattern that will benefit the public financially. By innovative and benefitting the public financially is meant something along the lines of the water purification project, which has increased the income of the sellers, who are also Sub-District Working Group volunteers. The water purification products, which are brought in from outside South Sulawesi Province, could be produced within the province so as to be able to resolve the potable water problem and provide additional income not only for the province, but also its residents.

*"...High Five needs to be able to replicate this successful project in other places (other sub-districts) and achieve the same results. Innovation can increase people's incomes..."* (City Working Group)

*"... we are dependent (the people of Makassar). If we try it and like it, then we'll buy it. If it isn't produced here, then we'll import it from Java or Banda Aceh. That's our problem. Why don't we produce it ourselves so that we can then sell it ..."* (City Working Group)

- ✓ High Five Program should work with other problems and local government agencies so as to accelerate High Five Program activities and also the programs of the local government agencies.

*"...Like I said, we didn't know if High Five could be accessed by all of the local government agencies ... better coordination would be really good as it would help motivate the local government agencies. We already have an AMPL Working Group, it's been set up, there no one else to motivate them except the AMPL Working Group ..."* (City Working Group)

- ✓ High Five Program should ensure that there is no overlapping with other organizations in its target areas.

*"... We need to think about this as sometime a Pamsimas (Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat - Water Supply and Sanitation Program) program arrives in sub-district A but we are building it in RW A, while there are still many residents of RW B who don't have any sanitation facilities. So if High Five wants to go into the same sub-district, where they already have facilities, then of course they should develop it in another area so that there is no overlapping ..."* (City Working Group)

- ✓ Improving coordination with related parties

*"...We in the PDAM haven't been involved in coordination ... maybe as I wasn't there I didn't hear about it, maybe my colleagues heard about it ..."* (City Working Group)

- ✓ The CBTS program should be supported by equipment/requisites sourced from Makassar so as to make use of available resources and reduce dependence on those outside Makassar.

*"... we are dependent (the people of Makassar). If we try it and like it, then we'll buy it. If it isn't produced here, then we'll import it from Java or Banda Aceh. That's our problem. Why don't we produce it ourselves so that we can then sell it ..."* (City Working Group)

- ✓ Bearing in mind that the objectives of High Five Program are to change behavior, which is something that is abstract in nature, the program needs to be supported by performance assessments conducted by third parties (through surveys/evaluations) so as to ensure neutrality.
- ✓ Resident involved (invited) in program implementation should be expanded and widened (although a number of respondents said that this had already been done in their areas).
 

*"... Before there were only a few people who really understood High Five ... so what is needed is that it should not just be confined to the Working Group, but also the public ..."* (Sub-District Working Group)
- ✓ High Five Program needs to map out its successes in Tallo and Lembo sub-districts so that the program can be replicated more quickly in other sub-districts.
- ✓ An opportunity needs to be given to highlight the successes of both the Sub-District Working Groups and residents so as to encourage pride and recognition of the changes that have taken place.

Both the City Working Group and Sub-District Working Groups hoped that High Five Program in the future would:

- ✓ Increase assistance for infrastructure development, particularly for people who were truly impoverished.
 

*"...The amount allocated to physical infrastructure is inadequate, it should be increased above 20% as most of the people here are in the middle to lower income brackets. That's the most important thing as there are money problems everywhere. I think the physical aspect needs to be enhanced as much as possible ..."* (Sub-District Working Group)
- ✓ Follow-up programs should be instituted in other areas so that a higher percentage of residents can be reached by the program.
 

*"...For me, I want to see it in 50% of our sub-districts (in Makassar) ..."* (City Working Group)

#### **e. Role of High Five Program in Integrating CBTS into the SSK Program**

It was stated by those members of the Makassar City Working Group who attended the group discussion that the SSK had been prepared in 2012 by Working Groups in the relevant local government agencies based on their respective areas of authority. The process was coordinated by Bappeda.

It was also stated that prior to the socialization and publication of the SSK, input had been received from academia.

*"... We ran it past the academics ..."* (City Working Group)

I-WASH was considered to have greatly assisted the preparation of the SSK (through collaboration and mentoring), while High Five Program had not played a significant role.

As regards the contents of the SSK, it was more influenced by PHBS (Perilaku Hidup Bersih Sehat – Healthy and Clean Living Behavior) than CBTS as PHBS was better known, while CBTS had only been introduced around 1 year earlier.

*"... Previously, there was much more about PHBS than CBTS ... that's because CBTS hadn't yet been started. So, there was a lot more talk about PHBS than CBTS ..."* (City Working Group)

❖ Hygiene and sanitation programs that had been operated in the High Five Program sub-districts and in Makassar Municipality in general include:

- ✓ Wash (construction of public latrines and hydrants)
- ✓ I-Care (construction of public latrines)
- ✓ Pamsimas (focused on clean water)
- ✓ USRI (sewerage system/treatment plant in Lembo)
- ✓ Nice (nutrition for under-5s)
- ✓ Green & Clean (mentoring, assistance with provision of garbage bins along canals -> only mentioned by City Working Group)
- ✓ IDB (Islamic Development Bank) -> new program focused on PHBS.

All of the programs referred to above were deemed to focus more on physical sanitation and hygiene infrastructure and facilities, while High Five Program was primarily focused on changing people's attitudes.

Only the members of the City Working Group were familiar with Community Led Total Sanitation (CLTS), which they considered to be similar to CBTS.

*"... The essence is the same ... in our view there is no difference between the programs. We talk to them about CLTS, how they want to behave, trying to get them to voluntarily change their behavior. In other words, we also act as a catalyst, we talk to them so as to get them to want to change ... CBTS is in essence the same, except that it's called community led total sanitation ..."* (City Working Group – Health Agency)

*"... CLTS covers one pillar, I think it was adopted from India. It focuses on how to trigger people to adopt clean and healthy practices, particularly in connection with the first pillar. So, for example, they become willing to change their practices as regards open defecation. They become embarrassed and in the end they become willing to build their own infrastructure – (Question from moderator – For CBTS, what's the trigger?) – a feeling of disgust, embarrassment ... the same ..."* (City Working Group)

### ❖ Identified Improvements

In the implementation of the CBTS program by High Five Program in Makassar, a number of positive changes had been brought about, according to a number of resource persons:

- ✓ People's behavior and mindsets had been changed as regards open defecation, CTPS, treatment of water prior to consumption, and the proper disposal of garbage. Respondent also applied peer pressure on each other to maintain environmental hygiene and sanitation.

*(Reprimanding a child) "... when you finish your snack, throw the garbage in the garbage bin ..."* (Sub-District Working Group)

*" ... in the home previously, we had a tradition of all of us washing our hands in the same finger bowl before eating. But after we received information from the CBTS volunteers, we changed our ways and started washing our hands with soap under running water. That was the biggest change ..."* (Sub-District Working Group)

*"... As regards changes, people are now embarrassed to practice open defecation, including children. Adults also understand the importance of hand washing."* (Lembo Sub-district Head)

*"There were people who originally didn't agree with the building of a communal septic tank. But, thank heavens, after being enlightened by USRI and High Five Program , they came to support the program ..."* (Lembo Sub-district Head)

*"... the problem of open defecation ... previously there was a lot of open defecation, behind the houses, in the drains. Now the kids defecate in the toilet. So, we can conclude that the mindsets of the children have moved in the direction of clean and healthy practices ..."* (Teacher in Penjaskes [Pendidikan Jasmani dan Kesehatan – Health and Physical Education) Malimongan Baru)

- ✓ The City Working Group felt that they had been assisted by the High Five Program in increasing the number and membership of the Sub-District Working Groups in Makassar Municipality.

*"... For example, 10 members in a Working Group, suppose 10 members, these 10 members have to train a number of volunteers. So High Five was able to help us with this. If we didn't have enough volunteers for a sanitation and hygiene program, High Five was of assistance to us as we didn't need to go into the High Five areas, meaning that we could focus our efforts on the other areas ..."* (City Working Group)

## B. Efficiency

As regards efficiency, the most appropriate sources are those from within High Five Program itself, namely, those responsible for implementing the CBTS Program in their respective areas. The following are the results of an interview with the High Five Program District Leader in Makassar.

### a. Use and Allocation of Resources for Program Implementation

As with the allocation of resources, like funding and equipment, in other High Five Program cities, this was also done in Makassar based on the priority objectives to be achieved. These were then submitted to High Five Program head office in Jakarta for approval for the following year. Budget preparation was based on the outcome of discussions between the facilitator team in the High Five Program Makassar District.

High Five Program Jakarta then evaluated the proposed budget, and the objectives that had been prioritized so as to ensure that they were capable of achieving the performance targets that had been agreed.

*"... So the reality is like this, every year we prepare what we call our AWP, our Annual Work Plan, which runs from January to December. Then, after we have prepared it on a district by district basis, we have a national meeting. Everyone attends, and they all make their presentations, including operational strategy definitions and so forth. We then discuss it after returning home from there. Jakarta knows what we have, so we break it down further into more simple activities. Every area can modify its plan. For example, our goals are the same. We want to engage in partnerships with those who can contribute to the High Five. There are those who get involved at the local government agency level, as needed ..."* (District Leader)

With the process being that the allocations for each area are based on proposals from the areas themselves, the resources used will obviously have been identified in accordance with the area's needs. As the High Five Program Makassar District makes plans for one year ahead and submits to the High Five Program head office in Jakarta, the resources provided by High Five Program's head office should be in line with the Makassar District's needs. High Five Program's head office almost never changes the AWP's submitted by the districts provided that these have been prepared in line with the rules and are approved by High Five Program Jakarta office.

*"... Normally the budget proposal is 100% prepared by us, and it is rarely changed by High Five Jakarta, unless the finance rules have been broken in connection with venues, accommodation, for example, for any expenditure over Rp 3 million, there must be 3 offers from hotels. If this rule isn't complied with, we can't go ahead. The High Five people in Jakarta help us choose. But they don't interfere with other things ..."* (District Leader)

As regards the allocation of financial resources, the Makassar District feels that its needs have been fully supported by High Five Program Jakarta office. Consequently, it has experienced no financial difficulties in program implementation. However, as regards human resources, the Makassar District considers this to be a challenge given how few people are currently on the team. As a consequence, some activities have had to be postponed.

*"... Yes, perhaps some of our friends are too creative so that we sometimes forget the limited human resources that we have available. So, we often have to carry over programs to the subsequent month as we don't have enough time (due to lack of personnel) to do them ..."* (High Five Program District Leader)

*"... there needs to be real support (what do you mean by support? – interviewer) ... yeah, finance administration support, part of supporting, and monitoring and evaluation is also part of support. There are other things that are needed, for example, as regards procurement, particularly as regards equipment ...."* (High Five Program District Leader)

## **b. Program Adaption and Implementation**

There were a number of activities that in essence were outside the principal activities that were agreed on and identified by High Five Program (for implementation in High Five Program Districts). However, during the course of the High Five program's 1.5 years in Makassar, not only were program adjustments made, but also program enhancements instituted:

- ✓ Appreciation for High Five Program work partners (the Sub-District Working Groups) in the form of capacity-building training. This was packaged as attractively as possible while at the same time incorporating education and games that were capable of bringing the team members closer together, enriching their capacities, and providing appreciation for what had been done by the Working Groups.

*"... We (High Five Makassar) once did something that was a bit beyond the scope of the High Five program, namely, upgrading training. This was provided at Galeso beach. In reality, my objective was to provide an enjoyable break for the members of the Sub-District Working Groups. We have "refreshing training." But we later received input from Jakarta, not to make it look to enjoyable. In the end, we also incorporated training on facilitation and on CBTS triggering, even though in reality what we had was an outbound program, lots of role play, lots of games. We did it at a comfortable picnic spot. In reality, the purpose was solely to provide appreciation for our friends in the Sub-District Working Groups. What we do normally only has to be sorted out with the High Five people in Jakarta ..."* (High Five Program District Leader)

Changes in the form of adjustments to take account of developments in the field generally did not result in significant changes to the overall budget plan. Such adjustments took place due to:

- ✓ Adjusting program timeframes to take account of programs run by relevant agencies in the Makassar government

*"... As of March, according to my calculations we had only spent 68% out of 100%. So we still had around 32% that had not been spent. The bulk of that 32%, 22% consisted of community events. We had a budget of around Rp 120 million for this and it consisted of a competition at the community level. We have 2 sub-districts, so we adopted the slogan "CBTS Sub-district" ... we planned to have the competition in April, while we had to do the calculations in March. So it was quite difficult because the series of events were already underway. So, out of*

*the budget of Rp 120 million we arranged meetings in July, a number of briefings, socialization with the sub-district authorities. We gave the sub-districts the opportunity to select the RWs and to nominate 3 RTs for assessment. They were give a month, from March to April, to make the preparations ..."* (High Five Program District Leader)

- ✓ External factors, for example, the holding of local government elections
 

*"... A lot of community activities had to be postponed because of the local elections. They (Sub-District Working Group), the PPK, the PPS also. All of the volunteers were taken. So, whether we liked it or not, we had to change the timing. This also had an impact on our spending. So the 32% I referred to was primarily due to this ..."* (High Five Program District Leader)
- ✓ Another constraint was changes on the part of work partners which had different goals from High Five Program. As a result, changes in plans occurred and these resulted in changes in implementation costs.

*"... At the start, to promote CTPS we joined up with the AMPL Working Group, that was back in October last year. So, the leading sector was the Health Agency on behalf of the Municipal Government and the AMPL Working Group, then there was CARE (an NGO). As regards contributions, PDAM provided clean water. That was it. Then High Five normally supplied consumables in the form of snacks. In October, Unilever wanted to force its concept on the local government. But we didn't agree as the branding was too prominent. As a result, we would not have been able to take part. The CARE people also agreed that we would each do our own thing in our respective locations. Now, the budget that I allocated was originally Rp 12 million for consumables. But this mushroomed to Rp 60 million as I had to organize special events in Makassar at the community level. So we promoted CTPS in the schools through various competitions, and at the community level through neighborhood campaigns. We had door prizes, went around the neighborhood, campaigning, door prizes again, like that ..."* (High Five Program District Leader)

## C. Sustainability

### a. How do the stakeholders perceive the High Five Program methodology compared with CLTS?

At the Sub-District Working Group level, people were not familiar with CLTS, although the Makassar City Working Group (Health Agency) was familiar with the concept, which it considered to be more or less the same as CBTS, that is, it focused on arousing disgust and embarrassment in people.

*"... it was adopted from India. It focuses on how to trigger people to adopt clean and healthy practices, particularly in connection with the first pillar. So, for example, they become willing to change their practices as regards open defecation. They become embarrassed and in the end they become willing to build their own infrastructure – (Question from moderator – For CBTS, what's the trigger?) – a feeling of disgust, embarrassment ... the same ..."* (City Working Group)

## b. Level of Acceptance by Stakeholders of High Five Program Approach

There was quite a variety of information and experiences obtained from the relevant stakeholders in connection with the methods applied by High Five Program in the selected sub-districts. In the in-depth interviews, some of the stakeholders expressed positive views and understood that the focus of High Five Program was on non-physical development, namely, changes people's behavior as regards sanitation and hygiene.

*"... As far as I know there was once a comparative study. I don't know who was on it, maybe they picked the wrong people at the sub-district level. I don't know where the comparative study was because on people from BPN and Public Works Agency were picked. No one from Bappeda was involved. So I don't really know what is going on at the sub-district level (Is there any difference with other programs? – Interviewer). Sure there are differences. High Five is only about capacity-building, while the other programs are more about building and physical development. High Five doesn't involve physical development. "The other programs aren't focused on triggering, not 100% triggering, while High Five is about consent, 100% triggering." It's good because its specifically about changing people's behavior, and it's focused on two sub-districts ..."*  
(Bappeda)

The Environmental Concern Journalists Forum, which has relatively close relations with High Five Program also had a positive view of how High Five Program was implementing the CBTS program in Makassar.

*"... I've been familiar with High Five since 2012. The program is concentrated on two sub-districts in Makassar and its activities include providing mentoring to local communities about the 5 CBTS pillars. First, how they encourage them not to practice open defecation. How to encourage people to wash their hands before eating, particularly children. Proper garbage management, managing waste in the RT. As regards garbage, a number of garbage banks have been set up in connection with the volunteers ..."* (PWI)

During the in-depth interviews, a number of teachers who had received training offered a positive view of the methods applied by High Five Program, although there were a number of less positive comments:

High Five Program was asked by the teachers who received training to always needed to preserve its neutrality.

*"... the people from Rahmat water company. They showed people how to purify water so as to make it drinkable. I had to ask myself, is this part of the program or not ..."* (teacher who had received training)

The teachers with training also said that assistance was needed for physical development on the part of residents and their students as this could not be separated from the effort to change mindsets.

*"... What has been done by High Five has involved mobilizing and motivating people. But they haven't done anything about physical development. It is this physical development that they need to incorporate in their program so that it can be seen by students and residents, so that they know that the program is really beneficial ..."*  
(teacher with training)

### **c. Contribution of High Five Program to Development of AMPL Working Group's Functions**

High Five Program 's role in developing the functions of the Makassar Municipal AMPL Working Group was viewed positively as High Five Program's presence meant that:

- ✓ The meetings held by High Five Program helped bring together each line units from the relevant local government agencies, and served as media for coordination and communication with the line units.

*"... So one of High Five Program 's roles was to improve coordination among us ..."* (City Working Group)

*"... With the programs coming in, sometimes we met again here (meetings between local government line units), with CARE. The point was programs were coming in ... sometimes we would have meetings 3 or 4 times a month ..."* (City Working Group)

- ✓ With the presence of High Five Program , it meant that the Makassar City Working Group had 2 sub-districts less to worry about.

*"... For sure there was an impact as the presence of High Five meant that automatically the workload of the AMPL Working Group was lessened as the people of these 2 sub-districts had already changed ..."* (City Working Group)

*"... Because whatever way you looked at it, the High Five activities were the same as our activities or duties as members of the AMPL Working Group ..."* (City Working Group)

However, the role played by High Five Program did not mean that the City Working Group and the local government line units were dependent on High Five Program in Makassar as the local government line units already had a system of coordination in place, with routine meetings held every 3 months between the line units.

*"... One of the functions of the line units in the relevant local government agencies is to coordinate with the AMPL Working Groups. Normally we meet the members of the AMPL Working Groups every three months to discuss sanitation issues. The AMPL Working Groups are able to work on their own and have a lot of sanitation programs. Sure there was an influence, but it wasn't overriding ..."* (City Working Group)

**d. Possibility of Program Replication**

This aspect was dealt with in IR1 on “Replication of High Five Program Sub-district Program by local governments and/or NGOs.”

## D. Relevance and Appropriateness

Our information on relevance and appropriateness was obtained from a number of different sources: the High Five Program team, community leaders (sub-district heads), Working Groups (City and Sub-district), teachers and households. The following are the results of the interviews with the sources.

### a. How is the Participatory Approach Carried Out?

The participatory approach applied by the High Five Program team in Makassar at the outset of program execution was more or less the same as that applied by the High Five Program teams in Medan and Surabaya. The triggering process involved 3 stages – mapping, demarcating the area and finally discussions. The triggering process involved all components of society in the selected sub-districts.

*"... So, from the outset we commenced what we call CBTS triggering. This consisted of 3 components -- mapping, demarcating the area and finally focus group discussions. We then focused on 4 groups in the community. Fathers with under-5s, mothers with under-5s, teenagers, and children aged 10-16. We gathered them all together in the same place, we joined up pieces of card together then we started with the place most familiar to local people, for example, the canal. We started by drawing the canal and then every house in the area, recorded. That was all part of the mapping process. So, they drew the houses that had under-5s, then the public facilities in the area, for example, Poskamling, Posyandu, the RT's house, the mosque, etc. We did that with each group. After they had drawn everything, we affixed flags for our 5 components, for example, places where people practiced open defecation, in pillar 1, for example. They would mark these places in red. So, the houses along the canal were marked in red. Homes that didn't have toilets were also marked ..."* (High Five Program District Leader)

During the focus group discussions between members of the Sub-District Working Groups, it was also recalled how High Five Program had first commenced the triggering process. The meeting was not only attended by representatives of the relevant municipal agencies, but also children, teenagers, and religious and community leaders from the selected sub-districts.

*"... The first time High Five Program, or the CBTS Sub-District Working Group came to our sub-district, the first thing that was done was mapping, mapping out the area, so that we would be aware of those places that were susceptible to, for example, open defecation, undisciplined garbage disposal, blocked drains. Then, we gather again with the residents and the sub-district authorities, the sub-district head himself, as well as children, teenagers and religious and community figures ..."* (Sub-District Working Group)

### b. Determining Hygiene and Sanitation Priorities

The placing decisions in the hands of the public (in line with CBTS), High Five Program's triggering efforts in Makassar involved all components of society, including various age groups and genders. The responsibility for determining priorities was assigned to the community based on the results of mapping and demarcation. These priorities were then set out in the RKM, and a Sub-District Working Group established.

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*"... So after the RKM had been drawn up, it only remained for us in High Five to see what areas the residents needed help with. Now, when the community started implementing the RKM, whose responsibility were the various activities it envisaged, from land procurement to construction of public latrines. Then we had to reduce the piles of garbage in particular locations. Some of the volunteers cleaned up the place where garbage was dumped and turned it into a mini garden ...."* (High Five Program District Leader)

The way in which sanitation and hygiene priorities were determined through the involvement of the community was also highlighted by community leaders during the in-depth interviews. They also compared this with other programs, which programs they considered to be better as they were not only orientated towards changing mindsets, but also the development of financial infrastructure (in Tallo Sub-district).

*"... Before making any decisions about activities, High Five Program would always invite community leaders and those of us from the government to discuss what was needed by the people of Lembo sub-district. They would ask for input from community leaders at the RT and RW levels, also from religious leaders. Thankfully, everything has worked well, with no problems ..."* (Lembo Sub-district Head)

Stakeholders continue to be very influenced by paradigm of physical development of infrastructure and facilities. Thus, the stakeholders viewed the High Five Program approach, which is orientated towards changing behavior, as being "different" from the normal community assistance programs.

*"... Oh clearly High Five was not the best. The best was Pamsimas (Pamsimas, is that right? So, High Five did not involve the community? – interviewer). Sure it involved the community, but Pamsimas was better as it not only changes mindsets but also involves the building of infrastructure and facilities. What is clear is that the one community figure who is really listened to by the residents in the LPM chairman. If he's on your side, then that will very good. They people really listen to him ..."* (Tallo Sub-district Head).

### **c. Inclusion of Gender and Environmental Issues in Program Implementation**

In line with the participatory approach, men and women were involved equally. In fact, thanks to the involvement of women, the activities involving the men and teenagers proved to be more successful.

*"... We (High Five) involved the children, teenagers and women, and in the end the men saw that everything went better when the women were in charge ..."* (High Five Program District Leader)

Environmental factors were also given close attention when it came to such things as selecting the locations for communal septic tanks.

*"... For example, the land was available and we (High Five) were ready to start building, it was difficult to construct the connections to the toilets as we had to dig through the houses. For example, there would be one house here, then the house behind it would also want a connection. The distance involved was no problem as it was only a matter of adding additional lengths of piping. But the problem was the*

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*physical digging. We had to dig through houses and they didn't want it. So, people at the back would not get access even though they wanted it. As a result, we had to reduce the scale, we had to see how many could be linked up to each communal septic tank. We tried an average of between 5 and 10 households. Not more than that. Then we make the necessary adjustments in size having regard to the number of connections. But if a building went up along the line of the pipe, we could still connect as we made provision for between 5 and 10 households. That was the problem. The land was available but because of the overcrowded conditions in the area there was no room for the pipes. So we had to dig up a number of roads. It was difficult to make the connections to their toilets ..."* (High Five Program District Leader)

## Part V

### Evaluation of Program Outcomes

#### Hygiene and Sanitation Practices in Five CBTS Pillars

#### A. Open Defecation Free

The majority (more than 50%) of respondents in Makassar (both in Tallo and Lembo) during the midline survey said that the last time they defecated was in a flush/U-bend toilet connected to a septic tank. This proportion was very different from at the time of the baseline survey in 2012, when the equivalent percentage was only 4.2%. In addition, the midline survey found that the proportion of respondents who defecated in the sea (13.3%) was the same as at the time of the baseline survey.

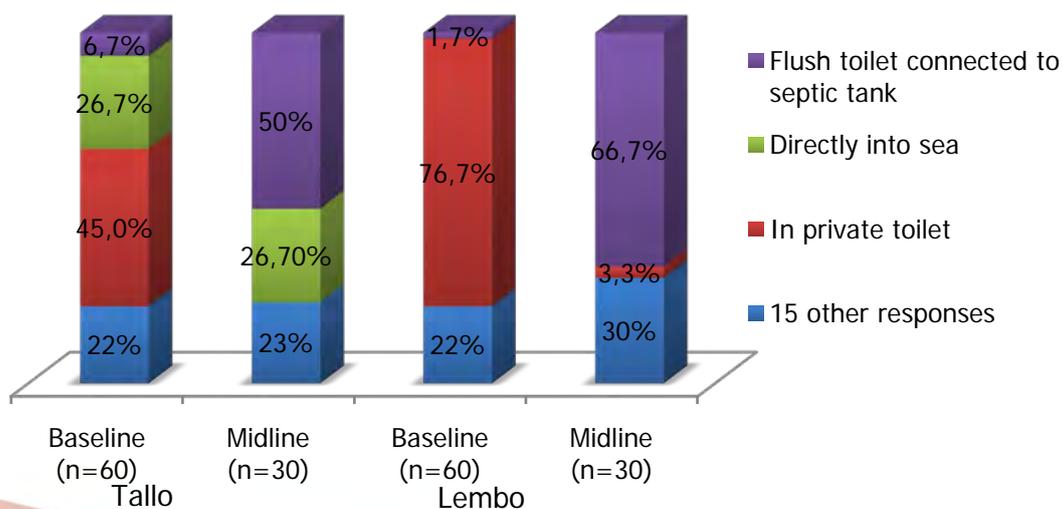
In Tallo, 50% of the respondents at the time of the midline survey used a flush U-bend toilet connected to a septic tank. This was a massive increase from the time of the baseline survey, when only 1.7% of respondents did so. However, 26.7% of respondents continued to defecate in the sea. The situation in Lembo was similar, with 66.7% of respondents saying that they last defecated using a flush U-bend toilet connected to a septic tank, compared with only 5.8% at the time of the baseline survey. Unlike Tallo, 13.3% of respondents defecated in a flush U-bend toilet that was not connected to a septic tank, while 10% defecated in communal toilets.

Having regard to the above data, we may conclude that overall the use of flush U-bend toilets connected to a septic tank in Makassar (both Tallo and Lembo) has massively increased since the time of the baseline survey.

The locations where the respondents habitually defecate are as shown below:

**Figure 5.1.**

**Last Place of Defecation**



The following table sets out the survey's observation findings:

**Table 5.1.**

**Findings of Observations on Destination of Toilet Waste**

Description	Tallo	Lembo
Respondent Base	30	30
Location of Last Defecation– by claim		
Flush toilet with septic tank	50%	66.7%
Non private toilet	13.3%	-
Toilet cubicle (communal and sea)	10%	13.3%
Disposed of in sea	26.7%	-
Flush and non-flush toilets without septic tanks	-	16.6%
Private toilet	-	3.3%
Place where human waste is channeled – based on observations		
Septic tank	60%	80%
River/Lake/Sea	40%	10%
Drainage system and drop toilet/hole in the ground	-	10%

Based on the above table, we can see that the majority of residents in both Tallo and Lembo have started to use flush toilets draining into septic tanks. However, based on respondent claims (16.6%), there continue to be both flush toilets and non-flush toilets that are not connected to septic tanks.

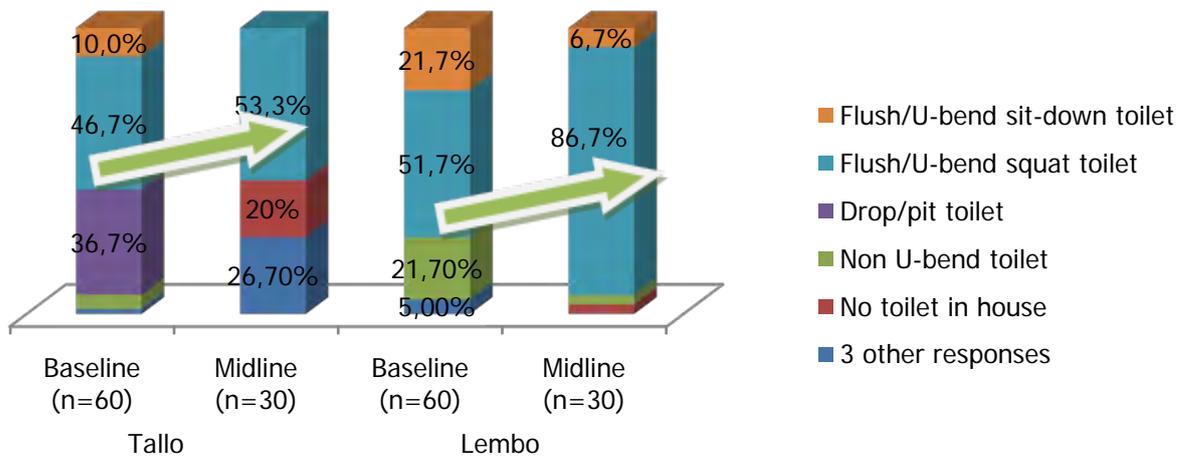
Meanwhile, table 5.1 above shows that the situation regarding final disposal of human waste in both sub-districts is similar. In Tallo, residents said that 60% of respondents' toilets are connected to septic tanks, while 40% are not connected to septic tanks. Meanwhile while in Lembo, the equivalent figures are 80% and 20%, respectively. This shows that there has been a reduction in open defecation in both sub-districts, although they are still not free of open defecation.

### Condition of Toilets in General

Based on the observations conducted on the types of toilets used by the respondents during the midline survey, the majority (between 53.3% and 86.7%) in the two sub-districts used U-bend squat toilets. In Tallo, the houses that at the time of the baseline survey used drop/pit toilets (36.7%) no longer did so at the time of the midline survey. However, the midline survey found that there were still respondents who did not have private toilets (20%). Meanwhile in Lembo, there had been a significant increase in the use of squat toilets by the time of the midline survey (increase of 35%)

**Figure 5.2.**

**Types of Toilets Used, Based on Observations**



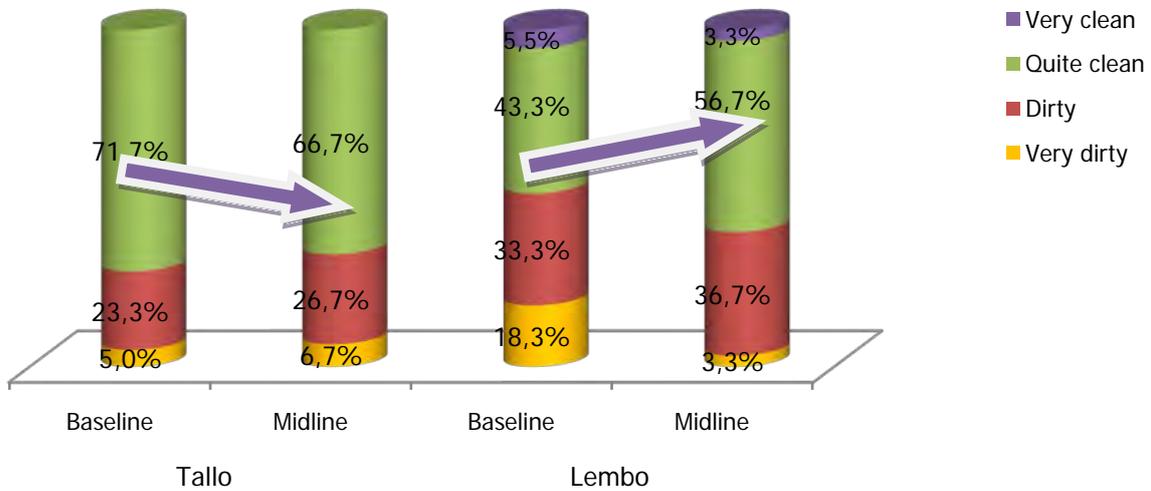
Still based on observations, in both sub-districts the majority of respondents said that they had private toilets in their homes (73.3% in Tallo and 83.3% in Lembo). In Tallo, 26.6% of respondents still needed quite a lot of time to reach the toilet (between 5 and 15 minutes). Similarly in Lembo, 13.3% needed between 2 and 15 minutes.

Based on the observations of toilet conditions in Tallo and Lembo, toilets were found to be quite clean (66.7% in Tallo and 56.7% in Lembo). However, there was a decline in the proportion of quite clean toilets from 71.7% at the time of the baseline survey. Conversely, there were quite significant increases in the percentages of toilets that were dirty (increase of 3.4%) and very dirty (increase of 1.7%). In Lembo, there was an increase in the proportion of toilets that were quite clean (up 13.4%). However, this increase was accompanied by an increase in the proportion of very dirty toilets and a decline in the proportion that were very clean.

The following graph presents a comparison between the condition of respondents' toilets at the time of the baseline survey and the midline survey.

**Figure 5.3.**

**Toilet Condition – based on Observations**



Respondent base: 60

Table 5.2 below provides a more detailed picture of toilet conditions in homes with under-5s in Makassar.

Overall, the condition of the toilets in target households in the two High Five Program Sub-districts was better than it was at the time of the baseline survey in 2012. The following improvements were noted:

- In Tallo, hygiene in toilets had improved (no longer traces of feces or sanitary napkins) compared with at the time of the baseline survey. In Lembo, the level of toilet hygiene had also improved, although traces of feces and sanitary napkins continued to be found in toilets (36.7% of respondents had feces on the wall/in the toilet bowl, while 3.3% of respondent toilets were found to have discarded sanitary napkins).
- In Tallo, 40% of respondents had taps with running water. Although not significant, this figure was 1.7% higher than at the time of the baseline survey. In Lembo, 50% of the taps had running water, 3.3% higher than at the time of the baseline survey.

The following table sets out a comparison of toilet conditions as observed during the baseline and midline surveys.

**Table 5.2**  
**Toilet Conditions, Based on Observations**

Toilet Conditions		Tallo		Lembo	
		Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)
Feces in toilet or on toilet walls	Yes	10%	-	31.7%	36.7%
	No	90%	100%	88.3%	63.3%
Sanitary napkin in toilet	Yes	3.3%	-	-	3.3%
	No	96.7%	100%	100%	96.7%
Flies in toilet	Yes	33.3%	6.7%	23.3%	33.3%
	No	66.7%	93.3%	76.7%	66.7%
Water available (if there is a tap, it is working)	Yes	38.3%	40%	46.7%	50%
	No	61.7%	60%	53.3%	50%
Water scoop present	Yes	60%	70%	78%	86.7%
	No	40%	30%	21.7%	13.3%
Water bucket/receptacle present	Yes	63.3%	76.7%	73.3%	83.3%
	No	36.7%	23.3%	26.7%	16.7%
Towel/cloth for drying available	Yes	1.7%	-	5%	23.3%
	No	98.3%	100%	95%	76.7%

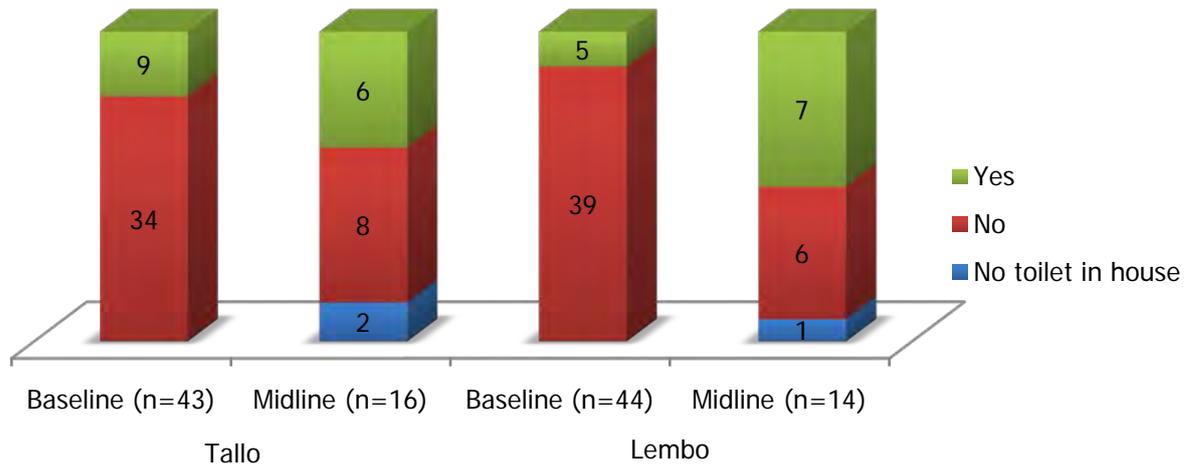
A further criterion for assessing achievements made under the first CBTS pillar concerns the number of under-3s who are toilet trained. The 2012 baseline survey found that there was a higher percentage of under-3s in both Tallo and Lembo who were not toilet trained (79%-89%).

At the time of the midline survey in 2013, there had been an increase in the percentage of under-3s who were toilet trained in both Tallo and Lembo, with the increase in Tallo (38.6%) being relatively higher compared with Lembo (16.6%). The figures in figure 5.4 below are absolute figures based on the consideration that the respondent base at the time of the midline survey was less than the minimum sample size, namely, 30 individuals. During the midline survey in Tallo, 6 respondents said that their under-3s were toilet trained, a smaller figure than the number of under-3s who were toilet trained (9 individuals). However, the percentage was bigger as the respondent base in the baseline survey consisted of 43 individuals, while the figure for the midline survey was only 16. In Lembo, the number of respondents who said that their under-3s were toilet trained amounted to 7 (respondent base: 14 individuals), while during the baseline survey in 2012 only 5 respondents said that their under-3s were toilet trained (respondent base: 44 individuals).

Figure 5.4. below shows in absolute terms as the base number of respondents was less than 30, the number of under-3s who are and who are not toilet trained.

**Figure 5.4**

**If you have a child aged under 3, is he/she toilet trained?**

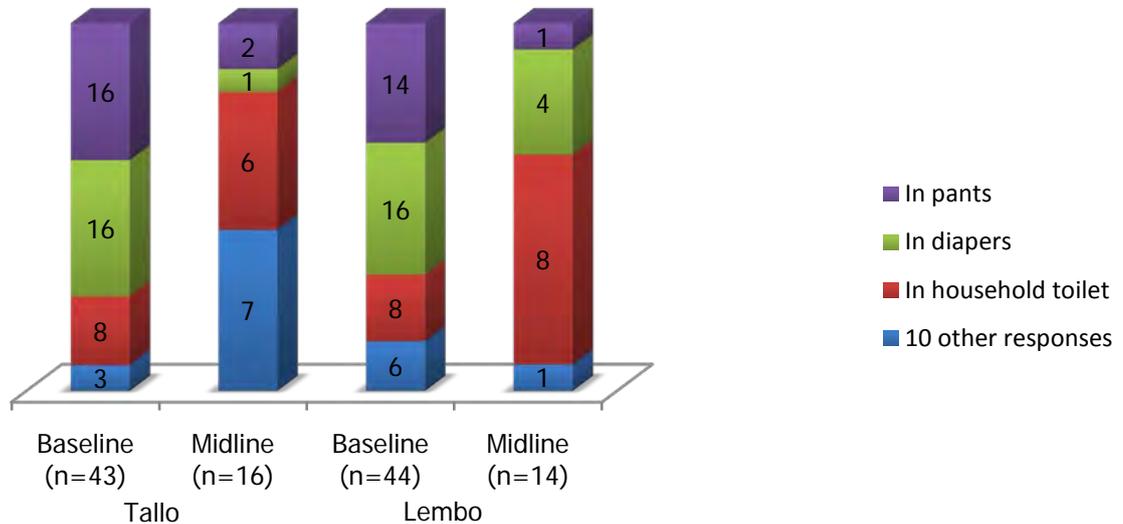


Also with regard to defecation practices among infants and the last place where under-3s defecated, at the time of the midline survey in both sub-districts in Makassar, there was found to be an increase in the percentage of under-3s who defecated in the household toilet (up by 18%-39%), and a significant decline (24.7%) in the percentage that last defecated in their pants.

If we look at the matter in more detail using absolute figures, at the time of the midline survey in Tallo, 6 respondents said that the last time their under-3s defecated was in the household toilet (with respondent base 16). This number was smaller than at the time of the baseline survey, when the equivalent figure was 8 (with respondent base 4). However, the percentage at the time of the midline survey was higher as there was a significant difference in the respondent base. Meanwhile in Lembo, 8 respondents at the time of both the baseline survey and the midline survey said that their under-3s last defecated in the household toilets (bigger percentage at the time of the midline survey than the baseline survey due to a quite significant difference in the respondent base).

The following graph shows in absolute terms as the base number of respondents was less than 30, the places where under-3s in Makassar last defecated:

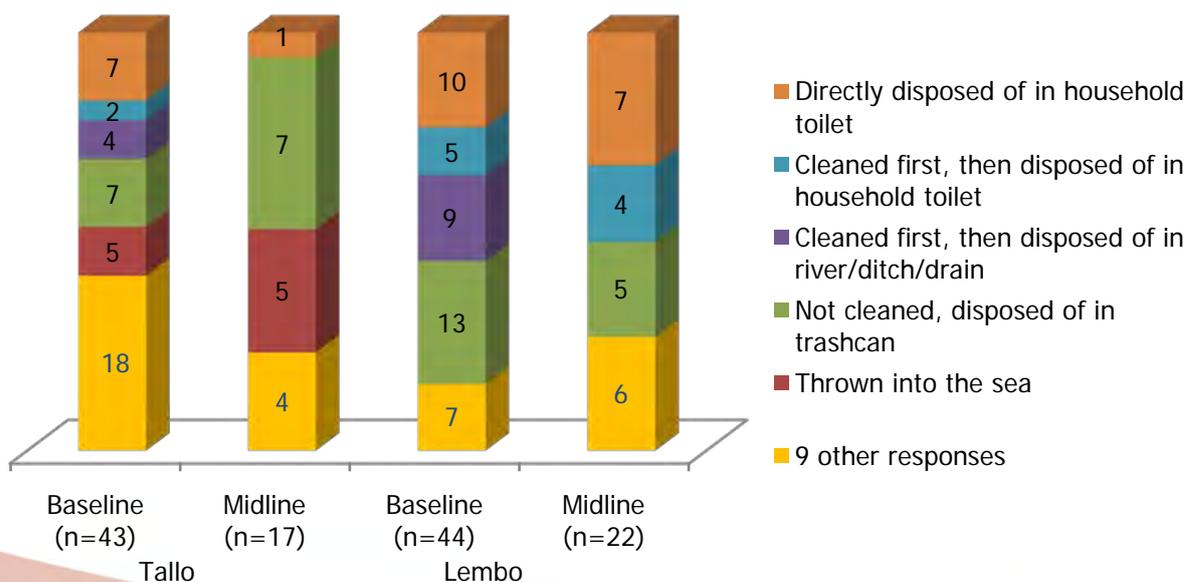
**Figure 5.5**  
**Location of Last Defecation among Under-3s**



As regards where caregivers last disposed of infant feces (see Figure 5.6), in Tallo almost one half of respondents with under-3s said that they directly disposed of it in the trash can without first cleaning. Meanwhile in Lembo, the biggest proportion of respondents said that they directly disposed of the feces in the household toilet.

Figure 5.6 shows in absolute terms as the base number of respondents was less than 30, how caregivers dispose of infant feces in the target areas:

**Figure 5.6**  
**Disposal of Infant Feces**

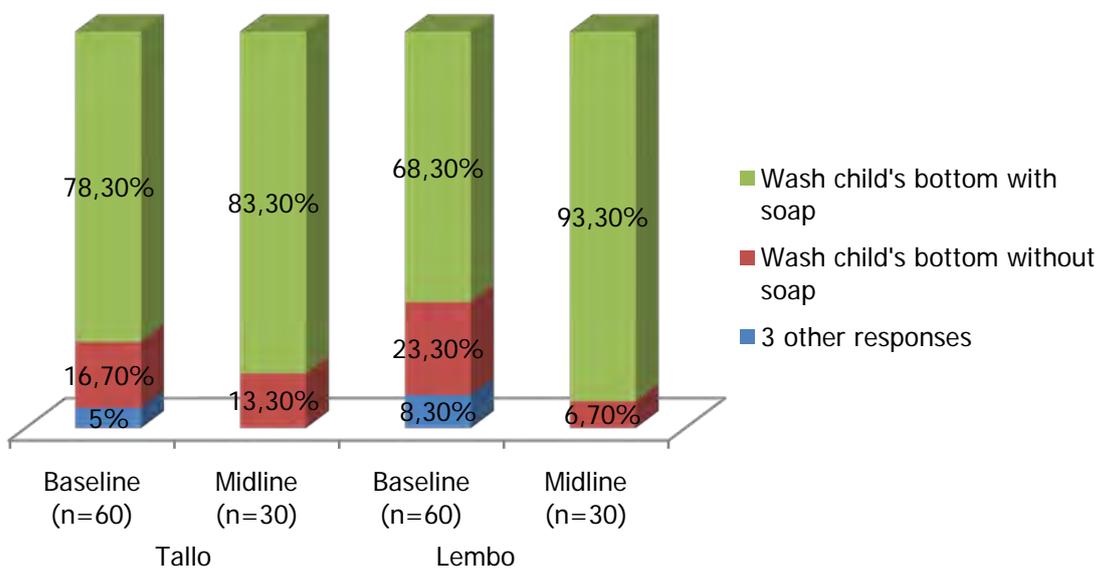


The defecation practices of children between 3 and 5 (under-5s) were also relatively heterogeneous, with the most common places for defecation being shown in Figure 5.7. At the time of the baseline survey in 2012, under-5s in Makassar were already accustomed to defecating in private toilets, although the types of toilets were not identified (23.3% for Tallo and 29% for Lembo). At the time of the midline survey, the majority of under-5s in Makassar were accustomed to defecating in a flush/U-bend toilet connected to a septic tank. However, under-5s were found in both Tallo and Lembo who practiced open defecation, with the percentages varying between 49% and 56% (these percentages are accumulated from a variety of responses, such as defecation in the sea, flush toilet/non flush toilet without septic tank, etc).

The majority of respondent caregivers of under-5s in Makassar were accustomed to wiping baby's bottom with soap after the child defecated (83.3% in Tallo and 93.3% in Lembo). These percentages had increased compared with at the time of the baseline survey, as shown in Figure 5.7. However, there continued to be caregivers who did not clean baby's bottom after defecation, although the percentage was down compared with at the time of the baseline survey in 2012 (down by 3% in Tallo and 16.6% in Lembo).

**Figure 5.7**

**What Respondents Do after Children Defecate**



Respondent base: 60

**Summary of First Pillar Findings: Open defecation free**
**Table 5.3**
**First Pillar Indicator: Open defecation free**

Indicator	Tallo		Lembo	
	Baseline	Midline	Baseline	Midline
<b>Caregiver's Last Place of Defecation</b>	(n=60)	(n=30)	(n=60)	(n=30)
Flush toilet draining into septic tank	6.7%	50%	1.7%	66.7%
<b>Defecation Locations of Under-3s</b>	(n=43)	(n=16)	(n=44)	(n=14)
Household toilet	8	6	8	8
<b>Place of disposal of under-3s' feces</b>	(n=43)	(n=17)	(n=44)	(n=22)
Directly disposed of in toilet	7	1	10	7
Not cleaned, thrown into trash can	7	7	13	5
<b>Defecation Locations of Under-5s</b>	(n=60)	(n=30)	(n=60)	(n=30)
Flush toilet draining into septic tank	5%	30%	3.3%	26.7%
<b>Post-infant defecation practices</b>	(n=60)	(n=30)	(n=60)	(n=30)
Wash child's bottom with soap	78.3%	83.3%	68.3%	93.3%

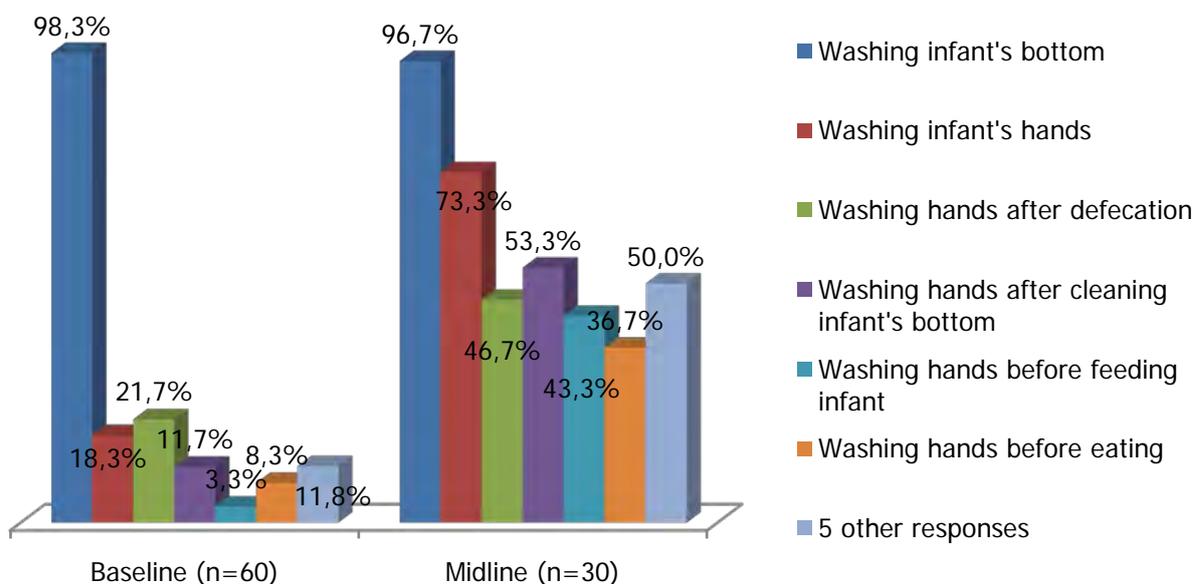
## B. Hand-Washing with Soap

In order to ascertain the extent to which respondents practiced hand washing with soap over the last 2 days, they were given multi answer questions and responses related to bathing and clothes washing were ignored (as the most common responses, up to 100%). This resulted in a finding that there was still 1 person in Tallo who bathed without using soap (percentage: 96.7%). The second most common response in Tallo was that respondents used soap to wipe baby's bottom after defecation (73.3%). This figure marked a significant compared with at the time of the baseline survey, when it was 18.3%. Overall, there had been many improvements in the use of soap at the time of the midline survey in Tallo, as shown in Figure 5.8 below.

The situation as regards washing hands with soap in Tallo Sub-district is as shown in the following chart:

**Figure 5.8**

### Use of Soap in Last Two Days in Tallo Sub-district – Multiple Answer

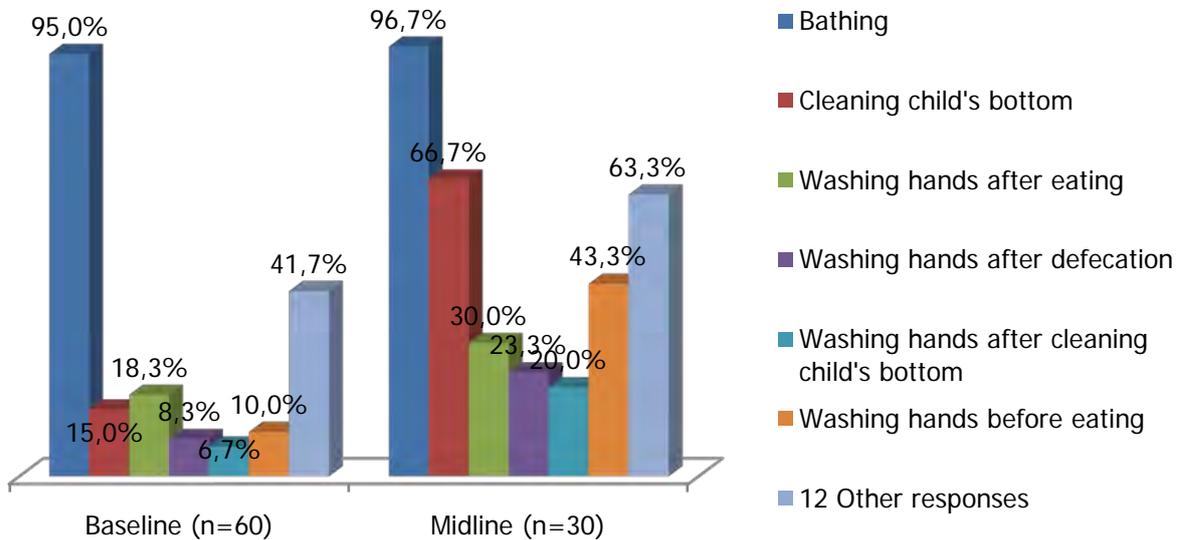


Meanwhile in Lembo Sub-district, it will be seen from Figure 5.9 that the percentage of respondents using soap at the time of the midline survey had increased significantly compared with at the time of the baseline survey. The most significant increase was in the washing of baby's bottom with soap by caregivers after defecation, which increased by more than 50% to 66.67% from 15% previously. Similarly in Lembo, there was still 1 respondent at the time of the midline survey who did not use soap when bathing. If we compare Lembo and Tallo, it would seem that Tallo has better use of soap practices than Lembo.

The following chart shows the use of soap over the last 2 days in Lembo:

**Figure 5.9**

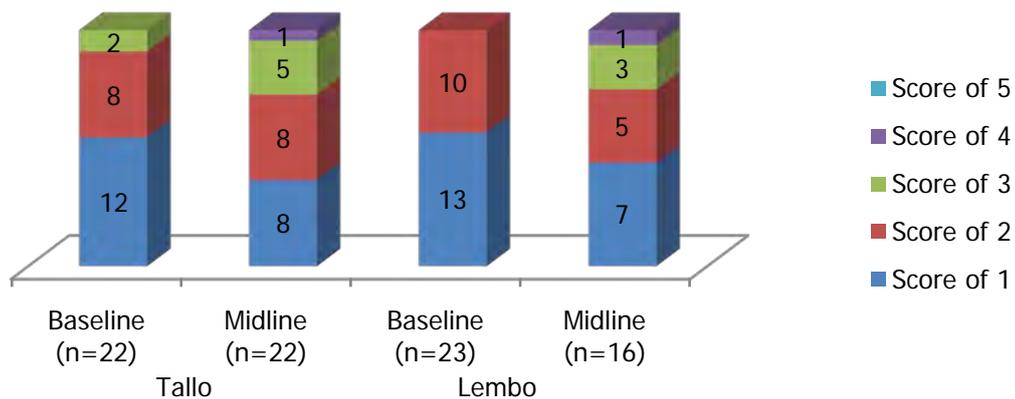
**Use of Soap over Last Two Days in Lembo Sub-district – Multiple Answer**



Each interviewed caregiver to an under-5 was assessed on washing hands with soap at five critical times, namely: (i) before eating; (ii) after feeding child, (iii) after defecation, (iv) after cleaning child's bottom, and (v) before preparing food. Based on a score of 1 for each of the above behaviors, the maximum score receivable was 5.10 The following graph shows the overall scores:

**Figure 5.10**

**Scores for Use of Soap at 5 Critical Times in Last 2 Days**



As will be seen from Figure 5.10 above (in absolute terms as the base number of respondents was less than 30), respondents in neither sub-districts washed their hands with soap at all critical times, either at the time of the baseline survey or the midline survey. Those who washed hands with soap at 1-2 critical times formed the majority in Tallo, while Lembo was almost the same, with 1 critical time being the most common

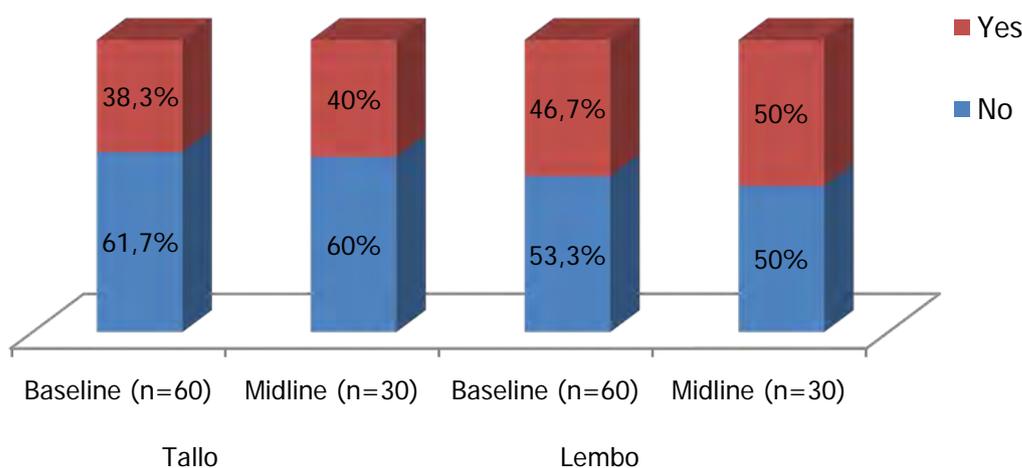
response, followed by 2 critical times. Only 1 individual in each sub-district did so at all 5 critical times (no respondents did so at the time of the baseline survey).

Another indicator for evaluating the second pillar of CBTS in connection with the practice of washing hands with soap is the availability of running water and soap. This is assessed based upon observations in the bathroom or when respondents wash their hands.

At the time of the midline survey in Makassar, less than half of total respondents (45%) had running water in their toilets. In Tallo, the percent was only 40%. This marked an increase of only 1.7% compared with the baseline survey. In Lembo, half (50%) of toilets that were observed had a tap with running water (an increase of 3.3% from the time of the baseline survey).

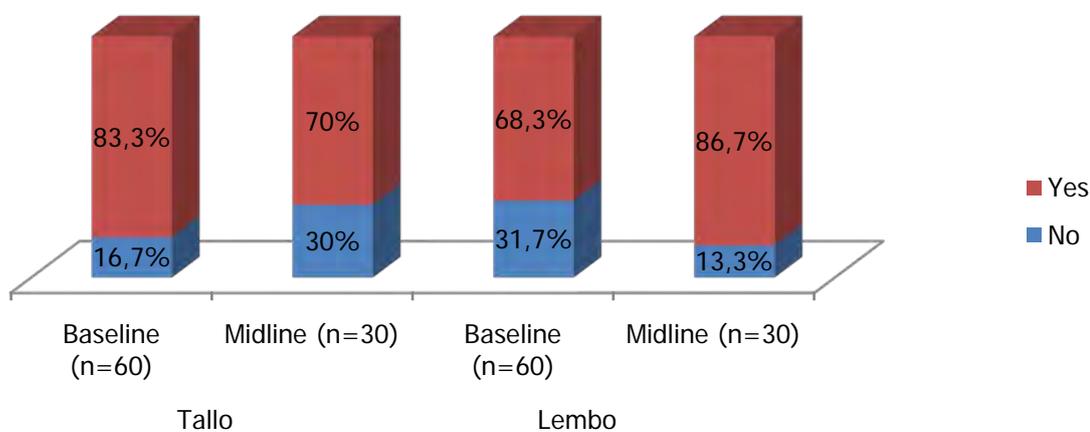
Figure 5.11 shows the availability of running water in toilets in the surveyed sub-districts:

**Figure 5.11**  
**Availability of Running Water**



The situation as regards the availability of soap (for washing hands) in the toilet or the place where the dishes are washed is as shown in Figure 5.12 below:

**Figure 5.12**  
**Availability of Soap**



Respondent base: 60

By comparing the observation findings from the 2 sub-districts, it will be seen that the availability of soap (both for washing hands and utensils) is more common in Lembo (86.7%), while in Tallo only 70% of households have soap available (both for washing hands and utensils). In fact, the percentage availability of soap at the time of the midline survey was smaller compared with the baseline survey (13.3% lower).

### Summary of Second Pillar: Practices of washing hands with soap

**Table 5.4**

#### Indicators Showing Practice of Washing Hands with Soap

Indicator	Tallo		Lembo	
	Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)
<b>Use of soap in last 48 hours – Multiple Answer</b>				
Washing clothes/dishes	98.3%	96.7%	95%	96.7%
Bathing	18.3%	73.3%	15%	66.7%
Washing child's bottom	21.7%	46.7%	18.3%	30%
Washing child's hands	11.7%	53.3%	8.3%	23.3%
Washing hands after eating	3.3%	43.5%	6.7%	20%
Washing hands after defecation	8.3%	36.7%	10%	43.3%
Washing hands after cleaning child's bottom	11.8%	50%	41.7%	63.3%
Washing hands before feeding child	98.3%	96.7%	95%	96.7%

Indicator	Tallo		Lembo		
	Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)	
Washing hands before dining	18.3%	73.3%	15%	66.7%	
Other responses	21.7%	46.7%	18.3%	30%	
<b>Observations</b>					
Availability of water (if tap, running water from tap)	Yes	38.3%	40%	46.7%	50%
	No	61.7%	60%	53.3%	50%
Availability of soap	Yes	83.3%	70%	68.3%	86.7%
	No	16.7%	30%	31.7%	13.3%

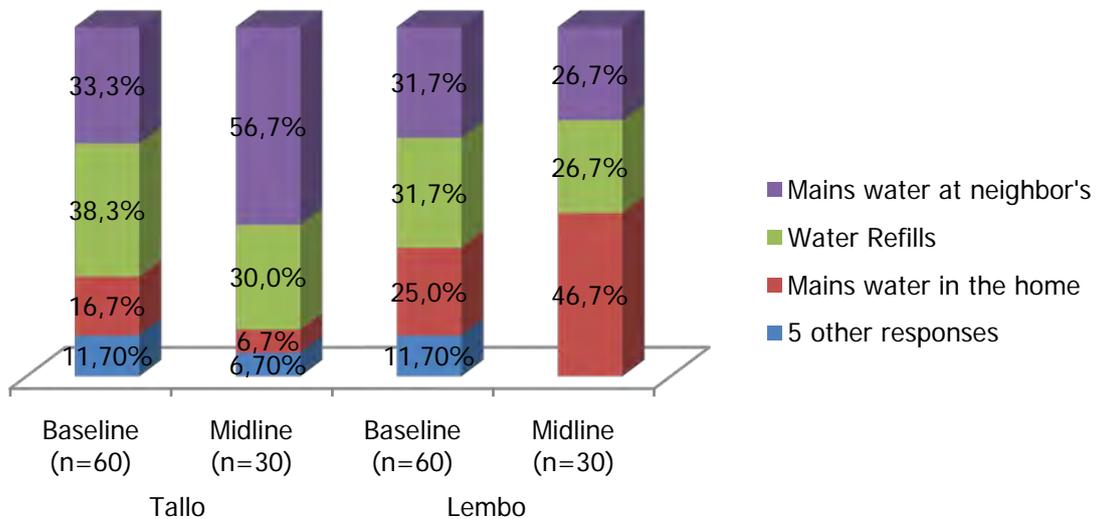
### C. Safe Drinking Water Treatment and Storage

The next CBTS pillar is safe and healthy drinking water treatment. By the water source most commonly used in the households (with under-5s) in the two sub-districts, mains water from a neighbor was the most common source in Tallo (56.7%), with water refills coming second (30%). In Lembo, 46.7% of respondents used water refills as their principal source of drinking water, followed by mains water from a neighbor and mains water in the house (both on 26.7%).

However, the findings for under-5s were different, with there being a decline in the use of mains water from a neighbor and an increase in the use of water refills. At the same time, the use of branded packaged water had emerged in both sub-districts, only the percentage was only 10% in each case.

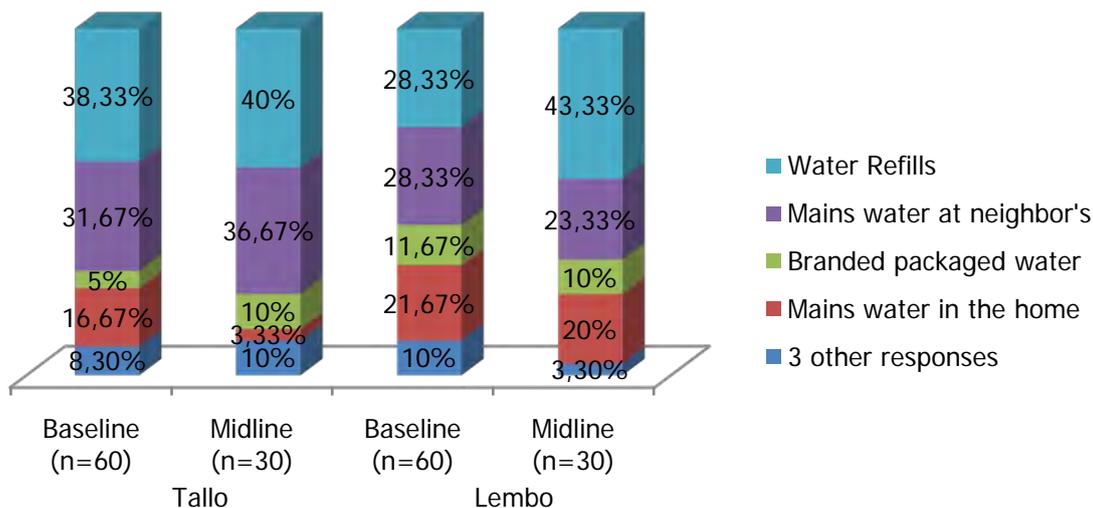
The principal sources of drinking water used in households (with under-5s) are as shown in the following graphs:

**Figure 5.13**  
**Sources of Drinking Water**



Respondent base: 60

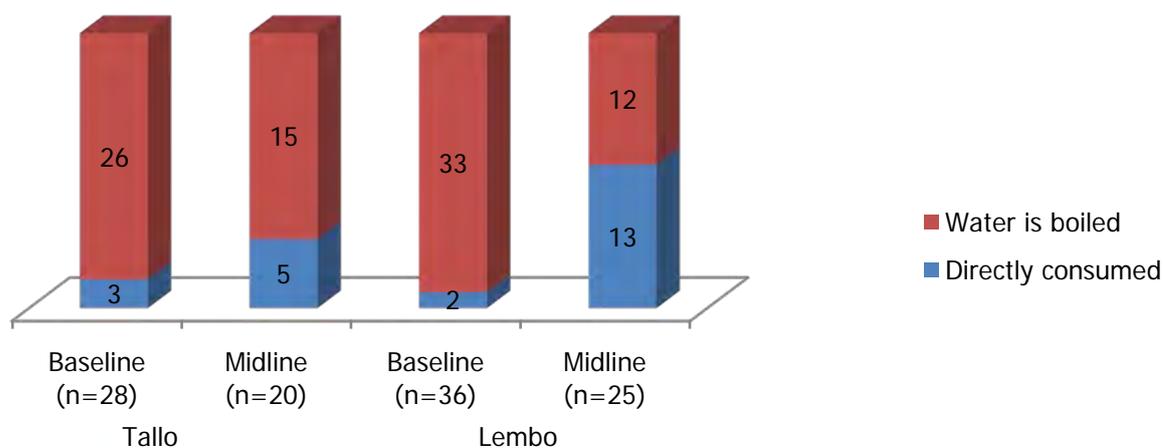
**Figure 5.14**  
Sources of Drinking Water for Under-5s in the Home



Respondent base: 60

Do caregivers in the surveyed sub-districts do anything (or not do anything) so as to improve the quality of drinking water before consumption? Water refills and branded packaged water were excluded from data processing, and only data on mains water (whether in the house or from a neighbor) has been used in the data processing so as to produce the following graph (in absolute terms as the base number of respondents was less than 30):

**Figure 5.15**  
What is done (to improve quality) before consumption  
(Excludes branded packaged water and water refills)

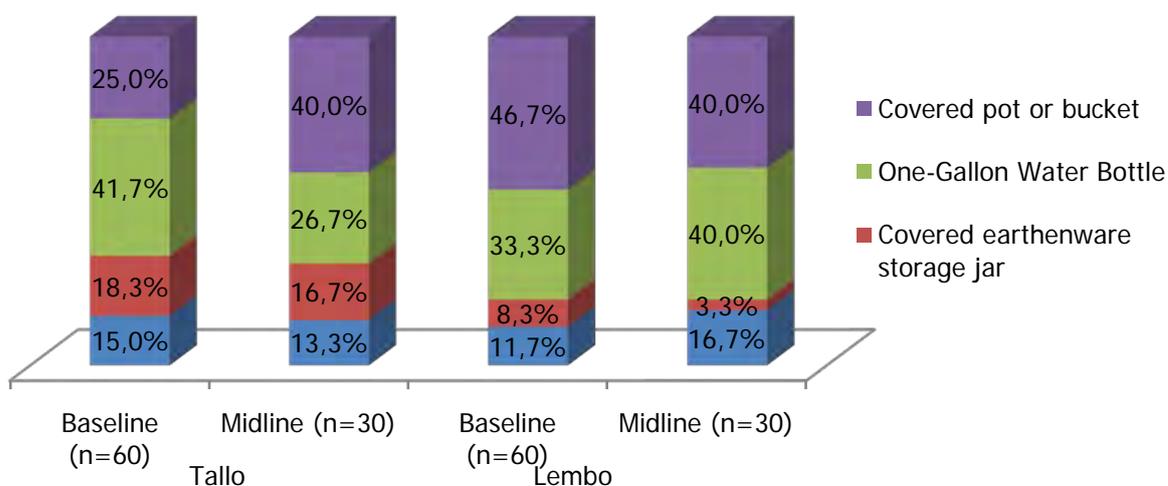


Almost half of total respondents in Lembo said that they first boiled water before drinking it, while the remainder said that they drank it directly without doing anything. In Tallo, the findings were slightly different with more than half of respondents saying that they boiled the water, and only 5 saying that they consumed it directly.

The following graph shows where drinking water is stored in households (with under-5s) in the surveyed sub-districts.

**Figure 5.16**

**Drinking Water Storage Places**

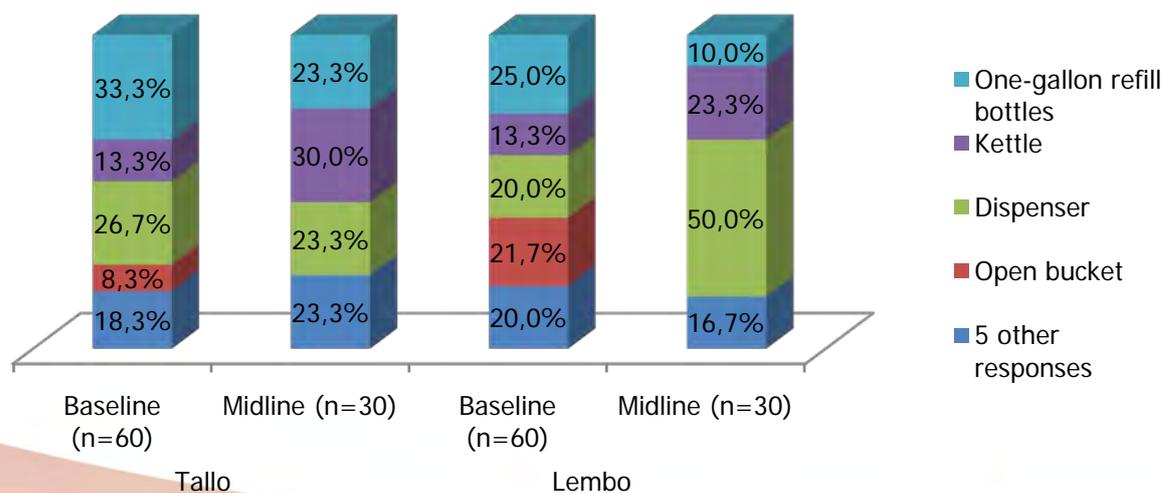


Respondent base: 60

A covered pot or bucket was the most common place for storing water in Tallo (40%), while in second place was a one-gallon water bottle. In Lembo, covered pots/buckets and one-gallon water bottles were the preferred choices on 40% each.

**Figure 5.17**

**Places Used to Store Drinking Water – Observations**



Respondent base: 60

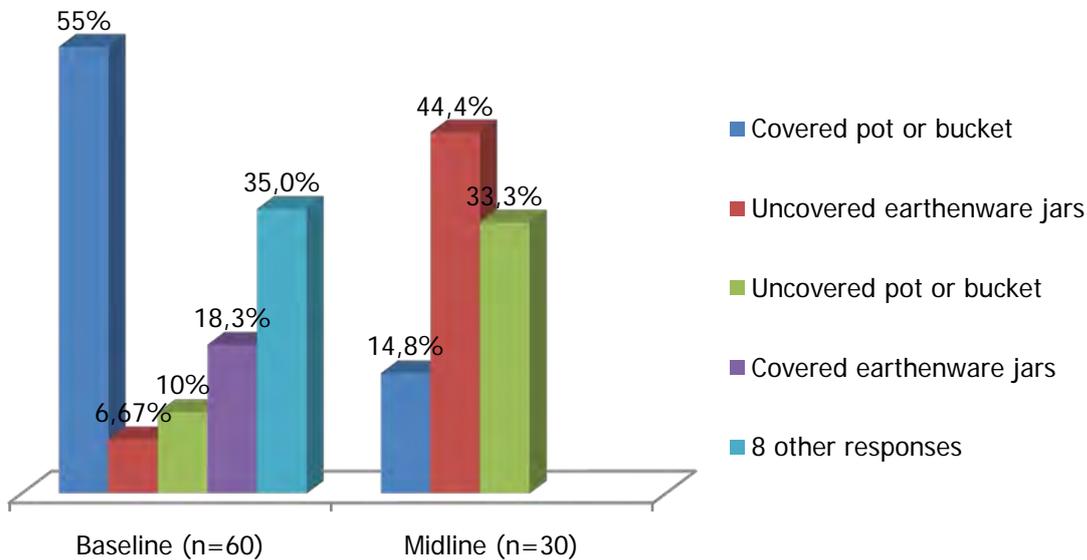
*Bringing You The Real Portrait of Indonesia*

Based on observations, the most common places for storing water in Makassar were water dispensers, although the percentage was less than half of total respondents (36.7%). In Lembo, dispensers were the favorite choice of half of the total respondents (50%), while kettles were employed by 23.3%. Meanwhile in Tallo, responses were more evenly distributed, with 30% of respondents storing their water in kettles and 46.6% doing so in one-gallon water refills and dispensers.

Besides observations on the places used for storing drinking water, observations were conducted on how respondents store water used for cooking. The following graphs shows the places used for such purposes in Tallo and Lembo:

**Figure 5.18**

**Places used to store water for cooking in Tallo - Observations – Multiple Answer**



Based on the results of the observations conducted during the midline survey in Tallo Sub-district, it was found that there had been regression in respondents' behavior as regards the storage of water to be used for cooking, which appeared to be better at the time of the baseline survey, when more than half (55%) of respondents used covered pots/buckets and only 6.7% used uncovered earthenware storage jars. By contrast, at the time of the midline survey, the percentage of respondents who stored water for cooking in uncovered earthenware jars had risen significantly to 44.4%, which was accompanied by a decline in the percentage of respondents using covered pots/buckets (down to 14.8%).

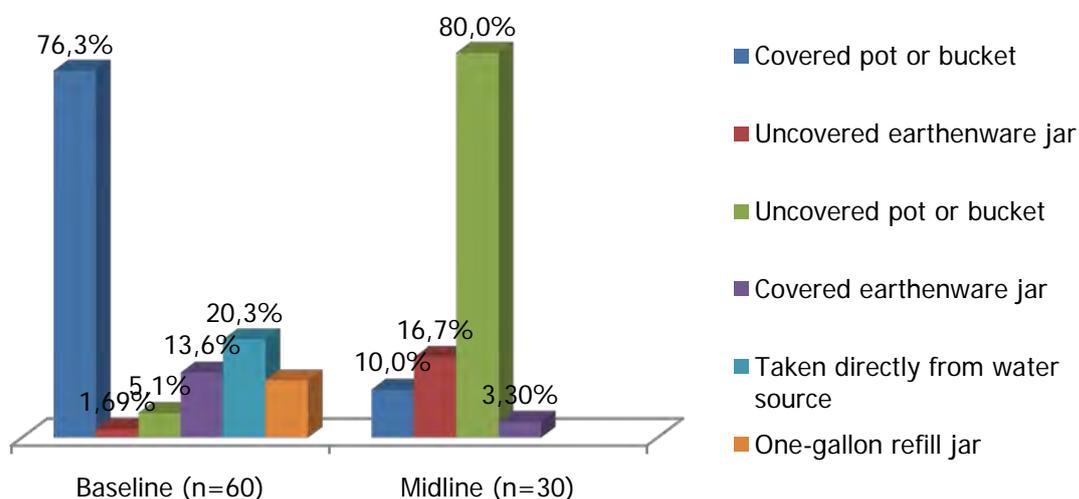
**Figure 5.19**
**Places used to store water for cooking in Lembo - Observations – Multiple Answer**


Figure 5.19 above shows the places used to store water for cooking by respondents in Lembo at the time of the midline survey. The findings for Tallo were almost the same, with a regression in the storage of water for cooking being apparent. At the time of the baseline survey, 76.3% of respondents said that they stored water for cooking in covered pots/buckets. However, this figure had declined to 10% at the time of the midline survey, while the percentage of respondents who used uncovered pots/buckets had increased.

**Table 5.5**
**Observations on Drinking Water Storage Receptacles, Processing and Presentation**

Indicator		Tallo		Lembo	
		Baseline	Midline	Baseline	Midline
Receptacle with	Narrow aperture	88.3%	83.3%	75%	100%
	Wide aperture	11.7%	16.7%	25%	-
Hard/non-cloth material	Yes	88.3%	93.3%	81.7%	100%
	No	11.7%	6.7%	18.3%	-
How about hands when taking water	Touch	-	3.3%	3.3%	-
	Do no touch	100%	96.7%	96.7%	100%

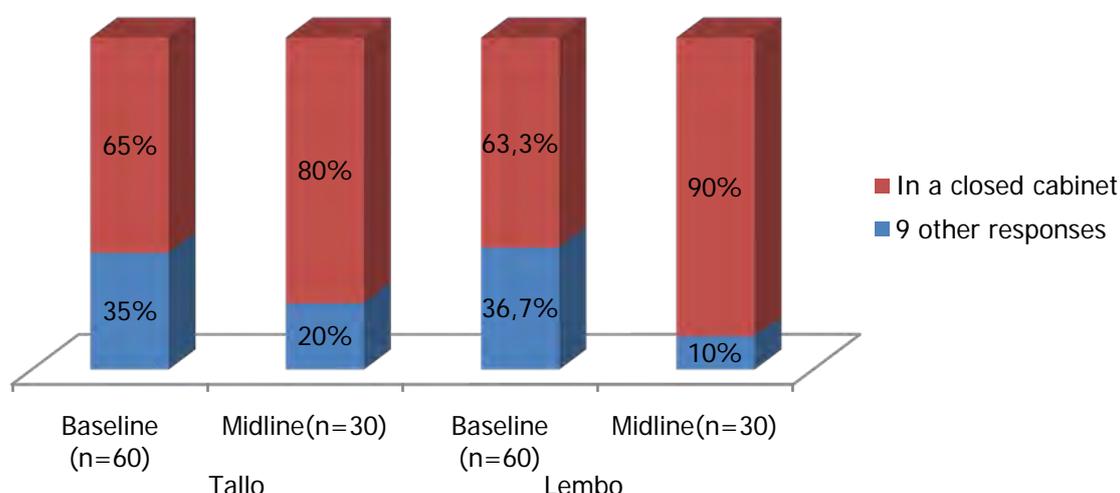
As regards the observation findings on the places used for storing drinking water (presented for day-to-day consumption in the home), there was a tendency for percentages to decline between the baseline survey and midline survey in Tallo. In the case of the presentation of drinking water indicator, at the time of the baseline survey 88.3% used receptacles with small apertures. However, by the time of the midline survey this figure had dropped to 83.3%. In addition, there was also a decline in the hands coming into contact with drinking water indicator. At the time of the baseline survey, all of the respondents (100%) were able to present water without touching it. However, at the time of the midline survey the hands of 3.3% of respondents came into contact with drinking water. However, in Tallo there was an increase in the percentage of covers made from hard material rather than cloth (up from 88.3% to 93.3%).

Unlike Tallo, in Lembo all of the respondents at the time of the midline survey used drinking water receptacles with small apertures, hard rather than cloth covers, and did not touch the water when presenting it (at the time of the baseline survey, none of these indicators registered 100%).

Also based on field observations, practices as regards the storage of food in households with under-5s are as shown in Figure 5.20 below:

**Figure 5.20**

**Places where food is stored – Observations**



Respondent base: 60

The bulk of ready-to-consumed food was stored in closed cabinets (80% in Tallo and 90% in Lembo). These figures were considerably up compared with the baseline survey.

## Summary of the Third Pillar: Household Safe Water Treatment and Storage Practices

The indicators for the third pillar of CBTS are summarized in the following table:

**Table 5.6**  
**Indicators for Third Pillar: Safe Water Treatment**

Indicator	Tallo		Lembo		
	Baseline	Midline	Baseline	Midline	
<b>Treatment of water prior to consumption (from mains, well)</b>	(n=28)	(n=20)	(n=36)	(n=25)	
Boil water (in absolute terms as the base number of respondents was less than 30)	26	15	33	12	
Consume directly (in absolute terms as the base number of respondents was less than 30)	3	5	2	3	
<b>Observations</b>					
Respondent base (individuals)	(n=60)	(n=30)	(n=60)	(n=30)	
Receptacle with	Narrow aperture	88.3%	83.3%	75%	100%
	Wide aperture	11.7%	16.7%	25%	-
Hard/non-cloth material	Yes	88.3%	93.3%	81.7%	100%
	No	11.7%	6.7%	18.3%	-
How about hands when taking water	Touch	-	3.3%	3.3%	-
	Do not touch	100%	96.7%	96.7%	100%
<b>Places where prepared food is kept</b>					
In closed cabinet	65%	80%	63.3%	90%	
3-7 Other Responses	35%	20%	36.7%	10%	

### D. Percentage of households that practice solid waste management

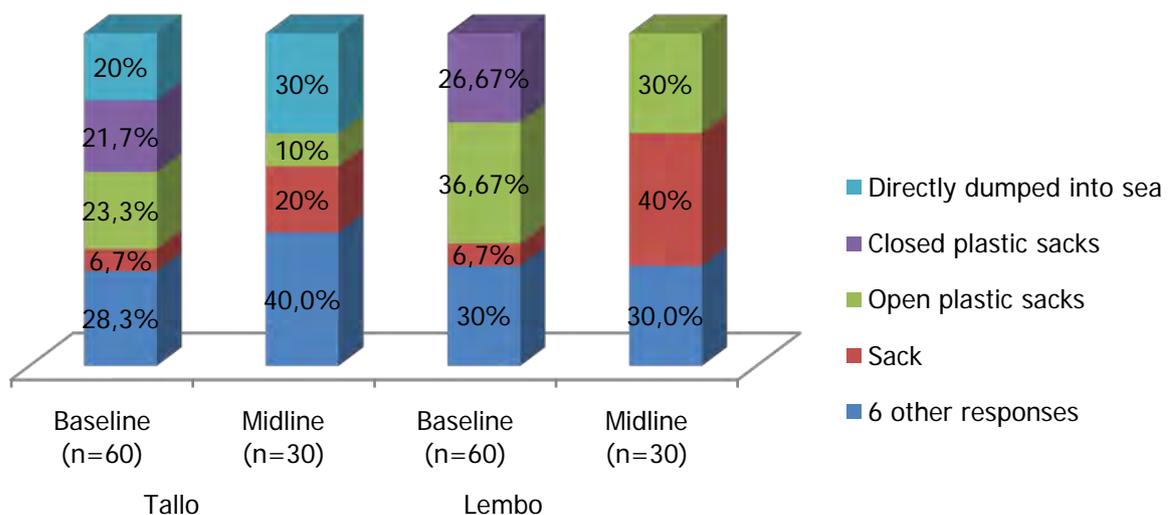
Not all households in Makassar had a trash can in the house – 9 household were recorded as not having trash cans. Meanwhile in Lembo, all of the households had a trash can. Lembo appeared to have a garbage disposal pattern that was more orderly than Tallo, with more than 50% of respondents disposing of garbage in an official disposal point outside the home. In Lembo by contrast, almost half of respondents (43%) disposed of their garbage directly into the sea, while only 33% disposed of it at an official garbage disposal point outside the home.

When compared with the baseline survey, the findings of the midline survey showed that the pattern of garbage disposal in Tallo was more disciplined as the number of respondents who dumped garbage outside the house yard in public places declined from 38.3% to 16.7%. In addition, there was an increase in the percentage of respondents who dumped their garbage at official garbage disposal points outside their homes. By contrast, in Tallo there was a regressive trend, with an increase in the number of respondents who dumped garbage in the sea (up from 35% to 43.3%).

Figure 5.21 shows the various responses elicited on household garbage disposal:

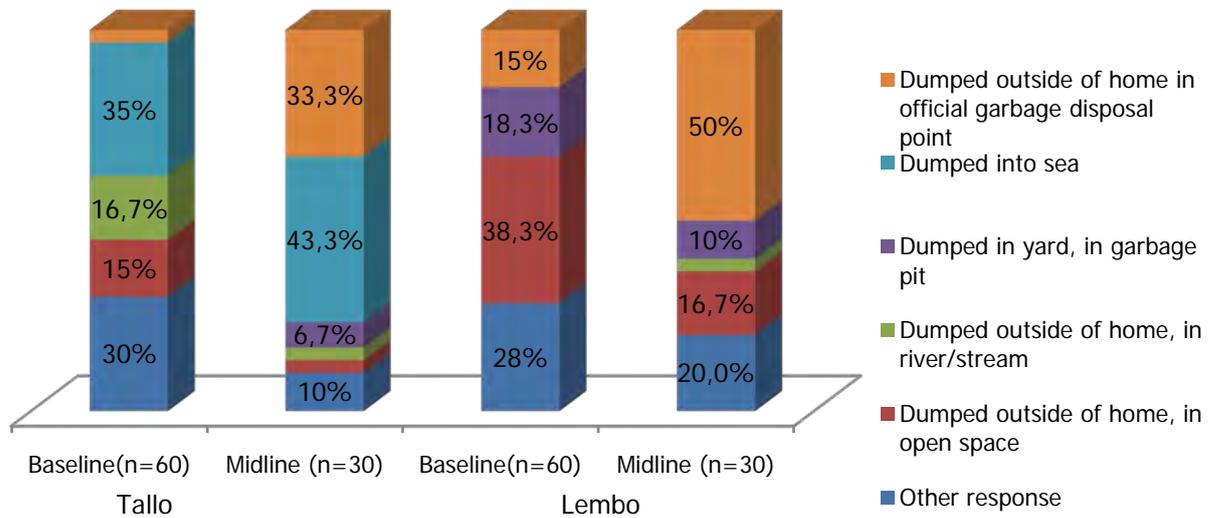
**Figure 5.21**

**Receptacles or Places Used for Collecting Garbage**



Respondent base: 60

**Figure 5.22**  
**Disposal of Solid Waste / Garbage**



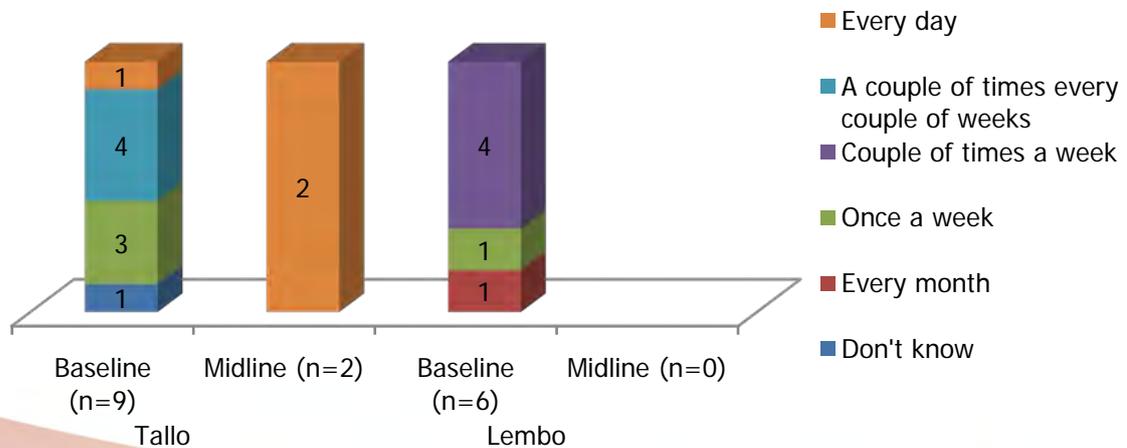
Respondent base: 60

At the time of the midline survey, only 2 respondents from Tallo collected their garbage in the home or at a joint collection point for removal by official garbage disposal workers, while in Lembo none of the respondents had their garbage collected by official garbage disposal workers. By contrast, at the time of the baseline survey 9 respondents in Tallo and 6 in Lembo used official garbage collection services.

In the case of the 2 respondents in Tallo who used official garbage collection services, they said that the garbage was collected every day.

The frequency of garbage collection is as shown in Figure 5.23 below (in absolute terms as the base number of respondents was less than 30):

**Figure 5.23**  
**Frequency of Garbage Collection By Official Garbage Collectors**



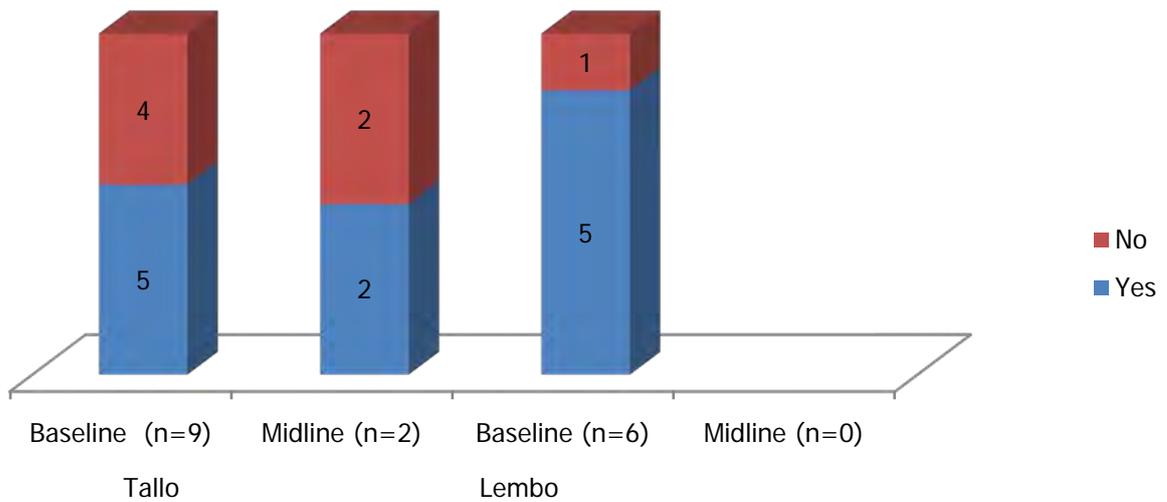
Respondent base: 60

None of the respondents in Lembo paid to have their garbage removed, while in Tallo, of the 2 respondents who said they used official garbage collection services, only 2 said he paid for them, while the other did not pay. As regards the amount of money paid, the 2 respondents said that they paid Rp 3,000. This differed from the baseline survey when payments ranged between Rp 1,000 and Rp 2,000.

The following graph shows in absolute terms as the base number of respondents was less than 30, whether respondents pay to have garbage removed:

**Figure 5.24**

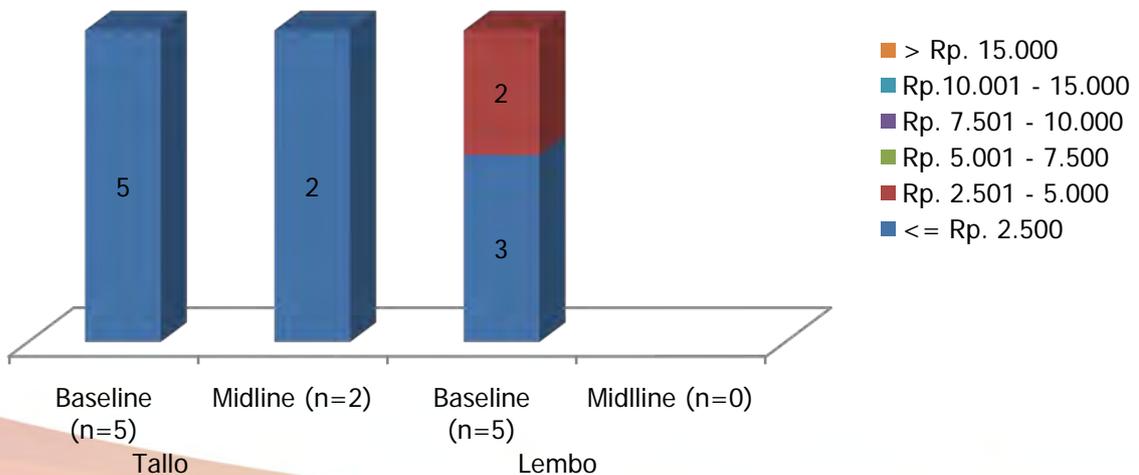
**Do You Pay for Garbage Collection?**



The amounts paid by respondents for garbage collection services are as shown in the following chart (in absolute terms as the base number of respondents was less than 30):

**Figure 5.25**

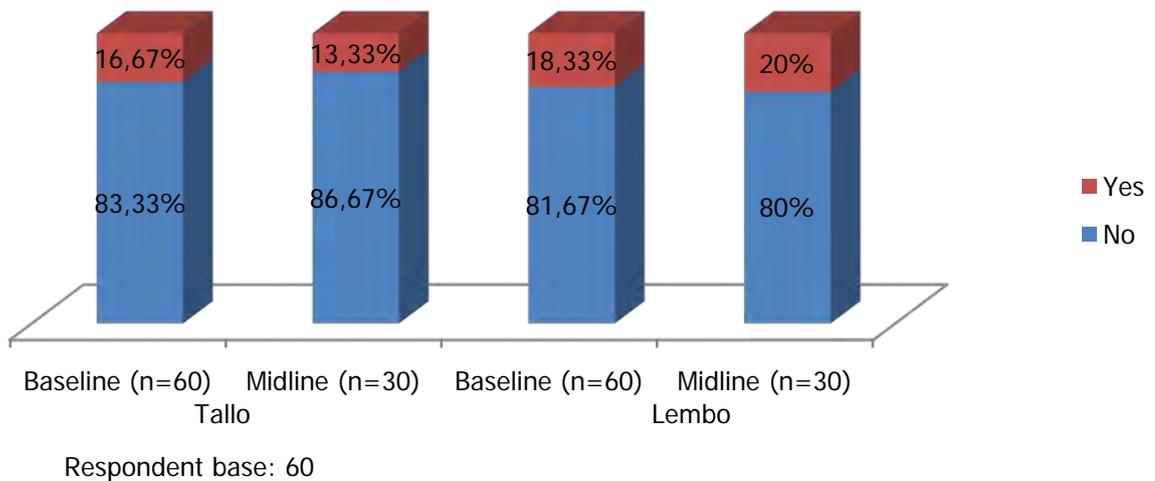
**Expenditure on Garbage Collection**



More than half of the households (that have under-5s) did not practice garbage separation (organic and inorganic). In Tallo at the time of the midline survey, only 13.3% of respondents practiced garbage separation, while only 20% did so in Lembo. The percentage that practiced garbage separation in Tallo was down 3.4% compared with at the time of the baseline survey.

**Figure 5.26**

**Is Organic and Inorganic Garbage Separated? – Respondent Claims**

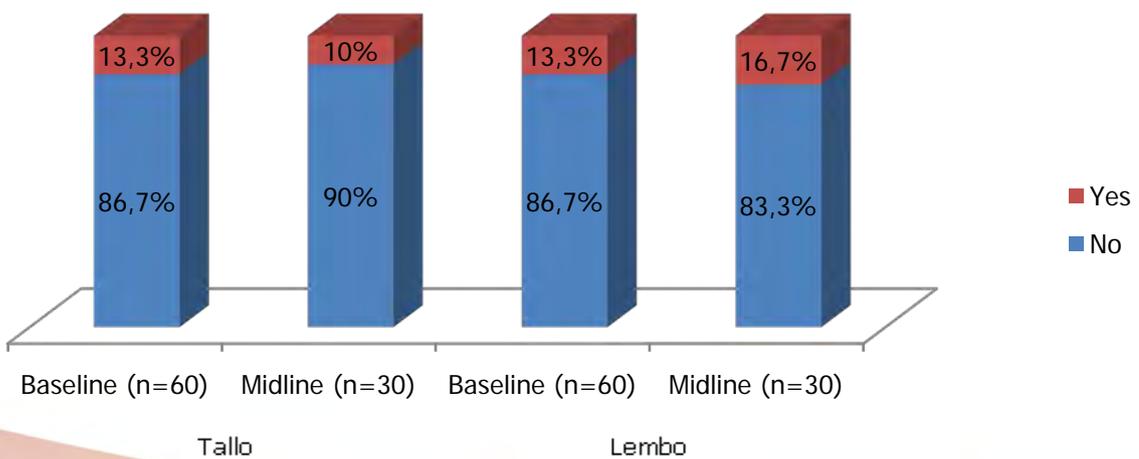


The observation findings differed somewhat from the respondent claims, and revealed that smaller percentages actually separated garbage – 10% in Tallo and 16.7% in Lembo.

The following graph shows the findings of observations on whether or not respondents actually practice garbage separation:

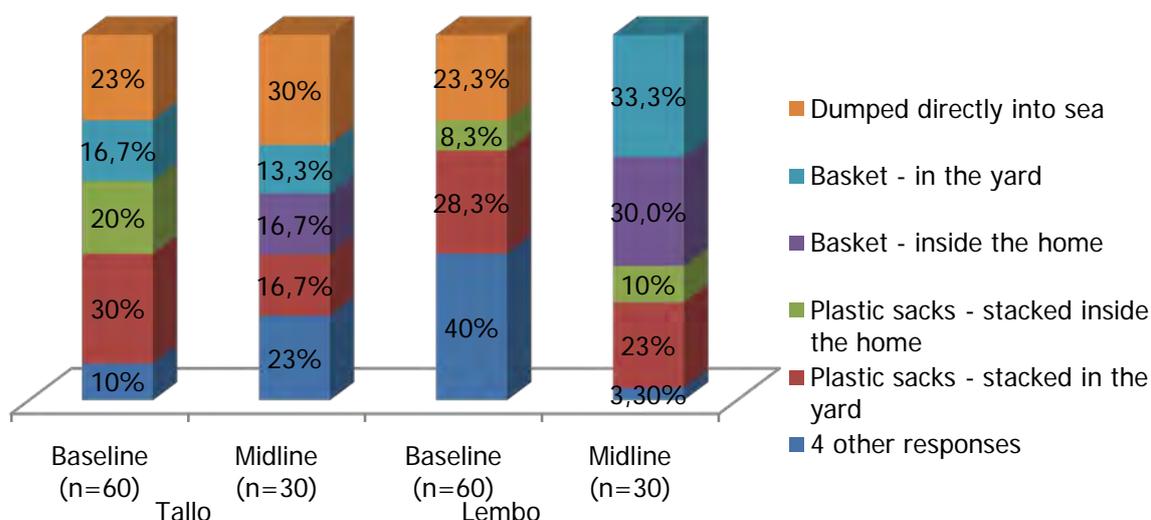
**Figure 5.27**

**Is Garbage (Organic and Inorganic) Separated? – Observations**



Based on the results of the field observations on the receptacles used to collect garbage, it was found that 30% of residents of Tallo continued to practice undisciplined garbage disposal by primarily dumping it into the sea. Meanwhile, only 16.7% collected garbage in the home in plastic sacks, while another 16.7% did so in baskets. In Lembo, people were more disciplined in disposing of garbage than in Tallo, with a total of 33.3% of respondents using baskets located in their yards and 30% using garbage baskets located inside the home in which to collect garbage.

**Figure 5.28**  
**Means Used for Collecting Garbage – Observations**



### Summary of Fourth Pillar: Solid Waste Management Practices

The following table summarizes the findings in respect of the fourth CBTS pillar indicators:

**Table 5.7**

#### Fourth Pillar Indicators: Solid Waste Management Practices

Indicator	Tallo		Lembo	
	Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)
<b>Garbage Disposal Places</b>				
Dumped outside the home at an official garbage disposal point	3.3%	33.3%	15%	50%
Dumped in sea	35%	43%	-	-
Dumped in garbage pit in yard	-	6.7%	18.3%	10%

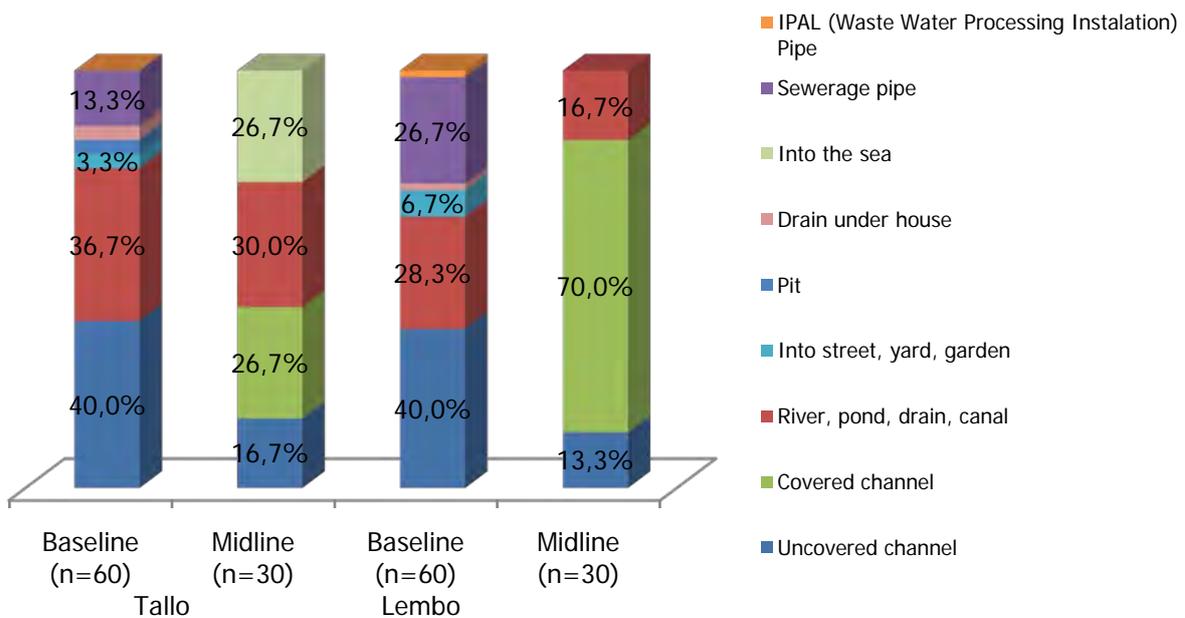
Indicator		Tallo		Lembo	
		Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)
Dumped outside the home, in river/stream		16.7%	3.3%	-	3.3%
Dumped outside the home in public place		15%	3.3%	38.3%	16.7%
Other responses		30%	10%	28%	20%
Garbage Separation	No	83.3%	86.7%	81.7%	80%
	Yes	16.7%	13.3%	18.3%	20%
<b>Receptacles used for collecting garbage – observations – 3 top answers</b>					
Directly dumped in sea		23%	30%	23.3%	-
Basket in yard		16.7%	13.3%	-	33.3%
Plastic sack in yard		30%	16.7%	28.3	23%

### E. Proper Wastewater Management

The final CBTS pillar is proper household wastewater management. A number of indicators were used to evaluate people's behaviors in this respect in Makassar. The findings of our observations on wastewater disposal are shown in the following graphs:

**Figure 5.29**

#### Disposal of kitchen wastewater – Observations

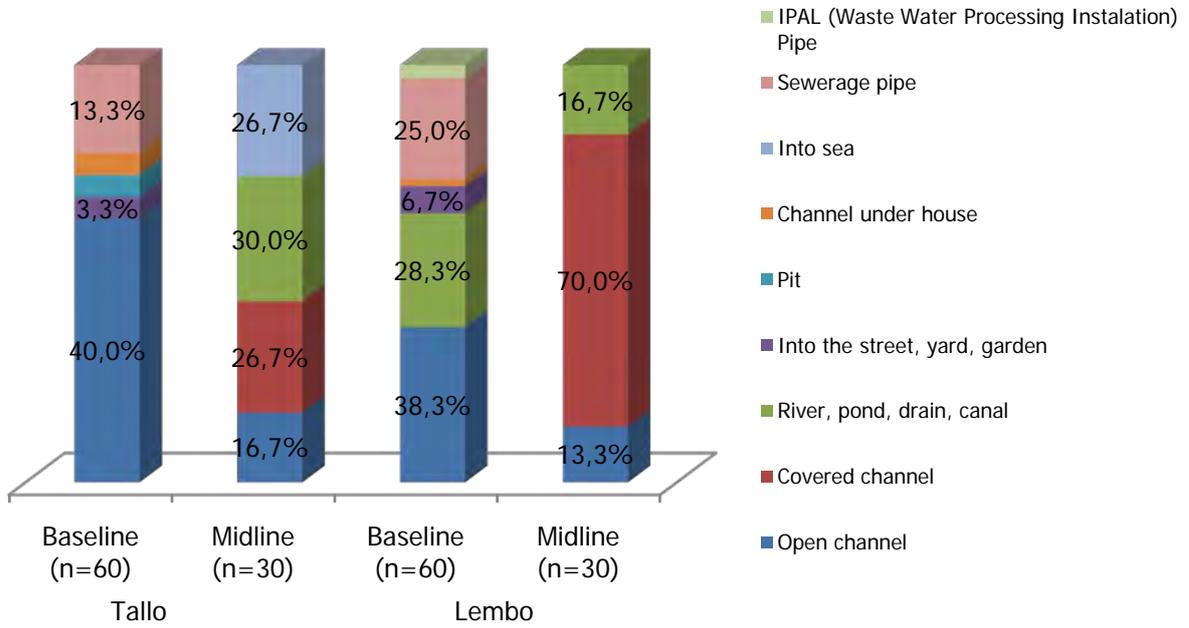


In Lembo, the findings of the midline survey observations revealed that wastewater disposal (kitchen, bathroom and laundry wastewater) methods were evenly distributed, with no response accounting for more than 50%. The wastewater produced by a total of 30% of respondents was recorded as flowing into covered channels and the sea, while in the case of 16.7%, the wastewater flowed into open channels. In Tallo, the wastewater produced by the majority of respondents flowed into covered channels, while in the case of 30% of respondents it flowed into rivers/ponds/drains/canals and open channels.

At the time of the midline survey, none of the respondents in the two sub-districts were connected to piped sewerage systems. By contrast, at the time of the baseline survey, a number of residents (13.3% in Tallo and 26.7% in Lembo) availed of piped sewerage systems to dispose of wastewater.

**Figure 5.30**

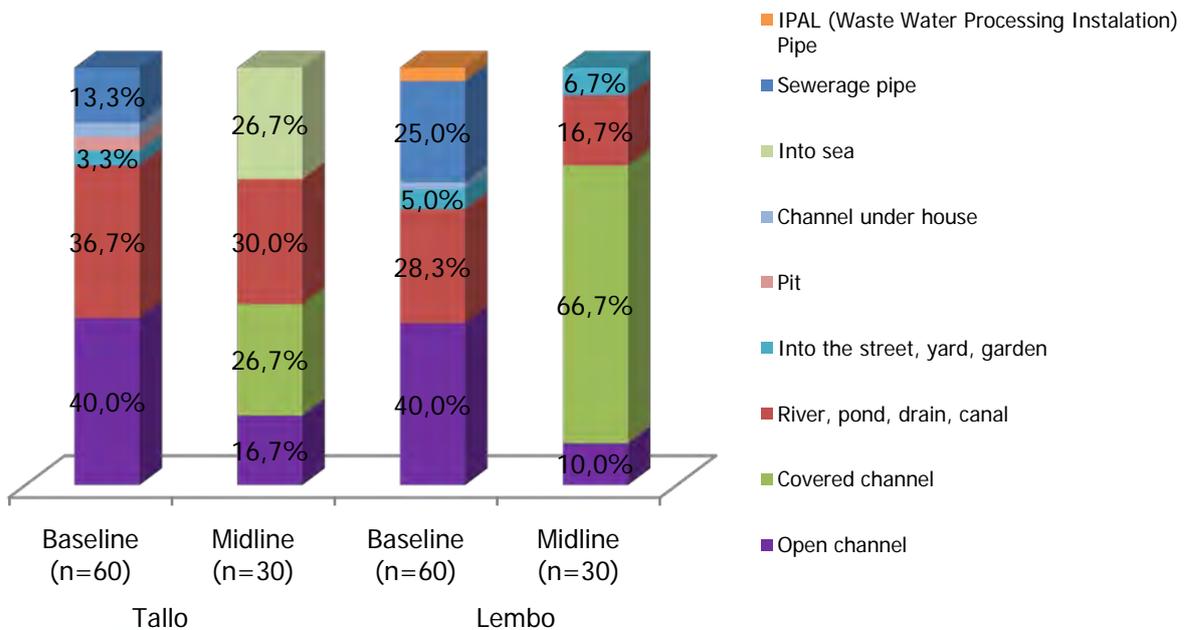
**Discharge of Wastewater from Bathroom/Toilet – Observations**



Respondent base: 60

**Figure 5.31**

**Discharge of Wastewater from Washing Clothes – Observations**



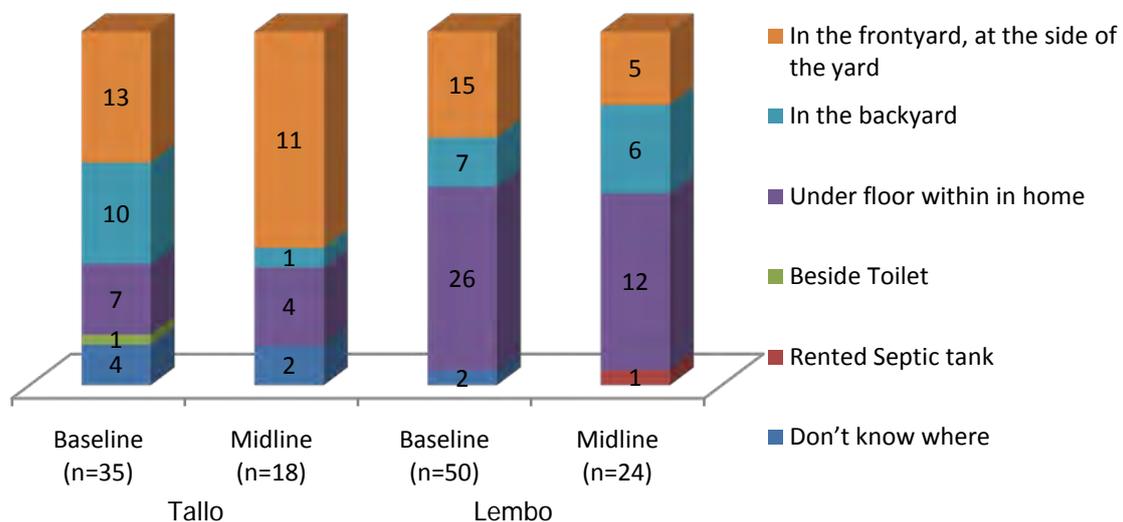
Respondent base: 60

There were differences in the locations of septic tanks in Tallo and Lembo. In Tallo, the septic tanks of more than half of respondents were not under the house, but were rather in the yard. A total of 11 houses in Tallo had their septic tanks in the front or side yards, while 1 had it in the back yard. Only 4 households had their septic tanks under the floor, while 2 did not know where their septic tanks were located.

In Tallo, lack of land meant that half of total respondents had their septic tanks under the floors of their houses, while the septic tanks of 11 houses were located outside the house, with 6 being in the back yard and 5 being in the front/side yard. In addition, there were households using rented septic tanks.

**Figure 5.32**

**Location of Septic tank – confined to those that have septic tank**

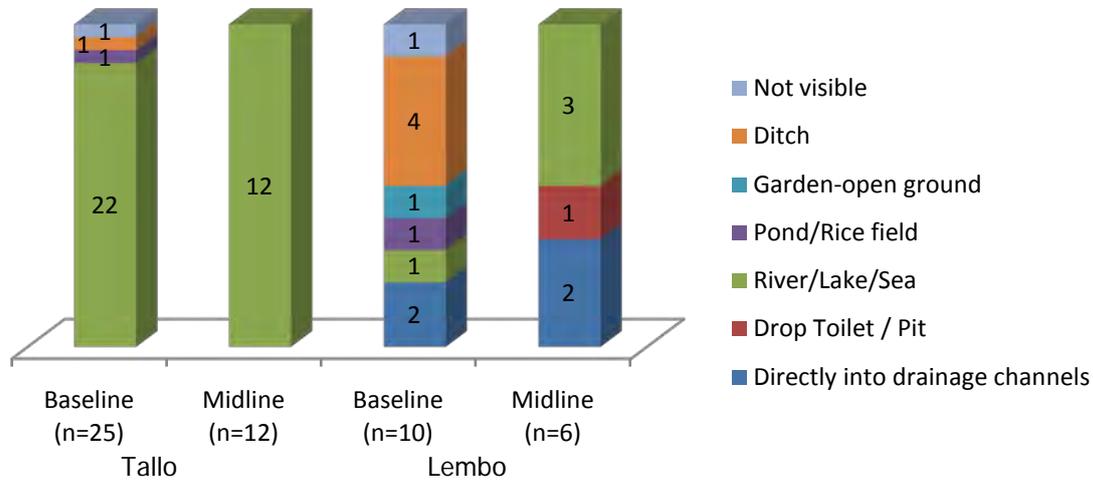


In the case of respondents that did not have septic tanks, field observations, the results of which are shown in Figure 5.32 (in absolute terms as the base number of respondents was less than 30) revealed that the toilet waste produced by 12 of these was discharged into a river/lake. This was similar to the findings of the baseline survey in Tallo, where it was found that more than half of respondents whose toilets were not connected to septic tanks discharged their toilet waste into a river/lake.

Of the 6 residents in Lembo who did not have a septic tank, toilet waste in the case of 3 discharged into a river/lake, into drainage channels in the case of 2, and into a toilet pit in the case of 1. In Lembo, the distribution of responses to the midline survey were rather different from at the time of the baseline survey, when the distribution of responses was more even and discharge into drain was the most common response (almost half of total respondents who did not have septic tanks). The figure below is in absolute terms as the base number of respondents was less than 30.

**Figure 5.33**

**Final place of disposal of feces (by those that lack septic tanks) – Observations**

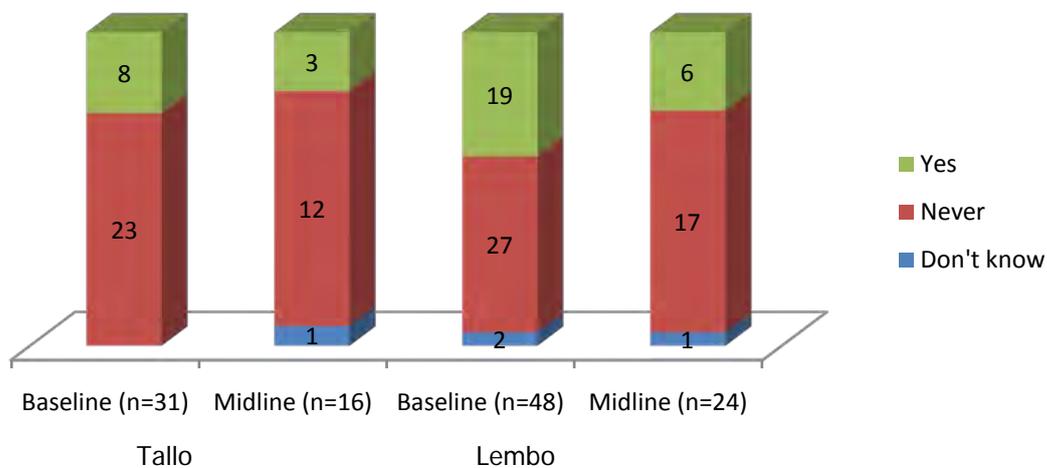


Of the homes in Makassar that were the targets of the survey, the majority (70%-75%) said that they had never emptied their septic tanks. For more details on this, see Figure 5.34 (in absolute terms as the base number of respondents was less than 30).

Of the 16 residents of Tallo who had septic tanks, the majority (12 respondents) had never emptied their septic tanks, 3 had emptied their septic tanks, and 1 did not know. Meanwhile in Lembo, of the 24 respondents with septic tanks, the majority (17) said they had never emptied them, 6 said they had emptied them, while 1 respondent did not know.

**Figure 5.34**

**Has your septic tank ever been emptied?**



For those who said that their septic tanks had been emptied at one time or another, Figure 5.35 below shows the last time their septic tanks were emptied. In Tallo, for the 3 respondents who said that their septic tanks had been emptied, there was an even

distribution of responses, with 1 respondent saying it had been emptied less than 2 years ago, 1 respondent saying it had been emptied between 2 and 5 years ago, and 1 saying it had been emptied more than 5 years ago.

In Lembo, the majority (4 respondents) said it had been more than five years ago, while 1 said it had been emptied less than 2 years ago, and 1 saying it had been emptied between two and five years ago. The figure below is in absolute terms as the base number of respondents was less than 30.

**Figure 5.35**

**When was the last time your septic tank was emptied?**

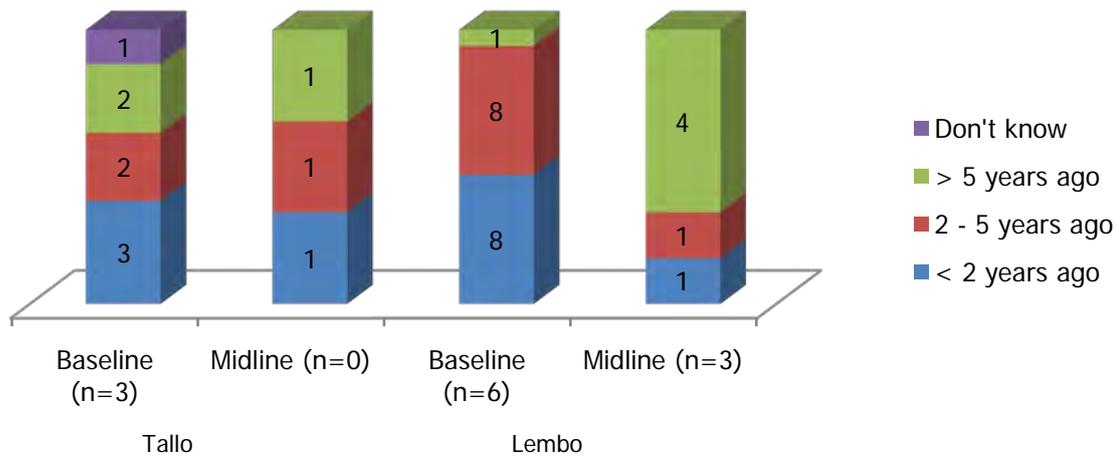
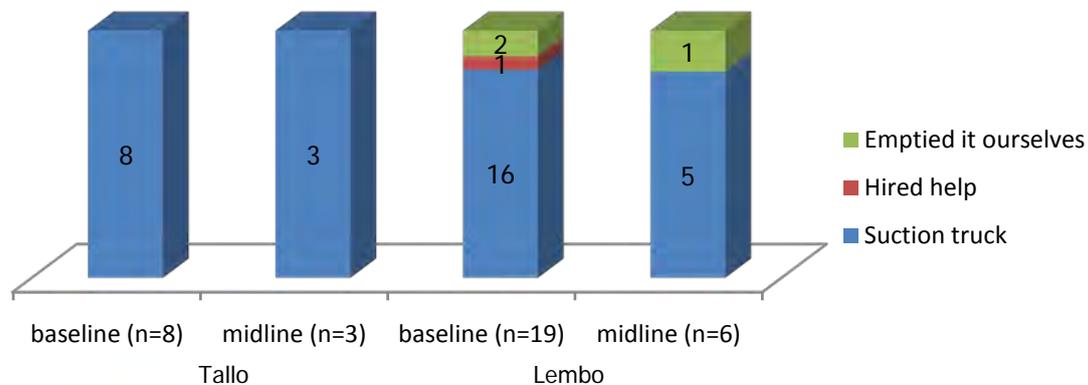


Figure 5.36 below shows that all of the respondents in Tallo opted to use suction truck services to empty their septic tanks, while in Lembo (of 6 respondents) not all used such services, with 1 respondents opting to empty his septic tank himself without using a suction truck. The figure below is in absolute terms as the base number of respondents was less than 30.

**Figure 5.36**

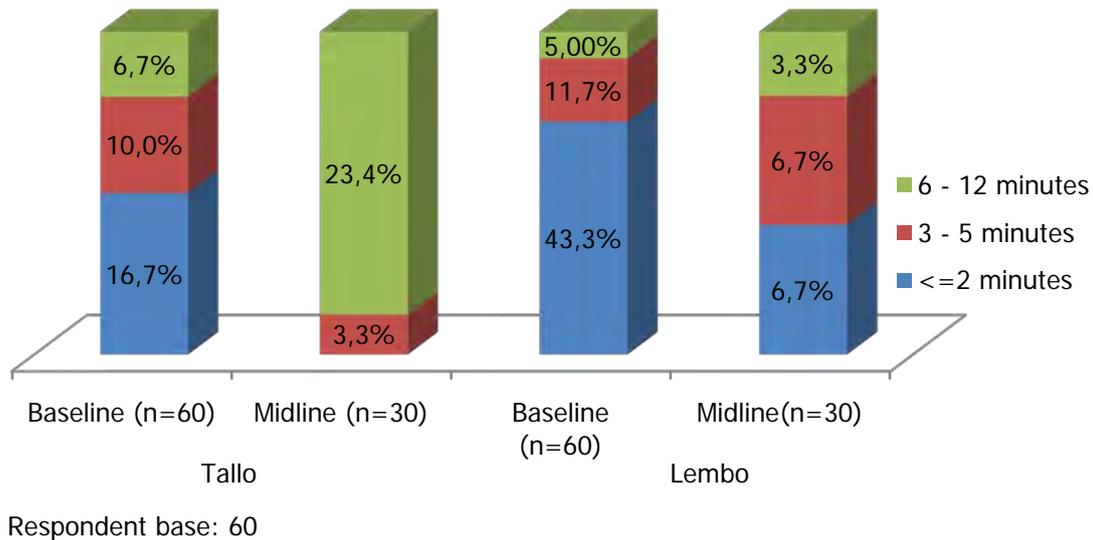
**Who emptied your septic tank the last time?**



The graph below shows the distance, based on observations, from a respondent's home to the toilet that the respondent normally uses.

**Figure 5.37**

**Distance from Home to Public Toilet**



As shown in the above graph, the majority of respondents in both Tallo (73.3%) and Lembo (83.3%) used a toilet in their own homes so that they did not need any time to reach the toilet. These percentages were significantly up from the time of the baseline survey in 2012, when the corresponding figures were 43.3% in Tallo and 40% in Lembo.

**Summary of Fifth CBTS Pillar: Wastewater management practices**

The following table sets out a summary of household wastewater management practices:

**Table 5.8**

**Indicators for Fifth Pillar: Wastewater Management Practices**

Indicator	Tallo		Lembo	
	Baseline	Midline	Baseline	Midline
<b>Place where kitchen wastewater is disposed of– 3 top answers</b>				
Respondent base	60	30	60	30
Open channel	40%	16.7%	40%	13.3%
River, pond, drain, canal	36.7%	30%	28.3%	16.7%
Sewerage pipe	13.3%	-	26.7%	-
Covered channel	-	26.7%	-	70%

Indicator	Tallo		Lembo		
	Baseline	Midline	Baseline	Midline	
Into Sea	-	26.7%	-	-	
<b>Place where bathroom wastewater is disposed of – 3 top answers</b>					
Respondent base	60	30	60	30	
Open channel	40%	16.7%	38.3%	13.3%	
River, pond, drain, canal	-	30%	28.3%	16.7%	
Sewerage pipe	13.3%	-	25%	-	
Covered channel	-	26.7%	-	70%	
Into Sea	-	26.7%	-	-	
<b>Place where wastewater from clothes-washing is disposed of – 3 top answers</b>					
Respondent base	60	30	60	30	
Open channel	40%	16.7%	40%	-	
River, pond, drain, canal	36.7%	30%	28.3%	16.7%	
Sewerage pipe	13.3%	-	25%	-	
Covered channel	-	26.7%	-	66.7%	
Into Sea	-	26.7%	-	-	
Has septic tank	No	25	12	10	6
	Yes	35	18	50	24
<b>Final Place of Disposal of Feces – Majority</b>					
Respondent base (the lack of septic tank)	25	12	10	6	
River/lake/sea	22	12	-	3	
Ditch	-	-	4	-	
Directly into drainage channel	-	-	2	2	
1 to 4 other responses	3	-	4	1	

The following table sets out a summary of the indicators for all five CBTS pillars in the sub-districts that were surveyed.

**Table 5.9**  
**Summary of Indicators for all Five CBTS pillar**

Indicator	Tallo		Lembo	
	Baseline	Midline	Baseline	Midline
<b>First Pillar: open defecation free</b>				
<b>Last place where caregiver defecated</b>	(n=60)	(n=30)	(n=60)	(n=30)
Flush toilet draining into septic tank	6.7%	50%	1.7%	66.7%
<b>Place of defecation for children aged 0 – 3</b>	(n=43)	(n=16)	(n=44)	(n=14)
Household toilet	8	6	8	8
<b>Place of disposal of under-3s' feces</b>	(n=43)	(n=17)	(n=44)	(n=22)
Directly disposed of in toilet	7	1	10	7
Not cleaned, thrown into trash can	7	7	13	5
<b>Place of disposal of feces of children aged 3 – 5</b>	(n=60)	(n=30)	(n=60)	(n=30)
Flush toilet draining into septic tank	5%	30%	3.3%	26.7%
<b>What was done after child defecated</b>	(n=60)	(n=30)	(n=60)	(n=30)
<b>Washed child's bottom with soap</b>	78.3%	83.3%	68.3%	93.3%
<b>Second Pillar: Hand washing with soap at least 2 out of 5 critical times</b>				
<b>Use of soap in last 48 hours – Multiple Answer</b>				
Bathing	98.3%	96.7%	95%	96.7%
Washing child's bottom	18.3%	73.3%	15%	66.7%
Washing hands after eating	21.7%	46.7%	18.3%	30%
Washing hands after defecating	11.7%	53.3%	8.3%	23.3%
Washing hands after washing child's bottom	3.3%	43.5%	6.7%	20%
Washing hands before eating	8.3%	36.7%	10%	43.3%

Indicator	Tallo		Lembo		
	Baseline	Midline	Baseline	Midline	
Other responses	11.8%	50%	41.7%	63.3%	
<b>With scoring</b>	<b>n= 22</b>	<b>n= 22</b>	<b>n= 23</b>	<b>n=16</b>	
score 1	12	8	13	7	
score 2	8	8	10	5	
score 3	2	5	0	3	
score 4	0	1	0	1	
<b>Observations</b>					
Is water available (if there is tap, is it running?)	Yes	38.3%	40%	46.7%	50%
	No	61.7%	60%	53.3%	50%
Is soap available?	Yes	83.3%	70%	68.3%	86.7%
	No	16.7%	30%	31.7%	13.3%
<b>Third Pillar: Household safe water treatment and storage</b>					
Treatment of water before consumption (water from mains/well)		<b>(n=28)</b>	<b>(n=20)</b>	<b>(n=36)</b>	<b>(n=25)</b>
Boil water		26	15	33	12
Directly drink		3	5	2	3
<b>Observations</b>		<b>(n=60)</b>	<b>(n=30)</b>	<b>(n=60)</b>	<b>(n=30)</b>
Receptacle with	Small aperture	88.3%	83.3%	75%	100%
	Wide aperture	11.7%	16.7%	25%	-
Hard material/not cloth	Yes	88.3%	93.3%	81.7%	100%
	No	11.7%	6.7%	18.3%	-
What about hands when taking water	Touches	-	3.3%	3.3%	-
	Doesn't touch	100%	96.7%	96.7%	100%
<b>Place where ready-to-consume food is kept</b>					
In closed cabinet		65%	80%	63.3%	90%
3- 7 Other Responses		35%	20%	36.7%	10%

Indicator	Tallo		Lembo	
	Baseline	Midline	Baseline	Midline
<b>Fourth Pillar: Practice solid waste management</b>				
<b>Place of disposal of garbage</b>				
Dumped outside the home at an official garbage disposal point	3.3%	33.3%	15%	50%
Dumped in sea	35%	43%	-	-
Dumped in garbage pit in yard	-	6.7%	18.3%	10%
Dumped outside the home, in river/stream	16.7%	3.3%	-	3.3%
Dumped outside the home in public place	15%	3.3%	38.3%	16.7%
Other responses	30%	10%	28%	20%
Garbage Separation	No	83.3%	86.7%	81.7%
	Yes	16.7%	13.3%	18.3%
<b>Receptacles used for collecting garbage – Observations – 3 top answers</b>				
Directly dumped in sea	23%	30%	23.3%	-
Basket in yard	16.7%	13.3%	-	33.3%
Plastic sack in yard	30%	16.7%	28.3	23%
<b>Fifth Pillar: Wastewater Management Practices</b>				
<b>Place where kitchen wastewater is disposed of– 3 top answers</b>				
Open channel	40%	16.7%	40%	13.3%
River, pond, drain, canal	36.7%	30%	28.3%	16.7%
Sewerage pipe	13.3%	-	26.7%	
Covered channel	-	26.7%	-	70%
Into Sea	-	26.7%	-	
<b>Place where bathroom wastewater is disposed of – 3 top answers</b>				
Open channel	40%	16.7%	38.3%	13.3%
River, pond, drain, canal	-	30%	28.3%	16.7%
Sewerage pipe	13.3%	-	25%	

Indicator	Tallo		Lembo		
	Baseline	Midline	Baseline	Midline	
Covered channel	-	26.7%		70%	
Into Sea	-	26.7%			
<b>Place where wastewater from clothes-washing is disposed of – 3 top answers</b>					
Open channel	40%	16.7%	40%	-	
River, pond, drain, canal	36.7%	30%	28.3%	16.7%	
Sewerage pipe	13.3%	-	25%	-	
Covered channel	-	26.7%	-	66.7%	
Into Sea	-	26.7%	-	-	
<b>Has septic tank</b>	No	25	12	10	6
	Yes	35	18	50	24
<b>Final Place of Disposal of Feces – Majority</b>					
River/lake/sea	22	12	-	3	
Ditch	-	-	4	-	
Directly into drainage channel	-	-	2	2	
1 to 4 other responses	3	-	4	1	

## F. Role of Community Members as Informants

Table 5.10a below shows the sources that provided information to the public on CBTS. Both in Tallo and Lembo, quite a lot of people played a role as sources of information, including RT heads and administrators, and Posyandu/sub-district and PKK workers (a number also mentioned TV as a source of information on the CBTS pillars). These were the figures that were deemed to play the most important role in providing information of CBTS to the public.

A CCP Facilitator (Asrul) also played a role in disseminating information on the 5 CBTS pillars since December 2012 (in Tallo).

As regards dissemination, socialization and outreach (including providing examples) were the most common methods mentioned by Respondents in Tallo. For parents (mothers), the providing of examples by women was the most common method used in connection with hygienic defecation practices. The first time the women provided examples of hygienic defecation practices was when the respondents were still children (around 20-24 years ago).

TV was also mentioned as a medium for the dissemination of information by a small group of respondents in connection with the first CBTS pillar. However, the respondents had forgotten when they had received such information from TV.

**Table 5.10a**

### Sources of information on the 5 CBTS Pillars in Tallo – Makassar - Multiple Answer - Spontaneous

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Resp. Base	Relationship	Method of information provision	
Defecation in proper place	Asrul	3	Facilitator	Socialization outreach	January 2013
	21 other names (including TV)	23	Varied (Parents/Mothers, RT, Teachers, etc)	Advice, Socialization/Outreach,	Varied, from 23 answers
Washing hands with soap	Asrul	4	Facilitator	Socialization outreach	January 2013
	20 other names (including TV)	23	Varied (Parents, RT, Teachers, etc)	Advice, recounted, practised/examples, socialization	Varied, from 23 answers
Treatment of household drinking water	Asrul	4	Facilitator	Socialization outreach	February 2013
	24 other names	24	Varied (Parents, RT, Teachers, etc)	Advice, recounted, practised/examples, socialization	Varied, from 24 answers
Garbage	Asrul	3	Facilitator	Socialization/outreach	January 2013

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Resp. Base	Relationship	Method of information provision	
Management	19 other names (including TV)	24	Varied (Parents, RT, Teachers, etc)	Advice, recounted, practised/examples, socialization	Varied, from 24 answers
Treatment of household wastewater	Asrul	4	Facilitator	Socialization/outreach	December 2012
	20 other names (including TV)	20	Varied (Parents, RT, Teachers, etc)	Advice, recounted, practised/examples, socialization	Varied, from 20 answers

**Table 5.10b**
**Sources of Information on 5 CBTS Pillars in in Lembo – Makassar – Multiple Answer - Spontaneous**

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Resp. Base	Relationship	Method of information provision	
Defecation in proper place	Medical students, Akper, Hj. Hasna, Diana, Dg. Mansur, Hj. Nani	14	Volunteers, Facilitators, RT	Practiced, Socialization/Outreach, Monitoring	February – March 2013 (students: 2010)
	11 other names (including TV)	12	Parents	Advice, Recounted, Practiced/Examples, Socialization, Advertisements	When respondents were young
Washing hands with soap	Serniwati	4	Volunteer	Socialization/outreach, monitoring, lectures in school	Varied from 4 respondents
	Students (Medical, Unhas, Akper) Diana, Dg Nginga, Hj Hasna, Farida Hana, Hj Nani, Dg Mansyur	16	Facilitator, Posyandu, Volunteers, RT	Socialization outreach, residents' meetings, practice	March 2012 - March 2013
	10 other names (including TV)	11	Volunteers, Parents/mothers	Socialization outreach, practice, advertisements	When respondents were young – March 2013
Treatment of household drinking	Serniwati	3	Volunteer	Socialization/outreach, lectures in school	March 2013
	15 other names (including TV)	15	Volunteers, parents/mothers	Practice/examples	Varied, since respondents were young

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Resp. Base	Relationship	Method of information provision	
water	Medical students, Unhas. Diana / Dg Nginga Hana, Hj Nani, Hj Hasna	12	Facilitator students, RT/RW, TV	Socialization/outreach	March 2012
Garbage Management	Medical students, Unhas, Diana/Dg Nginga, Hasnah	6	Facilitator, Volunteers, Parents/mothers	Socialization/outreach, examples	March 2012 - January 2013
	11 other names (including TV)	11	Volunteers, Parents/mothers	Socialization/outreach, monitoring, lectures in school	Varied, since respondents were young - March 2013
Treatment of household wastewater	Diana/Dg Nginga, Dg Mansyur, Hj. Nani, Mhs Kedokteran	9	Facilitator, Volunteers, RT/RW, Parents/Mothers	Socialization/outreach, monitoring, lectures in school, examples, residents' meetings, Posyandu	January 2013 - since respondents were young
	12 other names	12	Volunteers, Parents/mothers	Socialization/outreach, monitoring, lectures in school, examples	since respondents were young - March 2013.

It was found that there were more sources of initial information on each of the CBTS pillars in Lembo. Parents (mothers) were one source of initial information since the respondents had been young. Other names frequently mentioned were those of volunteers like Serniwati, Hj. Hasna, Dg Nginga/Diana, Hj. Nani dan Kasmawati. Dg Mansur (RT/RW) was also mentioned as a source of information. In addition, information was provided by medical students from Hasanuddin University and Akademi Keperawatan (Nursing Academy) in the 2 years prior to the midline survey (around 2012).

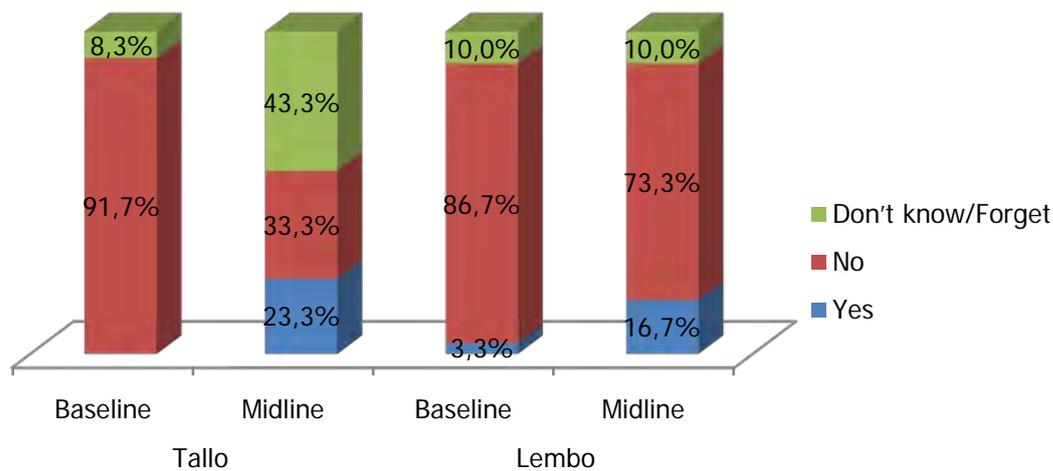
The information provided by parents (mothers) on sanitation and hygiene was remembered by the respondents many years later, which clearly shows that parents (mothers) have a strategic and significant influence on their children. The other information that was received, such as from volunteers, facilitators and sub-district officials, served as a reminder of what had already been taught and shown by parents (mothers) to their children, who were now adults and the main caregivers to their own under-5s.

## G. Healthy Life Practices

### Knowledge

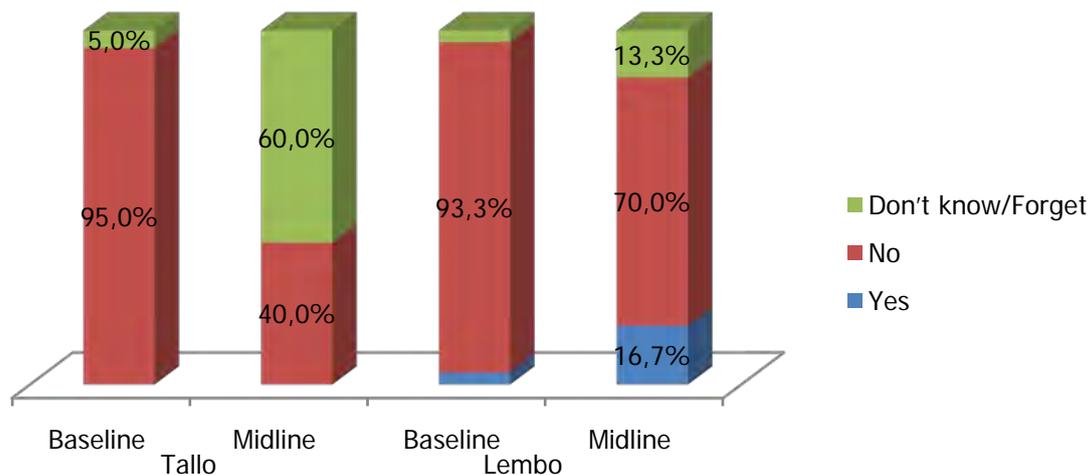
Figure 5.38 below shows an increase in awareness on the part of residents in both Tallo and Lembo between the baseline survey (in 2012) and the midline survey (in March 2013). In Tallo, 23.3% of caregivers to under-5s said they were aware of CBTS, while not one respondent had ever heard of CBTS at the time of the baseline survey. In Lembo, the percentage of those who said they had heard of CBTS increased by 13.4% to 16.7% at the time of the midline survey, compared with only 3.3% at the time of the baseline survey. Having regard to the relevancy of the High Five Program in the 2 students, this shows that the hard work of the High Five Program team and the Sub-District Working Groups has borne fruit as the people are now much more aware of CBTS and its related activities.

**Figure 5.38**  
**Have you Heard of CBTS?**



Respondent base: 60

Also in connection with awareness, Figure 5.39 below shows that the level of awareness of PHBS is relatively low (although 16.7% of respondents in Lembo said that they had heard of it). However, no respondent had heard of it in Tallo.

**Figure 5.39**
**Have you ever heard of PHBS (Perilaku Hidup Bersih Sehat – Clean and Healthy Living Behavior)**


Respondent base: 60

People's knowledge of sanitation can be specifically evaluated by assessing the level of agreement with a number of prepared questions, as discussed further below.

**Attitude**

The data set out in Table 5.11 below is based on closed-ended responses on a scale of four, where 1 expresses strong disagreement and 4 strong agreement with the following 10 health related statements that were presented to respondents:

**Table 5.11**
**Perceptions of Residents about Health**

Statement	Talio		Lembo	
	Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)
Every family should have its own toilet	3.2	3.1	3.2	3.1
Open defecation is not a problem for me	2.1	2.2	2.1	2.2
Hand washing with soap before eating is bothersome	2.1	2.2	2.1	2.2

Statement	Tallo		Lembo	
	Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)
We don't need a septic tank if we can dump feces directly into the river/drain	2.1	2.1	2.1	2.1
Wastewater from clothes washing can be discharged/dumped anywhere as it is quickly absorbed	2.3	2.4	2.3	2.4
Separating garbage is only a waste of time and does no good	<b>2.2</b>	<b>2.5</b>	<b>2.2</b>	<b>2.5</b>
My neighbors garbage is no concern of mine even though it goes everywhere	2.2	2.3	2.2	2.3
Preventing blockages in the drains is also my concern as a resident of this sub-district	3.0	2.9	3.0	2.9
As long as there are not too many, flies do no harm if they land on food	2.1	2.2	2.1	2.2
There no need to worry about cleaning drinking water receptacle as they are always full of water anyway	<b>2.1</b>	<b>2.3</b>	<b>2.1</b>	<b>2.3</b>

Scale of 1 to 4, where 1 = strongly disagree, and 4 = strongly agree

The findings in Tallo may be further explained as follows:

- ✓ The baseline survey in each sub-district in Makassar involved 60 respondents (as this district was not divided into intervention and non intervention areas, all of areas in each sub-district were designated as intervention areas) consisting of caregivers to under-5s. However, the midline survey covered 30 respondents in the same category, i.e., caregivers to under-5s.
- ✓ In Tallo, the responses to almost all of the prepared statements designed to assess the perceptions of caregivers to under-5s in connection with sanitation and hygiene issues revealed no significant differences ( $p > 0.05$ ) between their perceptions prior to the High Five Program (baseline survey, 2012) and current conditions, after the program had been underway for 1.5 years (midline survey, 2013). This means that there has been no improvement in perceptions of sanitation and hygiene issues among caregivers to under-5s in Tallo.
- ✓ Also in Tallo, there has been a regression in respondent perceptions in respect of two statements (No. 6 and No. 10) related to separating garbage being a waste of

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- time, and that a water drinking water receptacle does not need to be cleaned. This regression is statistically significant at  $p < 0.05$ .
- ✓ In Lembo, no significant difference ( $p > 0.05$ ) was found in respect of any of the statements. This shows that the perceptions of caregivers of under-5s are the same now as they were prior to the launching of the High Five Program (as assessed by the baseline survey in 2012). The difference in average values shown in Table 5.11 above is not significant statistically.

#### Residents, Community and Sanitation

The table below shows residents' responses (closed responses) to a series of 10 statements designed to gauge whether there is a sense of community among residents and administrators in their neighborhoods. The responses are ranked on a scale of 1 to 4, where 1 = fully sure, and 4 = not at all sure.

The general picture painted by the responses to the questions in the 2 sub-districts in Makassar is as follows:

- ✓ As regards the perceptions of residents as to whether there is a sense of community and collaboration between residents themselves and between residents and the sub-district authorities in Tallo and Lembo, Table 5.12 below shows that the perceptions of caregivers of under-5s in this regard are the same now (as assessed by the midline survey in 2013, 1.5 years after the launch of the High Five Program) as they were before the implementation of the High Five Program (as assessed by the baseline survey in 2012). This is best on statistical test outcome of  $p > 0.05$ .
- ✓ In Tallo, the question on the willingness of respondents to follow the advice of sub-district officials showed a significant increase ( $p < 0.05$ ) from 2.9 at the time of the baseline survey to 3.1 at the time of the midline survey. This indicates that the residents of Tallo are now more willing to heed the advice of sub-district officials (compared to at the time of the baseline survey in 2012).
- ✓ Also in Tallo, willingness to follow the advice of religious leaders on sanitation issues decreased significantly ( $p < 0.05$ ), from 2.9 at the time of the baseline survey in 2012 to 2.6 at the time of the midline survey in 2013.

**Table 5.12**  
**Residents Perception of Community**

Statement	Tallo		Lembo	
	Baseline (n=60)	Midline (n=30)	Baseline (n=60)	Midline (n=30)
The people here are aware of the importance of environmental hygiene and health	2.9	2.7	2.9	2.7
The people here have a strong sense of community, particularly as regards maintaining environmental hygiene and health	2.8	2.8	2.8	2.7
The people here are willing to work together to improve health conditions	2.9	2.9	2.9	2.9
The people here are willing to voluntarily pay contributions/charges to improve environmental hygiene and health	2.5	2.7	2.6	2.6
The people here are willing in all cases to follow the advice of sub-district officials	<b>2.9</b>	<b>3.1</b>	3.0	3.0
The people here are highly motivated in participating in environmental hygiene activities	2.9	2.9	3.0	3.1
The sub-district authorities are highly motivated in organizing environmental hygiene activities	3.0	2.9	3.0	3.1
The people here consider environmental hygiene and health to be the responsibility of the sub-district authorities	2.7	2.7	2.8	2.8
Community leaders support environmental hygiene and health activities	2.9	2.8	3.0	3.0
If religious leaders recommended environmental hygiene and health activities, residents would comply	<b>2.9</b>	<b>2.6</b>	2.9	3.0

Scale of 1 to 4, where 1 = fully sure, and 4 = not at all sure.

## Practices

In the practices section, residents were asked about 7 things related to health. In general, their responses revealed that:

- ✓ Tallo and Lembo has the same trouble (more than 50%) of environment that still finds the citizen defecate in places other than toilet, channel the sludge to the sewer lines, scattered garbage and clogged gutter.
- ✓ There is 43.3% of the people in Tallo and 46.7% in Lembo admitted also having problems with the availability of fresh water in the region.

**Table 5.13**

### Behaviors that can cause health and hygiene problems

Prevalency	Tallo						Lembo					
	Baseline			Midline			Baseline			Midline		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Defecation in place other than toilet	86.7%	11.7%	1.7%	66.7%	30.0%	3.3%	55.0%	40.0%	5.0%	73.3%	26.7%	-
Feces discharge into drains/ water channels	55.0%	40.0%	5.0%	63.3%	33.3%	3.3%	48.3%	45.0%	6.7%	56.7%	43.3%	-
Unsanitary environment due to undisciplined garbage disposal	33.3%	66.7%	-	100.0%	-	-	76.7%	23.3%	-	86.7%	13.3%	-
Blocked drains or water channels	58.3%	40.0%	1.7%	76.7%	23.3%	-	58.3%	40.0%	1.7%	70.0%	30.0%	-
Well water not fit for drinking even after treatment	28.3%	71.7%	-	56.7%	43.3%	-	16.7%	75.0%	8.3%	53.3%	46.7%	-

Prevalency	Tallo						Lembo					
	Baseline			Midline			Baseline			Midline		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Dengue fever	28.3%	66.7%	5.0%	13.3%	86.7%	-	26.7%	70.0%	3.3%	36.7%	63.3%	-
Difficulties with clean water	43.3%	56.7%	-	66.7%	33.3%	-	38.3	61.7%		70.0%	23.3%	6.7%

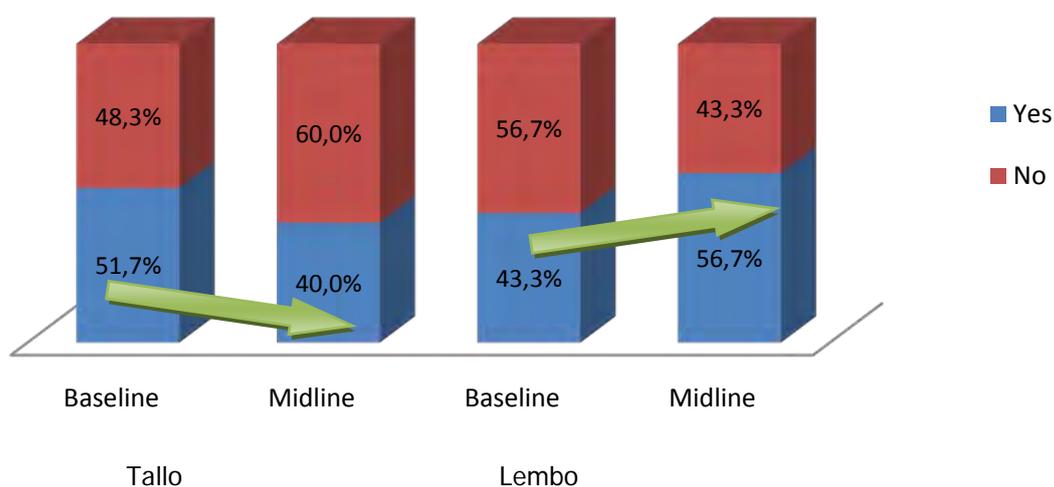
### Diarrhea

More than 50% (51.7%) of the caregivers to under-5s who were the respondents in the baseline survey in Tallo (2012) said that their children had suffered from diarrhea at one time or another. At the time of the midline survey in March 2013, the percentage had declined to 40%.

In Lembo, 43.3% of caregivers to under-5s at the time of the baseline survey in 2012 said that their children had suffered diarrhea at one time or another. By the time of the midline survey in 2013, this figure had increased to 56.7%.

**Figure 5.40**

### Has Your Under-5 Ever Suffered from Diarrhea?

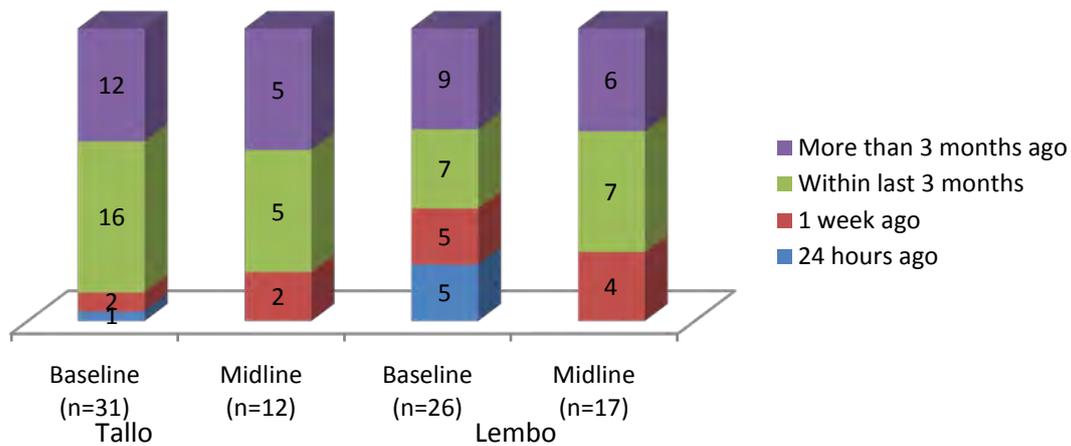


Respondent base: 60

The last time the under-5s were reported as suffering from diarrhea is as shown in the following graph. The figure below is in absolute terms as the base number of respondents was less than 30.

**Figure 5.41**

**Last Time your Under-5 Suffered from Diarrhea**



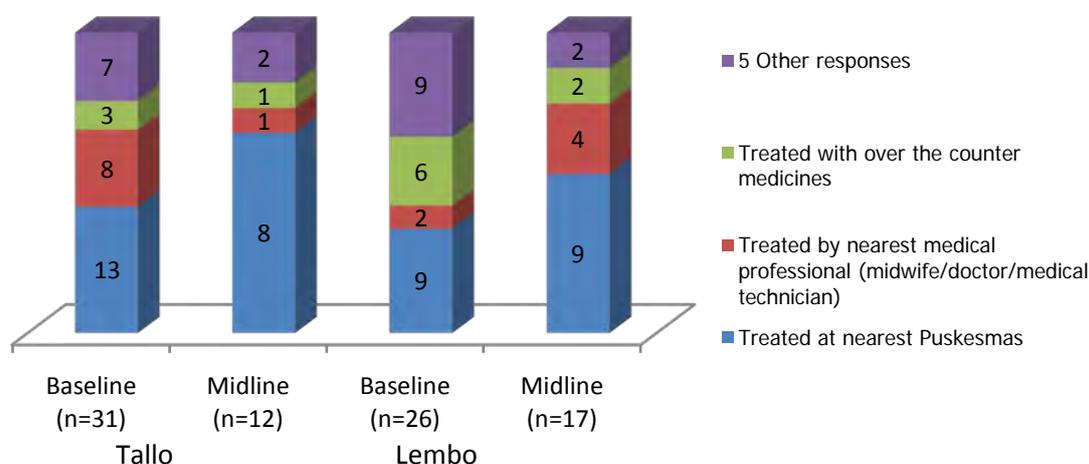
- ✓ In Tallo, at the time of the baseline survey in 2012, most of the under-5s had suffered diarrhea within the last 3 months, whereas at the time of the midline survey in March 2013, most of the children had suffered diarrhea within the last 3 months and more than 3 months ago, i.e., at the end of 2012 and start of 2013.
- ✓ In Lembo, at the time of the baseline survey most of the diarrhea cases had occurred 3 months ago, i.e., at the end of 2012. At the time of the midline survey, most of the cases of diarrhea had occurred within the last 3 months, i.e., at the start of 2013.

As regards what caregivers did when their under-5s suffered from diarrhea:

- ✓ The first choice for caregivers in Tallo and Lembo was to bring the under-5s to the nearest Puskesmas. The situation in this respect was the same both at the time of the baseline survey and the midline survey.
- ✓ Besides bringing the children to the nearest Puskesmas, caregivers also brought their children to the nearest medical professional (midwife/doctor/medical technician) or purchased over the counter medicine at the nearest warung.

The situation as regards the treatment of diarrhea in under-5s is as shown in the following chart (in absolute terms as the base number of respondents was less than 30):

**Figure 5.42**  
**Treatment of Diarrhea**

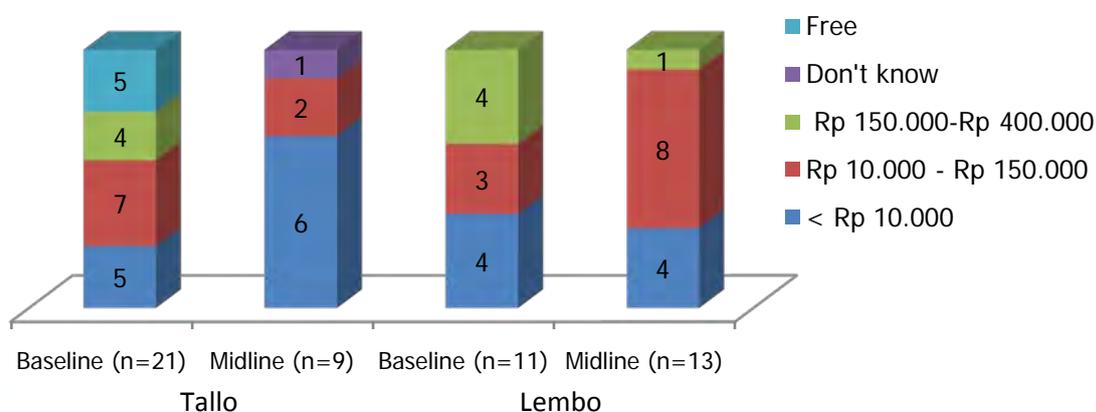


As regards the total cost (transportation, medical care and medicines) of treating under-5s suffering from diarrhea:

- ✓ In Tallo, to bulk of the caregivers said that they expended between Rp 10,000 and Rp 150,000 (at the time of the baseline survey, 2012). At the time of the midline survey in 2013, the cost of treatment had fallen to less than Rp 10,000.

The caregivers in Lembo said that they spent between Rp 150,000 and Rp 400,000 on treating their children for diarrhea, while another group said that they expended less than Rp 10,000 (at the time of the baseline survey, 2012). At the time of the midline survey in 2013, the bulk of the caregivers expended between Rp 10,000 and Rp 150,000.

**Figure 5.43**  
**Overall Cost of Treatment (transportation, consultation, medicine)**



The figure above is in absolute terms as the base number of respondents was less than 30.

## Part V

### Children Baseline – Elementary School

#### A. Perceptions of children regarding conditions that impact on healthy and clean life practices

During this process, the respondents were provided with stimuli in the form of pictures, where each CBTS pillar and non-CBTS pillar aspect was represented by two pictures. The stimuli also included pictures showing 'healthy children laughing', 'children bathing together in a well', and so forth. Each of these was represented by 2 pictures. A number of pictures showing the opposite were also presented (dirty/contrary to the CBTS pillars). Once again, each situation was represented by 2 pictures.

Of the pictures that were shown, two pictures showing 'washing hands with running water (tap)' and 'soap' were the 2 top choices, with 73% and 63% of the children selecting these as showing examples of clean and healthy lifestyles. The children at all age levels and genders chose these activities. The following choices were selected by at least 20% of respondents:

Figure 6.1

#### 8 top responses for conditions that are deemed clean and healthy – Multiple Answer



As in Surabaya and Medan, in Makassar the 'washing hands' picture also was more often selected by respondents between 10 and 12 years of age, compared with the other pictures. This may be influenced by a number of factors, such as: (1) recent campaign for washing hands with soap in the targeted schools so that the awareness of children about the importance of washing hands with soap was high. It was found that 90% of

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the children (out of 26.7% of the children) who said they had heard of the term CBTS associated it with washing hands with soap; (2) washing hands was a practice that was taught as standard by the adults around them (parents and teachers) so as to maintain healthy and hygiene.

As with the 2 pictures showing 'washing hands with soap' that were most frequently selected as the two top answers, the next choices were pictures showing 'covering food' and 'a dispenser against a background of a clean kitchen'. These were selected by 50% and 46.7% of the children, respectively.

After the two top choices ('washing hands' and 'covering food'), the picture of 'a sit-down toilet' was the next choice (40%), followed by 'food protected with a red cover' (30%). The next choice was 'a clean squat toilet' (20%).

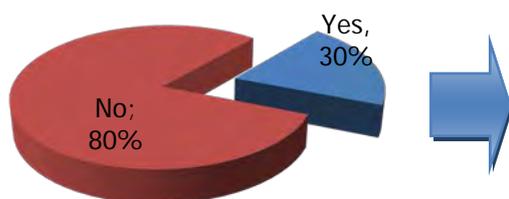
All of the choices of the children tended to correlate with the five CBTS pillars. Nevertheless, when the children were questioned about their awareness of CBTS, more than half of the respondents (80%) said that they had never heard of the term.

## B. Children's Understanding of CBTS

When the elementary school respondents were asked, 80% said they had never heard of CBTS, while only 20% said they had heard of the term.

**Figure 6.1**

**Children's Understanding of CBTS**



**Table 6.1**

**Understanding of CBTS by Grade**

Do You Know About CBTS	Grade 4	Grade 5	Grade 6	Total
Yes	0	3	3	6
No	10	7	7	24
<b>Total</b>	10	10	10	30

Comparing the information on respondent grades and their knowledge of the term CBTS, 3 children each from grades 5 and 6 said they were familiar with the term, but not one respondent from grade 4 was familiar with it.

Further, when the respondents who said they were familiar with CBTS were asked what they know about the concept, of the 6 who were familiar with it only 2 were able to state that the abbreviation stood for "Community Based Total Sanitation," while 4 others responded by naming CBTS pillars, namely, proper disposal of garbage, washing hands with soap. One respondent also misunderstood what CBTS stood for ("Community Based Evident Sanitation"). When probed further about their knowledge of CBTS, the following information was obtained:

**Table 6.2**  
**What More Do You Know About CBTS?**

Knowledge of CBTS – Multiple Answer	Number of Respondents *
Washing hands with soap	6
Safe Treatment and Storage of Drinking Water	1
Respondent Base: 6	

Note: \* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

Washing hands with soap was the practice most frequently identified with CBTS (other than the term CBTS itself). There were also those who could state 2 CBTS pillars (like CTPS itself and safe treatment and storage of water).

A number of pictures were shown to the respondents and they were asked to select those that reflected CBTS. The following are their choices:

**Figure 6.2**

**Pictures Showing CBTS – Multiple Answer**

Choice 1: 6 respondents

Choice 2: 1 respondent



Respondent Base: 6

The only CBTS pillar that was popular/remembered by respondents who were aware was CTPS, while one respondent selected another pillar – safe treatment and storage of drinking water. The two pictures selected to represent these were (1) washing hands with soap (selected by 6 respondents); (2) picture of dispenser against background of clean kitchen (selected by 1 respondent).

As regards where the 9 children who knew about CBTS had received their information, the following responses were obtained:

**Table 6.3**
**Information on CBTS Obtained From:**

Person Providing Information on CBTS – Single Answer	Person's name	Number of Respondents *
Health outreach from High Five Program	Don't know/forget	3
Older brother	Chairil Anwar	1
Students	Don't know/forget	1
Outreach from Puskesmas	Don't know/forget	1
Respondent Base : 6		

Note: \* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

One respondent said that he had been provided with information on CBTS by his elder brother Chairil Anwar around 1 month ago (February 2013). Similarly 1 respondent had received information in the form of outreach from the Puskesmas, while 3 respondents had received information in the form of outreach from High Five Program (in each case about 1 month ago – February 2013). However, those who had received information in the form of outreach from the Puskesmas and High Five Program could not remember the names of the people who had conveyed the information. The same applied in the case of one respondent who had been provided with information on CBTS directly by a student – the child could not remember the name of the person conveying the information or the time when it had been conveyed.

The following are the responses of the elementary school respondents related to their perceptions of the various practices involved in the CBTS pillars.

### Pillar 1: Open Defecation

While in general the child respondents in Makassar were familiar with various practices related to defecation, such as the importance of defecation in the right place, the causes of diarrhea and the dangers of diarrhea to children, it should also be noted that only 23.3% – 40% of the children were aware of the dangers that arise from infectious diseases transmitted through feces (including infant feces), such as diarrhea. The responses of the children on their perceptions related to human feces/excrement are as shown below:

**Table 6.4**  
**Perceptions of Children Related to Defecation**

Description	Correct	Incorrect
Defecation in a toilet that has a proper waste disposal system	73,3%	26,7%
Infant feces can be injurious to health	76.7%	23.3%
No need to wash hands with soap after defecation	10,0%	90,0%
Human feces contain germs that can cause diarrhea	60,0%	40,0%
Respondent Base: 30		

As regards various activities that are not appropriate in connection with defecation in the home or school environment, their responses are presented in the table below.

The responses of the elementary school children show that many unhealthy and unhygienic practices continue to be prevalent in their school and home environments. A total of 66.7% said that open defecation continues to occur around their homes, while 23.3% said it was still prevalent in the school environment. Similarly, 86.7% said that feces continued to be disposed of in water channels/drains around their homes, while 6.7% said the same applied in the school environment.

**Table 6.5**  
**Children's Explanations on Inappropriate Defecation Behavior in their Home and School Environments**

Do any of the following things happen:	At Home (%)		At School (%)		
	Yes	No	Yes	No	Don't know
Defecation outside of toilet.	66,7	30,0	23,3	76,7	66,7
Disposal of feces into drain/water channel	86,7	13,3	6,7	93,3	86,7
Respondent base: 30					

The quite significant differences in people's sanitation behavior in the school and home environments may be due to: (a) the time spent by respondents in the school environment is much less than in the home environment – thus, the description of behaviors around the home is more accurate than in the school environment; or (b) residents' behavior is much more hygienic around the schools.

#### Last place of defecation

A total of 86.75% of respondents said that their last place of defecation was in the toilet at home or at school. However, 13.3% said that it was a pond near their home/school, in an open space or in the sea. After defecation, 53.3% said that they directly washed themselves (without mentioning soap and water), 13.3% said they did so with soap and water, 23.3% said they did so with just water, while another 3.3% said they did nothing.

#### Defecation in school

A total of 90% of the students had urinated at one time or another in school (all in the toilet), but only 50% said they had defecated at one time or another at school, and all did so in the student's toilet.

A total of 33.3% of students said that urinating/defecating at school was different from at home for the following reasons:

**Table 6.6**

#### **Thing that make urinating/defecating at school different from at home**

No.	Difference	Number of Respondents
1.	No Soap	4
2.	Not enough water	4
3.	If I'm at home, I defecate in the sea	3
4.	Dirty/smelly	2
5.	Afraid because toilet is dark	1
Respondent Base: 10		

Note: \* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

From the statements made by the respondents in connection with the differences in defecation at home and defecation at school, besides a lack of convenience at school (no soap, not enough water, dirty/smell, dark), another factor was the practice of defecating in the sea on the part of a number of respondents.

## Pillar 2: Washing hands with soap

The knowledge of the children regarding the benefits of washing hands with soap was better than their knowledge of the first CBTS pillar. However, 33.3% of the respondents still needed to be informed that washing hands without soap was not enough to kill dangerous germs. In addition, 10% thought that there was no need to wash hands with soap after defecating, unless the hands were sticky.

**Table 6.7**

### Perceptions of Children Regarding CTPS-related Activities

Description	Right	Wrong
Washing hands with water alone is enough to clean off disease-spreading germs	33,3%	66,7%
We don't need to washing hands with soap after defecation unless our hands are sticky	10,0%	90,0%
Respondent base: 30		

As regards availability of water, 83.3% said that they had experienced difficulties with water for bathing and washing in their home environments. However, only 10.0% said that this was the case in their school environments.

**Table 6.8**

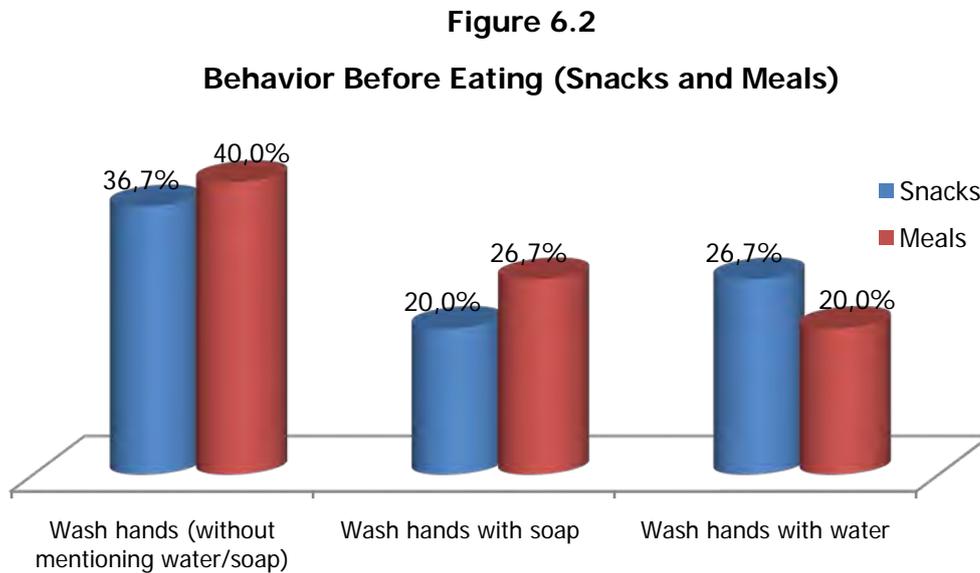
### Children's Description on Water Availability At Home and At School

Have you ever experienced any of the following?	At home (%)		At school (%)	
	Yes	No	Yes	No
Foul smelling or tasting drinking water	53,3	40	6,7	83,3
Difficulties with availability of water for bathing or washing	83,3	13,3	10,0	83,3
Respondent Base: 30				

Also as regards the availability of clean water, 53% of the respondents said that they had had experience of foul smelling or tasting drinking water in their home environment, while only 6.7% had experience of this at school.

Washing Hands in the Home

A total of 83.3% of respondents ate lunch at home, while only 16.7% did so at school. All of the respondents ate dinner at home. The following are their responses on their behavior before eating (both snacks and meals):



Respondent base: 30

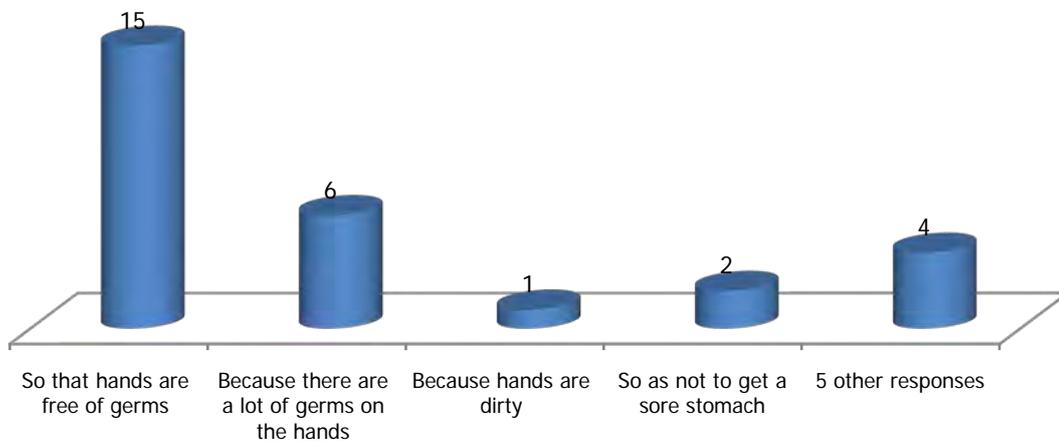
There was a greater tendency among respondents to wash hands with soap before a main meal compared to when they would eat snacks. The biggest proportion of respondents (40%) just said that they washed their hands (without mentioning water/soap) before a main meal, while 36.7% washed their hands with soap before eating a snack. The above table shows differences in hand washing practices before eating. When the respondents eat a main meal, they make sure to wash their hands with soap (26.7%), compared to only 20% before eating a snack. Meanwhile, 26.7% of respondents said that they wash their hands with water before eating a main meal, while 20% did so before consuming a snack. The following table sets out an overview of hand washing practices before consuming main meals and before consuming snacks.

**Table 6.9**  
**Hand Washing Practices Before Eating (Main Meals and Snacks)**

Group	MAKASSAR
Children who always wash their hands with water but without soap (before eating snack or main meal)	53.3%
Children who always wash their hands with soap (before eating snack or main meal)	26.7%
Children who have better hand-washing practices before eating main meals compared with snacks	6.7%
Children who never wash their hands before eating	13.3%
Respondent Base: 30	

The reasons given by respondents for washing their hands before eating were as follows:

**Figure 6.3**  
**Reasons for Washing Hands Prior to Eating – Multiple Answer**



Respondent base: 26

Using open-ended questions, it was found that the main reason for washing hands before eating was to rid the hands of germs (15 respondents). The remaining responses varied, but were also concerned with germs, while there were also 5 other responses: so as not to get a stomach ache, not to get diarrhea, not to get sick and not to have sticky hands.

The primary source of information on the importance of washing hands before eating so as to avoid germs was teachers in school (50%), parents (34.4%), health outreach campaigns in school (11.5%) and doctors (3.8%).

The other situations when they practiced hand-washing with soap were (1) after defecating (25%), (2) after playing (62.5%) and (3) after eating (25%)

### Hand-washing practices at school

All of the respondents (100%) said that they had facilities at school for washing hands, while 50% said that they always washed their hands before eating, and 23.3% said that they sometimes did so. Meanwhile, 26.7% said that they never washed their hands before eating.

As regards the practice of hand washing with soap, only 16.7% of respondents did it correctly (rubbing the palm and between the fingers with water and soap), while 3.3% rubbed between the fingers (without rubbing the palm) with water and soap, 53.3% rubbed the palm and between the fingers with water alone, while 20% just wet their hands with water alone.

### **Pillar 3: Clean and healthy treatment of drinking water**

A total of 60% of the elementary school respondents were aware of the importance of treating water before consumption, as well as treating food before consumption. Nevertheless, they still need more information on the risk of diarrhea from untreated water, and the dangers of consuming untreated vegetables (40% of the children thought that consuming raw vegetables was healthy and that there was no need to worry about contracting germs from the such raw vegetables). The responses as regards their knowledge of diarrhea and bacteria from untreated vegetables, and the spread of germs by flies, are as shown in the following table:

**Table 6.10**
**Perceptions of Children About Activities Related to Defecation**

Description	Right	Wrong
Eating untreated vegetables is healthy, and you don't need to worry about germs	60,0%	40,0%
Drinking untreated water can cause diarrhea	73,3%	26,7%
The legs of flies carry thousands of germs that can be spread from place to place	66,7%	33,3%
Respondent Base: 30		

Although the elementary school respondents had quite good knowledge about the need to treat water before consumption (73.3%), 27.7% did not understand why this was important. In addition, 70.0% referred to the drinking of untreated water at home. However, none of them referred to the drinking of untreated water at school. This could be because the respondents spend much more time at home, or because those in the school environment are aware of the health risks of consuming untreated water, such a diarrhea.

**Table 6.11**
**Children's Descriptions of Drinking Water Treatment At Home and At School**

Have any of the following things happened?	At Home (%)			At School (%)		
	Yes	No	Don't know	Yes	No	Don't know
People drank untreated water	70,0	23,3	6,7	-	83,3	16,7
Respondent Base: 30						

As regards sources of water at school, 96.7% of respondents said that they purchased it at school, while only 3.3% brought it from home. Of the 96.7% who purchased it at school (29 students), 22 purchased branded packaged water (both in cup and bottle form), while others purchased ices (branded, such as Marimas and Pop Ice, as well as unbranded). Thirteen respondents purchased drinks in the school canteen, while 16 did so in stalls outside the school.

#### Pillar 4: Garbage Management

Based on observations conducted in the schools, uncovered garbage bins were the most common places (66.7%) where students disposed of the packaging from their snacks (whether consumed during playtime or in the classroom). The remaining approximately 3.3% disposed of the garbage in the drain/ditch/stream/river.

#### Pillar 5: Solid and Liquid Waste Treatment

As regards the wastewater disposal channels in the places where the respondents lived, 4 pictures were used, consisting of 2 pictures showing clean drains and 2 pictures showing dirty drains. These elicited the following responses from the elementary school children:

**Table 6.12**

**Condition of Wastewater Disposal Channels in Place Where You Live**

Picture Number	Picture	Water Channel Category	Percentage
11		Clean	20%
12		Clean	30%
13		Dirty	50%
14		Dirty	-
Respondent base: 30			

### C. Perceptions of Children of Environmental Cleanliness at School and at Home

The elementary school respondents in Makassar were made up equally of children whose schools were located in Tallo and those whose schools were located in Lembo. Of these, 59% said that their school environment was quite clean, 36.7% said that their school environment was very clean. Out of 15 respondents from SDN (Sekolah Dasar Negeri – State Elementary School) Tallo, only 1 said that the school environment was not clean/dirty. Similarly, out of 15 respondents from SDN Lembo, only 1 said that the school environment was very dirty

The following table shows the children's responses:

**Table 6.13**

**Perceptions about Environmental Cleanliness**

Perceptions of Environment	School	Home
Quite Clean	50.0%	56.7%
Very Clean	36.7%	16.7%
Not clean (dirty)	10.0%	16.7%
Very dirty	3.3%	10.0%
Respondent base	30	

Although 96.7% of respondents perceived their school environment to be clean (quite clean and very clean), and only 26.7% felt their home environments to be dirty, nevertheless all (100%) said that environmental cleanliness at school and at home needed to be improved (70% and 30% said, respectively, that it needed to be greatly improved).

A number of behaviors found in the children's environment (school and home) were acknowledged by almost all respondents (more than 96.7%) as being inappropriate, such as adults discarding garbage in the open, which could lead to blocked drains (90% in the home environment, and much cleaner in the school environment – only 30% had seen blocked drains around their schools), and the continued occurrence of floods during the wet season – 83.3% said that there were floods every wet season in their home environment, while 40% said that this was the case in their school environment. A total of 80% of respondents said that diarrhea was still found in their home environments, while only 23.3% said that this was the case in their school environments.

As regards Dengue fever, 70% of respondents said that this was prevalent in their home environments, while only 10% said that this was the case in their school environments.

**Table 6.14**
**Children's Descriptions of Inappropriate Actions Related to Cleanliness in the Home and School Environments**

Have any of the following things happened:	At home (%)		At School (%)	
	Yes	No	Yes	No
Adults incorrectly disposing of garbage	96.7	3.3	40	60
Blocked water channels or drains	90	10	30	66.7
Dengue Fever	70	30	10	76.7
Flooding every wet season	83.3	13.3	76.7	23.3
Frequent outbreaks of diarrhea	80.0	13.3	23.3	70
Respondent Base: 30				

Sickness Episodes in the Last Month

A total of 60.0% of children had been absent from school on account of sickness in the last month (February 2013). The illnesses experienced were as follows:

**Table 6.15**
**Illnesses Experienced in Last 12 Months – Multiple Answer**

No.	Illness Experienced	Number
1	Fever	14 persons
2	Headache	7 persons
3	Diarrhea	2 persons
4	Cough	1 person
5	Cut on leg	1 person
6	Toothache	1 person
7	Sprain	1 person
Respondent base: 20		

Note: Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

As regards diarrhea in the last 2 weeks (end February 2013), 26.7% of children had experienced it, while 73.3% had not experienced diarrhea in the last 2 weeks. According to the children, the causes of diarrhea were as follows:

**Table 6.16**  
**Causes of Diarrhea in Last 2 Weeks – Multiple Answer**

No.	Cause	Number
1	Because of not being careful where I eat/snack	3 persons
2	Because of not washing hands before eating/because of germs on hands	2 persons
3	3 other reasons (eating spicy food, consuming ice, because of being rained on)	7 persons
Responden Base: 11		

Note: \* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

The causes of the diarrhea episodes experienced over the last two weeks, according to the responses of the respondents, were quite varied and revealed that many of the respondents were unaware of what the true causes of diarrhea are (responses: eating spicy food, consuming ice, being rained upon – these responses were given by 7 respondents). Other causes that are closer to the causes of diarrhea were (1) Because of not being careful where I eat/snack – cited by 3 respondents; and (2) Because of not washing hands before eating/because of germs on hands – cited by 2 respondents.

## Attachment Observations on Schools

### Target Schools and General Conditions

TARGET SCHOOL	NUMBER OF STUDENTS	NUMBER OF TEACHERS	NUMBER OF TOILETS	SCHOOL FLOOR	SCHOOL ROOF	SCHOOL WALLS
SDN 69 TALLO	542	15	3	Ceramic Tiles	Corrugated iron	Ceramic Tiles
SD TALLO TUA 2	301	10	2	Terrazzo Tiles	Corrugated	Tiles
SD TALLO TUA 1	566	19	3	Ceramic Tiles	Corrugated	Cement
SD KIP BARAYA	239	10	2	Ceramic Tiles	Corrugated	Ceramic tiles
SD MALIMONGAN BARU	183	9	2	Ceramic Tiles	Corrugated	Cement
SD INPRES BARAYA 2	220	14	3	Terrazzo Tiles	Corrugated	Cement

SDN: Sekolah Dasar Negeri - state elementary school

### Target Schools and CBTS Pillar 1 – 1

TARGET SCHOOL	TYPE OF TOILET	PLACE OF FECES DISPOSAL	CONDITION OF SCHOOL BATHROOMS	DISTANCE FROM WELL TO SEPTIC TANK/DROP TOILET	DISTANCE FROM WELL TO NEIGHBORING SEPTIC TANKS
SDN 69 TALLO	U-bend	Septic Tank	Quite clean	No well	Not measurable
SD TALLO TUA 2	U-bend	Septic Tank	Very dirty	10 steps	Not measurable
SD TALLO TUA 1	U-bend	Septic Tank	Very dirty	No well	Not measurable
SD KIP BARAYA	U-bend	Septic Tank	Dirty	5 steps	Not measurable
SD MALIMONGAN BARU	U-bend	Septic Tank	Dirty	12 steps	10 steps
SD INPRES BARAYA 2	U-bend	Septic Tank	Quite clean	No well	Not measurable

SDN: Sekolah Dasar Negeri - state elementary school

### Target School and CBTS Pillar 1 – 2

TARGET SEKOLAH	GENERAL CONDITION OF TOILET													
	FECES PRESENT		GARBAGE PRESENT		FLIES PRESENT		WATER AVAILABLE		SCOOP PRESENT		WATER RECEPTACLE		TOWEL PRESENT	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
SDN 69 TALLO	X	✓	✓	X	X	✓	✓	X	✓	X	✓	X	X	✓
SD TALLO TUA 2		✓	✓	X	X	✓	X	✓	✓	X	X	✓	X	✓
SD TALLO TUA 1	X	✓	✓	X	X	✓	✓	X	✓	X	✓	X	X	✓
SD KIP BARAYA	X	✓	✓	X	X	✓	X	✓	✓	X	X	✓	X	✓
SD MALIMONGAN BARU	X	✓	✓	X	X	✓	✓	X	✓	X	✓	X	X	✓
SD INPRES BARAYA 2	X	✓	X	✓	✓	X	✓	X	✓	X	✓	X	X	✓

SDN: Sekolah Dasar Negeri - state elementary school

### Target School and CBTS Pillar 2

TARGET SCHOOL								
	RUNNING WATER		CLEAR WATER		SOAP AVAILABLE		DRY TOWEL AVAILABLE	
	YES	NO	YES	NO	YES	NO	YES	NO
SDN 69 TALLO	X	✓	✓	X	X	✓	✓	X
SD TALLO TUA 2		✓	✓	X	X	✓	X	✓
SD TALLO TUA 1	X	✓	✓	X	X	✓	✓	X
SD KIP BARAYA	X	✓	✓	X	X	✓	X	✓
SD MALIMONGAN BARU	X	✓	✓	X	X	✓	✓	X
SD INPRES BARAYA 2	X	✓	X	✓	✓	X	✓	X

SDN: Sekolah Dasar Negeri - state elementary school

### Target School and Pillar 3

TARGET SCHOOL	FOOD CONTAINER IN CANTEEN	HOW IS FOOD PRESENTED IN CANTEEN	TYPE OF SCHOOL CANTEEN	HAND WASHING FACILITY IN CANTEEN	
				YES	NO
SDN 69 TALLO	Covered	Covered	"Wet foods" on sale	✓	x
SD TALLO TUA 2	Covered	Some covered, some uncovered	"Wet foods" on sale	x	✓
SD TALLO TUA 1	NA	Only packaged foods and drinks	"Dry foods" on sale	x	x
SD KIP BARAYA	Covered	Uncovered	"Dry foods" on sale	x	✓
SD MALIMONGAN BARU	x	x	x	x	x
SD INPRES BARAYA 2	Covered	Covered	"Wet foods" on sale	x	✓

SDN: Sekolah Dasar Negeri - state elementary school

**Target School and Pillar 4 – 1**

TARGET SCHOOL	NUMBER OF GARBAGE BINS	TYPE OF GARBAGE BIN	CLEANLINESS OF SCHOOL	FINAL DISPOSAL OF GARBAGE	GARBAGE SEPARATION	
					YES	NO
SDN 69 TALLO	10	Uncovered basket	Quite clean	Basket – in the yard	X	✓
SD TALLO TUA 2	2	Uncovered basket	Very dirty	In the grounds	✓	X
SD TALLO TUA 1	10	Uncovered basket	Very dirty	In the grounds	✓	X
SD KIP BARAYA	3	Covered basket	Quite clean	Public garbage disposal point	✓	X
SD MALIMONGAN BARU	8	Uncovered basket	Very dirty	In the grounds	✓	X
SD INPRES BARAYA 2	14	Covered basket	Quite clean	Basket – in the yard	X	✓

SDN: Sekolah Dasar Negeri - state elementary school

### Target School and Pillar 4 – 2

TARGET SCHOOL	CLEANLINESS OF CANTEEN	TYPE OF GARBAGE RECEPTACLE IN CANTEEN	REGULARITY OF GARBAGE COLLECTION	ARE FOOD LEFTOVERS SEPARATED	
				YES	NO
SDN 69 TALLO	Very clean	Uncovered basket	Every day	x	✓
SD TALLO TUA 2	Quite clean	Uncovered basket	Every day	✓	x
SD TALLO TUA 1	Quite clean	Uncovered basket	Every day	NA	NA
SD KIP BARAYA	Quite clean	Uncovered basket	Every day	✓	x
SD MALIMONGAN BARU	x	x	X	x	x
SD INPRES BARAYA 2	Quite clean	Uncovered basket	A couple of times a day	✓	x

SDN: Sekolah Dasar Negeri - state elementary school



### Target School and Pillar 5

TARGET SCHOOL	METHOD OF WASHING IN CANTEEN	WHERE DOES WASTEWATER FROM CANTEEN GO	FILTER ON WASHING IN CANTEEN		FINAL DISPOSAL OF WASTEWATER	
			YES	NO	BATHROOM	WASH HAND BASIN (IF AVAILABLE)
SDN 69 TALLO	Washed with soap, rinsed in clean water	Uncovered channel	X	✓	Covered channel	Not available
SD TALLO TUA 2	Washed with soap, rinsed in clean water	IPAL pipe	X	✓	Wastewater discharge pipe	Not available
SD TALLO TUA 1	NA	NA	NA	NA	Uncovered channel	Covered channel
SD KIP BARAYA	Washed with soap, rinsed in dirty water before being rinsed in clean water	Uncovered channel	X	✓	Street, yard, garden	Not available
SD MALIMONGAN BARU	X	X	X	X	Uncovered channel	Not available
SD INPRES BARAYA 2	Washed with soap, rinsed in clean water	Uncovered channel	X	✓	Uncovered channel	Not available

SDN: Sekolah Dasar Negeri - state elementary school



## REPORT

# HIGH FIVE PROGRAMS MIDLINE HOUSEHOLD SURVEY

COVERAGE AREA: MEDAN

Prepared for



May, 2013

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## PART I

### Background and Research Objectives

#### A. Background

The Indonesian government launched the Community-Based Total Sanitation (CBTS) Program in 2007 to improve hygiene and sanitation practices in households, thereby reducing the incidence of diarrhea, the second leading cause of infant mortality. The program consists of five hygiene and sanitation pillars, namely:

1. Stopping open defecation
2. Washing hands with soap
3. Household safe water treatment and storage
4. Solid waste management
5. Waste water management

The program was focused primarily on rural areas, where the emphasis was on Pillar 1 (stopping open defecation). Through the High Five Program, the Cipta Cara Padu (CCP) Foundation proposed that the program be extended to urban areas, thus contributing to the efforts to improve compliance with the five CBTS pillars in households and communities.

The High Five Program has now been running for 1.5 years in 3 cities, namely, Surabaya, Medan and Makassar. The program is conducted at the city level and the sub-district level. At the city level, The High Five Program advocates the incorporation of CBTS into current policies and AMPL/Sanitation Working Group activities, as well as the integration of CBTS strategies into municipal government development plans. At the sub-district level, The High Five Program operates in three RW (neighborhoods) at a high level of intensity, and in other neighborhoods at a low level of intensity.

It is very important to ensure that the program at every level is on track to achieve the key indicators in respect of intermediate results, particularly those resulting from interventions during the operative period, and that the implementation process is in accordance with participatory principles, and reflects gender equity and environmental considerations. Accordingly, an independent evaluator is required to review the performance of the program and provide recommendations for improving program implementation during its remaining lifetime.



## **B. Objectives**

The High Five Program focuses on improving hygiene practices at the household and community levels, identifying how many households are aware of children's health, sanitation and hygiene issues, whether that number has increased or decreased when compared with the 2012 baseline survey having regard to The High Five Program objective indicators. Accordingly, this midline survey evaluates:

- a. Program outcomes by comparing the midline survey's findings with those of the baseline survey so as to identify changes as regards:
  - Understanding of the CBTS pillars
  - Perceptions of the CBTS pillars
  - Habits/ behaviors associated with the CBTS pillars
- b. Program implementation so as to identify program effectiveness, efficiency, relevance, and sustainability.
- c. Providing recommendations for better program implementation.

## PART II

### Research Methodology

In general, both primary and secondary data were required for the purposes of this survey. However, Polling Center (in accordance with its agreement with High Five Program) collected primary data using the quantitative and qualitative methods.

In the implementation of this survey, the collection of primary data in the field was carried out using the quantitative method aimed at respondents from households with children, while the qualitative data was collected using in-depth interviews with stakeholders of the CBTS program being implemented by Cipta Cara Padu Foundation.

#### A. Survey Method

In order to obtain the data required for this research (as set out in the survey objectives), both the quantitative and qualitative methods employed questionnaires.

Data collection in the field in the Medan area was conducted as follows:

##### Quantitative Data

- Households : 9 to 14 March 2013
- Children : 6 to 10 March 2013

##### Qualitative Data

- Focus Group Discussion(FGD) : 5 March 2013
- In-depth Interviews (IDI) : 8 to 22 March 2013

#### B. Number of respondents

The number of respondents in each category in the Medan survey area is shown in the following table:

Table 2.1

Number of Respondent by Respondent Category in Each Area

Category	Area / Sub-district	Total Sample
Household	Kota Bangun	30 respondents
	Tegal Sari Mandala 3 (TSM 3)	30 respondents
Children	Surya Bakti Elementary School, Kota Baru	10 respondents
	Mis Al Wasliyah	10 respondents
	Baraya II Elementary School	10 respondents
<b>Total Respondents in Quantitative Survey</b>		<b>90 respondents</b>
FGD		1 group from Pokja Kota (Kelompok Kerja Kota – City Working Group)
		1 group from Pokja Kelurahan (Kelompok Kerja Kelurahan – Administrative Village Working Group)
IDI – per respondent category		
High Five Program District Leaders		1 respondent
High Five Program Facilitators		1 respondent
Community Leaders (Sub-district Heads)		2 respondents
Teachers with High Five Program training		2 respondents
Journalists		1 respondent
Medan Municipal Health Agency		1 respondent
BTKL (Balai Teknik Kesehatan Lingkungan – Technical Unit Environmental Health (replacing other Partners)		1 respondent
Local Government Water Company		1 respondent

Category	Area / Sub-district	Total Sample
Community Leaders (District Heads)		1 respondent
<b>Total Respondents in Qualitative Survey</b>		<b>11 respondent</b>

### C. Sample Selection Technique

#### 1. Respondent Households

Respondent households were selected using the simple random sampling method. The objective was to obtain findings that are representative of the population.

In the selected sub-districts in each city, a mapping process was first carried out in respect of households with under-5s, with the approval of local leaders (heads of RT/RW or sub-district heads).

After the population had been mapped, the selection of households was preceded by determining the household interval, that is, by dividing the total number (population) of households with children under 5 with the total respondent target (30 respondents) for each sub-district.

In this way, the caregiver respondents for under-5s to be interviewed were selected.

#### 2. Elementary school children in grades 4, 5 and 6

The selected elementary schools were all located in sub-districts where interventions had been effected. Respondents in the child category were selected randomly using the sampling interval technique. A total of 10 children from each school were interviewed, all of whom were from grades 4, 5, and 6. Consequently, the average sample size for each class was 3 children.

To select the children to be interviewed from each class, the interval random sampling method was used based on desk or attendance role sequences.

## Part III

### Findings

#### A. Respondent Profile – Age

The criteria for the selection of respondents for interview during the midline survey were the same as in the case of the previous baseline survey, namely, caregivers of under-5s. Both in Kota Bangun and Tegal Sari Mandala 3, 100% of respondents were women, the same as in the Medan baseline survey. This means that all of the respondents to the midline survey in Medan were female.

As a whole in the city of Medan, the majority (58.3%) of respondents interviewed were women aged 25-35. The second largest age group was those aged 35-45 (23.3%).

In more detail, the proportions of young women respondents (25-35 years of age) in Kota Bangun and Tegal Sari Mandala 3 were respectively 53.3% and 63.3%. In second place in Kota Bangun were women of under 25 years of age (26.7%). By contrast, Tegal Sari Mandala 3, women respondents of between the ages of 35 and 45 were the second biggest group on 26.7%.

#### B. Respondent Profile – Relationship between Respondent and Household Head

The respondents were the wives of household heads in the majority of cases in both sub-districts of Medan where interviews were held, with the proportion being 91.7% (93.3% in Kota Bangun and 90% in Tegal Sari Mandala 3). In the case of Kota Bangun, the remaining respondents were children or parents-in-law of household heads (3.3% for each category), while in Tegal Sari Mandala 3, they were children of household heads (6.7%) or parents of household heads (3.3%).

#### C. Respondent Profile – Number of Under-5s per Household

Overall, in the two sub-districts in which interviews held, the majority of respondents lived with 1 toddler at home (83.3%), while only 16.7% of respondents had 2 toddlers in the house. Similarly, when the findings are studied in more detail, in Kota Bangun the greatest percentage of interviewed respondents lived with 1 toddler at home (76.7%) while the remaining 23.3% of respondents had 2 toddlers in the home.

Figure 3.1.  
Respondent Age Groups

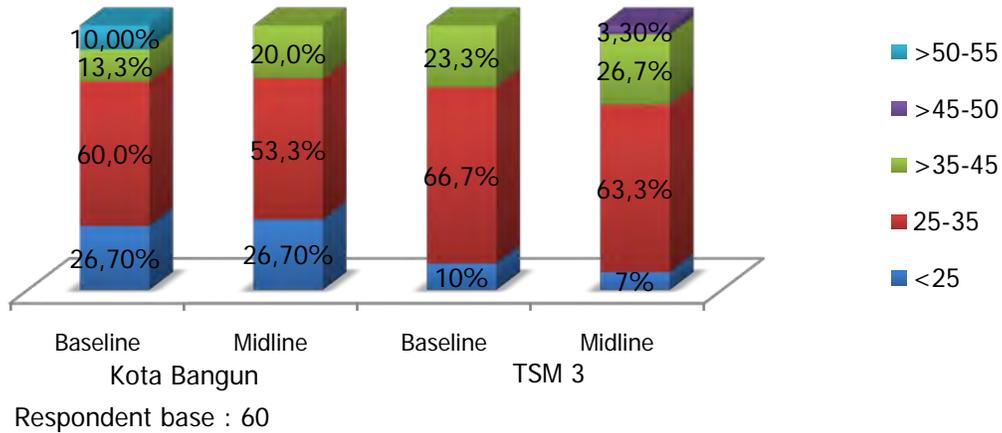
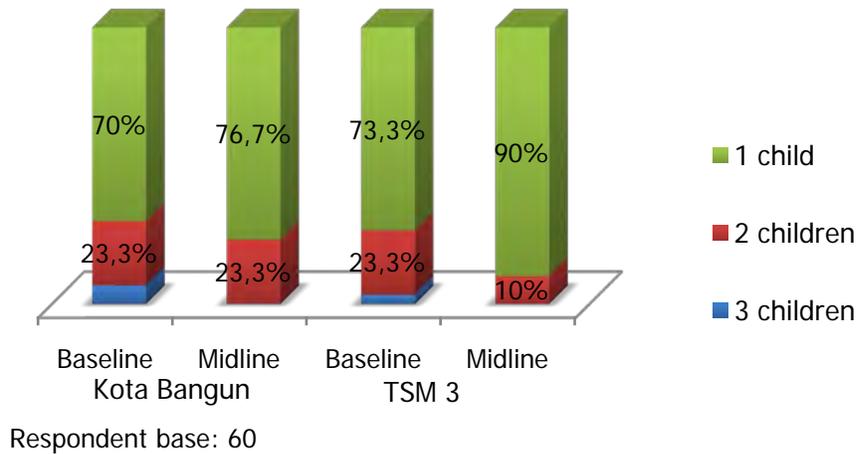


Figure 3.2  
Number of Under-5s per Household



#### D. Respondent Profile – Education

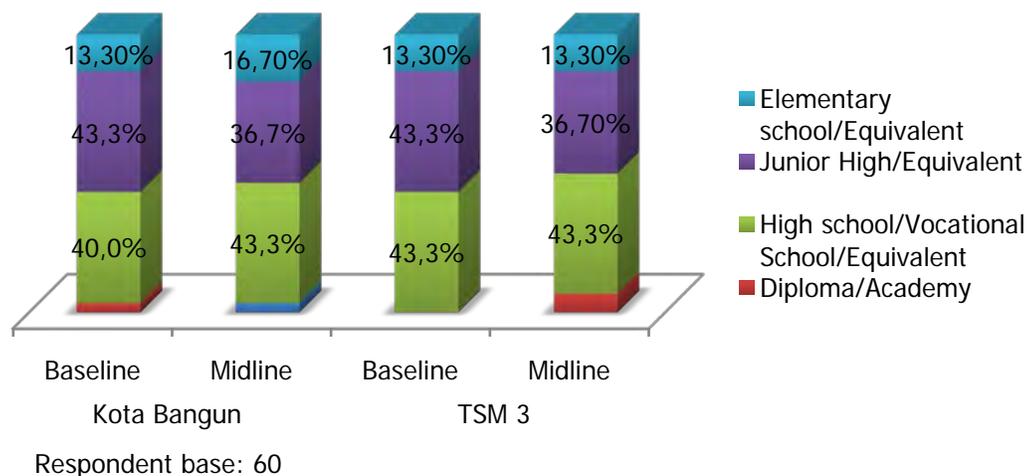
As regards the educational background of the respondents selected in Medan, an overall majority (43.3%) of them had completed high school (or equivalent), while the second largest group (36.7% of respondents) had graduated from junior high school (or equivalent).

The percentages were exactly the same at the sub-district level, where 43.3% of respondents in both Kota Bangun and Tegal Sari Mandala 3 having graduated from high school (or equivalent) and 36.7% having graduated from junior high school (or equivalent).

Figure 3.3 below shows the education attainments of the interviewed respondents in percentage terms and compares these with the findings of the baseline survey.

Figure 3.3

Highest Educational Attainment



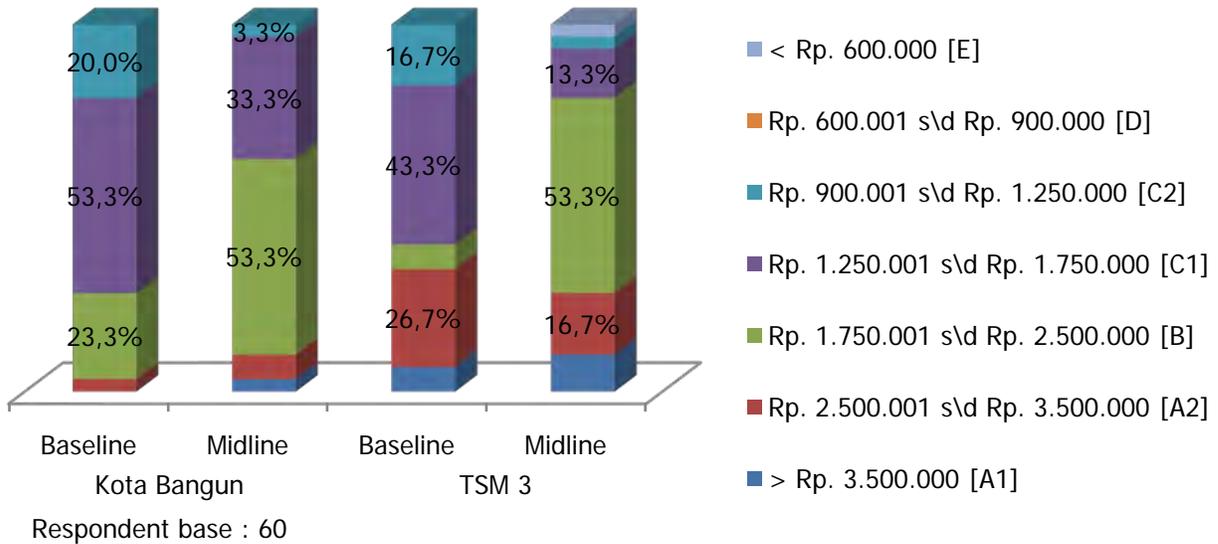
**E. Respondent Profile – Socioeconomic Class**

The midline survey in the Medan area found that overall 53.3% of respondents were categorized as being in socioeconomic class B, meaning that they had an average expenditure of Rp 1,750,001 to Rp 2,500,000, while the second biggest group was made up of those in socio-economic class C1 (indicating an average expenditure of Rp 1,250,001 to Rp 1,750,000 per month). By sub-district, both Kota Bangun and Tegal Sari Mandala 3, the majority of interviewees (53.3%) were found to be in socioeconomic class B (average expenditure of Rp 1,750,001 to Rp 2,500,000). In Kota Bangun, the next biggest group (33.3%) was made up of respondents in socioeconomic class C1 (average expenditure - Rp 1,250,001 to Rp 1,750,000). By contrast, in Tegal Sari Mandala 3 the second biggest group (16.7%) was made up of respondents in socioeconomic class second A2 (average expenditure Rp 2,500,001 to Rp 3,500,000).

The socioeconomic classes of the respondents in each sub-district are as shown below:

Figure 3.4

Average Household Expenditure Per Month



Staying on the issue of socioeconomic class, the following is a description of the home ownership situation, and observations concerning the homes occupied by respondents.

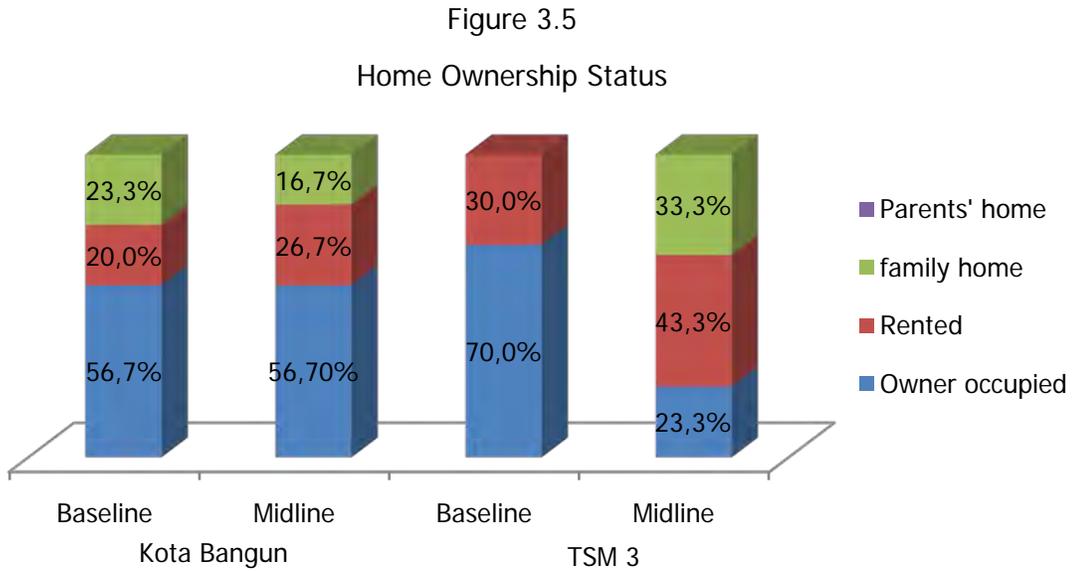
The majority of respondents in Medan (40%) said that they owned the homes they currently occupy, while 35% said that they were renting. In Kota Bangun sub-district, the figures were similar to the overall figures, with 56.7% owning their own homes and 26.7% renting. By contrast, in Tegal Sari Mandala 3 the majority of respondents (43.3%) said they were living in rented accommodation, while 33.3% were living in their extended family home and only 23.3% saying they owned their own homes.

As regards the condition of the respondents' houses, the majority of homes (70%) had cement floors, while 26.7% had ceramic tile floors. Precisely the same proportions were prevalent in both Kota Bangun and Tegal Sari Mandala 3.

As regards the roofs of the respondents' homes, overall the majority (95%) had galvanized iron roofs. In both Kota Bangun and Tegal Sari Mandala 3, the majority of respondent homes had such roofs, although the proportions were different, with the percentage in Kota Bangun being 93.3%, and in 96.7% in Tegal Sari Mandala 3.

Overall, the biggest proportion of homes had cement walls (43.3%), while the second biggest category was brick walls (23.3%). However, at the sub-district level there were some differences, with 33.3% of respondent homes (the biggest proportion) having plywood walls, and 30% having brick walls. In Tegal Sari Mandala 3, the proportions were similar to the overall situation in Medan, with a majority of houses (66.7%) having cement walls, and 16.7% having brick walls.

The following chart shows the situation as regards home ownership status in the survey areas in Medan:



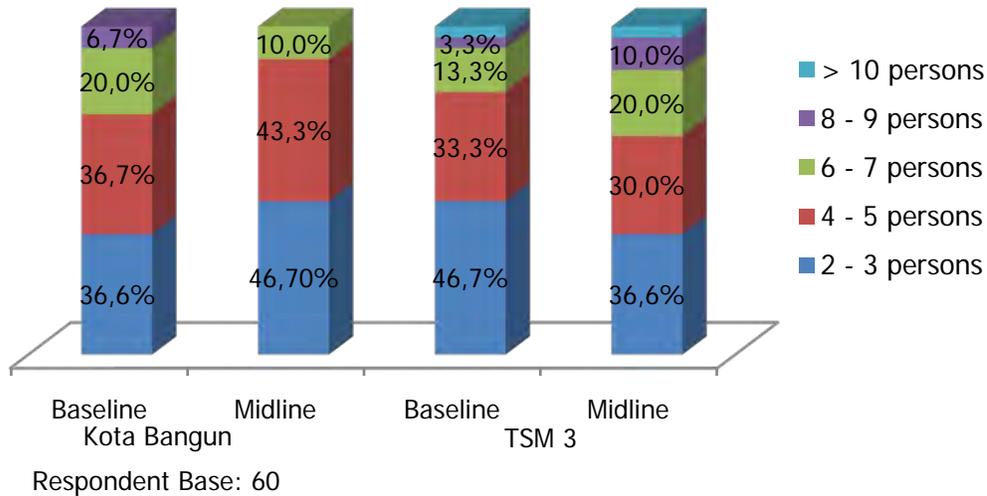
Respondent Base: 60

Overall, respondents in Medan do not only live with their main family (spouse and children), other than toddlers, we found that about 2 – 3 people live in the same house with 37 – 47% of the respondent. If we look closer in the village scale, about 43% respondents live with another 4 – 5 people in Kota Bangun. Whereas in Tegal Sari Mandala 3 about 30% of the respondent live with 4 – 5 other people over the age of 5.

The graph that shows the number of people who lives with the respondent (other than toddler) in both villages in Medan can be seen in the following chart (Figure 3.6)

Figure 3.6

Number of Persons Over Age of 5 Living in Home



## F. Respondent Profile Summary

A summary of the characteristics of the respondents in each of the sub-districts surveyed in Medan is shown in the following table:

Table 3.1

Respondent Profile Summary

Characteristic	Kota Bangun	Tegal Sari Mandala 3
<b>Age</b>	53.3% 25 – 35 years of age	63.3% 25 – 35 years of age
<b>Education</b>	43.3% graduated from high school	43.3% graduated from junior high school
<b>Number of under-5s</b>	76.7% 1 under-5 23.3% 2 under-5s	90% 1 under-5 10% 2 under-5s
<b>SES</b>	53.3% B	53.3% B
<b>Home Ownership</b>	56.7% owner occupied	43.3% rented

### **Kota Bangun**

The majority of respondents in Kota Bangun (53.3%) were homemakers (caregivers to under-5s) of between the ages of 25 and 35 who had been educated up to high school level or equivalent (43.3% of total respondents). They occupied their own homes (56.7%) and had an average monthly expenditure of between Rp 1,750,001 and Rp 2,500,000 (53.3%), while 33.3% had an average monthly expenditure of between Rp 1,250,001 and Rp 1,750,000.

A total of 76.7% of the respondents cared for one under-5, while 46.7% shared their homes not just with immediate family members (wife-husband-child), but with between 2-3 other family members (besides the under-5s).

### **Tegal Sari Mandala 3**

The majority of respondents in Tegal Sari Mandala 3 (63.3%) were homemakers (caregivers to under-5s) of between the ages of 25 and 35 who had been educated up to high school level or equivalent (43.3% of total respondents). The majority also occupied their own homes (43.3%) and had an average monthly expenditure of between Rp 1,750,001 and Rp 2,500,000 (53.3%), while 16.7% had a higher average monthly expenditure of between Rp 2,500,001 and Rp 3,500,000, meaning that they are categorized as being in the A2 socioeconomic group. A total of 36.6% shared their homes not just with immediate family members, but with between 2-3 other adults.

The following discussion of the findings is based on the strategic objectives of High Five Program (as explained in Part I of this survey).

## Part IV

### Program Implementation

#### A. Effectiveness

On the level of involvement of the public, private sector and community in developing and implementing plans to improve water availability, and sanitation and hygiene practices (coded as IR1 – program’s success indicator).

##### 1. Role of the High Five Program in developing partnership strategies as part of the SSK (Strategi Sanitasi Kota - Medan City Sanitation Strategy)

The High Five Program is considered to have played a very significant role in helping coordinate (and make routine) meetings of the Medan City AMPL Working Group. When High Five Program routinely coordinated with the related local government agencies to provide updates on what the program was doing, the meetings arranged by High Five Program for such purposes helped encourage the agencies to harmonize the programs of each line unit.

*"... There was a role played by High Five in respect of the local government agencies). It helped unify the programs of the different line units ..."* (City Working Group)

As regards the perspectives of other sources who participated in the in-depth interviews, the community leaders (sub-district and district heads) viewed High Five Program as playing a quite significant role in developing partnership strategies as part of the SSK. This was because coordination and participation in the AMPL/Sanitation Working Groups was considered to be optimal (even without High Five Program).

*"... It's optimal. We are working together well. They (the City Working Group) always coordinate with the sub-district heads..."* (Head of Medan Denai District)

*"... It's not as good as it could be as we're still waiting for the programs to be followed up on ... The main thing is that they (High Five) optimize the 5 pillars so that they can be properly applied. That's the key..."* (Head of TSM 3 Sub-district)

As regards the possibility of further developing the partnership strategy under the Medan SSK, this was essentially viewed as feasible as the program was considered to be good and worthy of expansion. Nevertheless, the community leaders felt that it was outside their authority to expand the partnerships.

*"... I don't know as this is the responsibility of the municipality, while I'm just a sub-district head. However, in my view the program should be included in the SSK as it is good. It could be expanded to all of the sub-districts in Medan City ..."* (Head of Kota Bangun Sub-district).

The community leaders also said that it would not be easy to integrate High Five Program (in this case, the partnership model developed by High Five Program) into the SSK. This was because the SSK was the responsibility of the municipality government. Any process of integration would not be easy and tend to be complicated.

*"... As I said, this is the responsibility of the municipal government, while High Five is a private operation. So the procedures would probably be difficult due to the convoluted bureaucracy..."* (Head of Kota Bangun District)

## 2. Replication of High Five Program Sub-district Program by local governments and/or nongovernmental organizations (NGOs)

During the focus group discussion, the Medan City Working Group (which did not include representatives of Bappeda - Badan Perencanaan Daerah – Local Development Planning Board) said that the possible replication of the program was the responsibility of Bappeda. Thus, they felt they lacked the capacity to respond to the question as to whether or not there were any plans to replicate the "High Five Program Sub-district Program."

Further, the City Working Group said that Bappeda had never raised the issue during their meetings, something that was probably due to Bappeda being busy with other matters.

The sub-district group has been prepared (mentally) by High Five Program to be left to work on its own and to spread the CBTS Program to other sub-districts.

*"... We are optimistic. From the outset, High Five told us that they would only be here on a temporary basis, for only 3 years, and helped prepare us to disseminate what we had learned after High Five had left ..."* (Sub-district Group).

Two of the community leaders who were interviewed (the Head of TSM 3 Sub-district and the Head of Medan Denai District, also said that they were not aware of any plans to replicate the High Five Program Sub-district Program. Meanwhile, the Head of Kota Bangun Sub-district said that the neighboring sub-district (Mabar) planned to replicate the High Five Program Sub-district Program. However, the Mabar sub-district head's concept of replication did not mean that the CBTS Program would be implemented in the same way as in the selected sub-districts, but rather would be expanded to include social activities and healthy lifestyles in general.

*"... There doesn't appear to be a plan yet. But if there was a plan, the program could be applied in Tegal Sari Mandala 2 Sub-district ..."* (Head of TSM 3 Sub-district).

*"... There's a plan to replicate it to in Mabar (sub-district). The idea is that the clinic in Mabar will focus on social assistance through free medical care, as well as things that are related to healthy lifestyles ..."* (Head of Kota Bangun Sub-district).

The things that it was believed would encourage others to replicate the High Five Program Sub-district Program were (i) the nature of the activities, which could be directly applied by the public, and (ii) the benefits of the program in the form of better health in the surrounding community, as evidenced by decreases in the incidences of diarrhea and Dengue fever due to more hygienic practices.

*"... Activities on the ground with the people, such as waste management, and how it can be converted into useful things ..."* (Head Medan Denai District)

*"... Because the program is good for improving the public health. For example, the people in other sub-districts might be interested because the incidences of diarrhea and dengue fever here have been reduced due to better hygiene, because we stopped open defecation and harmful garbage disposal practices. We have also instituted regular community work ..."* (Head of Kota Bangun Sub-district)

As regards the lack of public exposure about the activities of High Five Program, as well as the difficulty in determining the right sub-districts for application of the program in Medan given the large number of sub-districts that suffer from poor sanitation, these factors were considered to be the reasons why neither local governments nor NGOs were willing to officially replicate the High Five Program Sub-district Program.

*"... Probably due to lack of publicity, many people do not know about the High Five and what they do .."* (Head of TSM 3 Sub-district)

*"... In Medan, many sub-districts still suffer from poor sanitation. So determining the appropriate sub-districts for selection could be difficult ..."* (Head of TSM 3 Sub-district)

Funding constraints also posed a challenge for the related local government department (Health Agency) in replicating the High Five Program Sub-district Program in the city of Medan.

*"... On the Health Agency side, not yet. Because it's like this. Of the 2012 the plans that we prepared, a lot of the work was not carried out. This was because the budget was not sufficient. As regards the 2013 budget, it has not yet been disbursed. Not one cent has been disbursed. In fact, part of the 2012 budget has still to be paid out. That's the way it is. So what is the point of us making so many plans when we know that we won't have enough money to implement them ..."* (Medan Municipal Health Agency)

The representatives of the agencies that were present during the group discussion were of the view that the implementation of the CBTS program by High Five Program had been effective in reaching the community and that it would be beneficial to expand the program to other sub-districts.:

- ✓ The people-to-people approach will be more effective than city government officials making the approaches (about sanitation) to the public.

*"... In my view, the people all have the same character. They (the High Five volunteers) are hard workers. The local government officials feel they are smarter*

*and speak down to the ordinary people. The ordinary people don't like this. But these ladies (the High Five volunteers) never give up, they keep plugging away about littering and septic tank ..... they know how to talk to the ordinary people. When we (government officials) get involved, it's like a battle ..."* (City Working Group)

- ✓ High Five Program has disseminated the necessary knowledge to allow communities to continue the program in other sub-districts after High Five Program leaves.

*"... In terms of sustainability, what they have disseminated to the community groups that have been set up, this is what will allow the program to be completed, the availability of volunteers ..."* (City Working Group)

### 3. Level of financial support from private sector and community partners

Residents of the selected sub-districts worked hand in hand and donated materials for the building of composting facilities.

As regards the facilities / infrastructure that has been developed, residents collectively raise money for their management based on agreements among those who benefit from the facilities. Such facilities include:

- ✓ communal septic tank in Tegal Sari Mandala 3
- ✓ communal toilets, washing facilities, and composting facility in Kota Bangun

Collective responsibility processes had been agreed on since the beginning. In addition, special actions were taken (it is believed) based on particular events/occurrences, including regular fund-raising.

*"... raw materials have been supplied by the community, there were those who donated bricks, sand ..."*

*"...it has been agreed upon that the 13 households will collectively pay for the suction ..."* (Sub-district Working Group)

*"... Normally when it happens (the septic tank is full), that's when we do fund-raising. We can't be doing it all the time. But as long as there is proof (for what is needed), we'll set to work. The people now think that it's fine as long as there is proof..."* (Sub-district Head)

The community involvement process, the fact that people are informed about the importance of health, and the approaches employed mean that local residents are willing to pay for what they receive, rather than just waiting for assistance.

*"... In reality, it's not all of them (High Five), all of the public, that work together ... they (the people living along the railway tracks) want to because they feel it is good for their health ..."* (City Working Group)

*"... The approach (carried out by respondents so that residents would be willing to help themselves) ... We conducted socialization so as to make them aware of the importance of healthy living. Open defecation gives rise to a lot of diseases. So we*

*first gave them examples, if open defecation was prevalent, this would cause diarrhea and TB. We sometimes gathered people together in groups, sometimes we went house to house. But we focused more on talking the residents' groups -- residents consultation, we called it ..."* (City Working Group)

*"... On the one hand there are people who are willing to spend money on hygiene issues as they are aware of the importance of hygiene ..."* (City Working Group).

On the duplication of hygienic behavior and improving sanitation through participatory programs at the community level involving stakeholders, social networks and community members (coded as IR2 – program's success indicator).

#### 1. Promoting hygiene and sanitation in the schools

According to the Head of Tegal Sari Mandala 3 Sub-district, every state school in the sub-district had been visited by CBTS workers. However, in the case of High Five Program, the schools to be visited were selected based on their condition (i.e., those that needed better health and hygiene facilities) and locations (located within Tegal Sari Mandala 3). It was also stated that the activities undertaken were beneficial (both for the schools and their students). As a consequence, the schools were in favor of the program. In addition, the program was in line with the programs being run by the Medan Municipal Government.

*"... High Five visited those schools to conduct socialization and provide advice. In addition, they held a joint hand-washing event to mark World Hand-Washing Day ..."*  
(Head of TSM 3 Sub-district)

*"... A state elementary school on Jalan (street) Poksit and a private elementary school in Neighborhood 5 have installed sinks for washing hands with soap and provided trash cans so as to encourage students not to throw litter on the ground. They have also organized the students to work together to keep the school bathrooms clean ..."* (Head of Kota Bangun Sub-district).

*"... They (High Five) selected 30 children for training on the importance of hygiene. At the start they selected the children from grades 3, 4 and 5, but by the end they had more than 30 children. The children were asked to write essays on hygiene and the need to dispose of litter in its proper place. The essays were then read by the groups. There was also a joint hand-washing event ..."* (elementary school teacher).

#### 2. Media Support for Hygiene and Sanitation

The members of the Medan City Working Group who were present at the group discussion said that the issues of sanitation and hygiene were still not sufficiently communicated to the public at large as they were considered not "sexy" enough by the media. However, there were a number of journalists and media outlets that were concerned about such issues.

The establishment by High Five Program of KJPS (Komunitas Jurnalis Peduli Sanitasi - Community of Concerned Journalists for the Sanitation) was considered to be a major

step forward, and it was hoped that the group could help improve public awareness about the importance of hygiene and sanitation.

*"... High Five has established a community of journalists, who will promote such issues and also recruit new volunteers ..."* (City Working Group).

The training provided to members of the public on how to write about hygiene and sanitation (community environmental journalists) was considered to be a good way of exposing the hygiene and sanitation problems facing the community, and sharing experiences with other sub-districts.

*"So, they know how to get selected. Their volunteers are now even able to write about CBTS in the newspapers ..."* (City Working Group)

In addition to spreading information on hygiene and sanitation, journalists could also help accelerate the resolution of problems by highlighting them in the media.

*"... The involvement of journalists is absolutely essential so that other people can be made aware of this program and be motivated to adopt healthy practices ..."* (Head of TSM 3 Sub-district).

*"... What the journalists can do to support the CBTS Program is to go out into the community and find out about the real problems being faced by the people, and then to share their views on these problems with the public at large ..."* (Medan BTKL)

*"... The media is a provider of essential information to the public. So, it's really good that High Five has partnered with the media and journalists. In this way, what the program is doing can be read by all member of the public. All of the High Five programs and activities will be reported in the newspapers, for example. This informs the public about CBTS, and they can learn how to practice it in their own neighborhoods ..."* (Head of Medan Denai District).

*"... High Five held a meeting with journalists to provide them with information on the program. According to High Five, for the program to achieve maximum success, journalists would have to be involved. After that, High Five facilitated the establishment of a community of concerned journalists ..."* (KJPS).

In addition to being neutral parties when entering communities, journalists also will provide investigative reports on the hygiene and sanitation situations in particular areas, as well as the behaviors practiced by the people in those areas.

*"... I think that journalists will find it the easiest to be accepted in communities. They will find out what the people really want. Why are they unwilling to change? That's the most important thing. Finding the roots of the problems ..."* (BTKL).

Nevertheless, there was also a perception that such issues were not of much interest to readers.

*"... The problem is that there is no guarantee people will want to read about this as they are not interested in in-depth reports ..."* (PDAM Tirtanadi Medan Denai)

For the journalists grouped in the KJPL, their motivation in joining the community and focusing on issues that are not normally considered “sexy” was because not only because they felt that hygiene and sanitation issues needed to be highlighted (after receiving training from High Five Program), but also because they felt that these issues were of major importance to the public.

*“... In reality, we often wrote about these issues but only haphazardly. We didn’t realize how important proper garbage disposal is. After High Five Program brought us together and told us about this program based on the five CBTS pillars, we felt it was newsworthy, especially given the severity of the problems on the ground. While there is no special columns we can use to publicize hygiene and sanitation issues, such information is nevertheless important and needed by the public ... ” (KJPS)*

The journalists now plan to write articles on hygiene and sanitation so as to encourage greater participation on the part of both government and the public in resolving the problems facing communities.

*“... In line with the functions of the media, the press will print news and opinion pieces, both critical and supportive, which we hope will boost government and community participation ... ” (KJPS)*

Another component of IR2 – the extent to which households understanding the importance of the CBTS pillars – will be discussed in the quantitative report, while the number of households that have adopted positive behaviors and improved their hygiene and sanitation practices will be dealt with in the section on effectiveness.

On the empowerment of communities to ensure sustainable demand and access to safe water, hygiene and sanitation facilities at the household and community levels (coded as IR3 – program’s success indicator).

#### 1. Preparation and collection of proposals by communities/groups/schools

The Sub-district Working Groups said that they had received 25 proposals (for the same thing, namely, the development of a composting facility), which were prepared by Sub-district Working Group members, assisted by the High Five Program facilitators as editors. These proposals were subsequently sent to private businesses in the sub-districts, and relevant local government agencies.

The preparation of proposals by the Sub-district Working Groups (in this case their LPM - Lembaga Pemberdayaan Masyarakat - Community Empowerment Council sections) was dependent on “instructions” from the High Five Program team, which generally laid the groundwork by seeking information, making contacts and conducting exploratory meetings with businesses and local government units.

*“... The shredding machine was provided by the local government. But it was High Five which served as the go-between. After High Five got involved, it became easier ...” (Sub-District Working Group).*

*"... We haven't made any proposal as the green light (for operating a garbage bank) is still a long way off. The facilitators (High Five) haven't told us to make a proposal. Maybe they will in 2013. If they tell us to make a proposal, then we'll draw one up ..."* (Sub-District Working Group)

The motivation for members of the Sub-District Working Groups in making proposals was primarily to support to CBTS Program, and an awareness that this would require assistance in the form of money and facilities from external parties (both private sector and government). Thus, the objective of preparing proposals was to elicit support from third parties so that the CBTS Program could be successfully implemented in their areas.

The members of the Sub-District Working Groups were also aware of the possibility of failure in their attempts to elicit support from third parties. Nevertheless, they continued to make proposals and never gave up hope of success.

*"... So, we were asked to make a proposal. According to High Five, if the people were willing to prepare proposals, there was always a possibility that they would be successful ..."* (Sub-District Working Group)

*"... We prepared 25 proposals for the same thing, a composting facility, as there was no guarantee that the companies would give us anything. Some of the proposals for funding came from the LPM"* (Sub-District Working Group)

In many cases, the efforts of the High Five Program Sub-District Working Groups in preparing fund-raising proposals and their forwarding to private sector businesses and other relevant parties were not informed to the community leaders, the sub-district and district heads.

*"... I've heard nothing to date. I don't know why I've not been informed. The people around here never think about putting in proposals to the sub-district. That's because they've always been content with what they have. If we were to receive a proposal, especially if it benefitted all of the community, we would of course give it our full support ..."* (Head of Kota Bangun Sub-district).

*"... To the best of my knowledge we haven't received any. I don't think there's anything stopping people submitting proposals. Perhaps they don't feel it necessary to submit proposals to the district. Perhaps they submit their proposals to the sub-district. I don't really know ..."* (Head of Medan Denai District).

## 2. Use of BCC (Behavioral Change Communication) Materials in Socialization Process

High Five Program's BCC materials, which were shown during the FGD, were familiar to all of the Sub-District Working Group members, who said they were effective in helping the members of the Working Groups in conducting socialization on the CBTS Program.

Each Working Group member said that they employed different methods when using the BCC materials, depending on how comfortable they were in using the materials.



However, the objective in all cases was the same – to familiarize people with the CBTS Program.

*"... effective, gets the message across, easy to understand, especially with diagram V ..."* (Sub-District Working Group)

*"... banners were set up in one neighborhood so that everyone could read about the 5 CBTS pillars ..."* (Sub-District Working Group)

*"... everyone employed different ways of using them. In my case, I wrote them down on a sheet of paper, then I posted it up, and then I explained what it was all about using a flipchart. Everyone has their own way of doing it ..."* (Sub-District Working Group)

It was stated that it would be better for the BCC materials to be printed more clearly, using bigger letters.

*"... for me, the writing on the CBTS stickers is too small, the format is also too small ..."* (Sub-District Working Group)

## **A. Views of stakeholders (community leaders, facilitators, Sub-District Working Groups, High Five Program team, sanitation workers, and teachers)**

According to the stakeholders, the CBTS Program, which has now been underway for 1.5 years in Medan, should achieve its objectives. Besides considering what has already been achieved (by comparing the findings of this survey and those of the 2012 baseline survey), this survey also assessed the extent to which:

1. Communities in the High Five Program sub-districts prioritize public so that prior assistance and programs provide an opportunity for the community to complete them in line with the community's capacity. It is only then that High Five Program steps in as a facilitator. This gives rise to a spirit of self-help in the community as a concrete manifestation of the community's participation.

*"... so, High Five involves the people, increases the role of the people in CBTS ..."* (Sub-District Working Group)

2. High Five Program has proved itself through concrete action on the part of communities in carrying out the CBTS Program in the selected sub-districts so that the communities in question respect, trust and voluntarily participate in the implementation of the things that have been socialized by High Five Program (assisted by the Sub-District Working Group).

*"... I feel that what has been done by High Five is very good ... High Five has involved all sections of the community. Not just the district head, sub-district head or other local officials, but the entire community. As a result, everyone feels responsible for keeping the neighborhood clean ..."* (Head of Medan Denai District)

3. High Five Program has played a role as a mediator by involving other parties (such as the private sector, journalists, the relevant local government agencies, and so forth). In Kota Bangun sub-district, for example, the community is currently in the process of submitting fund-raising proposals for the development of a composting facility and a communal septic tank to a number of local companies.

*"... When I told the facilitators that the next-door neighbors' children had come down with diarrhea, they immediately paid a visit. They did something concrete. This was the first time something like this had happened. Before this, all we got were campaigns ..."* (Sub-District Working Group)

*"... There's a lot of companies here, so we submitted our proposals to them. There's a lot of big factories in Belawan (port city). They shouldn't just leave us to suffer from the pollution ..."* (Sub-District Working Group)

## a. Challenges and Their Potential to Result in Non-Achievement of Program Objectives

According to the City Working Group (the members of which were present during the group discussion), the number of High Five Program personnel (only 3) posed a constraint on the geographical reach of the program, with the areas benefitting being small compared to the overall size of Medan.

*"... They have only 3 officers and the distance between Kota Bangun Deli and Tegal Sari Mandala 3 is very far. When we meet them, they sometimes appear exhausted ..."* (Medan City Working Group)

The members of the Sub-District Working Groups said that the principal challenges they faced when carrying out the CBTS Program were as follows:

- ✓ Low level of awareness on the part of the public so that sometimes when people were invited to take part in the program, they would seek some sort of enticements or inducements.

*"... If we have a meeting, they won't come unless we feed them. We have to give them food at every meeting ..."* (Sub-District Working Group)

- ✓ The Sub-District Working Groups found that there were small numbers of people who attempted to dissuade others from participating in the CBTS Program.

*"... There is a group of people who have no interest in hygiene. They sometimes try to provoke those who are participating. They say all sorts of things, try to dissuade people. People who are participating sometimes change their minds because of this. They are always complaining, trying to poison the minds of others. In my area there are 15 alleyways, and there's up to 10 of them in each alleyway ..."* (Sub-District Working Group)

- ✓ As regards media support, the principal challenges are: (i) the level of understanding on the part of journalists about the issues, and who to keep them interested in the issues; and (ii) the impossibility of having special columns dedicated to hygiene and sanitation as these issues have never been considered as priorities. In fact, they are regarded as being low down on the list compared to other issues. Thus, articles on hygiene and sanitation will only be printed when space is available.

*"... It's probably mostly about how to increase the level of awareness of the journalists. Then, how to keep the journalists interested so that they don't become preoccupied with other issues to the detriment of sanitation ..."* (KJPS)

*"... There are no specific columns devoted to sanitation in the media. So, it's impossible for us to keep publishing regular articles on sanitation as there are many other more pressing and fresher issues. Sanitation is not regarded as being particularly pressing so that articles are only published when there is space ..."* (KJPS).

## **b. Steps that Can Be Taken to Prevent the Challenges Resulting in Non-Achievement of Program Objectives**

In order to achieve The High Five Program objectives and overcome the challenges the program faces (from the perspectives of the stakeholders), the Medan City Working Group and the CBTS Working Group made the following suggestions:

- ✓ High Five Program should take steps to ensure the sustainability of the program so that when High Five Program leaves, what has been done to date by High Five Program will be continued by the community. This is despite the steps that have already been taken by High Five Program in this respect, such as:
  - Transferring knowledge to the local community
 

*"... From the perspective of sustainability, it is the transfer of knowledge that has taken place and the setting up of community groups that will ensure the completion of the program. We have volunteers ..."* (City Working Group)
  - Each volunteer should have another team of volunteers so as to make the the team stronger, particularly when High Five Program is due to terminate the program.
 

*"... So as to ensure that the volunteers we have trained are strong enough and will continue the struggle, they will recruit other volunteers, like MLM (multi level marketing). It will trickle down from the top ... so they'll develop solid networks ..."* (City Working Group)
  - Physical infrastructure that benefits the entire community and which can be used in the long term needs to be developed. The members of the Sub-District Working Groups said that such facilities would serve as monuments so as to keep the spirit of High Five Program alive.
 

*"... They would be like monuments, such as the communal septic tank. That's one of High Five's monuments, something that is really useful. We were asking for it for 1.5 years. We'll really make maximum use of it and it will keep the memory of High Five alive after the program is over ..."* (Sub-District Working Group)
- ✓ Regarding community elements that were attempting to undermine the program, the Sub-District Working Groups said that a number of things could be done:
  - Neutralize the damage done by "provocateurs" by providing accurate information.
 

*"... so how do we neutralize it ... by keeping going ..."* (Sub-District Working Group)
  - Making approaches to the "provocateurs" so as to identify why they are trying to undermine the program and to persuade them to join with the rest of the community and the members of the Sub-District Working Group in implementing the CBTS Program.
 

*"... We will continue to inform them, rather than letting enmity get out of control ..."* (Sub-District Working Group)



The members of the Medan City Working Group who were in attendance at the group discussion also suggested that High Five Program:

- ✓ Fully involve the public. In this respect, the respondents said that the reach of the program should be expanded.

*"... Perhaps the High Five approach is like planting a seed that grows into a large tree. I mean, because of their limited number of personnel, they have to keep recruiting new volunteers. Once a new volunteer is recruited, he goes to another area to help the local people and recruit more volunteers. So, while they go everywhere, they continue to maintain their noble values ..."* (City Working Group)

- ✓ Work together with various organizations and institutions so as to make sanitation and healthy practices major issues that are continually in the public eye.

*"... In my opinion, not enough information is being disseminated on the program's successes. We need to involve more journalists, we need to unite to manage everything well – members of the public, journalists, local government agencies, we need to form a media network, prepare programs, print leaflets, set up a Facebook page ..."* (City Working Group)

- ✓ Regarding journalists and the media, High Five Program needs to always make effective approaches by providing journalistic training so as to improve the awareness of journalists in writing articles and in news reporting, as well as to keep them updated on the latest news on hygiene and sanitation.

### **c. Role of High Five Program in Integrating CBTS into the SSK Program**

According to the Medan City Working Group, the Medan SSK had been designed following the holding of consultative planning meetings at the district level. Then, five local government agencies discussed the recommendations produced by the consultative planning meetings, under the coordination of Bappeda.

*"... In the municipal government we have a system (for preparing the SSK), that is to say, through consultative planning meetings in each of Medan's districts. This also covers sanitation. So, there is a system, which also includes coordinating meetings at the provincial right up to the national level ..."* (City Working Group).

Based on this system for preparing the SSK, and also based on the views of the members of the City Working Group who were present during the group discussion, High Five Program did not play a role in the formulation of the SSK. The role played by High Five Program was more focused on mentoring the public on who to apply CBTS.

*"... it played a role in providing mentoring, it played a role in promotion ..."* (City Working Group).

As the City Working Group was not very active in the performance of its duties due to the fact that its members were busy with their work in the relevant local government agencies, the



presence of a High Five Program representative on the Working Group had been beneficial by leading to an increase in the number of meetings held.

*"... So, because the members drawn from the local government agencies were too busy with their own work, managing their own agencies, the Working Group was not as active as it could be... We used to hold a meeting only once a year. There was no such thing as regular meetings to discuss sanitation or anything else ..."* (High Five Program District Leader)

- ✓ The presence of the High Five Program representatives served as a reminder that they had a CBTS program that contained various activities that had yet to be implemented due to the busy schedules of the respondents.
- ✓ High Five Program played a role as a partner of the Working Group in implementing the CBTS Program (even though it was only applied in two sub-districts).

*"... We who are from the local government agencies have our own busy schedules. High Five acts as a mentor to communities, develops a willingness on the part of communities ... we do what we can to help, for example, when they needed a composting shredder, we were there to help. We gave it to them. But if we were to give it to just anyone, then it would be disappear just like that ..."* (City Working Group)

- ❖ The activities / programs related to hygiene and sanitation that have been undertaken in the High Five Program sub-districts or in Medan City as a whole are as follows:

Both the City Working Group and the Sub-District Working Groups felt that they did not have enough information on similar programs to High Five Program. Among the other programs they were aware of:

- Yespi
- Nice
- NBR
- IUWASH
- ADB (Asian Development Bank)
- IDB (Islamic Development Bank) > Clean and Healthy Behaviors, a new program that is due to start.

All of the programs listed above were considered to be more focused on the financial development of sanitation and health facilities, while High Five Program was primarily aimed at changing people's behavior.

Not all of the members of either the City Working Group or Sub-District Working Groups fully understood the concept of CLTS (Community Led Total Sanitation).



#### ❖ Improvements Brought About by High Five Program

Regarding hygiene and clean and healthy lifestyles in Medan City, the implementation of the CBTS Program by High Five Program has resulted in a variety of positive changes, according to a number of the respondents. These changes may be listed as follows:

- ✓ The High Five Program has helped improve hygiene and clean and healthy practices in the selected sub-districts.

*"... The High Five would be capable of overcoming the problems related to hygiene and cleanliness in the community here if it was continued on a sustainable basis. Significant inroads have been made to date into the garbage and open defecation problems ..."* (Head of TSM 3 Sub-district)

- ✓ The High Five Program has helped induce changes in people's behavior so that they no longer dispose of garbage in the river or practice open defecation. Such changes in behavior happened because they were made aware of the dangers these practices posed.

*"... In Kota Bangun, very little attention was paid in the past to hygiene and sanitation. People used to defecate in the river, throw their trash in the river. Now the people are aware of the dangers of disposing of garbage in the river, of open defecation. In my opinion, The High Five has been just what the people here needed. I can see that they have started to pay attention to environmental hygiene, and the place is no longer awash with garbage. The children are also being taught to wash their hands with soap. So, everything has changed as regards hygiene practices. But not everyone has changed. There are still some who don't understand. But hopefully they will come to understand if we keep explaining things to them ..."* (Head of Kota Bangun Sub-district).

Another related party, UPT BTKL (Unit Pelaksana Teknis BTKL – BTKL Technical Implementer Unit), acknowledged that they did not know a lot about High Five Program and had not been following the program's progress. They said that people's behavior was not easy to change and there was no guarantee that the problems related to hygiene and sanitation would be overcome permanently.

*"... High Five Program, eh? I don't really know much about it, just a little. But we need to focus more on finding the real roots of the problem. We have to deal with the roots first. So, it hasn't been going very well? The problem is that the roots of the problem are to be found in the culture. People's awareness? Increasing their awareness won't solve the problem ..."* (BTKL)

#### **B. Efficiency**

As regards efficiency, the most appropriate sources are those from within High Five Program itself, namely, those responsible for implementing the CBTS Program in their respective areas. The following are the results of an interview with the High Five Program District Leader in Medan.

### a. Use and Allocation of Resources for Program Implementation

The use and allocation of resources, such as funds and equipment, by High Five Program Medan is based on the priority of the objectives that it is desired to achieve. The allocation proposals are forwarded to High Five Program head office in Jakarta one year in advance. The formulation of the program's budget is based on discussions between the members of the High Five Program team of facilitators in Medan.

High Five Program head office evaluates the budget proposals that are submitted, and the objectives that are to be focused on, assessing whether these are likely to help achieve the High Five Program key performance indicators before giving approval.

*"... (High Five Medan) submit our proposals. The key consideration is what we have achieved. The main thing for us (High Five Medan) is to achieve our targets. So, we (High Five Medan) design the programs. We also discuss everything with the facilitators so as to seek their agreement. The question is whether the proposed program will help us achieve our indicators ..."* (District Leader)

Given that the resource allocations for CBTS Program implementation in each area is based on proposals from the areas in question, resources are applied in accordance with local needs. As High Five Program Medan prepares a resource allocation plan for one year ahead and submits it for approval to High Five Program Central, the allocation of resources by High Five Program Central should be in accordance with real needs in the Medan district.

### b. Program Adaption and Implementation

As regards the programs that had been envisaged, a number have not proceeded as planned over the last 1.5 years of The High Five Program in Medan. These are as follows:

- ✓ CBTS training for members of the City Working Group. This has not been implemented due to the busy schedules of the City Working Group's members. The purpose of the proposed training was primarily to provide them with information and a better understanding of the CBTS Program so as to encourage them to integrate the CBTS Program into the SSK or other sanitation-related programs.

*"...The Working Group have not fully understood about CBTS, maybe their thoughts are similar with PHBS (Perilaku Hidup Bersih Sehat – Healthy and Clean Living Behavior) and therefore The working Group central have decided to create awareness to those who have yet to have a mindset about CBTS and its aim to totally achieve their purpose by inviting members of the working group and AMPL (Air Minum dan Penyehatan Lingkungan – Working Group on Water and Sanitation) from different areas. So, when we talk to them, they don't know what CBTS is all about. They just do this as they are told to by their superiors. Every regency and municipality must do this ... But they themselves don't really understand CBTS. So that's why we planned to provide them with training. But it turned out that they were all too busy. So we couldn't proceed with the plan. So while we wanted to provide training, it couldn't go ahead as they were busy with other things ..."* (High Five Program District Leader)

Program changes and adaptations in response to conditions on the ground did not have a significant effect on the program budget.

*"... There were changes to the original plans. We (High Five Medan) have contingency funds that we can use to fund such changes. So we have the authority to make changes, while at the same time remaining within budget. But we have to justify any changes, which we do by preparing justification memos. The funds will then be disbursed later. As long as there is a justification, then it's not a big program. An example of a change at the community level is where they suddenly say to us, "Miss, we want a socialization meeting." In such circumstances, we may hold the meeting even though it wasn't included in our plan. It will all depend on our financial situation ..."*  
(High Five Program District Leader).

### C. Sustainability

#### a. How do the stakeholders perceive the High Five Program methodology compared with CLTS?

Nobody from either the Medan City Working Group or the Sub-District Working Groups had ever heard of the CLTS methodology. Thus, the approach applied by High Five Program in the selected sub-districts in Medan cannot be compared with the CLTS approach.

#### b. Level of Acceptance by Stakeholders of High Five Program Approach

High Five Program was viewed positively by the members of the Medan City AMPL Working Group, who said that the High Five Program approach differed from those of other similar programs. The differences included the following:

- ✓ High Five Program involved a community of journalists to support program socialization in the selected sub-districts

*"... High Five set up a community of journalists, which helps promote High Five's CBTS Program, in addition to the volunteers recruited by High Five ..."* (City Working Group)

- ✓ High Five Program involves community leaders from a variety of backgrounds when making approaches in the selected sub-districts so that the program is able to reflect the real needs of the community and encourage people to solve their own problems.

*"... They (High Five) regularly visit us (chairman of Environmentally Concerned Youth Community), all three of them frequently visit us. They ask us about what is going on ... whom should they invite to participate in particular activities, community leaders, youth leaders, religious leaders. That's the way they do it. So we can see that they are willing to come down here to the people, not just go directly to the district head. They first map out the problems, who should be invited. So they are very diligent when they come into an area ..."* (Other Partner – NGO).

According to the members of the Sub-district CBTS Working Group, High Five Program employ the right approach as they:

- ✓ Come directly into the community, contacting people who have influence in the community.

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- ✓ Directly address the needs of the community as they visit people and seek input from them. For example, they go door-to-door to meet the people and find out what they can do to help.
- ✓ The CBTS Program is focused on the real needs of the people. In other words, its activities are formulated based on the outcomes of repeated discussions with local people.
- ✓ High Five Program receives unstinting assistance from the members of the Sub-District Working Groups when making approaches to the community, and employs a gradual strategy so as to impart an understanding of the program to local people.

*"... The construction of the septic tank involved three phases. During the first phase, we (members of the Sub-District Working Group) were roundly attacked by a really emotional guy who was shooting off his mouth. He accused us of owning the land. He said it was the government which should be building it, but the people were being asked to pay. What he meant was that it should have been free. So I said that it wasn't a question of money. All that was needed was for people to work together. If you have no money, then you can contribute your labor. But he wouldn't change his stance. During the second phase, he came around a little, but not fully. Finally, during the third phase he apologized to us for being so angry. After we explained things to him, he finally signed up and is now involved in negotiations with the landowner. So, there has been progress ..."* (Sub-district Group)

### **c. Contribution of High Five Program to Development of AMPL Working Group's Functions**

The Medan AMPL Working Group has experienced difficulties in organizing regular coordination meetings (particularly if under Bappeda coordination). So, the approach to coordination adopted by the Medan High Five Program team is to contact each of the line units in the relevant local government agencies.

High Five Program believes that each of the members of the Medan AMPL Working Group has a contribution to make in improving interaction with the other members. Among the coordinative functions performed by High Five Program, as revealed during the group discussion, are the following:

- ✓ Thanks to the regular meetings held by High Five Program, communication and interaction between the members of the AMPL Working Group have strengthened.

*"Good (referring to the role played by High Five in ensuring coordination between the members of the AMPL Working Group and line unit heads) ... although they (High Five) used the wrong procedure the first time they came to us, but they're good ..."* (City Working Group).

*"... But nowadays, if there is an event or a meeting, there's no need for a letter. All they have to do is call us. Same thing for both High Five Program and Bappeda, all they have to do is call and we'll come. That's the way it is, no need for formalities. We often have meetings ..."*

- ✓ Every meeting between High Five Program and line units from the relevant local government agencies is considered to have resulted in practical outcomes capable of implementation.

*"... The fact is that it's much too easy to talk about coordination. It's a cliché. Coordination is easy, but implementation is the hard part. We in this line unit have our own programs. All of these programs may be said to be related to CBTS, but the problem is coordination. So, whenever there is an activity, they always invite us, we work together. That's the type of role that High Five Program plays ..."* (City Working Group)

*"... The Working Group is not good at implementation as our members are too busy with other things. But our meetings with High Five Program remind us about realization, about implementation ..."* (City Working Group)

- ✓ High Five Program has greatly assisted the Working Group (Municipal Health Agency) in implementing its programs as High Five Program uses a bottom up approach. As a result, it is responsive to community needs.

*"... Schoolchildren are encouraged to adopt clean and healthy practices by washing their hands with soap. This is really important for us. High Five is assisting us as our programs also involve the socialization of CBTS in the community..."* (City Working Group)

*"... It's very different in the case of the government's approaches, when everything is very formal. But when High Five goes into the community, it's all very different. The people are kind of reticent with us as we employ a top-down approach, while High Five uses a bottom-up approach. They're great. They really know what they're doing. If we were trained like High Five, then we would be able to change ..."* (City Working Group)

#### **d. Possibility of Program Replication**

This aspect was dealt with in IR1 on "Replication of High Five Program Sub-district Program by local governments and/or NGOs."

### **D. Relevance and Appropriateness**

Our information on relevance and appropriateness was obtained from a number of different sources: the High Five Program team, community leaders (sub-district heads), Working Groups (City and Sub-district), teachers and households. The following are the results of the interviews with the sources.

#### **a. How is the Participatory Approach Carried Out?**

High Five Program was considered by the city group to have had a significant impact, as shown by the following statements:



*"... I was not involved directly, it was Pak (Mr) Oden who attended. But Pak Oden reported to me. They (High Five) organized a meeting to encourage public involvement in seeking solutions to the various problems. I thought to myself, that's the way it should be. The people should be involved in identifying and solving their own problems. Everyone should help and support each other in overcoming the problems. I thought that this was a good model to be developed ..."*  
(Municipal Health Agency).

The Sub-District Working Groups also appreciated the way in which High Five Program involved all elements of society in the socialization of The High Five Program as part of the application of CBTS in the selected sub-districts.

*"... At least 40 people attended the discussion. Those in attendance included community leaders, Muslim and Christian religious leaders, influential figures, Muslim clerics, clan chiefs. Many of us were members of associations, like STM (Mutual Assistance Society). Six groups and their chairpersons were invited to attend ... "* (Sub-District Working Group)

It was also stated that the volunteers who were selected were properly trained and provided the support the needed for the successful operation of the program.

*"... when those of us from the Working Group joined the High Five Program CBTS Program, we were provided with the knowledge we needed by High Five Program. For example, if garbage kept being thrown into the Deli River, it would eventually burst its banks. That's how our meetings went ..."* (Sub-District Working Group)

## **b. Determining Hygiene and Sanitation Priorities**

The prioritization of hygiene and sanitation issues in the High Five Program sub-districts in Medan is based on input from the local communities conveyed through the Sub-district CBTS Working Groups. As the nature of The High Five Program is facilitation, the choice of priorities is left up to the members of the Working Group. The same applies when various options are available for resolving a problem, as well as which matters will be followed up on and which will not. In all these cases, High Five Program endeavors to listen closely to the views of Working Group members, and to carry out what they have planned. Whenever assistance is needed from High Five Program to make approaches to particular third parties, then High Five Program will always be forthcoming with such assistance.

*"... We work in partnership with the National Community Empowerment Program (PNPM), the Community Empowerment Council (LPM) and the Environmental Health Technology Center (BTKL). The LPM was selected as a partner as they are one of the few bodies operating in the sub-district. So we teamed up with them for various programs. As regards the BTKL, we used their services to survey drinking water depots so as to check the quality of the water ..."* (High Five Program Facilitator).



### **c. How are Gender and Environmental Issues Included in Program Implementation**

The environment is one of the most important issues to be taken into consideration when making decisions on the ground. In attempting to resolve hygiene and sanitation problems, it is impossible to ignore the environment. During the process of resolving the problems covered by Pillar 1 (toilets without septic tanks), land has emerged as an important issue as the area is densely populated and there is not much vacant land available. So, the local residents will be invited to discuss possible solutions, and their decisions will be communicated to and discussed by the High Five Program team. In this way, High Five Program can consider the choice of location based on land availability and environmental issues.

As regards gender, although this has not received specific attention in the implementation of the CBTS Program in Medan, the role of women in implementing the program on the ground has been very pronounced. The majority of volunteers are women, and most of those approached by the team are also women. The reason why the majority of volunteers are women is because it is easier for them to make approaches to and conduct socialization among residents (particularly mothers) as they themselves play a strategic role in the home. The socialization media that are employed are very much dominated by women, such as Koranic survey sessions and other types of meeting.

## Part V

### Evaluation of Program Outcomes

#### Hygiene and Sanitation Practices in Five CBTS Pillars

##### A. Open Defecation Free

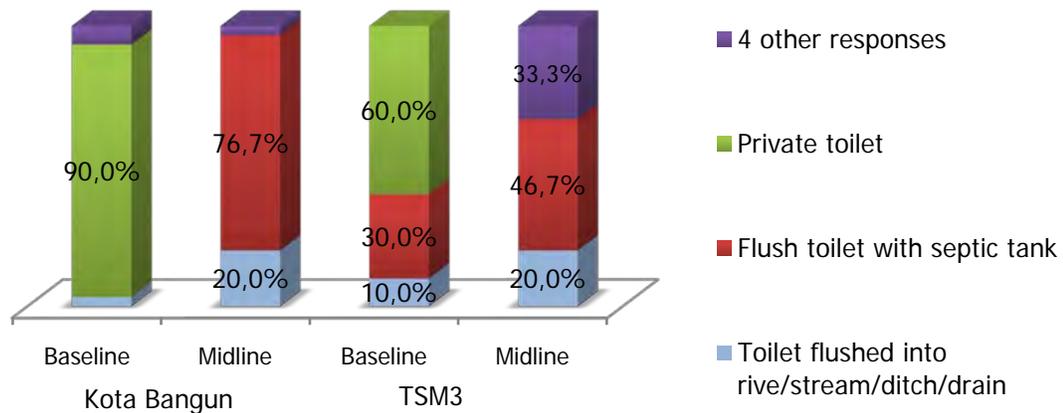
The majority of respondents in both Kota Bangun and Tegal Sari Mandala 3 during the midline survey used flush or U-Bend toilets connected to a septic tank. In Kota Bangun, by the time of the midline survey in 2013 there had been an increase of 100% in the use of flush/U-bend toilets connected to septic tanks. Previously at the time of the midline survey, not a single respondent said they used a flush/U-bend toilets connected to a septic tank. A similar situation was apparent in Tegal Sari Mandala 3, where there was also an increase in the use of flush/U-bend toilets connected with septic tanks, although the increase was not as significant (16.7%).

The data obtained reveals that the number of residents with their own toilets connected to septic tanks has increased over the course of approximately the last two years (the interval between the baseline and midline surveys).

The locations where the respondents habitually defecate are as shown below:

Figure 5.1.

Last Place of Defecation



Respondent base: 60

The following table sets out the survey's observation findings:

Table 5.1.

Findings of Observations on Destination of Toilet Waste

Description	Kota Bangun	TSM 3
Respondent Base	30	30
<b>Location of Last Defecation– by claim</b>		
Flush toilet with septic tank	76.7%	46.7%
Flush toilet draining into river/stream/ditch/drain	20.0%	20.0%
Non-flush toilet draining into river/stream/ditch/drain	3.3%	-
Flush toilet connected to sewage system	-	23.3%
Shared toilet	-	3.3%
No facilities, into river/drain/ditch/stream	-	6.7%
<b>Place where human waste is channeled – based on observations</b>		
Septic tank	73.3%	63.3%
Directly into drainage system	26.7%	10%
River/Lake/Sea	-	23.3%
Drop toilet/hole in the ground	-	3.3%

The above table presents a comparison between the place of last defecation based on the claims of respondents, and the findings of the observations conducted in the field. In Tegal Sari Mandala 3, only 46.7% of respondents said that their toilets drained into a septic tank. By contrast, the observations in the field found that 63.3% of respondents' toilets drained into a septic tank.

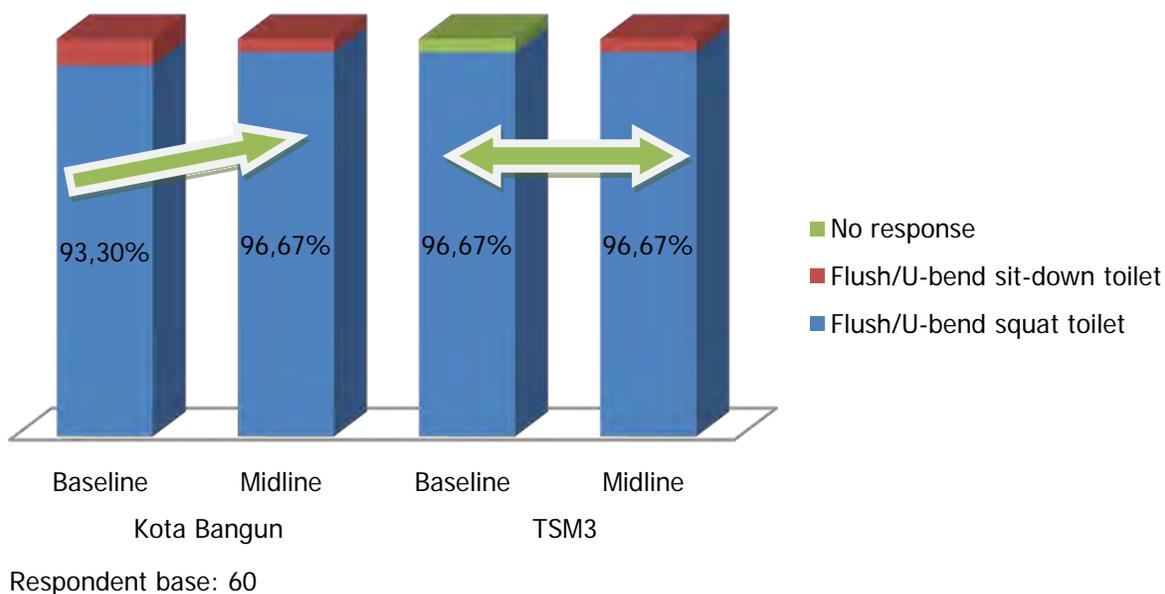
The above table shows that the majority of respondents in both Kota Bangun (73.3%) and Tegal Sari Mandala 3 (63.3%) have toilets that are connected to septic tanks. However, there were also respondents in both sub-districts whose toilets were not connected to septic tanks. Thus, open defecation free status has not yet been achieved in these two sub-districts.

## Condition of Toilets in General

Based on the observations conducted on the types of toilets used by the respondents, the majority (more than 95%) in both Kota Bangun and Tegal Sari Mandala 3 used flush/U-bend squat toilets. Only a small proportion (3.3%) used flush/U-bend sit-down toilets. The proportions of the different types of toilets were found to be almost the same during the midline survey as at the 2012 baseline survey, with flush/U-bend squat toilets predominating at both times.

Figure 5.2.

Types of Toilets Used, Based on Observations

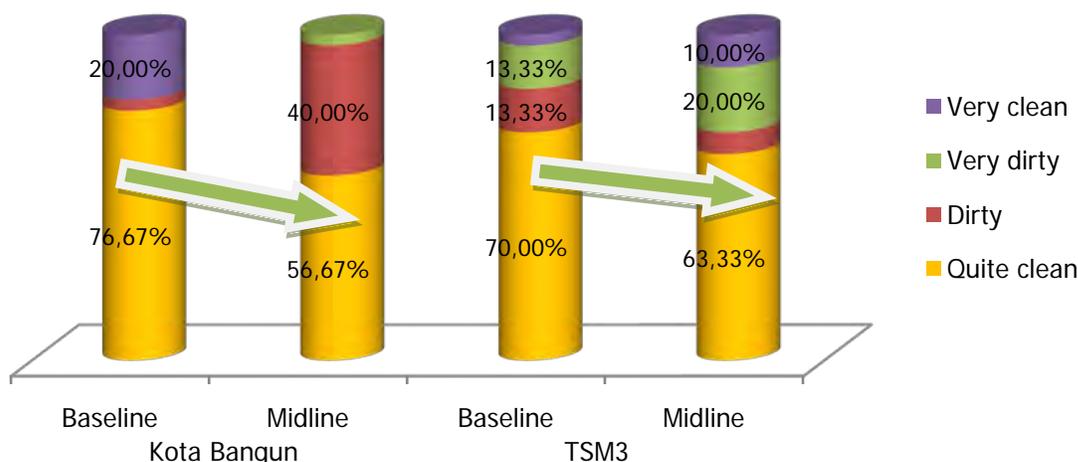


The observations revealed that there had been a regression as regards respondent behavior in maintaining toilet cleanliness. This was apparent from a decline in the proportion of toilets categorized as being “quite clean” in both sub-districts. In Kota Bangun, the proportion declined from 76.7% to 56.7%, and was accompanied by an increase in the proportion of toilets classified as “dirty” (from 3.3% to 40%). The midline survey found that some toilets were “very dirty”, while this was not the case at the time of the baseline survey.

The following graph presents a comparison between the condition of respondents' toilets at the time of the baseline survey and the midline survey.

Figure 5.3.

Toilet Condition – based on Observations



Responden base: 60

Table 5.2. below sets out in more detail the findings of the observations on toilet cleanliness in target households with under-5s.

Overall, the condition of the toilets in target households in the two High Five Program Sub-districts was no better than it was at the time of the 2012 baseline survey. Table 5.2 shows that the condition of the toilets in Kota Bangun, is getting better than in Tegal Sari Mandala 3. Regressions are apparent in a number of areas in both sub-districts.

- Two respondent households were found to have feces in the toilet. At the time of the baseline survey, no such incidences were found.
- A used sanitary napkin was observed in one toilet in Tegal Sari Mandala 3. No such incidence was found during the baseline survey.
- 1 toilet in Kota Bangun lacked a water scoop, while during the baseline survey all households were found to have a water scoop in their toilets. In addition, 3 households in Tegal Sari Mandala 3 were found not to have water buckets in their bathrooms, while 15 did not have a towel or cloth for drying hands in their toilets.

The following table sets out a comparison of toilet conditions as observed during the baseline and midline surveys.

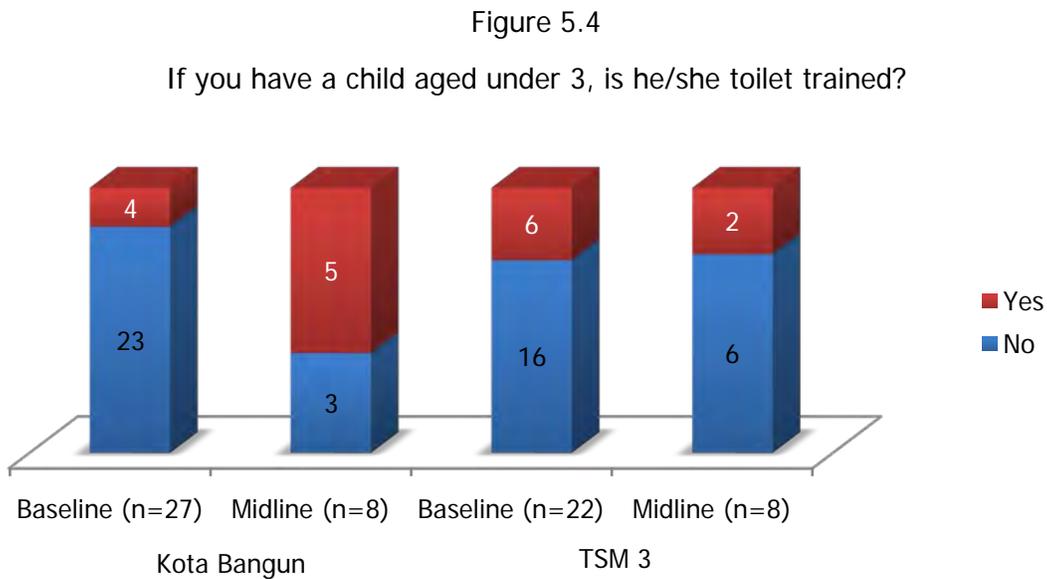
Table 5.2  
Toilet Conditions, Based on Observations

Toilet Conditions		Kota Bangun		TSM3	
		Baseline (n=30)	Midline (n=30)	Baseline (n=30)	Midline (n=30)
Feces in toilet or on toilet walls	Yes	-	-		6.7%
	No	100.0%	100.0%	100.0%	93.3%
Sanitary napkin in toilet	Yes	-	-		3.3%
	No	100.0%	100.0%	100.0%	96.7%
Flies in toilet	Yes	-	10.0%	3.3%	3.3%
	No	100.0%	90.0%	96.7%	96.7%
Water available (if there is a tap, it is working)	Yes	43.3%	40.0%	83.3%	90.0%
	No	56.7%	60.0%	16.7%	10.0%
Water scoop present	Yes	100.0%	96.7%	93.3%	96.7%
	No	-	3.3%	6.7%	3.3%
Water bucket/receptacle present	Yes	100.0%	100.0%	100.0%	90.0%
	No	-	-	-	10.0%
Towel/cloth for drying available	Yes	50.0%	-	56.7%	50.0%
	No	50.0%	100.0%	43.3%	50.0%

A further criterion for assessing achievements made under the first CBTS pillar concerns the number of under-3s who are toilet trained. The 2013 midline survey found that a greater proportion of under-3s in Kota Bangun than in Tegal Sari Mandala 3 are toilet trained.

During the midline survey in Kota Bangun, more than half of the total number of respondents (who had under-3s) said that their under-3s were toilet trained, while in Tegal Sari Mandala 3 more than half of the respondents said that their under-3s were not toilet trained.

Figure 5.4. below (in absolute terms as the base number of respondents was less than 30) shows the proportions of under-3s who are and who are not toilet trained.

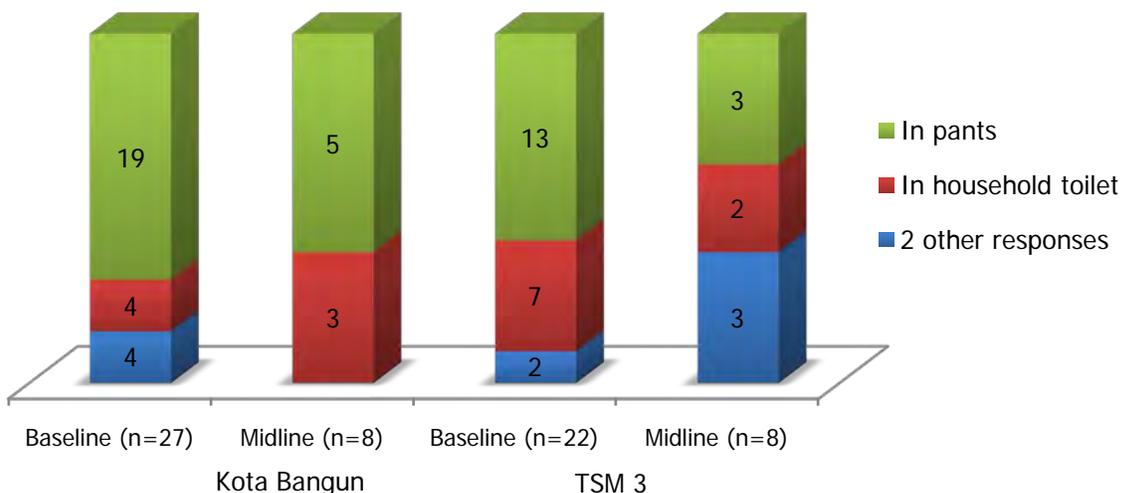


Also with regard to defecation practices among infants, the last place where the majority of under-3s defecated was their pants, while only a small proportion of respondents said that the last place where their under-3s defecated was their private toilet (as the respondent base in each sub-district was 8, the figures shown are absolute given that the respondent base is below the minimum sample size, i.e., 30 respondents).

The following graph shows the places where under-3s in Medan last defecated (the figure below is in absolute terms as the base number of respondents was less than 30):

Figure 5.5

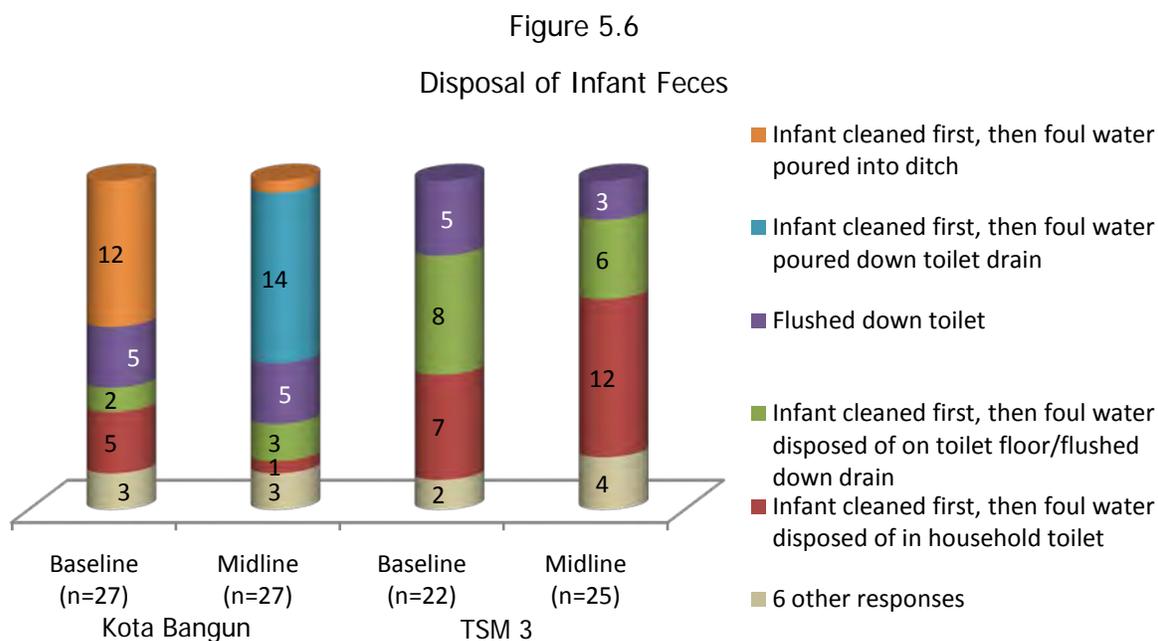
Location of Last Defecation among Under-3s



As regards where caregivers last disposed of infant feces (see Figure 5.6), the majority of respondents in Kota Bangun (51.9%) said that they first cleaned the infant and then disposed of the foul water down the toilet drain/outlet, while 18.5% said they flushed it down the toilet.

In Tegal Sari Mandala 3, almost half of respondents said that they first cleaned the infant and then flushed the foul water down the toilet, while 24% said they first washed the infant and then poured the foul water out on the toilet floor or down the toilet drain/outlet.

Figure 5.6 shows how caregivers dispose of infant feces in the target areas (in absolute terms as the base number of respondents was less than 30):



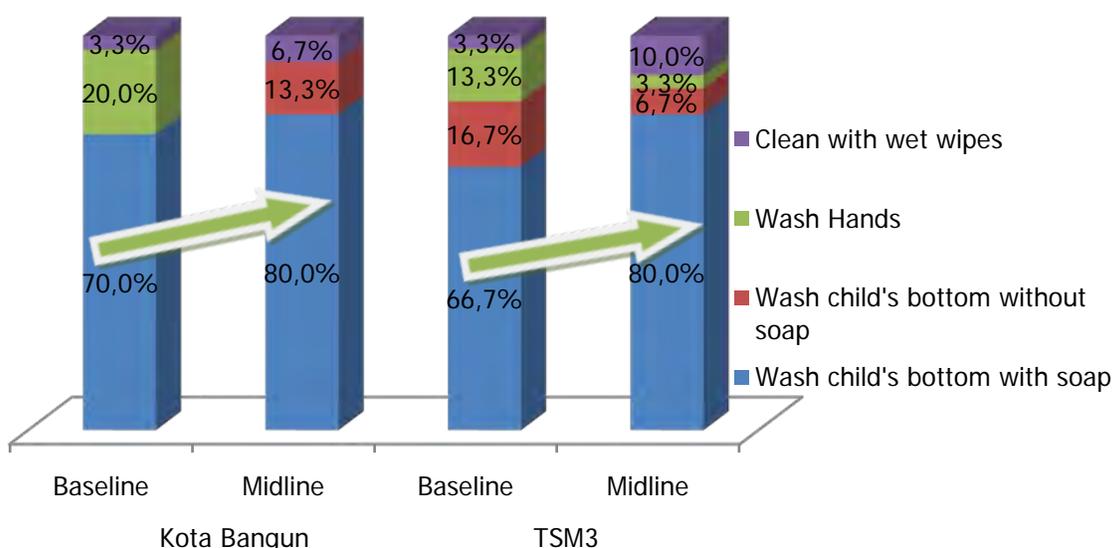
The next question concerns the defecation practices of children aged 3 to 5. In Kota Bangun, at the time of the baseline survey the majority of respondents said that their 3-5 year olds were used to defecating in the private household toilet (the types of toilets used were not identified). Meanwhile, during the midline survey more than half of respondents said that the last time their 3-5 year olds defecated they had used a flush/U-bend toilet connected to a septic tank, while 25% were considered to practice open defecation as their toilets drained directly into a river/stream/ditch/drain.

In Tegal Sari Mandala 3, the last places where 3-5 year olds defecated were more diverse, with 37.5% of respondents stated that the last place was a flush/U-bend toilet draining into a sewerage system. However, another 37.5% said that the last place their 3-5 year olds had defecated was in their pants. In addition, 12.5% said that the last place their 3-5 year olds had defecated was in a shared bathroom, while another 12.5% were categorized as practicing open defecation as their flush toilets drained directly into a river/stream/ditch/drain, rather than into a septic tank.

As regards what caregivers did after their 3-5 year olds defecated, the majority of respondents in both sub-districts said that they washed their children’s bottoms using soap. However, the midline survey also found that there were respondents who did not do this (13.3% in Kota Bangun and 6.7% in Tegal Sari Mandala 3), while only 3.3% of respondents in Tegal Sari Mandala 3 said that they immediately washed their hands after cleaning their children’s bottoms.

Figure 5.7

What Respondents Do after Children Defecate



Responden base: 60

### Summary of First Pillar Findings: Open defecation free

Table 5.3

First Pillar Indicator: Open defecation free

Indicator	Kota Bangun		TSM3	
	Baseline	Midline	Baseline	Midline
Caregiver's Last Place of Defecation				
Respondent Base	30	30	30	30
In private toilet	90.0%	-	60.0%	-
Toilet draining into septic tank	-	76.7%	30.0%	46.7%

Indicator	Kota Bangun		TSM3	
	Baseline	Midline	Baseline	Midline
Toilet draining into sewerage system	6.7%	-	-	23.3%
Toilet draining into river/stream/ditch/drain	3.3%	20.0%	10.0%	20.0%
Non-flush toilet draining into river/stream/ditch/drain	-	3.3%	-	-
In shared toilet	-	-	-	3.3%
No facilities, into river/drain/ditch/irrigation channel	-	-	-	6.7%
Defecation Locations of Under-3s				
Respondent Base	27	8	22	8
In pants	70.4%	62.5%	59.1%	37.5%
In household toilet	14.8%	37.5%	31.8%	25.0%
In disposable diapers	14.8%	-	-	37.5%
Place of disposal of under-3s' feces				
Respondent Base	11	8	16	8
Flushed down toilet into sewerage system	1	-	-	3
Flushed down toilet into septic tank	-	6	3	
Flushed down toilet into river/stream/ditch/drain	-	2	1	1
In private toilet	10	-	11	-
In bathroom	-	-	1	-
In shared toilet	-	-	-	1
In pants	-	-	-	3
Post-infant defecation practices				
Wash child's bottom with soap	70.0%	80.0%	66.7%	80.0%
Wash child's bottom without soap		13.3%	16.7%	6.7%
Wash hands	20.0%		13.3%	3.3%
Clean with wet wipes		6.7%		

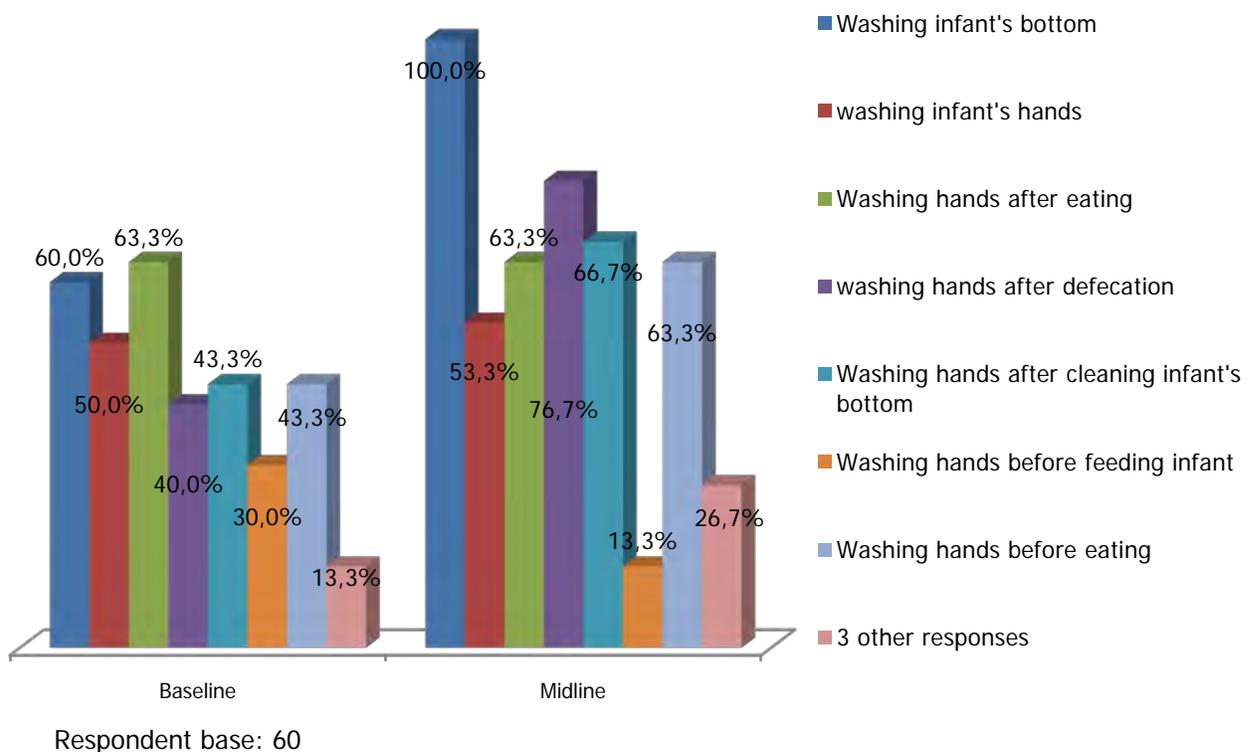
## B. Hand-Washing with Soap

In order to ascertain the extent to which respondents practiced hand washing with soap over the last 2 days, they were given multi response questions and responses related to bathing and clothes washing were ignored (as the most common responses, up to 100%). Besides bathing and washing clothes, all of the respondents in Kota Bangun said that they had used soap in the last two years to wash baby's bottom, and more than half of respondents (76.7%) used soap when washing their hands after defecating. Overall in Kota Bangun, the level of respondent awareness of the importance of washing hands with soap was found to be higher than at the time of the 2012 baseline survey.

The situation as regards washing hands with soap in Kota Bangun Sub-district is as shown in the following chart:

Figure 5.8

Use of Soap in Last Two Days in Kota Bangun Sub-district – Multiple Answer



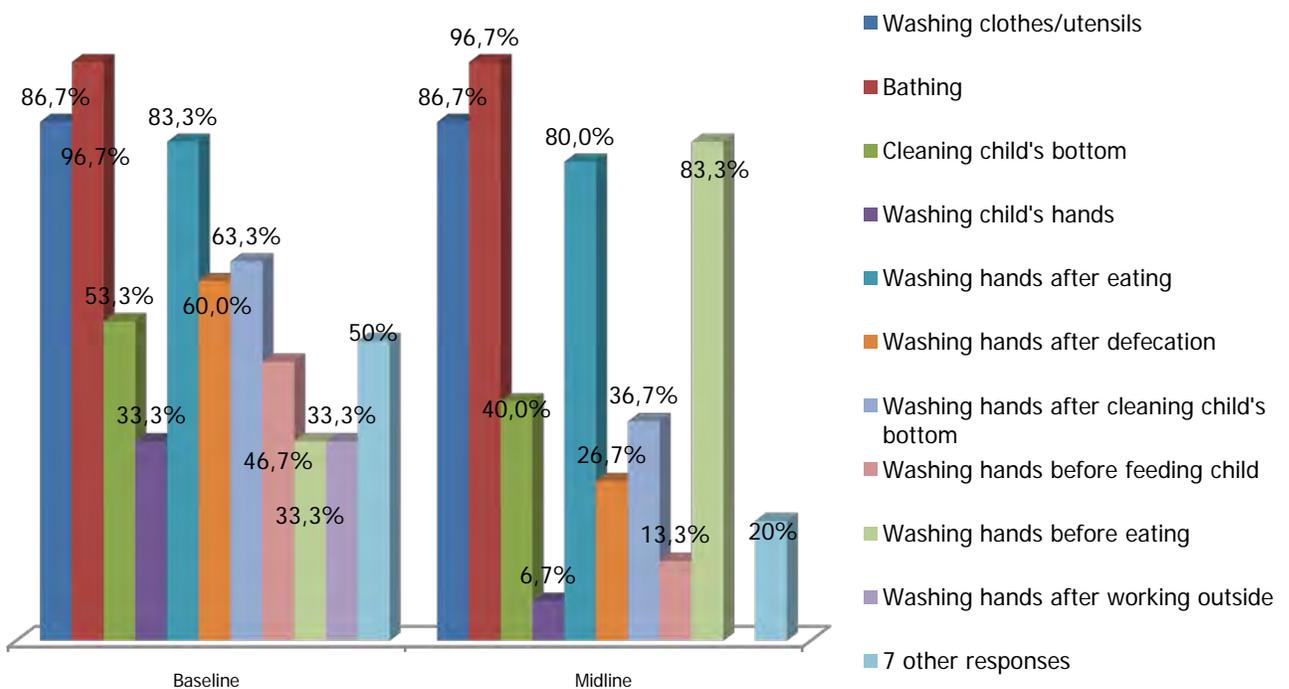
In Tegal Sari Mandala 3, it was found that not all of the respondents used soap when washing clothes (86.7% used soap for washing clothes, while 96.7% did so when bathing). Besides bathing and washing clothes, the majority of respondents also used soap when washing their hands before eating (83.3%) and after washing their children's bottoms (80%). When compared with the Baseline Survey, the Midline Survey does not reveal any improvement in

people’s awareness of the importance of using soap. In fact, quite a few incidences of regression were revealed by the Midline Survey. Overall, the respondents from Kota Bangun demonstrated better practices and behavior in the use of soap than was the case with those from Tegal Sari Mandala 3.

The following chart shows the use of soap over the last two days in Tegal Sari Mandala 3:

Figure 5.9

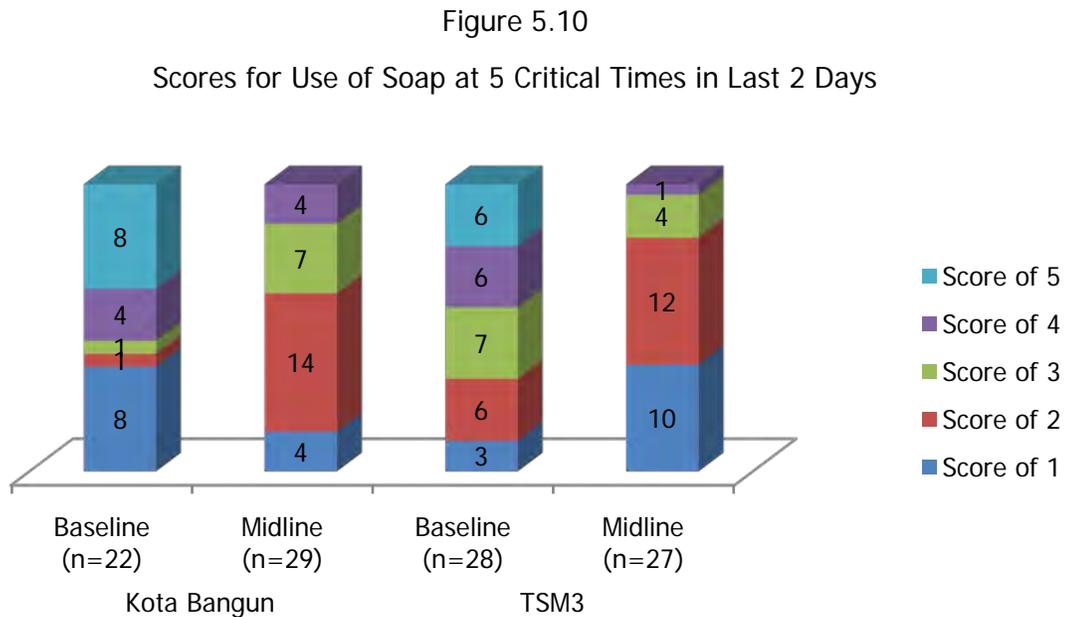
Use of Soap over Last Two Days in Tegal Sari Mandala 3 Sub-district – Multiple Answer



Respondent base: 60

Each interviewed caregiver to an under-5 was assessed on washing hands with soap at five critical times, namely: (i) before eating; (ii) after feeding child, (iii) after defecation, (iv) after cleaning child’s bottom, and (v) before preparing food. Based on a score of 1 for each of the above behaviors, the maximum score received was 5.

The following graph shows the overall scores (in absolute terms as the base number of respondents was less than 30):



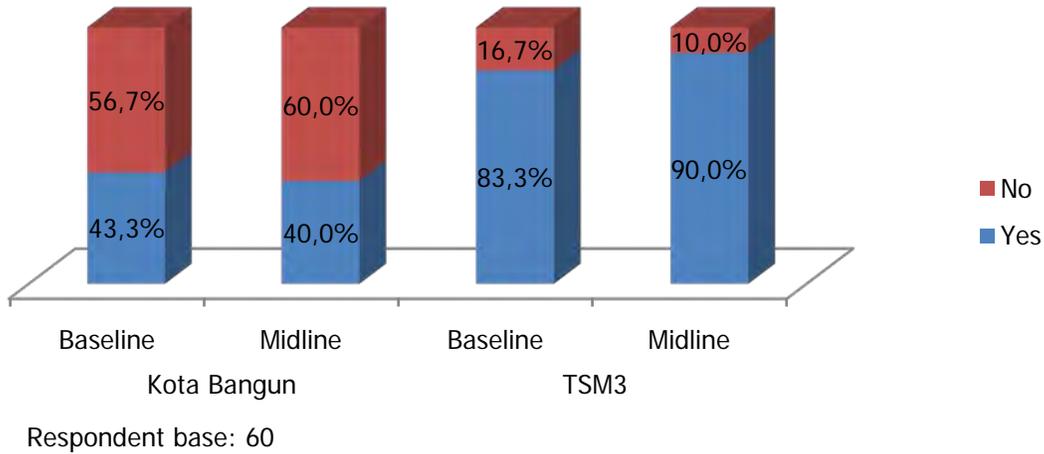
As will be seen from Figure 5.10 above, the midline survey in Kota Bangun found that the majority of the respondents (14) only washed their hands with soap at 2 out of the 5 critical times, and not one respondent did so at all 5 critical times. This demonstrates a marked regression from the findings of the baseline survey in 2012, where 8 respondents stated that they washed their hands with soap at all 5 critical times. The same applied in Tegal Sari Mandala 3, where the midline survey found that not one respondent washed their hands with soap at all critical times. In fact, the majority (12 respondents) said that the only washed their hands with soap at 2 out of the 5 critical times. By contrast, the baseline survey found that 6 respondents washed their hands with soap at all critical times.

Another indicator for evaluating the second pillar of CBTS in connection with the practice of washing hands with soap is the availability of running water and soap. This is assessed based upon observations in the bathroom or when respondents wash their hands.

In Kota Bangun, less than half of the toilets that were observed (40%) had running water when the tap was opened, while 60% did not have running water. The situation was different in Tegal Sari Mandala 3, where almost all the toilets had running water.

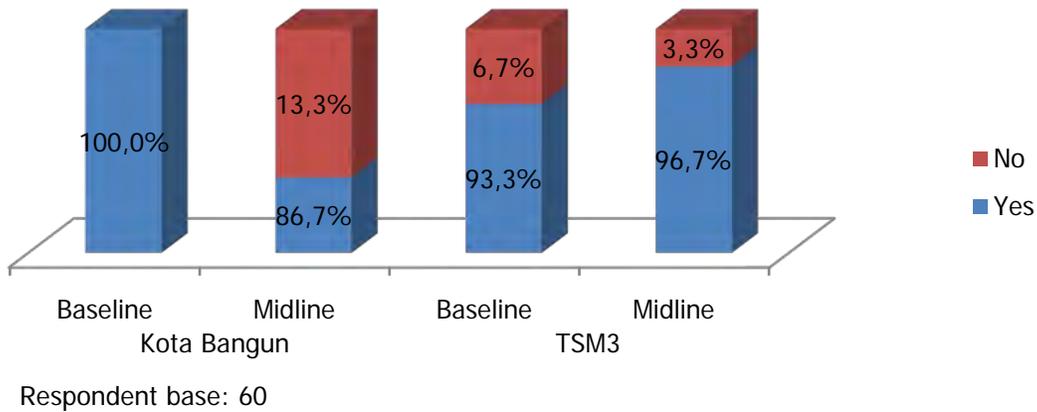
Figure 5.11 shows the availability of running water in toilets in the surveyed sub-districts:

Figure 5.11  
Availability of Running Water



Besides the availability of running water, the availability of soap in the toilet (for washing hands) is another indicator of the practice of washing hands with soap. The situation as regards the availability of soap (for washing hands) in the toilet or the place where the dishes are washed is as shown in Figure 5.12 below:

Figure 5.12  
Availability of Soap



As will be seen from Figure 5.12 above, not all houses in the two sub-districts had soap available (for washing hands or dishes). In Kota Bangun, 13.3% of respondents did not have soap available in the toilet or place where dishes are washed, while the baseline survey found that all respondents in Kota Bangun had soap available in these places. Meanwhile in Tegal Sari Mandala 3, only 3.3% of respondents did not have soap available, which marked an

improvement over the situation at the time of the baseline survey in 2012, when 6.3% of respondents did not have soap available in the bathroom (for washing hands or dishes).

## Summary of Second Pillar: Practices of washing hands with soap

Table 5.4

Indicators Showing Practice of Washing Hands with Soap

Indicator	Kota Bangun		TSM3		
	Baseline n=30	Midline n=30	Baseline n=30	Midline n=30	
<b>Use of soap in last 48 hours – Multiple Answer</b>					
Washing clothes/dishes	100.0%	90.0%	86.7%	86.7%	
Bathing	100.0%	100.0%	96.7%	96.7%	
Washing child's bottom	60.0%	100.0%	53.3%	40.0%	
Washing child's hands	50.0%	53.3%	33.3%	6.7%	
Washing hands after eating	63.3%	63.3%	83.3%	80.0%	
Washing hands after defecation	40.0%	76.7%	60.0%	26.7%	
Washing hands after cleaning child's bottom	43.3%	66.7%	63.3%	36.7%	
Washing hands before feeding child	30.0%	13.3%	46.7%	13.3%	
Washing hands before dining	43.3%	63.3%	33.3%	83.3%	
Other responses	13.3%	26.7%	83.3%	20%	
<b>Observations</b>					
Availability of water (if tap, running water from tap)	Yes	43.3%	40.0%	83.3%	90.0%
	No	56.7%	60.0%	16.7%	10.0%
Availability of soap	Yes	100%	96.7%	93.3%	96.7%
	No		3.3%	6.7%	3.3%

### C. Safe Drinking Water Treatment and Storage

The next CBTS pillar is safe and healthy drinking water treatment. By the water source most commonly used in the households (with under-5s) in the two sub-districts, water refills were the main choice of the majority of respondents (both in Kota Bangun and Tegal Sari Mandala 3).

More specifically, in Kota Bangun, as in the case of the baseline survey, water refills continued to be the principal source of water for the respondents (70% according to the midline survey), followed by mains water in the home (16.7%). Almost the same situation prevailed in Tegal Sari Mandala 3. Both at the time of the baseline and midline surveys, water refills were the main source of water for more than half of respondents (53.3%), followed by mains water in the home (33.3%).

As regards water for children in the home, the majority of caregivers in Kota Bangun said that they also used water refills as the main source of water for under-5s. By contrast, the majority of respondents in Tegal Sari Mandala 3 felt more confident using water from covered wells (53.3%) and mains water (33.3%) for the under-5s.

The principal sources of drinking water used in households (with under-5s) are as shown in the following graphs:

Figure 5.13  
Sources of Drinking Water

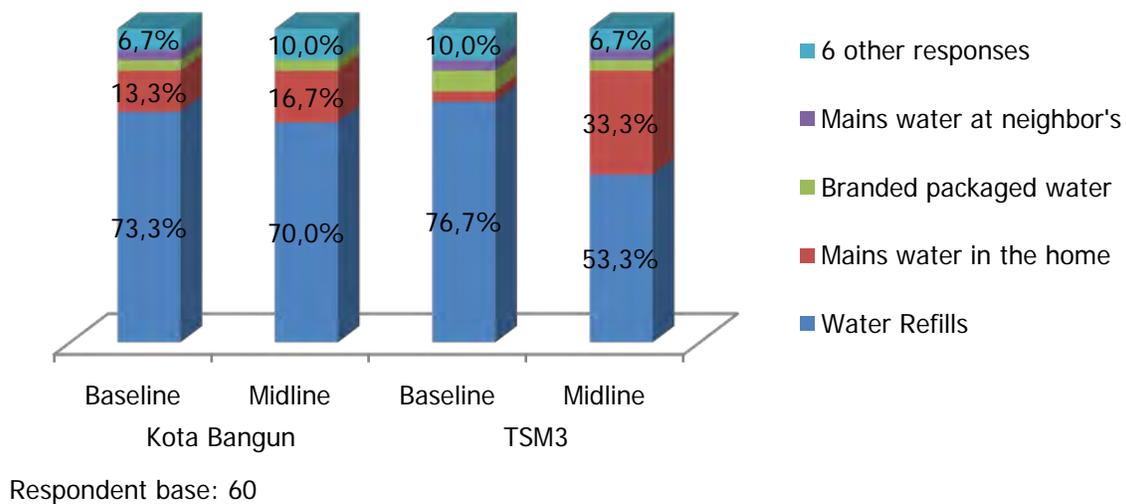
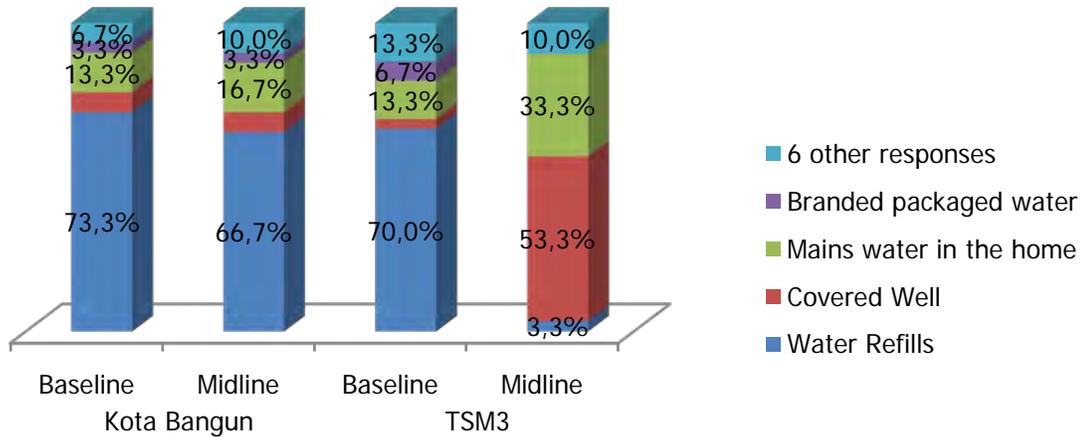


Figure 5.14

Sources of Drinking Water for Under-5s in the Home

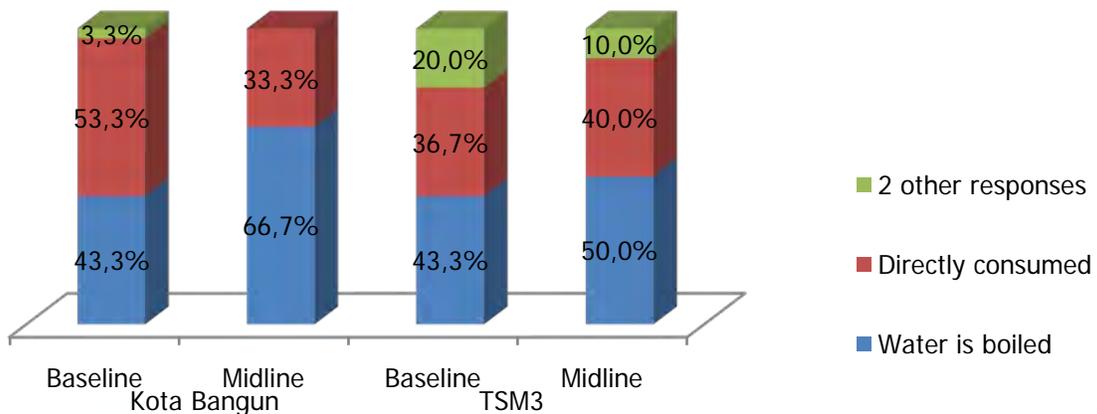


Respondent base: 60

Figure 5.14 above shows what caregivers in the surveyed sub-districts do (or do not do) so as to improve the quality of drinking water before consumption. Water refills and branded packaged water were excluded from data processing, and only mains water, water from bore wells, water purchased from itinerant water vendors and water from covered wells were included in the data processing so as to produce the following graph:

Figure 5.15

What is done (to improve quality) before consumption  
(Excludes branded packaged water and water refills)



Respondent base: 60

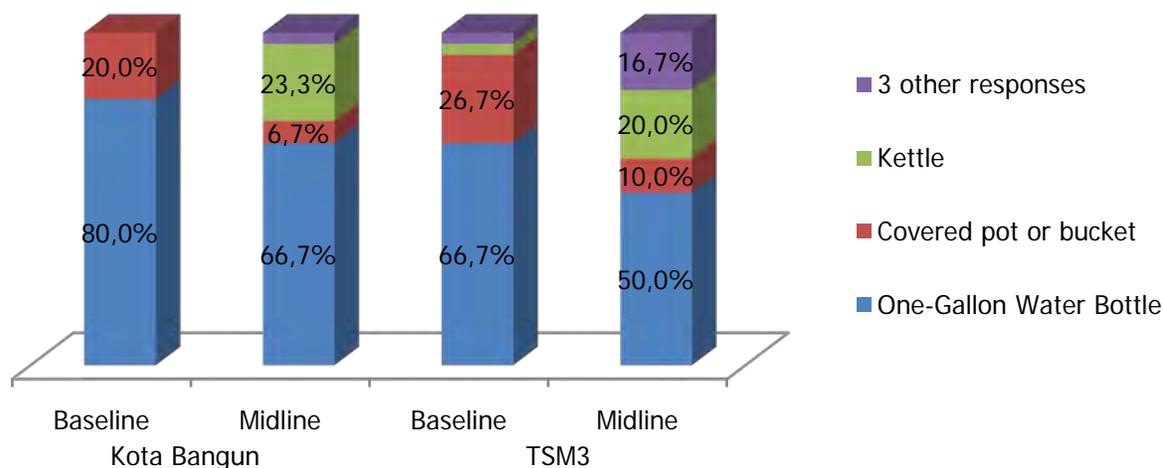
The biggest proportion of respondents in Kota Bangun and Tegal Sari Mandala 3 said that they boiled water prior to drinking it, while a small proportion said that they consumed it directly without first treating it in some way.

All of the caregivers to under-5s in Kota Bangun and Tegal Sari Mandala 3 said that they obtained their water from the water refill, excavated wells or bore wells, and that they treated the water before consuming it.

The following graph shows where drinking water is stored in households (with under-5s) in the surveyed sub-districts.

Figure 5.16

Drinking Water Storage Places



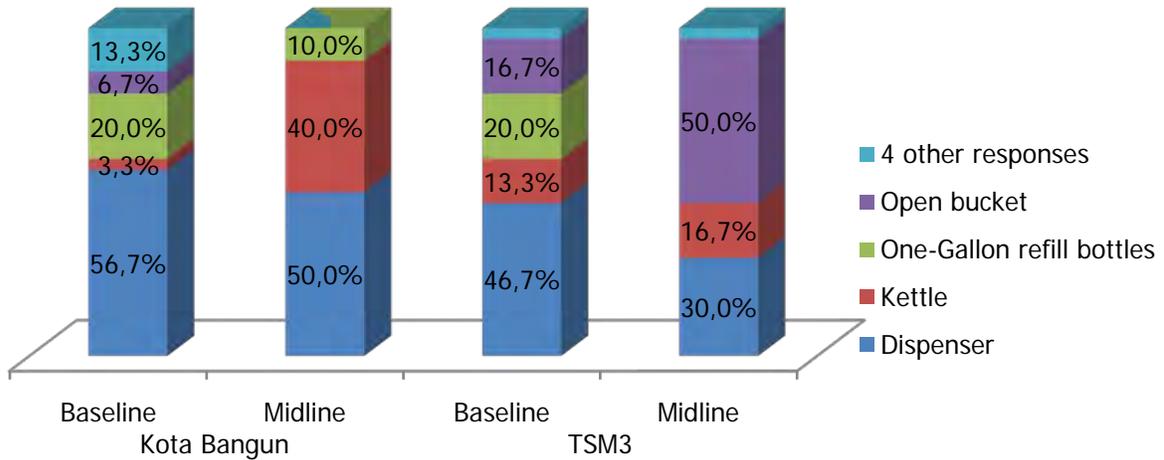
Respondent base: 60

Based on what the respondents said, one-gallon water bottles are the most common drinking water storage places in Medan. In more detail, 66.7% of respondents from Kota Bangun used one-gallon water bottles to store their drinking water. In second place were kettles (20%).

However, some inconsistencies were noted during the observations to verify what the respondents had to say, with 50% being found to use water dispensers and 40% kettles as their preferred places for storing drinking water. Meanwhile in Tegal Sari Mandala 3, where the majority of respondents said that they used one-gallon water bottles to stores their drinking water, the observations found that 50% of all respondents took their drinking water from open buckets. The types of receptacle used to store drinking water by the respondents is shown in greater detail in Figure 5.17 below.

Figure 5.17

Places Used to Store Drinking Water – Observations



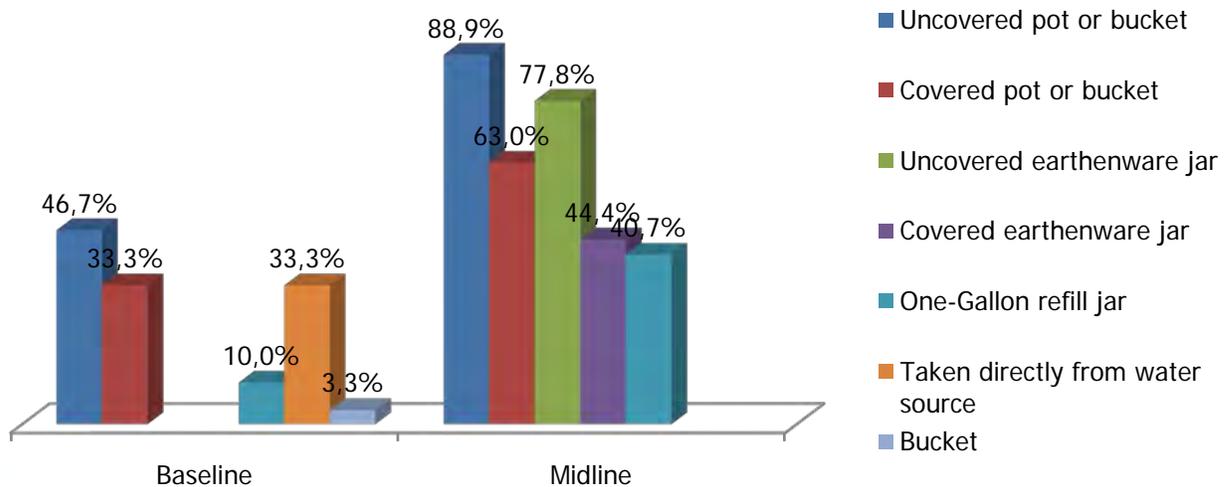
Responden base: 60

Besides observations on the places used to store drinking water, observations were also conducted so as to ascertain what receptacles respondents used to store water for cooking.

The following graphs shows the places used for such purposes in Kota Bangun and Tegal Sari Mandala 3:

Figure 5.18

Places used to store water for cooking in Kota Bangun - Observations – Multiple Answer



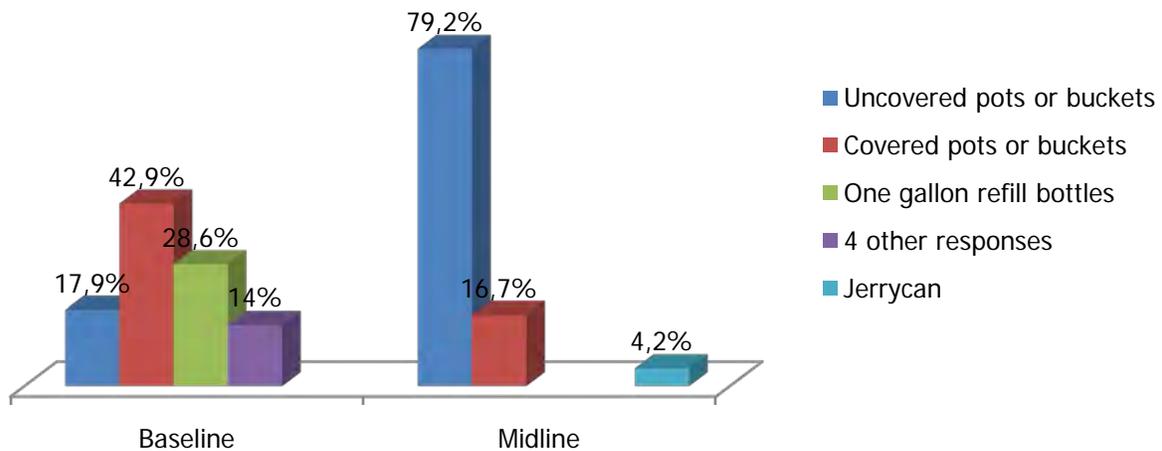
Respondent base: 60

Based on Figure 5.18, the incidence of use of an uncovered pot or bucket has increased from 46.7% at the time of the baseline survey to 88.9% during the midline survey. This increase corresponds with the emergence of uncovered earthenware jars for storing water for cooking. However, while this increase has been significant, it has been accompanied by an increase in the use of covered pots or buckets to 29.7%.

As regards the receptacles used by the residents of Tegal Sari Mandala 3 to store water for cooking, these are as shown in Figure 5.19 below:

Figure 5.19

Places used to store water for cooking in Tegal Sari Mandala 3 - Observations – Multiple Answer



Respondent base: 60

From the above table, it will be seen that the receptacles used to store water for cooking were more homogenous at the time of the midline survey. The favorite choice was uncovered pots and buckets (79.2%), compared with 42.9% of respondents at the time of the baseline survey though it was safer to store their cooking water in covered pots/buckets. Thus, the usage of covered pots/buckets had declined by the time of the midline survey.

Table 5.5

Observations on Drinking Water Storage Receptacles, Processing and Presentation

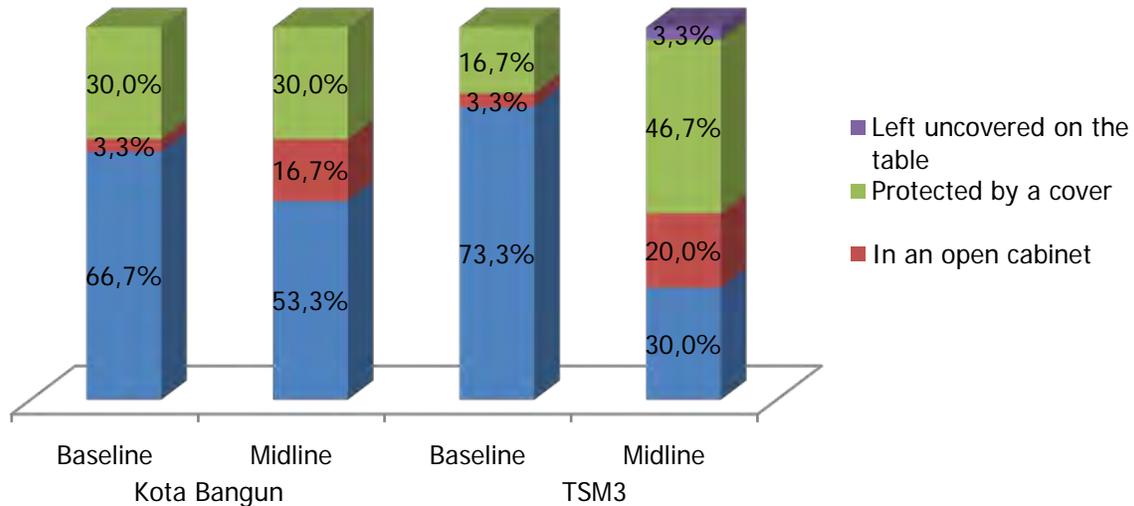
Indicator		Kota Bangun		TSM3	
		Baseline	Midline	Baseline	Midline
Respondent base		30	30	30	30
Receptacle with	Narrow aperture	80%	100.0%	80%	50.0%
	Wide aperture	20%	-	20%	50.0%
Hard/non-cloth material	Yes	50%	56.7%	90%	40%
	No	50%	43.3%	10%	60%
How about hands when taking water	Touch	3.3%	13.3%	13.3%	-
	Do no touch	96.7%	86.7%	86.7%	100.0%

As regards the observation findings on the places used for storing drinking water (presented for day-to-day consumption in the home), in Kota Bangun the use of receptacles with narrow apertures increased to 100% (compared with 80% previously). However, a different story was apparent in Tegal Sari Mandala 3, with the use of such receptacles declining from 80% to 50%.

In addition, Tegal Sari Mandala 3 also witnessed a quite drastic decline in the use of a hard cover for water receptacles, down from 90% to 40%. Nevertheless, there was an improvement as regards whether the respondents' hands touched the water when taking it from the receptacle. All of the respondents in Tegal Sari Mandala 3 said that they could take water without touching it with their hands.

In Kota Bangun, more than 50% of respondents said that they covered their water receptacles with a hard cover (rather than a cloth cover). However, there was a decline as regards whether the respondents' hands touched the water when taking it from the receptacle, with 13.3% of respondents saying that their hands now came in contact with the water, compared with just 3.3% at the time of the baseline survey.

Figure 5.20  
Places where food is stored – Observations



Respondent base: 60

More than half of the respondents in Kota Bangun (53.3%) put prepared food in a closed cabinet, similar to the situation at the time of the baseline survey (66.7%). Meanwhile, in Tegal Sari Mandala 3 almost half of respondents (46.7%) left prepared food on the table, protected by a cover. However, one respondent in Tegal Sari Mandala 3 left prepared food uncovered on the table, while 20% of respondents kept prepared food in an open cabinet.

No respondents in Kota Bangun said that they left prepared food uncovered on the table, although there were respondents who kept prepared food in an open cabinet.

## Summary of the Third Pillar: Household Safe Water Treatment and Storage Practices

The indicators for the third pillar of CBTS are summarized in the following table:

Table 5.6  
Indicators for Third Pillar: Safe Water Treatment

Indicator	Kota Bangun		TSM3		
	Baseline	Midline	Baseline	Midline	
Treatment of water prior to consumption (from mains, well)					
Respondent base	14	30	13	27	
Boil water	92.9%	66.7%	100.0%	55.6%	
Consume directly	100%	33.3%	64.7%	44.4%	
Observations					
Respondent base	30	30	30	30	
Receptacle with	Narrow aperture	80%	100.0%	80%	50.0%
	Wide aperture	20%	0.0%	20%	50.0%
Hard/non-cloth material	Yes	50%	56.7%	90%	40%
	No	50%	43.3%	10%	60%
How about hands when taking water	Touch	3.3%	13.3%	13.3	0.0%
	Do not touch	96.7%	86.7%	86.7%	100.0%
Places where prepared food is kept – top 3 answers					
In closed cabinet	66.7%	53.3%	73.3%	30.0%	
Protected by cover	3.3%	16.7%	3.3%	20.0%	
Left uncovered on table	30.0%	30.0%	16.7%	46.7%	

### D. Percentage of households that practice solid waste management

The next CBTS pillar is household waste management. All of the surveyed households (with under-5s) in Kota Bangun and Tegal Sari Mandala 3 said that they had a place for disposing of garbage in their homes. In Kota Bangun, 50% of the respondents collected their garbage in

uncovered garbage baskets, while in Tegal Sari Mandala 3 40% of respondents used covered plastic sacks in which to collect their garbage. Uncovered plastic sacks were used by 36.7% of respondents in both Kota Bangun and Tegal Sari Mandala 3.

In disposing of their garbage, the residents of Tegal Sari Mandala 3 tended to be more orderly than those of Kota Bangun. A total of 70% of the respondents in Tegal Sari Mandala 3 said that they used the services of garbage collectors (house-to-house collection or shared collection point). By contrast, only 16.7% of respondents in Kota Bangun used the services of garbage collectors, while the biggest proportion (36.7%) burned their garbage. In addition, 20% of respondents in Tegal Sari Mandala 3 disposed of their garbage at an official garbage collection point, while only 10% gave other responses, including burying garbage in a pit in their yard. Two responses fell within the category of littering (directly dumped into the river/ditch/drain and in open places).

A total of 40% of the respondents in Kota Bangun practiced a variety of different methods of garbage disposal (these were treated cumulatively), ranging from dumping in a pit in the yard and then burning, dumping in a pit in the yard and then leaving it, collecting in the yard and then burning, dumping in an official garbage disposal point, directly burying, and directly dumping into the river/ditch/drain and in open places outside the home.

Figure 5.21 shows the various responses elicited on household garbage disposal:

Figure 5.21

Receptacles or Places Used for Collecting Garbage

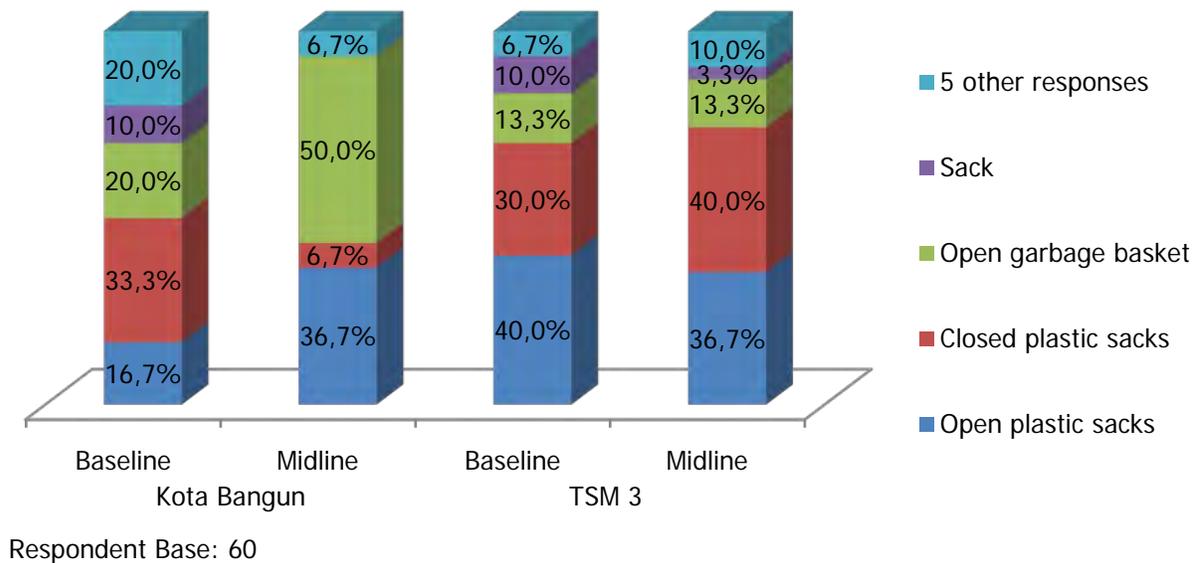
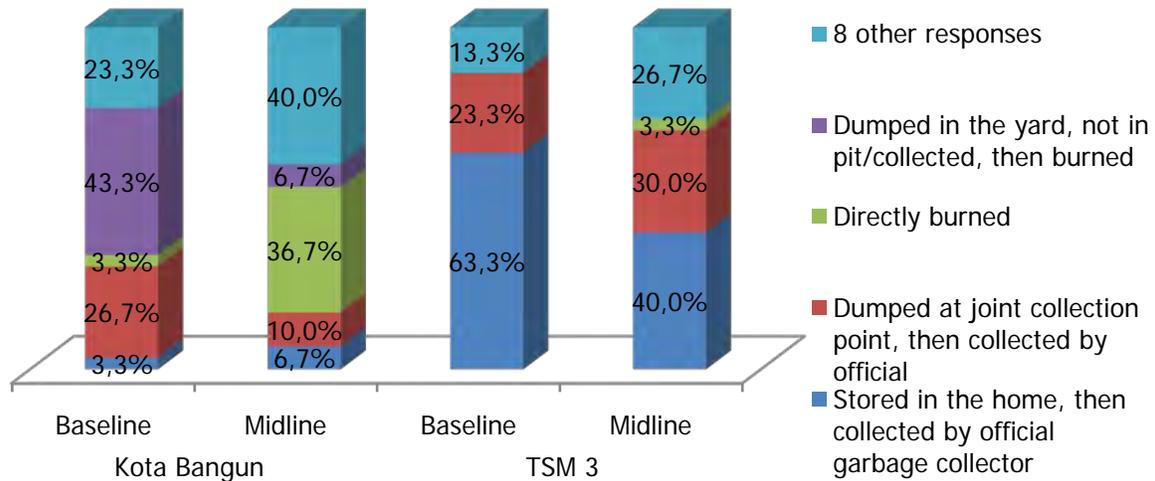


Figure 5.22  
Disposal of Household Garbage



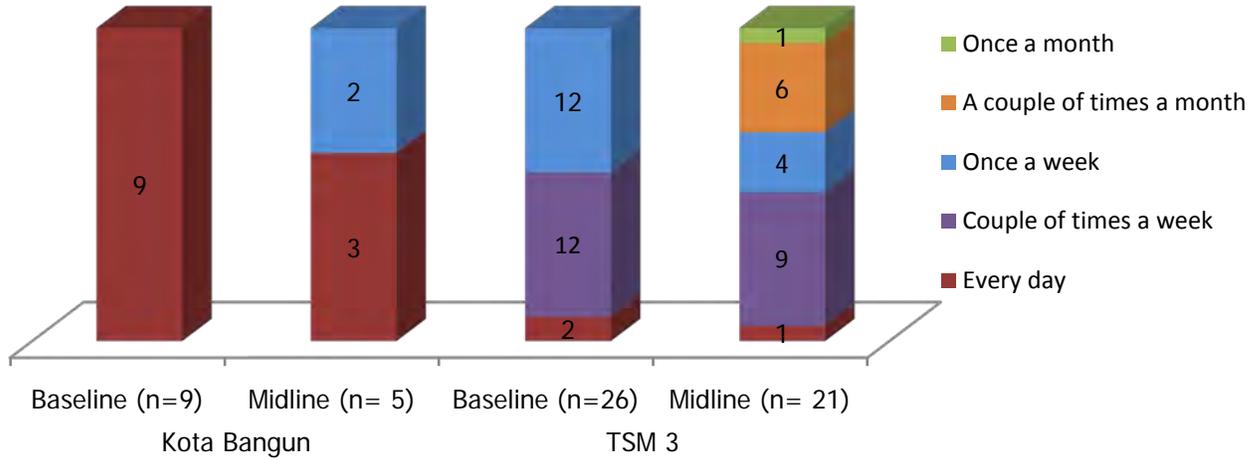
Respondent base: 60

For the respondents who used an official garbage collection service (home-to-home or at joint collection point), the frequency of collection varied quite a lot. In Kota Bangun, of the 5 respondents who used an official collection service, 3 said that the garbage was collected every day, while the remaining 2 said that garbage was collected once a week.

In Tegal Sari Mandala 3, of 21 respondents who used a garbage collection service, the biggest proportion (9 respondents) said that the garbage was collected only a few times a month. Six said that the garbage was collected only a couple of times a month, while 4 other respondents said that the garbage was collected once a week. Only one respondent said that the garbage was collected every day, while 1 other respondent said that the garbage was collected once a month.

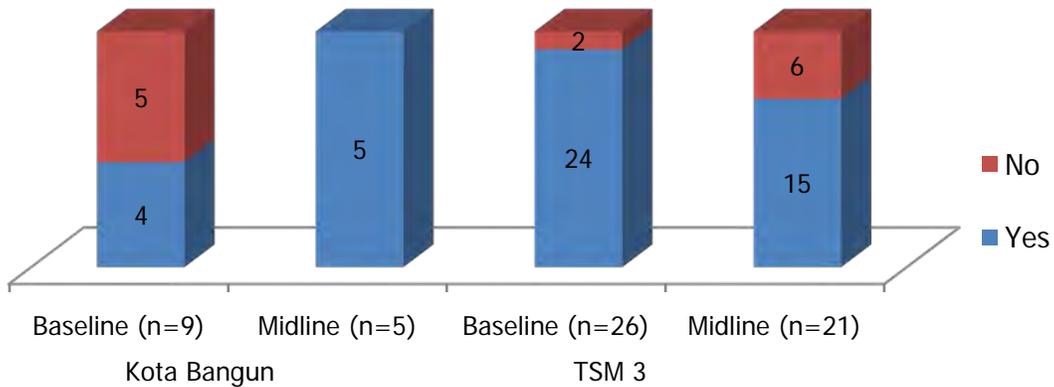
The frequency of garbage collection is as shown in Figure 5.23 below (in absolute terms as the base number of respondents was less than 30):

Figure 5.23  
Frequency of Garbage Collection



Of all of the households in Tegal Sari Mandala 3 that used an official garbage collection service, only 15 said that they paid for this, while the other 6 households said that never paid for garbage collection. By contrast, of the 5 households in Kota Bangun that used an official garbage collection service, all of them said that they paid for it.

Figure 5.24  
Do You Pay for Garbage Collection?

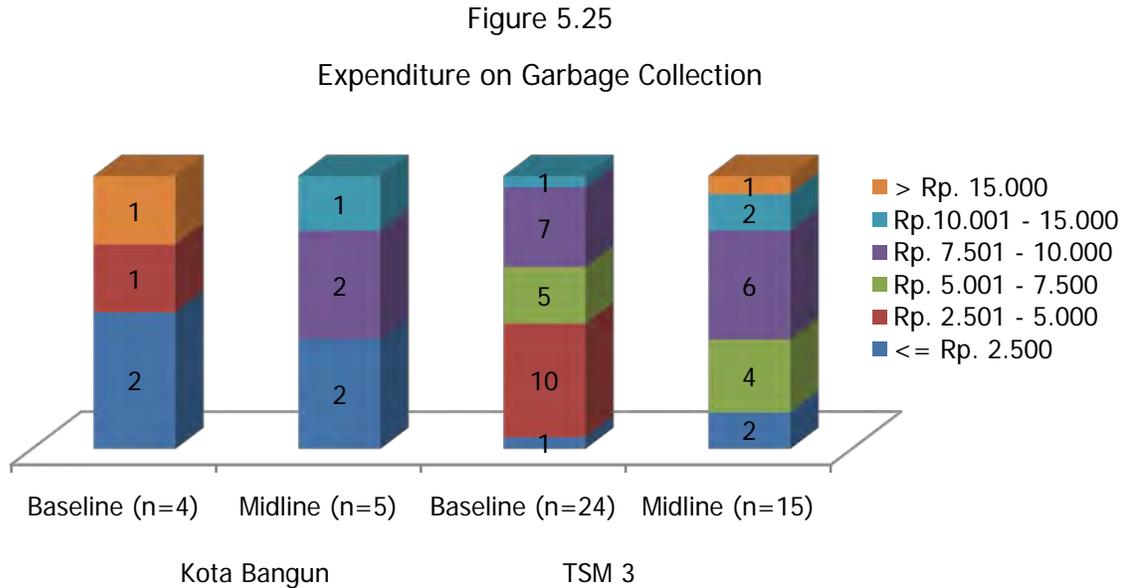


The figure above is in absolute terms as the base number of respondents was less than 30.

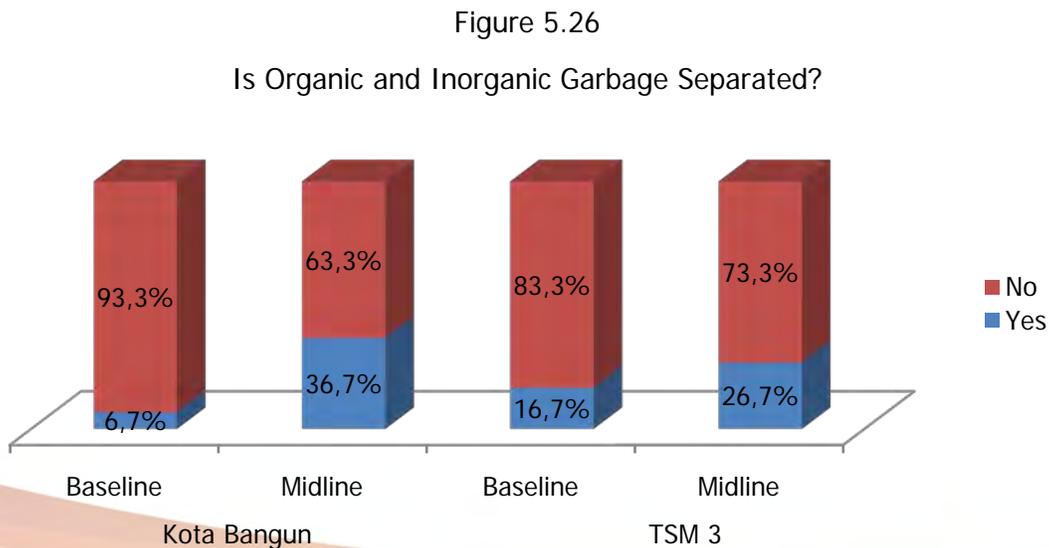
In Kota Bangun, of the household that said they paid for garbage collection, 2 paid less than Rp 2,500, 2 paid between Rp 7,501 and Rp 10,000, while 1 household paid between Rp 10,001 and Rp 15,000.

The biggest proportion of households in Tegal Sari Mandala 3 paid between Rp 7,501 and Rp 10,000. This was followed between Rp 5,001 and Rp 7,500.

The amounts paid by respondents for garbage collection services are as shown in the following chart (The figure below is in absolute terms as the base number of respondents was less than 30):



Separation between organic and inorganic was increasingly practiced by households with under-5s in the selected sub-districts in Medan, with the figures being 36.7% in Kota Bangun (while only 6.7% in 2012) and 26.7% in TSM3 (only 16.7% on baseline survey). Figure 5.26 below shows garbage separation behaviors based on respondents claims and observations verifying such claims.



Respondent base: 60

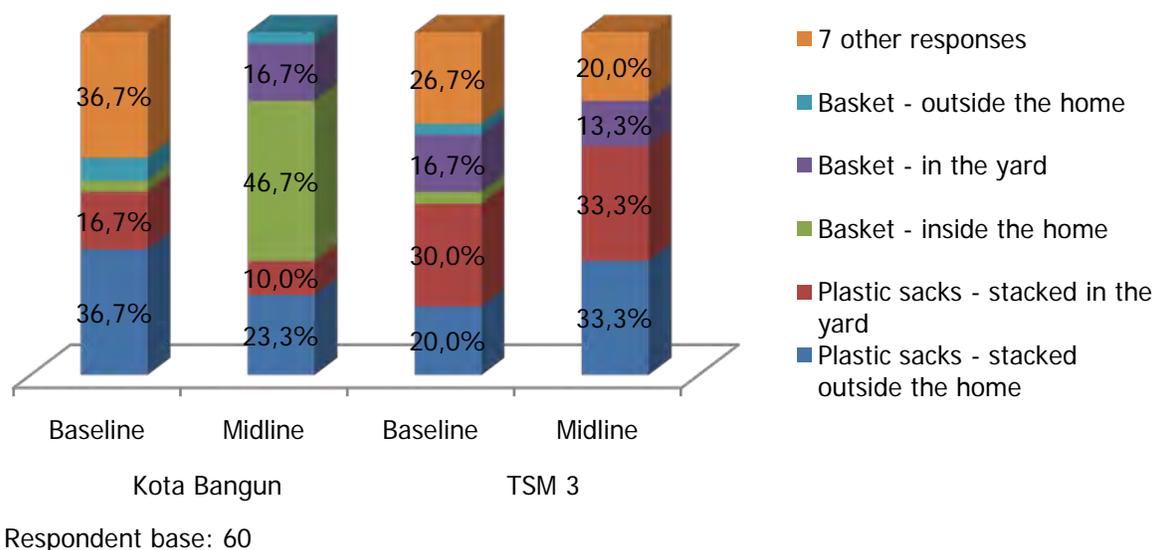
*Bringing You The Real Portrait of Indonesia*

Besides the claims of respondents, observations were also conducted to ascertain the means used to collect garbage in both Kota Bangun and Tegal Sari Mandala 3. Based on the observations, it was found that the situation in Kota Bangun had changed since the time of the baseline survey, when the biggest proportion of respondents used plastic sacks, which they stacked outside their homes. Rather, 46.7% of respondents were using garbage baskets placed inside the home. However, plastic sacks stacked outside the home were still used by 23.3% of respondent households.

In Tegal Sari Mandala 3, the situation was similar to that prevailing at the time of the baseline survey, with 33.3% of respondents using plastic sacks which they stacked inside the home, while another 33.3% of respondents used plastic sacks which they stacked outside the home.

Figure 5.27

Means Used for Collecting Garbage – Observations



### Summary of Fourth Pillar: Solid Waste Management Practices

The following table summarizes the findings in respect of the fourth CBTS pillar indicators:

Table 5.7

Fourth Pillar Indicators: Solid Waste Management Practices

Indicator	Kota Bangun		TSM3	
	Baseline	Midline	Baseline	Midline
<b>Garbage Disposal Places – 3 top answers</b>				

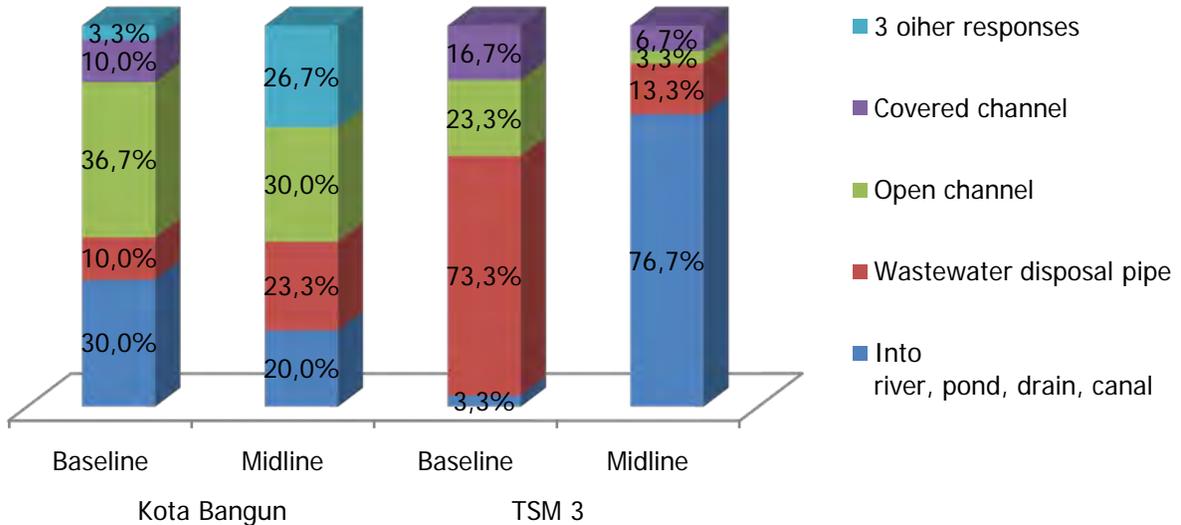
Indicator		Kota Bangun		TSM3	
		Baseline	Midline	Baseline	Midline
<b>Stored in home, then collected by garbage collection official</b>		3.3%	6.7%	63.3%	40.0%
<b>Stored at joint collection point, then collected by garbage collection official</b>		26.7%	10.0%	23.3%	30.0%
<b>Dumped in yard, without pit/collected, then burned</b>		43.3%	6.7%		
<b>Garbage separation?</b>	No	93.3%	63.3%	83.3%	73.3%
	Yes	6.7%	36.7%	16.7%	26.7%
<b>Receptacles used for collecting garbage – observations – 3 top answers</b>					
<b>Uncovered garbage basket</b>		36.7%	23.3%	20.0%	33.3%
<b>Closed plastic sack</b>		16.7%	10.0%	30.0%	33.3%
<b>Open plastic sack</b>		3.3%	46.7%	3.3%	-

## E. Proper Wastewater Management

The final CBTS pillar is proper household wastewater management. A number of indicators were used to evaluate people's behaviors in this respect in Medan. The findings of our observations on wastewater disposal are shown in the following graphs:

Figure 5.28

Disposal of kitchen wastewater – Observations



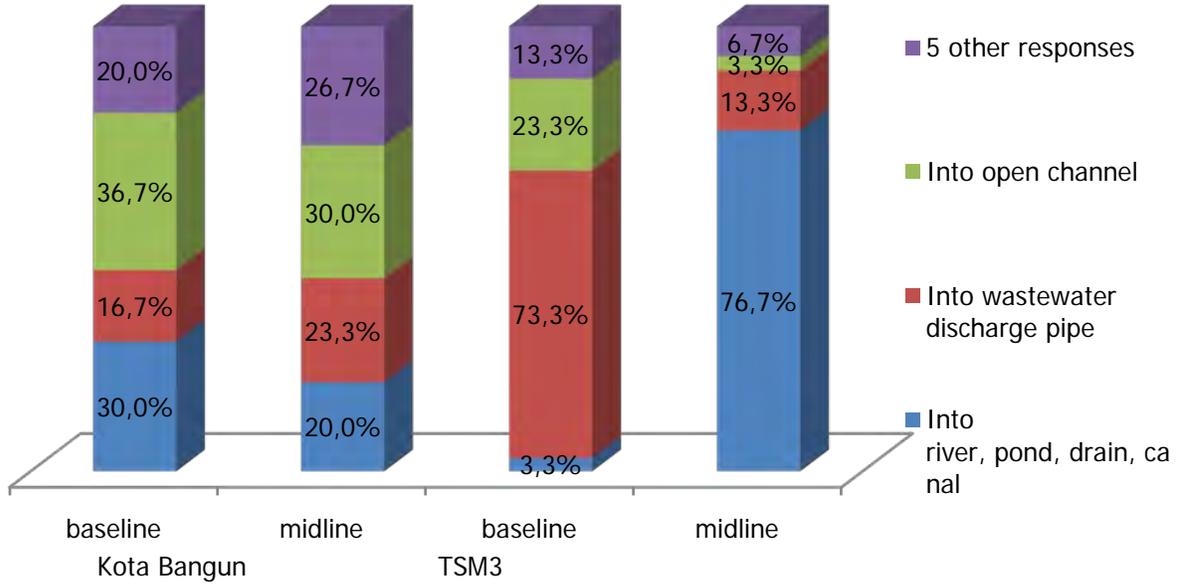
Respondent base: 60

As shown in Figure 5.28, the majority of respondent households in Tegal Sari Mandala 3 discharged wastewater (from kitchen, toilet/bathroom and from washing clothes) into the river, pond, drain or canal, while only 6.7% of them discharged wastewater into a covered channel. By contrast, at the time of the baseline survey, the majority of respondent households discharged wastewater into a wastewater discharge pipe, while 16.7% did so into a covered channel.

In Kota Bangun, there was a more even distribution of responses. Figure 29.a below shows that the situation was still the same as at the time of the baseline survey, with 30% of respondents discharging wastewater into an open channel. There were no respondents in Medan who discharged wastewater into a closed channel.

Figure 5.29

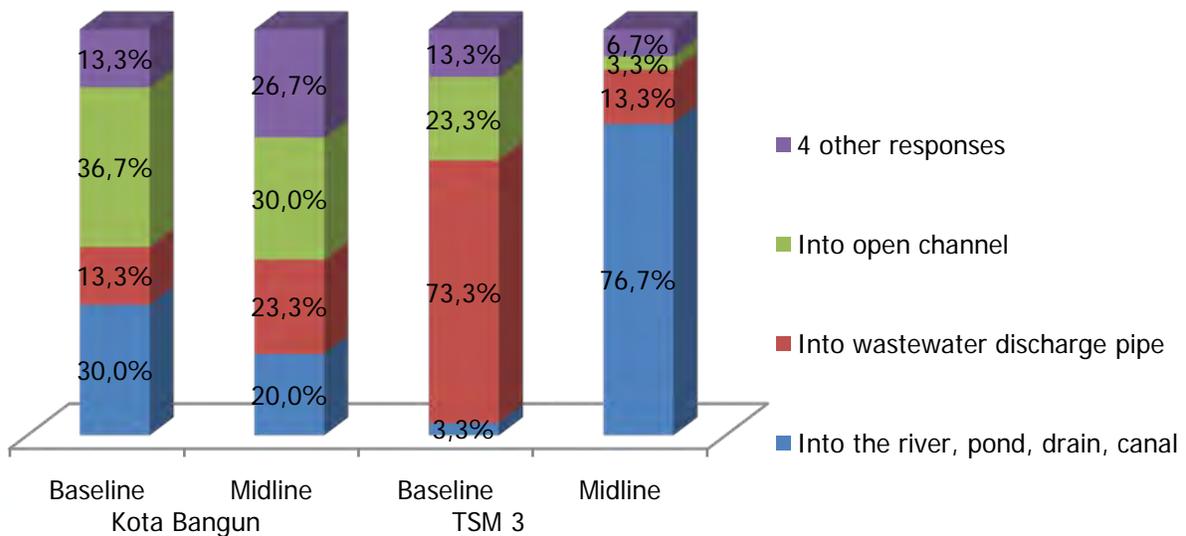
Discharge of Wastewater from Bathroom/Toilet – Observations



Respondent base: 60

Figure 5.30

Discharge of Wastewater from Clothes Washing – Observations



Respondent base: 60

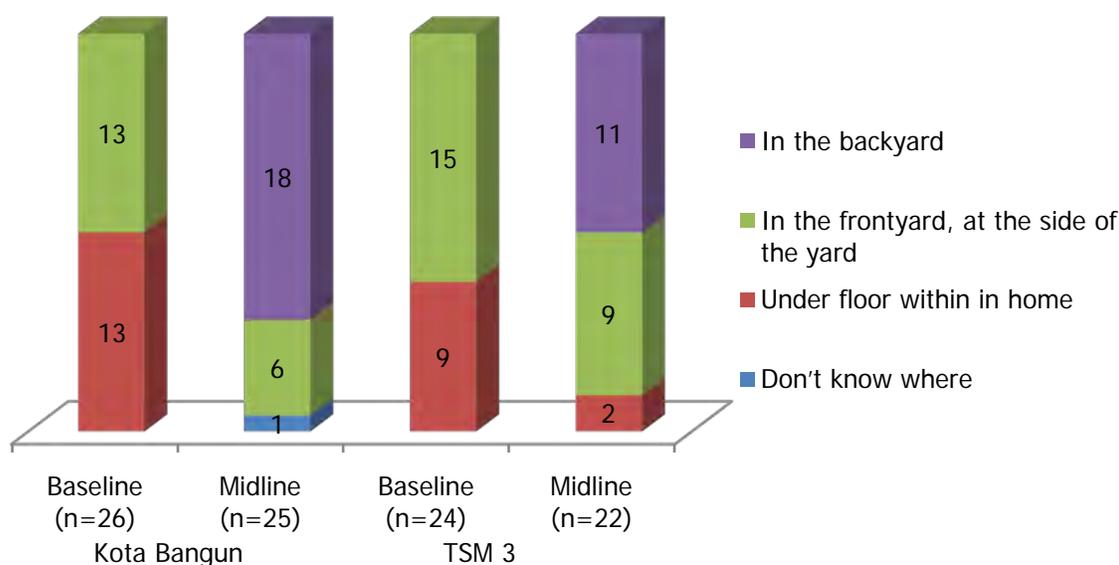
We now look at the location of septic tanks. From figure 5.31 below, it will be seen that at the time of the midline survey, the most common location for septic tanks in Kota Bangun was in the yard of the house (18 out of 15 respondents), and also in Tegal Sari Mandala 3 (11 out of 22 respondents). This was because sufficient land was available so that it was necessary to have the septic tank within the house. This was different from at the time of the baseline survey, when many households in both Kota Bangun and Tegal Sari Mandala 3 had septic tanks within the home (under the floor) due to a lack of land.

Only 2 households at the time of the midline survey in Tegal Sari Mandala 3 had septic tanks within the home, while none did so in Kota Bangun, although there was one household which did not know where its septic tank was located.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.31

Location of Septic tank – confined to those that have septic tank



As regards households that did not have septic tanks based on observations in the field, Figure 5.32 shows that the drain was the main choice for all households (4 respondents) in disposing of waste from the toilet. The midline survey found that 5 households that did not have septic tanks directly disposed of toilet wastewater into drainage channels.

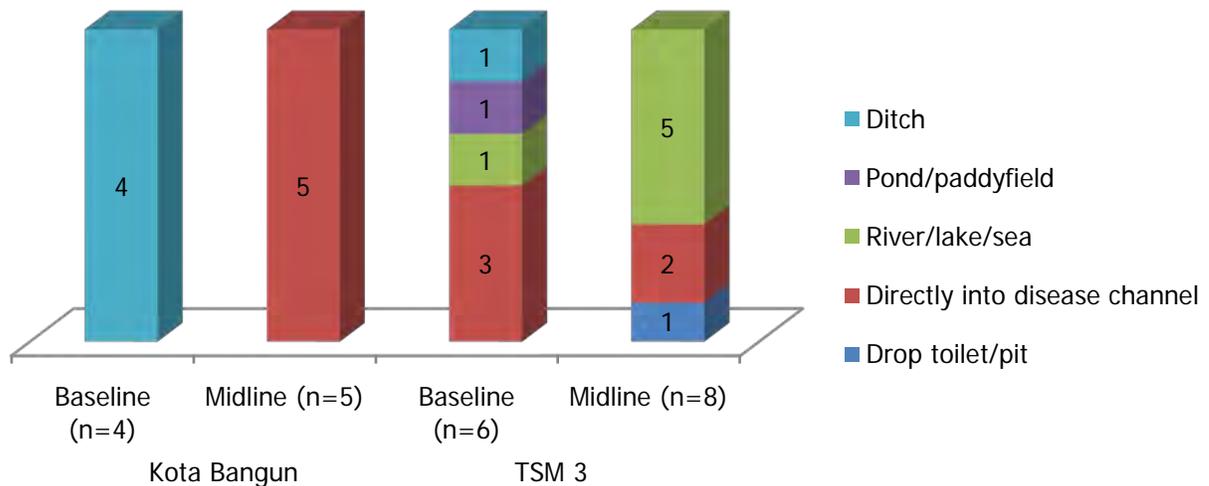
In Tegal Sari Mandala 3, 5 (out of 8) respondent households that did not have septic tanks disposed of toilet waste into the river/lake/sea, while the remaining 3 respondents disposed of such waste into drainage channels or used a drop toilet/cesspool/pit. Those who did not have septic tanks may be categorized as engaging in open defecation as although they have toilets, the toilet waste is disposed of in the open.

The following graph shows how feces are disposed of by those who lack septic tanks, based on field observations:

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.32

Final place of disposal of feces (by those that lack septic tanks) – Observations



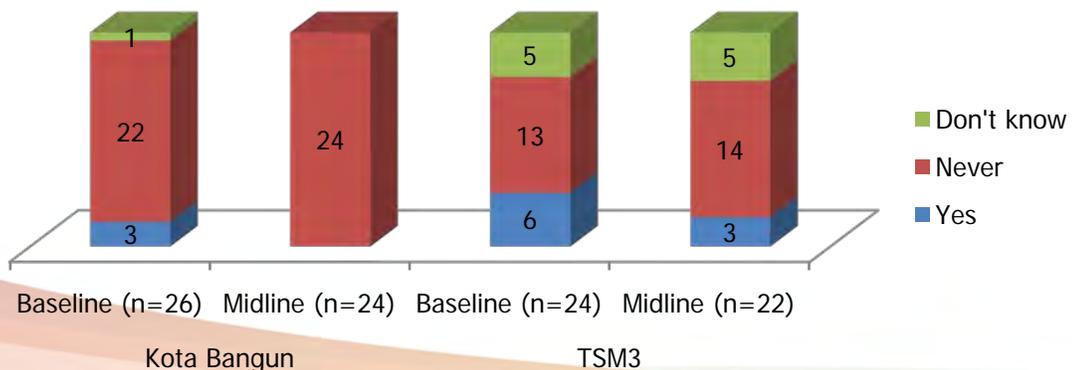
Among the households that did have septic tanks, the majority said that they were never emptied. In Kota Bangun, of 24 households that had septic tanks, not one had ever emptied the tank, while in Tegal Sari Mandala 3 only 3 (out of 22 respondent households) said that they had ever emptied their tank. Five also said that they did not know if their tank had ever been emptied.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.33 below shows the situation as regards the emptying of septic tanks:

Figure 5.33

Has your septic tank ever been emptied?

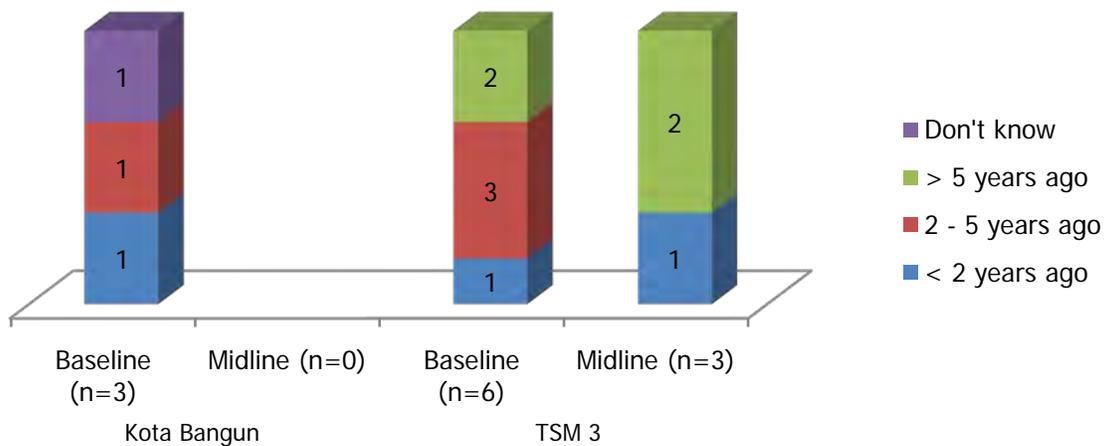


Of those who said that their septic tank had ever been emptied, Figure 5.34 shows the last time this happened. It will be seen that in Tegal Sari Mandala 3 3 respondents said that their septic tank had at one time or another been emptied, while 2 said that it had been emptied less than 5 years ago. The remaining respondent said that their septic tank had been emptied less than 2 years ago.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.34

When was the last time your septic tank was emptied?



It will be seen from Figure 5.35 below that households in Tegal Sari Mandala 3 did not use suction trucks to empty their septic tanks but rather preferred to do it themselves.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.35

Who emptied your septic tank the last time?

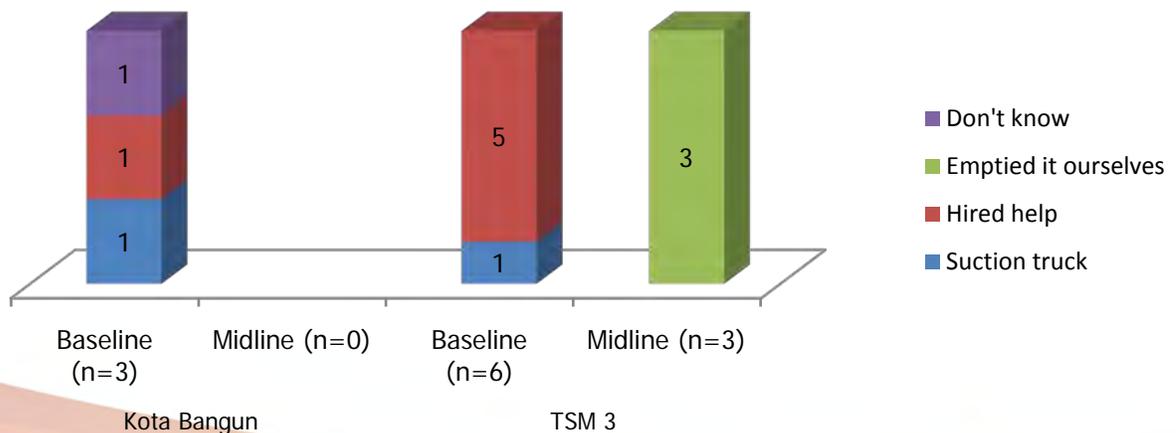


Figure 5.36

Distance from Home to Public Toilet

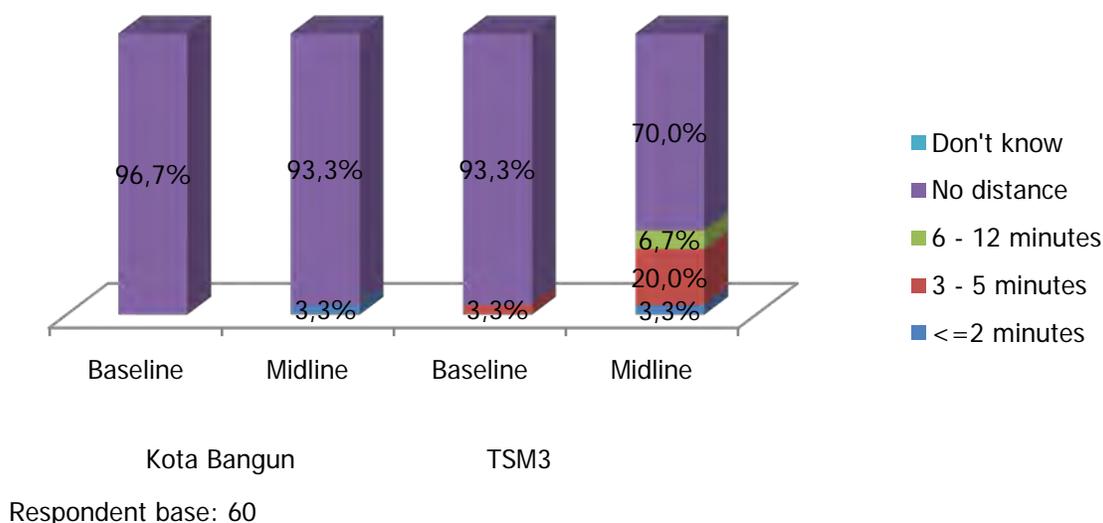


Figure 5.36 above shows the distance from the home to the toilet normally used by respondents. The majority of respondents in both Kota Bangun (93.3%) and Tegal Sari Mandala 3 (70%) said that there was no distance to the toilet as the toilet was in the home. In Kota Bangun, 3.3% of respondents needed less than 2 minutes to reach the toilet, while in Tegal Sari Mandala 3, 20% of respondents needed between 3 and 5 minutes, 6.7% up to 12 minutes, and only 3.3% less than two minutes.

### Summary of Fifth CBTS Pillar: Wastewater management practices

The following table sets out a summary of household wastewater management practices:

Table 5.8

Indicators for Fifth Pillar: Wastewater Management Practices

Indicator	Kota Bangun		TSM3	
	Baseline	Midline	Baseline	Midline
Place where kitchen wastewater is disposed of– 3 top answers				
River, pond, drain, canal	30.0%	20.0%	3.3%	76.7%
Wastewater disposal pipe	10.0%	23.3%	73.3%	13.3%
Covered channel	36.7%	30.0%	23.3%	3.3%
Place where bathroom wastewater is disposed of – 3 top answers				

Indicator	Kota Bangun		TSM3		
	Baseline	Midline	Baseline	Midline	
Wastewater disposal pipe	16.7%	23.3%	73.3%	13.3%	
River, pond, drain, canal	30.0%	20.0%	3.3%	76.7%	
Open channel	36.7%	30.0%	23.3%	3.3%	
Place where wastewater from clothes-washing is disposed of – 3 top answers					
Wastewater disposal pipe	13.3%	23.3%	73.3%	13.3%	
River, pond, drain, canal	30.0%	20.0%	3.3%	76.7%	
Open channel	36.7%	30.0%	23.3%	3.3%	
Covered channel					
Has septic tank	No	13.3%	26.7%	20.0%	36.7%
	Yes	86.7%	73.3%	80.0%	63.3%
Place where septic tank is disposed of – observations – 3 top answers					
Septic tank	86.7%	73.3%	80.0%	63.3%	
River/lake/sea	-	26.7%	3.3%	23.3%	
Ditch	13.3%	-	3.3%	-	
Directly into drainage channel	-	-	10.0%	10.0%	

The following table sets out a summary of the indicators for all five CBTS pillars in the sub-districts that were surveyed.

Table 5.9

Summary of Indicators for all Five CBTS pillar

Indicator	Kota Bangun		TSM3	
	Baseline	Midline	Baseline	Midline
<b>First Pillar: open defecation free</b>				
<b>Last place where caregiver defecated– 3 top answers</b>				
Respondent Base	30	30	30	30
Private toilet	90.0%		60.0%	-
Flush toilet draining into septic tank	-	76.7%	30.0%	46.7%
Flush toilet draining into river/stream/ditch/drain	3.3%	20.0%	10.0%	20.0%

Indicator	Kota Bangun		TSM3	
	Baseline	Midline	Baseline	Midline
Flush toilet draining into wastewater disposal	-	20.0%	-	20.0%
<b>Place of defecation for children aged 0 – 3</b>				
<b>Respondent Base</b>	27	8	22	8
In pants	70.4%	62.5%	59.1%	37.5%
Household toilet	14.8%	37.5%	31.8%	25.0%
Disposable diapers	14.8%	-	-	37.5%
<b>Place of disposal of feces of children aged 3 – 5</b>				
<b>Respondent Base</b>	11	8	16	8
Flush toilet, into pipe/sewerage system	1	-	-	3
Flush toilet draining into septic tank	-	6	3	
Flush toilet draining into river/stream/ditch/drain	-	2	1	1
Private toilet	10	-	11	-
Bathroom	-	-	1	-
Shared toilet	-	-	-	1
In pants	-	-	-	3
<b>Place of defecation of children aged 3 – 5</b>				
Private toilet	10	-	11	-
<b>What was done after child defecated</b>				
<b>Respondent Base</b>	27	8	22	8
Washed child's bottom with soap	70.0%	80.0%	66.7%	80.0%
Washed child's bottom without soap	-	13.3%	16.7%	6.7%
Washed hands	20.0%	-	13.3%	3.3%
Wiped with wet wipes	-	6.7%	-	-
<b>Second Pillar: Hand washing with soap at at least 2 out of 5 critical times</b>				
<b>Use of soap in last 48 hours – Multiple Answer</b>				
<b>Respondent Base</b>	30	30	30	30
Washing clothes/utensils	100.0%	90.0%	86.7%	86.7%
Bathing	100.0%	100.0%	96.7%	96.7%
Washing child's bottom	60.0%	100.0%	53.3%	40.0%
Washing child's hands	50.0%	53.3%	33.3%	6.7%
Washing hands after eating	63.3%	63.3%	83.3%	80.0%
Washing hands after defecating	40.0%	76.7%	60.0%	26.7%
Washing hands after washing child's bottom	43.3%	66.7%	63.3%	36.7%
Washing hands before feeding child	30.0%	13.3%	46.7%	13.3%
Washing hands before eating	43.3%	63.3%	33.3%	83.3%

Indicator	Kota Bangun		TSM3		
	Baseline	Midline	Baseline	Midline	
Other responses	13.3%	26.7%	83.3%	20%	
<b>With scoring</b>					
Respondent Base	22	29	28	27	
score 1	36.4%	13.8%	10.7%	37.0%	
score 2	4.5%	48.3%	21.4%	44.4%	
score 3	4.5%	24.1%	25.0%	14.8%	
score 4	18.2%	13.8%	21.4%	3.7%	
Score 5	36.4%	-	21.4%	-	
<b>Observations</b>					
Is water available (if there is tap, is it running?)	Yes	43.3%	40.0%	83.3%	90.0%
	No	56.7%	60.0%	16.7%	10.0%
Is soap available?	Yes	100%	96.7%	93.3%	96.7%
	No		3.3%	6.7%	3.3%
<b>Third Pillar: Household safe water treatment and storage</b>					
Treatment of water before consumption (water from mains/well)					
Respondent Base	14	30	13	27	
Boil water	92.9%	66.7%	100.0%	55.6%	
Directly drink	100%	33.3%	64.7%	44.4%	
<b>Observations</b>					
Receptacle with	Small aperture	80%	100.0%	80%	50.0%
	Wide aperture	20%	-	20%	50.0%
Hard material/not cloth	Yes	50%	56.7%	90%	40%
	No	50%	43.3%	10%	60%
What about hands when taking water	Touches	3.3%	13.3%	13.3	0.0%
	Doesn't touch	96.7%	86.7%	86.7%	100.0%
<b>Place where ready-to-consume food is kept– 3 top answers</b>					
Respondent Base	30	30	30	30	
In closed cabinet	66.7%	53.3%	73.3%	30.0%	
Protected by cover	3.3%	16.7%	3.3%	20.0%	
Left uncovered on table	30.0%	30.0%	16.7%	46.7%	
<b>Fourth Pillar: Solid waste management</b>					
Place of disposal of garbage – 3 top answers					
Respondent Base	30	30	30	30	
Gathered in home, then collected by official	3.3%	6.7%	63.3%	40.0%	
Gathered at shared collection point, then	26.7%	10.0%	23.3%	30.0%	

Indicator	Kota Bangun		TSM3	
	Baseline	Midline	Baseline	Midline
Dumped on surface of yard, then burned	43.3%	6.7%		
Dumped outside of yard into sea	3.3%	6.7%	63.3%	40.0%
Dumped on surface of yard, then burned	26.7%	10.0%	23.3%	30.0%
Dumped in pit, then burned	43.3%	6.7%		
Separation of garbage?	No	93.3%	63.3%	83.3%
	Yes	6.7%	36.7%	16.7%
<b>Means of collecting garbage – observations – 3 top answers</b>				
Open basket	36.7%	23.3%	20.0%	33.3%
Closed plastic sack	16.7%	10.0%	30.0%	33.3%
Open plastic sack	3.3%	46.7%	3.3%	-
<b>Fifth Pillar: Wastewater management</b>				
<b>Place where kitchen wastewater is disposed of– 3 top answers</b>				
Respondent Base	30	30	30	30
River, Pond, Drain, Canal	30.0%	20.0%	3.3%	76.7%
Wastewater disposal pipe	10.0%	23.3%	73.3%	13.3%
Covered channel	36.7%	30.0%	23.3%	3.3%
<b>Place where bathroom wastewater is disposed of – 3 top answers</b>				
Wastewater disposal pipe	16.7%	23.3%	73.3%	13.3%
River, Pond, Drain, Canal	30.0%	20.0%	3.3%	76.7%
Uncovered channel	36.7%	30.0%	23.3%	3.3%
<b>Place where wastewater from clothes-washing is disposed of – 3 top answers</b>				
Wastewater disposal pipe	13.3%	23.3%	73.3%	13.3%
River, Pond, Drain, Canal	30.0%	20.0%	3.3%	76.7%
Uncovered channel	36.7%	30.0%	23.3%	3.3%
Covered channel				
Have septic tank?	No	13.3%	26.7%	20.0%
	Yes	86.7%	73.3%	80.0%
<b>Place where septic tank is disposed of – observations – 3 top answers</b>				
Septic tank	86.7%	73.3%	80.0%	63.3%
River/Lake/Sea	-	26.7%	3.3%	23.3%
Ditch	13.3%	-	3.3%	-

## F. Role of Community Members as Informants

The CBTS managers and Posyandu (Pos Pelayanan Terpadu – Integrated Services Center) workers are those who were considered to play the dominant role in providing information on the CBTS pillars in Kota Bangun.

- CBTS managers (not explained from where they came or their positions) were deemed to play a vital role in Kota Bangun disseminating information on all of the CBTS pillars, namely: Open Defecation (11 respondent), washing hands with soap (12 respondents), treatment of drinking water (5 respondents), household solid waste management (9 respondents) and household wastewater management (2 respondents).
- Posyandu workers were also deemed to play a very important role on the five CBTS pillars, namely: Open Defecation (15 respondents), washing hands with soap (10 respondents), treatment of drinking water (1 respondent), household solid waste management (3 respondents) and household wastewater management (2 respondents).

Table 5.10a

Sources of information on the 5 CBTS Pillars in Kota Bangun, Medan – Multiple Answer - Spontaneous

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Number of Respondents	Relationship	Method of information provision	
Defecation in proper place	Melly	5	CBTS	Posyandu meeting	January 2013
		3		Outreach	February 2013
		2		House-to-House visit	January & February 2013
		1		PKK	December 2012
	Pipi	2	Posyandu	Posyandu meeting	December 2013
		5		Outreach	January 2013
	Latifah	5	Posyandu worker	Outreach	January 2013
		1		Outreach	December 2013
		1		House visit	December 2012
	Ida	1	Worker	House visit	January 2013
Vivi	2	NGO	Posyandu meeting	December 2012	
Washing hands with	Melly	4	CBTS	Posyandu meeting	January 2013

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Number of Respondents	Relationship	Method of information provision	
soap		6		Outreach	January 2013
		1		House visit	December 2012
		1		PKK	December 2012
	Ida	2	Posyandu	Posyandu meeting	December 2012
		1		Outreach	December 2012
		2		House visit	February 2013
	Pipi	4	Posyandu	Outreach	January 2013
	Vivi	1	NGO	Posyandu meeting	January 2013
	Vivi	1	Posyandu	Posyandu meeting	December 2012
Treatment of household drinking water	Melly	2	CBTS	Posyandu meeting	January 2013
		2		Outreach	January 2013
		1		House visit	February 2013
				PKK	December 2012
	Ita	1	Cadre	House visit	January 2013
Pipi	1	Posyandu	Outreach	January 2013	
Garbage disposal	Melly	2	CBTS	Posyandu meeting	January 2013
		5		Outreach	January 2013
		1		House visit	December 2012
		1		PKK	December 2012
	Pipi	3	Posyandu	Outreach	January 2013
Treatment of household wastewater	Melly	2	CBTS	Outreach	February 2013
	Pipi	2	Posyandu		

A total of 11 respondent said that they had heard information about open defecation from Melly during home visits, Posyandu or PKK meetings, or through outreach work between December 2012 and February 2013. In addition to Melly, 7 respondents said that they had received such information from Pipi and Latifah, Posyandu workers, between December 2012 and February

2013. The information was provided through meetings and outreach work in the Posyandu, as well as visits to residents' homes.

As regards washing hands with soap, 11 residents said that they had received information from Melly (they did not identify her position or role), with such information being provided through Posyandu/PKK meetings, home visits, and outreach work, while 5 residents said they had received such information from Ida (who was stated to be a Posyandu worker) during Posyandu meetings and outreach work. There were also some who said that the information had been provided through home visits.

As regards treatment of household drinking water, 9 respondents said they received information on this from Melly between December 2012 and February 2013, with the information being provided through Posyandu/PKK meetings, and also direct home visits.

As regards garbage disposal, the biggest proportion of respondents (11) said that they had received information from Melly at the same times and using the same methods as described above. The same applied in the case of household wastewater management, where Melly's name was once again mentioned (by 2 respondents) as a source of information.

Meanwhile in Tegal Sari Mandala 3, Table 5.10b shows that RT/RW officials, Posyandu workers and Sub-district officials were the parties who played dominated roles in providing information on CBTS. Overall, information on each pillar was not only provided by one of these categories, but by a number working together, as will be seen from Table 5.10b.

Table 5.10b

Sources of Information on 5 CBTS Pillars in Tegal Sari Mandala 3, Medan – Multiple Answer - Spontaneous

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Number of Respondents	Relationship	Method of information provision	
Defecation in proper place	Don't know	1	Posyandu	Home visit	December 2012
	Don't know	1	Sub-district official	During community work activities	A few months ago
	Don't know	1	Sub-district official		March 2012
	Mira	1	Neighborhood Block Assistant/RT	Home visit	October 2012
	Syafrizal	2	RT/RW	Home visit	December 2012
	Bapak Dudung	2	RT/RW	Home visit	March 2012
	Ibu Butet	2	Posyandu	Home visit	February 2013

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Number of Respondents	Relationship	Method of information provision	
		1		During community work activities	January 2013
Washing hands with soap	Ibu butet	2	Posyandu	Home visit	February 2013
		1		During community self-help activities	January 2013
	Don't know	1	Posyandu	Home visit	October 2012
		1		During community work activities	January 2013
	Bapak Dudung	1	RT/TW	Residents meeting	March 2012
		1		Puskesmas brochure	March 2012
	Mira	1	Neighborhood Block Assistant/RT	Home visit	October 2012
	Don't know	1	Celebrity	Advertisement	March 2012
	Don't know	1	Sub-district official	During community work activities	A few months ago
Don't know	1	Television	Advertisement	October 2012	
Treatment of household drinking water	Ibu butet	1	Posyandu	Home visit	February 2013
		2		During community self-help activities	January 2013
	Don't know	1	Sub-district official	During community self-help activities	A few months ago
	Don't know	1	Posyandu	During community self-help activities	January 2013
Garbage disposal	Don't know	2	RT/RW	Residents meeting	May 2012
		1		Outreach	6 years ago
		1		Home visit	March 2012
		1		During community self-help activities	October 2012
		1		Never happened	
	Mira	1	Neighborhood Block Assistant/RT	Residents meeting	October 2012
		3		Home visit	October 2012
	Ibu Butet	2	Posyandu	Home visit	February 2013
		1		During community self-help activities	January 2013
	Pak Dudung	2	RT/RW	Residents meeting	March 2012
		1		During community work activities	March 2012
	Syafrizal	3	RT/RW	Home visit	October 2012
	Don't know	1	Sub-district official	During community self-help activities	A few months ago

Environmental Health Topic	Give name of person and that person's relationship with respondent				First time when provided with information
	Name	Number of Respondents	Relationship	Method of information provision	
Treatment of household wastewater	Bakar Koto	1	RT/RW	Outreach	October 2012
	Don't know	1	Posyandu	During community self-help activities	January 2013
	Ibu Butet	2	Posyandu	Home visit	February 2013
		1		During community self-help activities	January 2012
Pak Dudung	1	RT/RW	Residents meeting	March 2012	
	Don't know	1	Subdistrict official	During community self-help activities	A few months ago

According to the respondents, the advice to avoid open defecation was conveyed not only by 1 person, but rather simultaneously by a number of people during the period from March 2012 to the end of February 2013. Such advice was delivered using various methods, namely, Posyandu/PKK meetings, outreach, and direct socialization through home visits. Information on washing hands with soap was also stated by the respondents to have come from a number of people during the period from March 2012 to the end of February 2013. One of the sources of information named by 2 respondents was Ibu Butet (from the Posyandu). The methods of conveying information varied, ranging from meetings and outreach work to community self-help activities and even brochures. Besides information being directly provided by the persons concerned, two respondents said that they had received information on washing hands with soap from television advertisements.

As regards the third CBTS pillar, treatment of drinking water, 3 respondents said that they had heard of it from Ibu Butet (from the Posyandu) between January and February 2013, with the information being provided on a house-to-house basis and during community self-help activities.

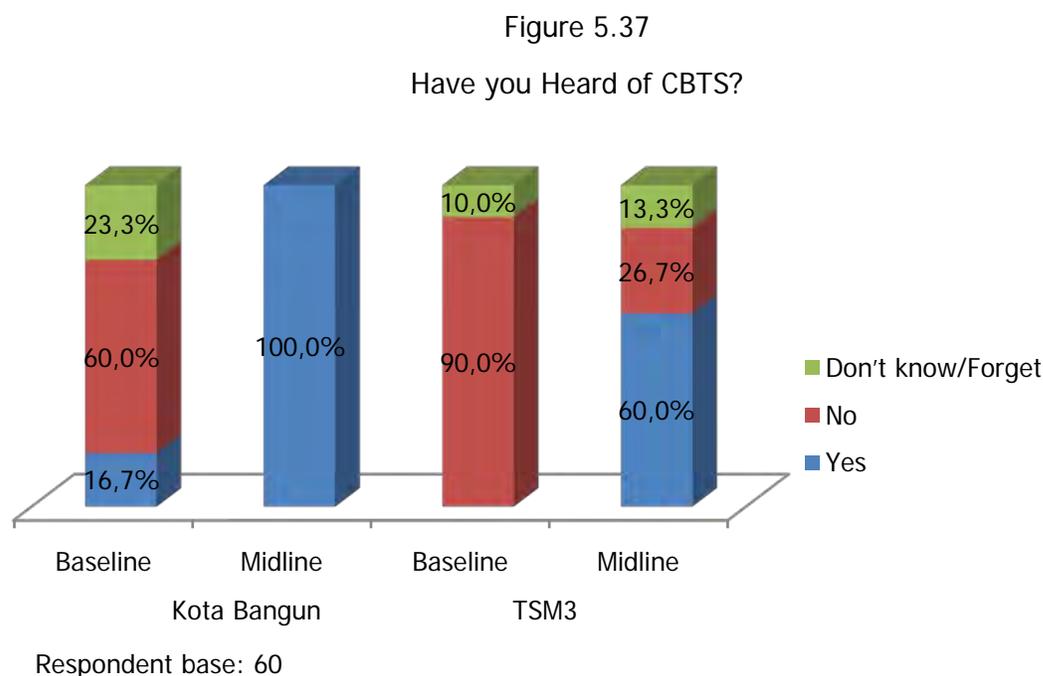
For the fourth CBTS pillar 5 respondents said that they had heard about it for the first time as part of admonitions for proper waste management from the RT/RW (couldn't remember name of person or his position) at different times. The information had been provided during meetings, outreach drives, community self-help efforts, and on a house-to-house basis. Four other respondents said that they had heard of it from Mira (Neighborhood Block Assistant/RT) in October 2012 during house-to-house visits and meetings with residents.

Ibu Butet was also stated to have provided information by 3 residents on the fifth pillar, namely, domestic waste management. Such information had been provided on a house-to-house basis or during community self-help efforts.

## G. Healthy Life Practices

### Knowledge

Figure 5.37 below shows an increase in awareness on the part of residents in both Kota Bangun and Tegal Sari Mandala 3. This is shown by the fact that at the time of the baseline survey, only 16.7% of respondents had heard of the term CBTS, while at the time of the midline survey in 2013, all of the respondents in Kota Bangun said they had heard of it. There was also an increase in Tegal Sari Mandala 3, with 60% of respondents saying that they had heard of it at the time of the midline survey, compared with none at the time of the 2012 baseline survey.



Of 30 respondents who said they had heard of CBTS in Kota Bangun, 28 said that they had heard of it during activities undertaken by an NGO some time ago in the area where they lived, while 2 read about it in a newspaper/magazine. Meanwhile in Tegal Sari Mandala 3, the biggest proportion of respondents said that they had heard of CBTS during activities undertaken by an NGO some time ago, while 4 said they had heard about it at the Posyandu. Five others gave a variety of responses (during training from the local health agency, from a newspaper/magazine, from a brochure or heard about it from the Block Head).

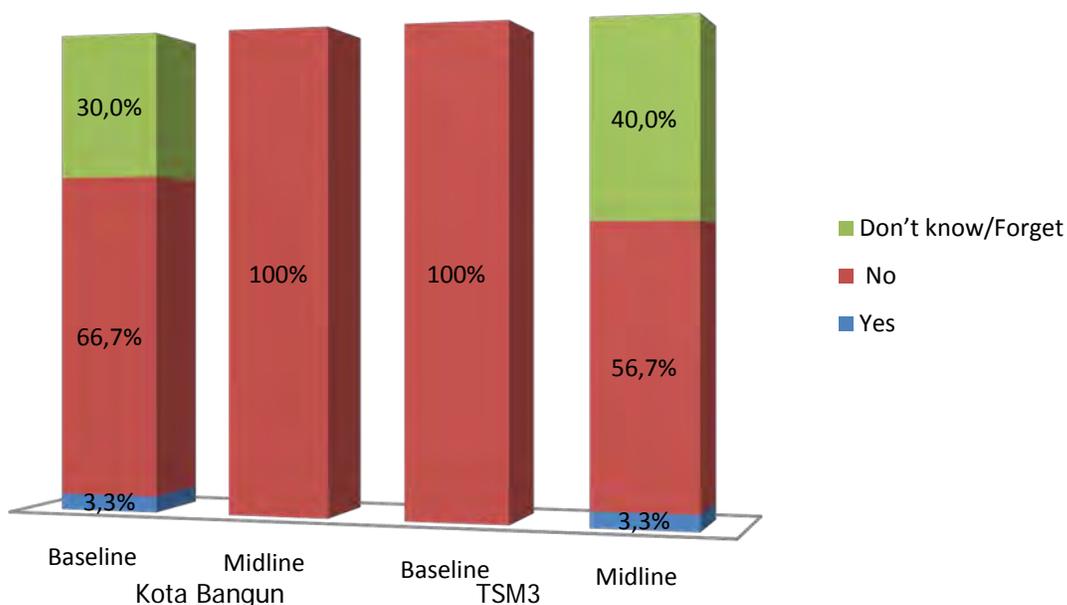
As regards the understanding of CBTS among those who had heard about it (multiple responses), the biggest proportion of residents in Kota Bangun said that it referred to washing hands with soap (26 respondents), stopping open defecation (21 respondent), garbage management (18 respondents) and bathing two times a day with soap (11 respondent). In

Tegal Sari Mandala 3 (respondent base 18, multiple responses), 16 respondents said it referred to garbage management, 14 to washing hands with soap, and 10 to stopping open defecation.

As regards people's level of concern for the program, Figure 5.38 below shows people's level of concern for PHBS. Unlike CBTS, the biggest proportion of respondents in Medan (both at the time of the baseline survey and midline survey) did not know what PHBS was. At the time of the baseline survey in Kota Bangun, 3.3% of respondents knew what PHBS was, while at the time of the midline survey, not one knew what it was. In Tegal Sari Mandala 3, at the time of the baseline survey, not a single respondent knew what PHBS was, while only 3.3% knew what it was at the time of the midline survey.

Figure 5.38

Have you ever heard of PHBS



Respondent base: 60

People's knowledge of sanitation can be specifically evaluated by assessing the level of agreement with a number of prepared questions, as discussed further below.

## Attitude

The data set out in Table 5.11 below is based on closed-ended responses on a scale of four, where 1 expresses strong disagreement and 4 strong agreement with the following 10 health related statements that were presented to respondents:

Table 5.11  
Perceptions of Residents about Health

Statement	Kota Bangun		TSM 3	
	Baseline	Midline	Baseline	Midline
Every family should have its own toilet	3.3	3.3	3.4	3.2
Open defecation is not a problem for me	1.8	1.8	1.6	1.9
Hand washing with soap before eating is bothersome	1.9	1.9	<b>2.0</b>	<b>2.3</b>
We don't need a septic tank if we can dump feces directly into the river/drain	<b>1.8</b>	<b>2.0</b>	2.0	2.4
Wastewater from clothes washing can be discharged/dumped anywhere as it is quickly absorbed	<b>1.8</b>	<b>2.5</b>	<b>1.9</b>	<b>2.1</b>
Separating garbage is only a waste of time and does no good	2.0	2.1	<b>2.2</b>	<b>2.5</b>
My neighbors garbage is no concern of mine even though it goes everywhere	2.0	2.4	2.2	2.3
Preventing blockages in the drains is also my concern as a resident of this sub-district	<b>3.0</b>	<b>2.7</b>	<b>3.2</b>	<b>2.7</b>
As long as there are not too many, flies do no harm if they land on food.	1.9	1.9	1.6	1.9

Statement	Kota Bangun		TSM 3	
	Baseline	Midline	Baseline	Midline
There no need to worry about cleaning drinking water receptacle as they are always full of water anyway.	1.8	2.0	1.7	1.9

Scale of 1 to 4, where 1 = strongly disagree, and 4 = strongly agree

The findings in Kota Bangun may be further explained as follows:

1. At the time of both the baseline survey and midline survey, the residents of Kota Bangun tended to feel that every family should have its own toilet (average score of 3.3)
2. Open defecation was described on average in Kota Bangun as being a problem during both the baseline survey and midline survey (average score of 1.8)
3. Both at the time of the baseline survey and midline survey, the residents of Kota Bangun did not see washing hands with soap before eating as troublesome.
4. At the time of the evaluation of the baseline survey, residents did not agree with the statement, *"We don't need a septic tank if we can dump feces directly into the river/drain"* (average score of 1.8). However, at the time of the midline survey, the average had increased significantly ( $p < 0.05$  to 2.0, although residents continued to disagree with the statement.
5. The baseline survey found that the residents of Kota Bangun at that time did not agree with the statement that "Wastewater from clothes washing can be discharged/dumped anywhere as it is quickly absorbed" (1.8). However, at the time of the midline survey, the average had increased significantly ( $p < 0.05$ ) to 2.5. Thus, it may be concluded that at the time of the midline survey residents tended to agree that "Wastewater from clothes washing can be discharged/dumped anywhere."
6. Both at the time of the baseline survey and midline survey, residents tended not to agree that garbage separation was a waste of time.
7. It may also be said that residents disagreed with the statement that "My neighbors' garbage is no concern of mine even though it goes everywhere." The midline survey showed that there had been an increase in the awareness of residents about their joint responsibility for environmental hygiene (significant average difference at  $p < 0.05$ ).
8. At the time of the baseline survey, the residents of Kota Bangun expressed agreement with the statement *"Preventing blockages in the drains is also my concern as a resident of this sub-district,"* with an average score of 3.0. At the time of the midline survey, this figure had dropped significantly ( $p < 0.05$ ) to 2.7.

9. The residents of Kota Bangun at the time of both the baseline survey and midline survey did not agree with the statement that “As long as there are not too many, flies do no harm if they land on food.”
10. According to the residents of Kota Bangun at the time of the baseline survey, water containers must be kept clean even though they are always in contact with water (1.8). A significant increase in awareness (at  $p < 0.05$ ) was noted at the time of the midline survey (2.0).

The findings in Tegal Sari Mandala 3 may be further explained as follows:

1. The level of awareness of respondents was the same at the time of the baseline survey and the midline survey as regards the need to have one’s own septic tank, and that open defecation was a problem.
2. Respondents also did not see washing hands with soap before eating as bothersome. There was an increase in awareness in this regard at the time of the midline survey (significant difference at  $p < 0.05$ ).
3. Although feces could be thrown directly into the river/drain, respondents at the time of both the baseline survey and the midline survey took the view that a septic tank was obligatory – no differences were recorded in this respect during the time between the baseline survey and midline survey.
4. The evaluations of the baseline survey and midline survey revealed that residents did not agree that “Wastewater from clothes washing can be discharged/dumped anywhere as it was easily absorbed.”
5. As in the case of Kota Bangun, the residents of Tegal Sari Mandala 3 at the time of both the baseline survey and the midline survey did not believe that garbage separation was a waste of time.
6. At the time of both the baseline survey and midline survey, residents felt jointly responsible for garbage.
7. At the time of the baseline survey, the residents of Tegal Sari Mandala 3 felt that drain blockages were their joint responsibility as residents (average of 3.2). However, this had declined significantly at the time of the midline survey ( $p < 0.05$ ) to 2.7.
8. Flies around food, even in small numbers, were considered dangerous by residents at the time of both the baseline survey and midline survey.
9. Even though water receptacles are continuously in contact with water, residents felt that they still needed to be cleaned (at the time both of the baseline survey and midline survey).

### Residents, Community and Sanitation

The table below shows residents' responses (closed-ended responses) to a series of 10 statements designed to gauge whether there is a sense of community among residents and administrators in their neighborhoods. The responses are ranked on a scale of 1 to 4, where 1 = fully sure, and 4 = not at all sure.

The general picture painted by the responses to the questions in Kota Bangun is as follows:

1. While residents were aware of the importance of environmental hygiene and health (2.6) at the time of the baseline survey, this awareness was found to have increase at the time of the midline survey (3.0).
2. The baseline survey found that the residents of Kota Bangun lacked a sense of community as regards the need to maintain environmental hygiene and health. However, the findings of the midline survey were different – residents by that stage did have a sense of community as regards the need to maintain environmental hygiene and health.
3. During the baseline survey, it was found that residents were willing to work together so as to improve environmental health and hygiene. This willingness had increased by the time of the midline survey with the average response being 3.1.
4. At the time of the baseline survey, the residents of Kota Bangun had a relatively low willingness to voluntarily contribute/pay dues so as to improve the quality of environmental health and hygiene. However, the level of willingness had increase by the time of the midline survey (significantly at  $p < 0.05$ ).
5. At the time of the baseline survey, the respondents in Kota Bangun said that there was no guarantee that advice from the village authorities would be heeded. However, this had changed at the time of the midline survey, when it was stated that such advice would be heeded.
6. The residents of Kota Bangun at the time of both the baseline survey and the midline survey were willing to participate it neighborhood hygiene activities.
7. As regards the statement that “village authorities are interested in conducting village hygiene activities”, the level of agreement stood at 2.8 at the time of the baseline survey. This had increased by the time of the midline survey.
8. At the time of the baseline survey, the residents of Kota Bangun said that they were not sure that hygiene in Kota Bangun was the responsibility of the village authorities. However, at the time of the midline survey, the respondents agreed on average with this statement.
9. Both at the time of the baseline survey and the midline survey, it was found that there was a relatively similar level of confidence that community leaders would support environmental health and hygiene activities.

10. At the time of the midline survey, it was found that there was a higher level of willingness to comply with advice from religious leaders regarding environmental health and hygiene than at the time of the baseline survey (2.7).

As regards Tegal Sari Mandala 3, the general picture painted by the responses to the questions was as follows:

1. The findings of the baseline survey showed that there was a low level of awareness of the importance of health and hygiene, However, people were quite sure that health and hygiene were important.
2. The findings of the baseline survey showed that the residents of Tegal Sari Mandala 3 did not have a very strong sense of community as regards maintaining environmental health and hygiene. However, this had increased by the time of the midline survey.
3. At the time of the baseline survey, residents were quite willing to work together so as to improve environmental health and hygiene. The level of willingness had increased at the time of the midline survey.
4. The resident of Tegal Sari Mandala 3 were not very willing to voluntarily make contributions/pay fees for health and hygiene, and were not very willing to follow the advice of village officials on anything.
5. At the time of both the baseline survey and the midline survey, residents may be said to be willing to participate in efforts to clean up their areas.
6. At the time of the baseline survey, the residents were not quite sure that cleanliness was the responsibility of village officials. However, by the time of the midline survey, the average belief that this was the responsibility of village officials had increased significantly at  $p < 0.05$ .
7. Residents believed that village officials were quite interested in conducting hygiene activities.
8. The residents of Tegal Sari Mandala 3 (both at the time of the baseline survey and midline survey) took the view that community leaders were supportive of environmental health and hygiene.
9. At the time of both the baseline survey and the midline survey, the residents of Tegal Sari Mandala 3 said that advice on environmental health and hygiene from religious leaders would be followed.

Table 5.12  
Residents Perception of Community

Statement	Kota Bangun		TSM 3	
	Baseline	Midline	Baseline	Midline
The people here are aware of the importance of environmental hygiene and health	2.6	3.0	2.6	2.9
The people here have a strong sense of community, particularly as regards maintaining environmental hygiene and health	2.6	3.0	2.6	2.8
The people here are willing to work together to improve health conditions	2.8	3.1	2.7	3.1
The people here are willing to voluntarily pay contributions/charges to improve environmental hygiene and health	<b>2.5</b>	<b>3.1</b>	2.5	2.5
The people here are willing in all cases to follow the advice of sub-district officials	<b>2.6</b>	<b>3.2</b>	2.8	2.7
The people here are highly motivated in participating in environmental hygiene activities	2.9	3.3	2.7	2.8
The sub-district authorities are highly motivated in organizing environmental hygiene activities	2.8	3.1	2.8	3.0
The people here consider environmental hygiene and health to be the responsibility of the sub-district authorities	2.3	2.7	2.8	2.7
Community leaders support environmental hygiene and health activities.	2.8	3.0	2.9	3.0

Statement	Kota Bangun		TSM 3	
If religious leaders recommended environmental hygiene and health activities, residents would comply	2.7	3.0	2.8	2.7

Scale of 1 to 4, where 1 = fully sure, and 4 = not at all sure.

## Practices

In the practices section, residents were asked about 7 things related to health (Tabel 5.13 below). In general, their responses revealed that:

- ✓ There are still many residents in Kota Bangun (60%) who dispose of feces in drains/water channels (although the figure is lower than at the time of the baseline survey).
- ✓ In Kota Bangun, the proportion of respondents who dispose of feces in drains/water channels has increased quite significantly (30%) compared to at the time of the 2012 baseline survey in.
- ✓ The midline survey found that garbage was more widespread in Kota Bangun than at the time of the baseline survey. In Tegal Sari Mandala 3, however, the percentage of garbage had declined, although the sub-district was not yet garbage-free. In fact, >80% of respondents said the area was dirty due to garbage.
- ✓ In general, it may be concluded that both Kota Bangun and Tegal Sari Mandala 3 remain dirty and that people lack discipline in matters related to cleanliness.
- ✓ As regards environmental hygiene, it may be said that Tegal Sari Mandala 3 was somewhat ahead of Kota Bangun. However, Kota Bangun was slightly ahead of Tegal Sari Mandala 3 in terms of clean water and the incidence of Dengue fever.

Table 5.13

### Behaviors that can cause health and hygiene problems

Prevalent	Kota Bangun						TSM 3					
	Baseline			Midline			Baseline			Midline		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Defecation in place other than toilet	30.0%	66.7%	3.3%	20.0%	80.0%	-	13.3%	86.7%	-	53.3%	46.7%	-

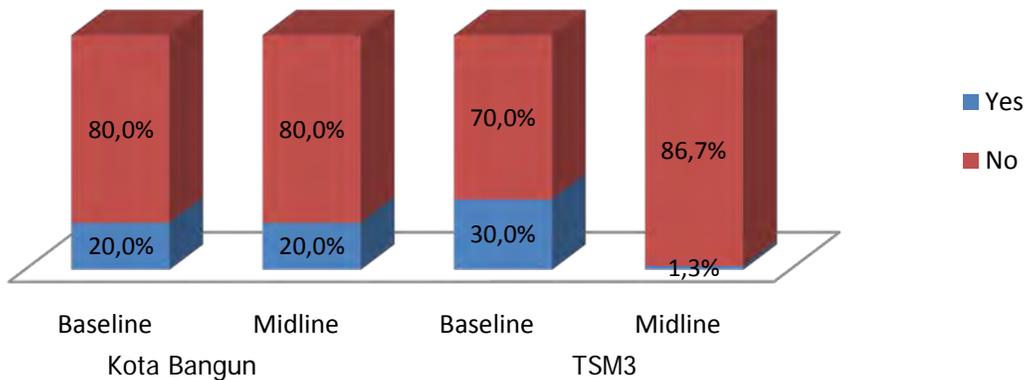
Prevalent	Kota Bangun						TSM 3					
	Baseline			Midline			Baseline			Midline		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Feces dumped in drains/water channels	63.3%	36.7%	-	60.0%	40.0%	-	16.7%	83.3%	-	46.7%	53.3%	-
Dirty environment due to widespread garbage	73.3%	26.7%	-	100%	-	-	90.0%	10.0%	-	83.3%	16.7%	-
Blocked drains or water channels	86.7%	13.3%	-	50.0%	50.0%	-	50.0%	50.0%	-	73.3%	26.7%	-
Well water not fit for drinking even after treatment	10.0%	90.0%	-	10.0%	90.0%	-	26.7%	73.3%	-	36.7%	63.3%	-
Dengue fever	-	100.0%	-	3.3%	96.7%	-	46.7%	53.3%	-	23.3%	73.3%	3.3%
Difficulties with clean water	3.3%	96.7%	-	-	100.0%	-	60.0%	40.0%	-	26.7%	66.7%	6.7%

### Diarrhea

In Medan, as shown in Figure 5.39, the incidence of under-5s suffering from diarrhea is relatively low. This can be seen from the low percentage of respondents in Kota Bangun saying that their under-5s had ever suffered from diarrhea (only 20% at the time both of the baseline survey and midline survey). Meanwhile in Tegal Sari Mandala 3, while 30% of respondents said that their under-5s had ever suffered from diarrhea during the baseline survey, this had fallen to 13.3% by the time of the midline survey.

Figure 5.39

Has Your Under-5 Ever Suffered from Diarrhea?



Respondent base: 60

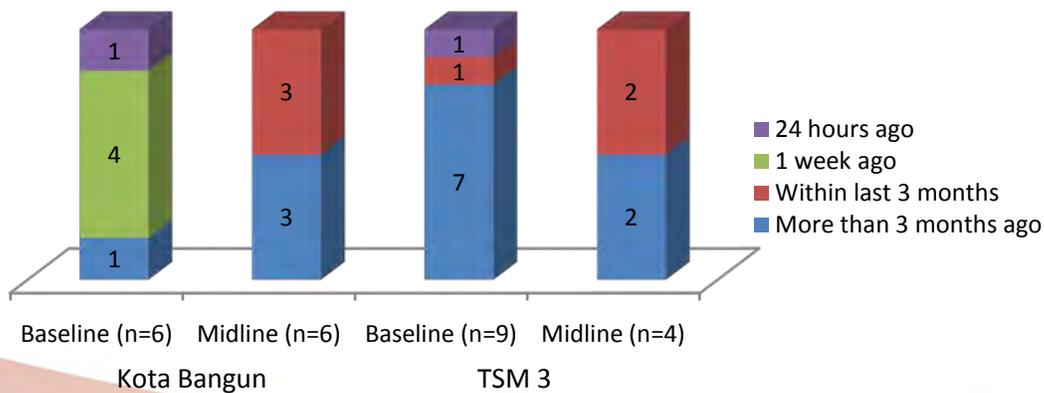
Of the 6 respondents in Kota Bangun who said that their under-5s had ever suffered from diarrhea, 3 said that the last time had been within the last 3 months, while the other 3 said that it had been more than 3 months ago.

In Tegal Sari Mandala 3, of 4 respondents who said that their under-5s had ever suffered from diarrhea, 2 said that it had been within the last 3 months, while 2 said it had been more than 3 months ago.

Figure 5.40 below shows the last time the respondents' under-5s suffered from diarrhea (in absolute terms as the base number of respondents was less than 30).

Figure 5.40

Last Time your Under-5 Suffered from Diarrhea



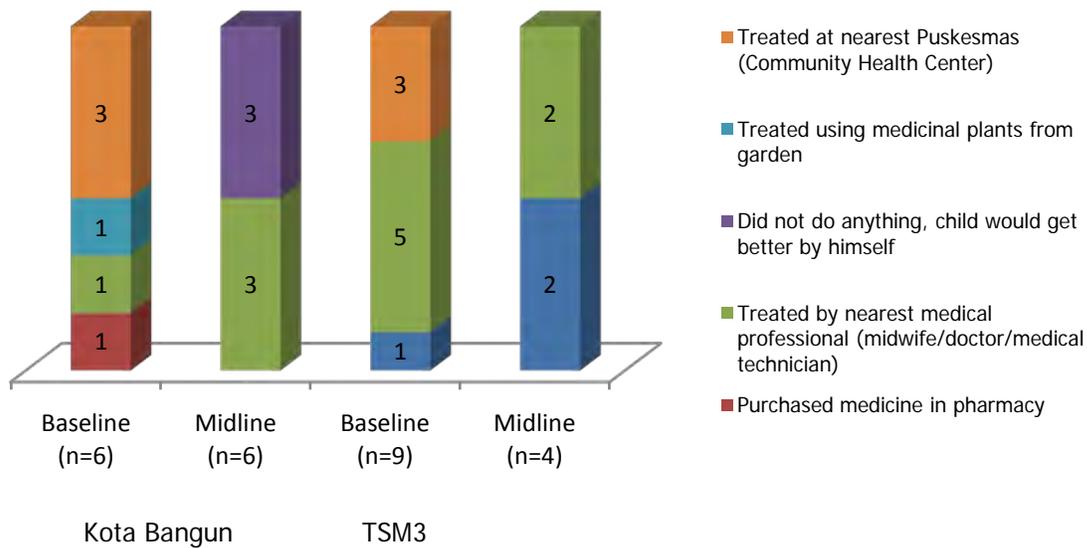
Of the respondents whose under-5s had suffered diarrhea at one time or another, in Kota Bangun 3 of the 6 respondents said they had brought their children to be treated by the nearest medical professional (midwife/doctor/medical technician). The remaining respondents did not seek treatment as she believed the child would get better by himself.

Meanwhile in Tegal Sari Mandala 3, 2 respondents brought their children to the nearest medical professional, while the other 2 self-treated the diarrhea with over-the-counter drugs purchased at a nearby side street stall.

The situation as regards the treatment of diarrhea in under-5s is as shown in the following chart (in absolute terms as the base number of respondents was less than 30):

Figure 5.41

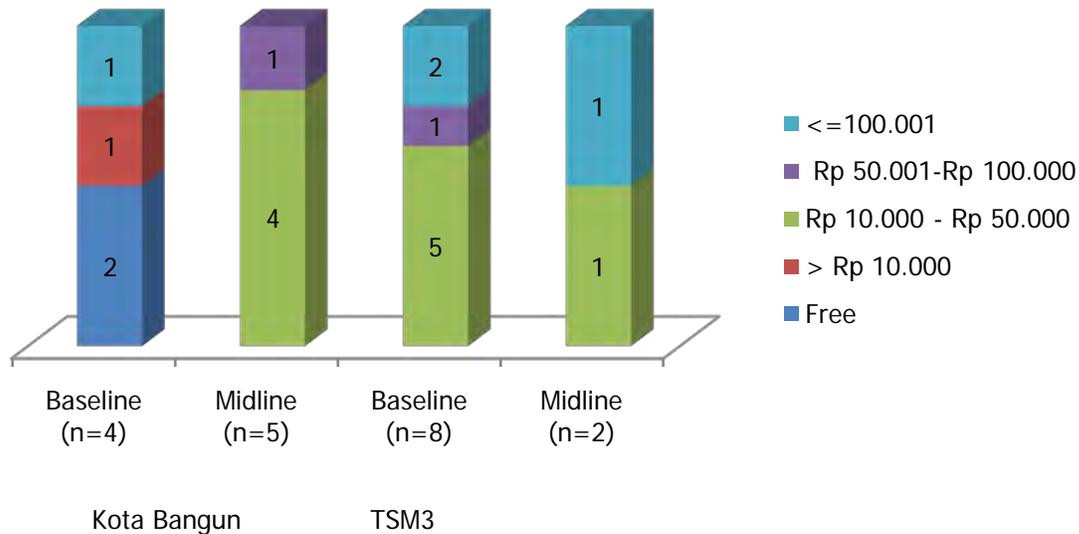
Treatment of Diarrhea



The following chart shows the costs incurred in the treatment of diarrhea among under-5s (in absolute terms as the base number of respondents was less than 30):

Figure 5.42

Overall Cost of Treatment (transportation, consultation, medicine)



Four respondents from Kota Bangun spent between Rp 10,000 and Rp 50,000 on the treatment of diarrhea among their under-5s, while 1 respondent had spent Rp 100,000. In Tegal Sari Mandala 3, 1 respondent spent between Rp 10,000 and Rp 50,000, while 1 other spent Rp 175,000. At the time of the midline survey, none of the respondents received treatment, while at the time of the baseline survey in Kota Bangun, 2 respondents said that they had received free treatment for diarrhea for their under-5s.

## Part VI

### Children Baseline – Elementary School

#### A. Perceptions of children regarding conditions that impact on healthy and clean life practices

During this process, the respondents were provided with stimuli in the form of pictures, where each CBTS pillar and non-CBTS pillar aspect was represented by two pictures. The stimuli also included pictures showing 'healthy children laughing', 'children bathing together in a well', and so forth. Each of these was represented by 2 pictures. A number of pictures showing the opposite were also presented (dirty/contrary to the CBTS pillars). Once again, each situation was represented by 2 pictures.

Of the pictures that were shown, two pictures showing 'washing hands with running water and soap' were the 2 top choices, with 86% and 80% of the children selecting these as showing examples of clean and healthy lifestyles. The children at all age levels and genders chose these activities. The following choices were selected by at least 20% of respondents:

Figure 6.1

8 top responses for conditions that are deemed clean and healthy



As in Medan, the 'washing hands' picture was more often selected by respondents between 10 and 12 years of age, compared with the other pictures. This may be influenced by a number of factors, such as: (1) recent campaign for washing hands with soap in the targeted schools so that the awareness of children about the importance of washing hands with soap was high – only 91.7% of the children (out of 26.7% of the children) who said they had heard of the term

CBTS associated it with washing hands with soap; (2) washing hands was a practice that was taught as standard by the adults around them (parents and teachers) so as to maintain healthy and hygiene.

As with the 2 pictures showing ‘washing hands with soap’ that were most frequently selected as the two top answers, the next choices were pictures showing ‘covering food’, which were selected by 63.3% and 60.0%.

After the two top choices (‘washing hands’ and ‘covering food’), the picture of ‘a dispenser against a background of a clean kitchen’ was the next choice (56.7%), followed by the picture of ‘a house with a clean yard’ (50%). The next choices were the picture showing ‘a child defecating in a sit-down toilet’ (43.3%), and ‘a clean squat toilet’ (also 43.3%).

All of the choices of the children tended to correlate with the five CBTS pillars. Nevertheless, when the children were questioned about their awareness of CBTS, more than half of the respondents (70%) said that they had never heard of the term.

### 1. Children’s Understanding of CBTS

When the elementary school respondents were asked, 70% said they had never heard of CBTS, while around 30% had heard of the term.

Figure 6.1

Children’s Understanding of CBTS

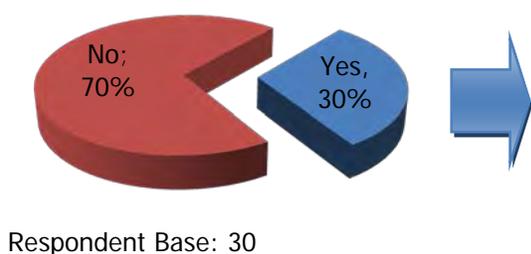


Table 6.1

Understanding of CBTS by Grade

Do You Know About CBTS	Grade 4	Grade 5	Grade 6	Total
Yes	4	2	3	9
No	6	8	7	21
<b>Total</b>	10	10	10	30

Comparing the information on respondent grades and their knowledge of the term CBTS, there appears to be no correlation between grade and awareness -- the fact that a child is in a higher grade does not mean that he or she will be more aware than a child in a lower grade.

Further, when the 9 respondents who said they were aware of CBTS were asked what they know about the concept, only 6 were able to state that the abbreviation stood for “Community Based Total Sanitation,” while the 2 others said “Community Based Sanitation.” The remaining

respondent could only say “Community Based Total.” When probed further about their knowledge of CBTS, the following information was obtained:

Table 6.2

What More Do You Know About CBTS?

Knowledge of CBTS – Multiple Answer	Number of Respondents *
Washing hands with soap	9
Stopping open defecation	3
Consists of 5 pillars	3
Garbage Management	2
Treating and Storing Drinking Water Safely	1
Treatment of household wastewater	1
<b>Respondent base : 9</b>	

\* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

Washing hands with soap was the practice most frequently identified with CBTS (other than the term CBTS itself). There were also those who stated the number of CBTS pillars and a number of different pillars (like CTPS, stopping open defecation, safe treatment and storage of drinking water and household waste management).

A number of pictures were shown to the respondents and they were asked to selected those that reflected CBTS. The following are their choices:

Figure 6.2

Pictures Showing CBTS – Multiple Answer

Choice 1: 7 resp



Choice 2: 7 resp



Choice 3: 5 resp



Choice 4: 4 resp



Choice 5: 2 resp



Choice 6: 2 resp



Choice 7: 2 resp 6



Other choices: 6 resp

Respondent Base: 9

The most popular CBTS pillars (the ones most frequently remembered, and therefore the relevant pictures most frequently selected) were as follows: 'Washing hands with soap' – the pictures representing this pillar were selected by 7 respondents; 'Covering food' and 'treating drinking water' were selected by 5 respondents who picked the same picture, while 2 other respondents picked another picture to represent this pillar. Meanwhile, the 'squat toilet' (representing stopping open defecation) was selected by 4 respondents, while the 'sit-down toilet' was selected by 2 respondents. 'Protecting prepared food with a cover' was chosen by 2 respondents.

However, 2 of the children selected the picture showing 'defecation in a drain' as representative of CBTS (outside of CBTS activities). In addition, the following three pictures were chosen by 1 respondent each: 'bathing', 'dirty hands', 'playing with friends'.

As regards where the 9 children who knew about CBTS had received their information, the following responses were obtained:

Table 6.3  
Information on CBTS Obtained From:

Person Providing Information on CBTS – Single Answer	Person’s name	Number of Respondents *
From school (health outreach from High Five Program)	Ibu Mely	4
Women who visited school	Don’t know/Forget	4
From friends	Don’t know/Forget	1
Respondent base : 9		

\* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

As will be seen from the above table, information on CBTS was obtained from a variety of sources, namely: (1) from health outreach work in school provided by Ibu Mely on behalf of High Five Program Medan (2 visits in 1 month) – 4 respondents gave this response, also stating that the first time they received information on CBTS was around February 2013; (2) information from women who visited school – this response was given by 4 respondents, however none of them knew or could remember the name of the person who provided the information. They said that they had first received information on CBTS around January 2013; (3) information from friends – this was stated by 1 respondent, however he did not know or could not remember the name of the friend and he also forgot when he had received the information.

The following are the responses of the elementary school respondents related to their perceptions of the various practices involved in CBTS.

#### Pillar 1: Open Defecation

While in general the child respondents in Medan were familiar with various practices related to defecation, such as the importance of defecation in the right place, the causes of diarrhea and the dangers of diarrhea to children, it should also be noted that there were also children who were not aware (10 – 16.7%) of the dangers that arise from infectious diseases transmitted through feces. The responses of the children on their perceptions related to human feces/excrement are as shown below:

Table 6.4

Perceptions of Children Related to Defecation

Description	Correct	Incorrect
Defecation in a toilet that has a proper waste disposal system	90%	10%
Human feces contain germs that can cause diarrhea	90%	10%
No need to wash hands with soap after defecation	6.7%	93.3%
Infant feces can be injurious to health	83.3%	16.7%
Respondent base: 30		

As regards various activities that are not appropriate in connection with defecation in the home or school environment, their responses are presented in the table below.

The responses of the elementary school children show that many unhealthy and unhygienic practices continue to be prevalent in their school and home environments. A total of 63.3% said that open defecation continues to occur around their homes, while 10% said it was still prevalent in the school environment. Similarly, 40% said that feces continued to be disposed of in water channels/drains around their homes.

Table 6.5

Children's Explanations on Inappropriate Defecation Behavior in their Home and School Environments

Do any of the following things happen:	At Home (%)		At School (%)		
	Yes	No	Yes	No	Don't know
Defecation outside of toilet	63,3	36,7	10	83,3	6,7
Disposal of feces into drain/water channel	40	60	0	93,3	6,7
Respondent base: 30					

The quite significant differences in people's sanitation behavior in the school and home environments may be due to: (a) the time spent by respondents in the school environment is much less than in the home environment – thus, the description of behaviors around the home is more accurate than in the school environment; or (b) residents' behavior is much more hygienic around the schools.

### Last place of defecation

A total of 96.7% of respondents said that their last place of defecation was in the toilet at home or at school. However, 3.3% said that it was a pond near their home/school. After defecation, 70% said that they directly cleaned themselves with soap and water, while 23.3% said they did so with water only, 3.3% said they just washed their hands, and another 3.3% said they did nothing.

### Defecation after school

All of the students had urinated at one time or another in school (36.7% in the bathroom and 63.3% in the WC), but only 40% said they had defecated at one time or another at school, and all did so in the student's WC.

A total of 76.7% of students said that urinating/defecating at school was different than at home for the following reasons:

Table 6.6

Thing that make urinating/defecating at school different from at home

No.	Difference	Percentage
1.	No soap	43.5%
2.	Dirty/smelly	30.4%
3.	No enough water	30.4%
4.	Have to queue, take turns with other students	30.4%
5.	2 other responses	8.6%
<b>Respondent base: 23</b>		

The biggest difference between going to the toilet in school and at home was lack of soap (43.5%), dirty and smelly, and lack of water. In addition, queuing was another problem bearing in mind that the ratio between toilet facilities and number of students was quite high (30.4%). The two other responses referred to the comfort of going to the toilet at home (more relaxed, not need to queue/shove).

### Pillar 2: Washing hands with soap

The knowledge of the children regarding the benefits of washing hands with soap after defecation was better than their knowledge of the first CBTS pillar (spread of disease through human feces). However, the respondents still needed to be informed that washing hands without soap was not enough to kill dangerous germs.

Table 6.7

Perceptions of Children Regarding CTPS-related Activities

Description	Right	Wrong
Washing hands with water alone is enough to clean off disease-spreading germs	20%	80%
We don't need to wash hands with soap after defecation unless our hands are sticky	6,7%	93,3%
Respondent base: 30		

As regards availability of water, 43.3% said that they had experienced difficulties with water for bathing and washing in their home environments, and also in their school environments.

Table 6.8

Children's Description on Water Availability At Home and At School

Have you ever experienced any of the following?	At home (%)		At school (%)		
	Yes	No	Yes	No	Don't know
Foul smelling or tasting drinking water	40	60	20	80	-
Difficulties with availability of water for bathing or washing	43,3	56,7	43,3	50	6,7
Respondent base: 30					

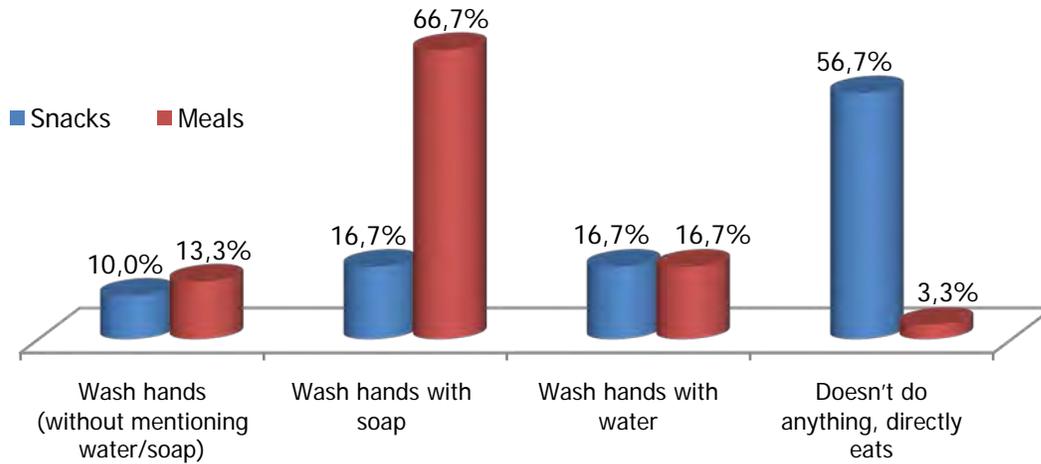
Also as regards the availability of clean water, 40% of the respondents said that they had had experience of foul smelling or tasting drinking water in their home environment, while only 20% had experience of this at school.

Washing Hands in the Home

A total of 96.7% of respondents ate lunch at home, while only 3.3% did so at school. All of the respondents ate dinner at home. The following are their responses on their behavior before eating (both snacks and meals):

Figure 6.2

Behavior Before Eating (Snacks and Meals)



Respondent base: 30

There was a greater tendency among respondents to wash hands with soap before a main meal compared to when they would eat snacks. The majority of respondents (66.7%) said that they washed their hands with soap before a main meal, while only 16.7% washed their hands with soap before eating a snack. A total of 56.7% said they did not do anything before eating a snack, while 3.3% said they did not do anything before eating a main meal. In addition, 16.7% said that they washed their hands with water prior to eating a main meal, while another 16.7% did so before eating a snack. The remaining respondents (13.3%) said that they washed their hands, without mentioning soap or water, prior to eating a main meal, while 10.0% did the same before eating a snack.

Table 6.9

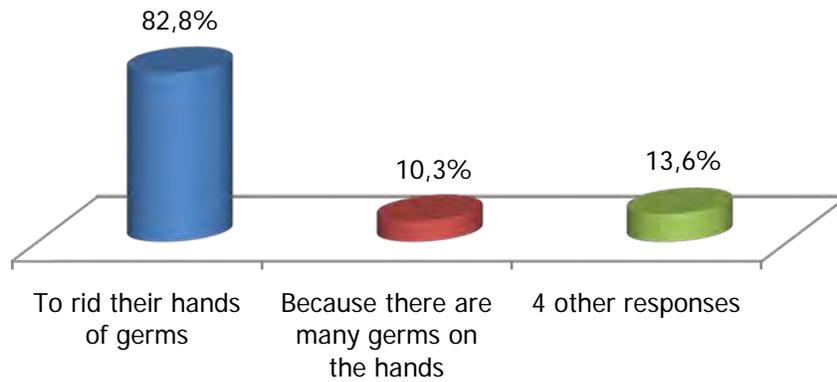
Below sets out a compilation of the responses on hand washing before eating main meals and snacks:

Group	MEDAN
Children who always wash their hands with water but without soap (before eating snack or main meal)	63,3%
Children who always wash their hands with soap (before eating snack or main meal)	13,3%
Children who have better hand-washing practices before eating main meals compared with snacks	16,7%
Children who never wash their hands before eating	3,3%
Respondent base: 30	

The reasons given by respondents for washing their hands before eating were as follows:

Figure 6.3

Reasons for Washing Hands Prior to Eating – Multiple Answer



Respondent base: 30

Using open-ended questions, it was found that the main reason for washing hands before eating was to rid the hands of germs (82% of respondents). The remaining responses varied, but were also concerned with germs, while there were also 4 other responses: so as not to get a stomach ache, not to get diarrhea, not to get sick and not to have sticky hands.

The primary source of information on the importance of washing hands before eating so as to avoid germs was parents (69.0%) and teachers in school (20.7%). The remaining respondents said they had received the information during outreach campaigns in school (6.7%) or from elder siblings (3.4%).

The other situations when they practices hand-washing with soap were (1) after defecating (47.6%), (2) after playing (38.1%); (3) after eating (28.6%) and after disposing of garbage (23.8%). The remainder consisted of 7 other responses, namely: after cleaning the house (13.3%), after urinating (9.5%), before sleeping (9.5%), after holding animals (9.5%), and after bathing and after eating snacks , each on 4.8%.

Hand-washing practices at school

A total of 96.7% of respondents said that they had facilities at school for washing hands, while 30% said that they always washed their hands before eating, and 26.7% said that they sometimes did so. Meanwhile, 43.3% said that they never washed their hands before eating.

As regards the practice of hand washing with soap, only 6.7% of respondents did it correctly (rubbing the palm and between the fingers with water and soap), while 36.7% rubbed between the fingers (without rubbing the palm) with water and soap, 40% rubbed the palm and

between the fingers with water alone, and 16.7% rubbed between the fingers with water alone. The remainder did not use water and soap.

### Pillar 3: Clean and healthy treatment of drinking water

A total of 73.3% of the elementary school respondents were aware of the importance of treating water before consumption, as well as treating food before consumption. Nevertheless, they still need more information on the risk of diarrhea from untreated water, and the dangers of consuming untreated vegetables. The responses were quite encouraging as regards their knowledge of diarrhea and bacteria from untreated vegetables, and the spread of germs by flies, as shown in the following table:

Table 6.10

#### Perceptions of Children About Activities Related to Defecation

Description	Right	Wrong
Eating untreated vegetables is healthy, and you don't need to worry about germs	26,7%	73,3%
Drinking untreated water can cause diarrhea	96,7%	3,3%
The legs of flies carry thousands of germs that can be spread from place to place	96,7%	3,3%
Respondent base: 30		

Although the elementary school respondents had quite good knowledge about the need to treat water before consumption, 60% of respondents referred to the drinking of untreated water at home.

Table 6.11

#### Children's Descriptions of Drinking Water Treatment At Home and At School

Have any of the following things happened?	At Home (%)		At School (%)		
	Yes	No	Yes	No	Don't know
People drank untreated water	60	40	10	73,3	16,7
Respondent Base: 30					

As regards sources of water at school, 66.7% of respondents said that they purchased it at school, while only 33.3% brought it from home. Of the 66.7% who purchased it at school (20 students), 5 purchased branded packaged water in tea form (X Teh), while others purchased ices (branded such as Pop Ice, Seger Sari, and unbranded, such as cucumber ice, chocolate ice, melon ice, and 'es cendol' – a traditional dessert). Thirteen respondents purchased drinks in the school canteen, while 7 did so in stalls outside the school.

#### Pillar 4: Garbage Management

Based on observations conducted in the schools, uncovered garbage bins were the most common places (96.7%) where students disposed of the packaging from their snacks (whether consumed during playtime or in the classroom).

#### Pillar 5: Solid and Liquid Waste Treatment

As regards the wastewater disposal channels in the places where the respondents lived, 4 pictures were used, consisting of 2 pictures showing clean drains and 2 pictures showing dirty drains. These elicited the following responses from the elementary school children:

Table 6.12

Condition of Wastewater Disposal Channels in Place Where You Live

Picture Number	Picture	Water Channel Category	Percentage
11		Clean	50%
12		Clean	25,6%
13		Dirty	23,3%

Picture Number	Picture	Water Channel Category	Percentage
14		Dirty	1,1%
Respondent base: 30			

## B. Perceptions of Children of Environmental Cleanliness at School and at Home

The elementary school respondents in Medan were dominated by children whose schools were within Tegal Sari Mandala 3 (20 respondents out of a total of 30 in Medan). Of these, 33.3% said that their school environment (TSM-3 Elementary School) was quite clean, while 36.7% said that their school environment was very clean. Of the 20 respondents, 3 said that the school environment was not clean/dirty. The following table shows the children's responses:

Table 6.13

### Perceptions about Environmental Cleanliness

Perceptions of Environment	School	Home
Quite Clean	33,3%	63,3%
Very Clean	36,7%	13,3%
Dirty	30%	23,3%
<b>Respondent base: 30</b>		

Although 70% of respondents perceived their school environment to be clean (quite clean and very clean), and only 23.3% felt their home environments to be dirty, nevertheless all (100%) said that environmental cleanliness at school and at home needed to be improved (53.3% and 40% said, respectively, that it needed to be greatly improved).

A number of behaviors found in the children's environment (school and home) were acknowledged by almost all respondents (more than 60%) as being inappropriate, such as adults discarding garbage in the open, which could lead to blocked drains (70% in the home environment, and much cleaner in the school environment – only 43.3% had seen blocked drains around their schools), and the continued occurrence of floods during the wet season. A total of 83% of respondents said that diarrhea was still found in their home environments, while 53.3% said that this was the case in their school environments.

Table 6.14

Children's Descriptions of Inappropriate Actions Related to Cleanliness in the Home and School Environments

Have any of the following things happened:	At home (%)		At School (%)		
	Yes	No	Yes	No	Don't know
Adults incorrectly disposing of garbage	93,3	6,7	60	40	-
Blocked water channels or drains	70	30	43,3	53,3	3,3
Dengue Fever	73,3	26,7	43,3	53,3	3,3
Flooding every wet season	60	40	23,3	76,7	-
Frequent outbreaks of diarrhea	83,3	16,7	53,3	40	6,7
Respondent base: 30					

Sickness Episodes in the Last Month

A total of 60.0% of children had been absent from school on account of sickness in the last month (February 2013). The illnesses experienced were as follows:

Table 6.15

Illnesses Experienced in Last 12 Months – Multiple Answer

No.	Illness Experienced	Number *
1	Fever	15 persons
2	Headache	3 persons
3	Stomach ache	3 Persons
<b>Respondent Base: 18</b>		

\* In absolute terms as the base number of respondents was less than 30

As regards diarrhea in the last 2 weeks (end February 2013), 20% of children had experienced it, while 80% had not experienced diarrhea in the last 2 weeks. According to the children, the causes of diarrhea were as follows:

Table 6.16

Causes of Diarrhea in Last 2 Weeks – Multiple Answer

No.	Cause	Number *
1	Eating spicy food	3 Persons
2	Because of fever	2 Persons
3	Consuming ice drinks	1 Person
<b>Respondent base: 6</b>		

\*In absolute terms as the base number of respondents was less than 30

According to the children, the bouts of diarrhea they had experienced in the last 2 weeks were not due to their food being contaminated by bacteria or germs, but were rather due to eating spicy food (3 respondents), fever (2 respondents) and consuming ice drinks (1 respondent).

**Attachment**  
**Observations on Schools**  
**Target Schools and General Conditions**

TARGET SCHOOL	NUMBER OF STUDENTS	NUMBER OF TEACHERS	NUMBER OF TOILETSs	SCHOOL FLOOR	SCHOOL ROOF	SCHOOL WALLS
SDN SURYA BAKTI KOTA BARU	308	14	3	Cement	Corrugated Iron	Cement
MIS AL WASLIYAH	248	10	3	Ceramic Tiles	Corrugated	Cement
SDN 06 497	356	22	4	Ceramic Tiles	Corrugated	Cement

**Target Schools and CBTS Pillar 1 – 1**

TARGET SCHOOL	TYPE OF TOILET	PLACE OF FECES DISPOSAL	CONDITION OF SCHOOL BATHROOMS	DISTANCE FROM WELL TO SEPTIC TANK/DROP TOILET	DISTANCE FROM WELL TO NEIGHBORING SEPTIC TANKS
SDN SURYA BAKTI KOTA BARU	U-Bend	Septic Tank	Quite clean	20 steps	34 steps
MIS AL WASLIYAH	U-Bend	Septic Tank	Dirty	No well	No well
SDN 06 497	U-Bend	Septic Tank	Quite clean	12 steps	20 steps

SDN: Sekolah Dasar Negeri - state elementary school

**Target School and CBTS Pillar 1 – 2**

TARGET SEKOLAH	GENERAL CONDITION OF TOILET													
	FECES PRESENT		GARBAGE PRESENT		FLIES PRESENT		WATER AVAILABLE		SCOOP PRESENT		WATER RECEPTACL		TOWEL PRESENT	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
SDN SURYA BAKTI KOTA	X	✓	X	✓	X	✓	✓	X	✓	X	✓	X	X	✓
MIS AL WASLIYAH	✓	X	X	✓	X	✓	✓	X	✓	X	X	✓	X	✓
SDN 06 497	X	✓	X	✓	X	✓	✓	X	✓	X	✓	X	✓	X

**Target School and CBTS Pillar 2**

TARGET SCHOOL								
	RUNNING WATER		CLEAR WATER		SOAP AVAILABLE		DRY TOWEL AVAILABLE	
	YES	NO	YES	NO	YES	NO	YES	NO
SDN SURYA BAKTI KOTA BARU	✓	X	✓	X	✓	X	✓	X
MIS AL WASLIYAH	✓	X	✓	X	X	✓	X	✓
SDN 06 497	X	✓	✓	X	✓	X	✓	X

**Target School and Pillar 3**

TARGET SCHOOL	FOOD CONTAINER IN CANTEEN	HOW IS FOOD PRESENTED IN CANTEEN	TYPE OF SCHOOL CANTEEN	HAND WASHING FACILITY IN CANTEEN	
				YES	NO
SDN SURYA BAKTI KOTA BARU	Covered	Uncovered	Dry foods on sale	x	✓
MIS AL WASLIYAH	X	X	X	X	X
SDN 06 497	X	X	X	X	X

**Target School and Pillar 4 – 1**

TARGET SCHOOL	NUMBER OF GARBAGE BINS	TYPE OF GARBAGE BIN	CLEANLINESS OF SCHOOL	FINAL DISPOSAL OF GARBAGE	GARBAGE SEPARATION	
					YES	NO
SDN SURYA BAKTI KOTA	8	Uncovered basket	Quite clean	Basket – in yard	✓	X
MIS AL WASLIYAH	8	Uncovered basket	Quite clean	In sack	✓	X
SDN 06 497	10	Uncovered basket	Very clean	Basket – in yard	✓	X

**Target School and Pillar 4 – 2**

TARGET SCHOOL	CLEANLINESS OF CANTEEN	TYPE OF GARBAGE RECEPTACLE IN CANTEEN	REGULARITY OF GARBAGE COLLECTION	ARE FOOD LEFTOVERS SEPARATED	
				YES	NO
SDN SURYA BAKTI KOTA BARU	Quite clean	Covered basket	Everyday	NA	NA
MIS AL WASLIYAH	X	X	X	X	X
SDN 06 497	X	X	X	X	X

SDN: Sekolah Dasar Negeri - state elementary school

## Target School and Pillar 5

TARGET SCHOOL	METHOD OF WASHING IN CANTEEN	WHERE DOES WASTEWATER FROM CANTEEN GO	FILTER ON WASHING IN CANTEEN		FINAL DISPOSAL OF WASTEWATER	
			YES	NO	BATHROOM	WASH HAND BASIN (IF AVAILABLE)
SDN SURYA BAKTI KOTA BARU	Washed with soap, rinsed in dirty water, then clean water	Collected in bucket, then thrown in ditch	X	✓	River, pond, drain, canal	River, pond, drain, canal
MIS AL WASLIYAH	X	X	X	X	River, pond, drain, canal	River, pond, drain, canal
SDN 06 497	X	X	X	X	River, pond, drain, canal	River, pond, drain, canal

SDN: Sekolah Dasar Negeri - state elementary school



## REPORT

# HIGH FIVE PROGRAMS MIDLINE HOUSEHOLD SURVEY

COVERAGE AREA: SURABAYA

Prepared for



September, 2013

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## Part I

### Background and Research Objectives

#### A. Background

The Indonesian government launched the Community-Based Total Sanitation (CBTS) Program in 2007 to improve hygiene and sanitation practices in households, thereby reducing the incidence of diarrhea, the second leading cause of infant mortality. The program consists of five hygiene and sanitation pillars, namely:

1. Stopping open defecation
2. Washing hands with soap
3. Household safe water treatment and storage
4. Solid waste management
5. Waste water management

The program was focused primarily on rural areas, where the emphasis was on Pillar 1 (stopping open defecation). Through the High Five Program, the Cipta Cara Padu (CCP) Foundation proposed that the program be extended to urban areas, thus contributing to the efforts to improve compliance with the five CBTS pillars in households and communities.

The High Five Program has now been running for 1.5 years in 3 cities, namely, Surabaya, Surabaya and Makassar. The program is conducted at the city level and the sub-district level. At the city level, the High Five Program advocates the incorporation of CBTS into current policies and AMPL/Sanitation Working Group activities, as well as the integration of CBTS strategies into municipal government development plans. At the sub-district level, the High Five Program operates in three RW (neighborhoods) at a high level of intensity, and in other neighborhoods at a low level of intensity.

It is very important to ensure that the program at every level is on track to achieve the key indicators in respect of intermediate results, particularly those resulting from interventions during the operative period, and that the implementation process is in accordance with participatory principles, and reflects gender equity and environmental considerations. Accordingly, an independent evaluator is required to review the performance of the program and provide recommendations for improving program implementation during its remaining lifetime.

#### B. Objectives

The High Five Program focuses on improving hygiene practices at the household and community levels, identifying how many households are aware of children's health, sanitation and hygiene issues, whether that number has increased or decreased when compared with the

2012 baseline survey having regard to the High Five Program objective indicators. Accordingly, this midline survey evaluates:

- a. Program outcomes by comparing the midline survey's findings with those of the baseline survey so as to identify changes as regards:
  - Understanding of the CBTS pillars
  - Perceptions of the CBTS pillars
  - Habits/ behaviors associated with the CBTS pillars
- b. Program implementation so as to identify program effectiveness, efficiency, relevance, and sustainability.
- c. Providing recommendations for better program implementation.

## Part II

### Research Methodology

In general, both primary and secondary data were required for the purposes of this study. However, Polling Center (in accordance with its agreement with High Five Program) collected primary data using the quantitative and qualitative methods.

In the implementation of this survey, the collection of primary data in the field was carried out using the quantitative method aimed at respondents from households with children, while the qualitative data was collected using in-depth interviews with stakeholders of the CBTS program being implemented by Cipta Cara Padu Foundation .

#### A. Survey Method

In order to obtain the data required for this research (as set out in the study objectives), both the quantitative and qualitative methods employed questionnaires.

Data collection in the field in the Surabaya area was conducted as follows:

##### Quantitative Data

- Households : 9 to 13 March 2013
- Children : 6 to 12 March 2013

##### Qualitative Data

- Focus Group Discussion (FGD) : 5 March 2013
- In-depth Interviews (IDI) : 7 to 22 March 2013

#### B. Number of respondents

The number of respondents in each category in the Surabaya survey area is shown in the following table:

Table 2.1

Number of Respondents by Respondents Category in Each Area

Category	Area / Sub-district	Total Sample
Households	Wonorejo	30 respondents
	Petemon	30 respondents
Elementary School (Sekolah Dasar/SD) Children	SD Petemon	5 children
	SD Wonorejo 7	5 children
	SD Wonorejo 5	5 children
	SD Wonorejo 4	5 children
	SD Wonorejo 2	5 children
	SD Wonorejo 1	5 children
<b>Total Respondents in Quantitative Survey</b>		<b>90 respondents</b>
FGD		1 group from Pokja Kota (Kelompok Kerja Kota – City Working Group)
		1 group from Pokja Kelurahan (Kelompok Kerja Kelurahan – Administrative Village Working Group)
IDI – per respondent category		
High Five Program District Leaders		1 respondent
High Five Program Facilitators		1 respondent
Community Leaders (Sub-district Heads)		2 respondents
Sanitarians		1 respondent
Teachers with High Five Program training		1 respondent

Category	Area / Sub-district	Total Sample
Other Relevant Parties: Private Sector – PundiAmal SCTV (tv station)		1 respondent
Other Relevant Parties: Academia		1 respondent
Other Relevant Parties: nongovernmental organization (NGO)		1 respondent
Provincial Health Agency		1 respondent
Media/Journalists		1 respondent
<b>Total Respondents in Qualitative Survey</b>		<b>11 respondents</b>

### C. Sample Selection Technique

#### 1. Respondent Households

Respondent households were selected using the simple random sampling method. The objective was to obtain findings that are representative of the population.

In the selected sub-districts in each city, a mapping process was first carried out in respect of households with under-5s, with the approval of local leaders (heads of RT/RW or sub-district heads).

After the population had been mapped, the selection of households was preceded by determining the household interval, that is, by dividing the total number (population) of households with children under 5 with the total respondent target (30 respondents) for each sub-district.

In this way, the caregiver respondents for under-5s to be interviewed were selected.

#### 2. Elementary school children in grades 4, 5 and 6

The selected elementary schools were all located in sub-districts where interventions had been effected. Respondents in the child category were selected randomly using the sampling interval technique. A total of 10 children from each school were interviewed, all of whom were from grades 4, 5, and 6. Consequently, the average sample size for each class was 3 children.

To select the children to be interviewed from each class, the interval random sampling method was used based on desk or attendance role sequences.

## Part III Findings

### A. Respondent Profile – Age

The criteria for the selection of respondents for interview during the midline survey were the same as in the case of the previous baseline survey, namely, caregivers of under-5s. Both in Wonorejo and Petemon, 100% of respondents were women. While in the case of Wonorejo, this was the same as during the baseline survey, the percentage of female respondents during the baseline survey in Petemon was 96.7%, while the remaining respondents were male.

As a whole in the city of Surabaya, the majority (56.7%) of respondents interviewed were women aged 25-35, with the proportions in Wonorejo and Petemon being respectively 46.7% and 66.7%.

### B. Respondent Profile – Relationship between Respondent and Household Head

A total of 86% of the respondents were the wives of household heads (with the percentages for Wonorejo and Petemon being respectively 83.3% and 90%). Meanwhile, those who were the children or parents of households in Indonesia amounted to only 3.3% and 5% respectively.

These figures show that the majority (45%-67%) of caregivers in both sub-districts are young women of between 25 and 35.

### C. Respondent Profile – Number of Under-5s per Household

Overall, in the two sub-districts in which interviews held, the majority of respondents lived with 1 toddler at home (81.7%), while only 16.7% of respondents had 2 toddlers in the house.

More specifically, the number of households with one under-5 in the respondents' homes in Wonorejo was 86.7%, while 13.3% of households had 2 under-5s.

The following graphs show the respondent age-group distribution and the number of under-5s in respondent households by sub-district in Surabaya at the time of the midline and baseline surveys.

Figure 3.1.  
Respondent Age Groups

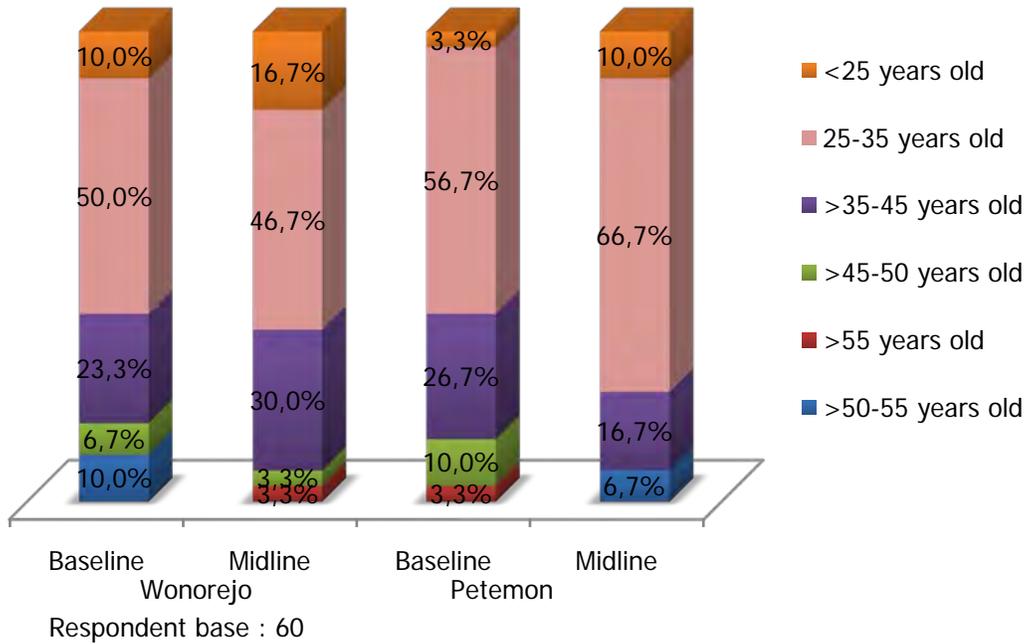
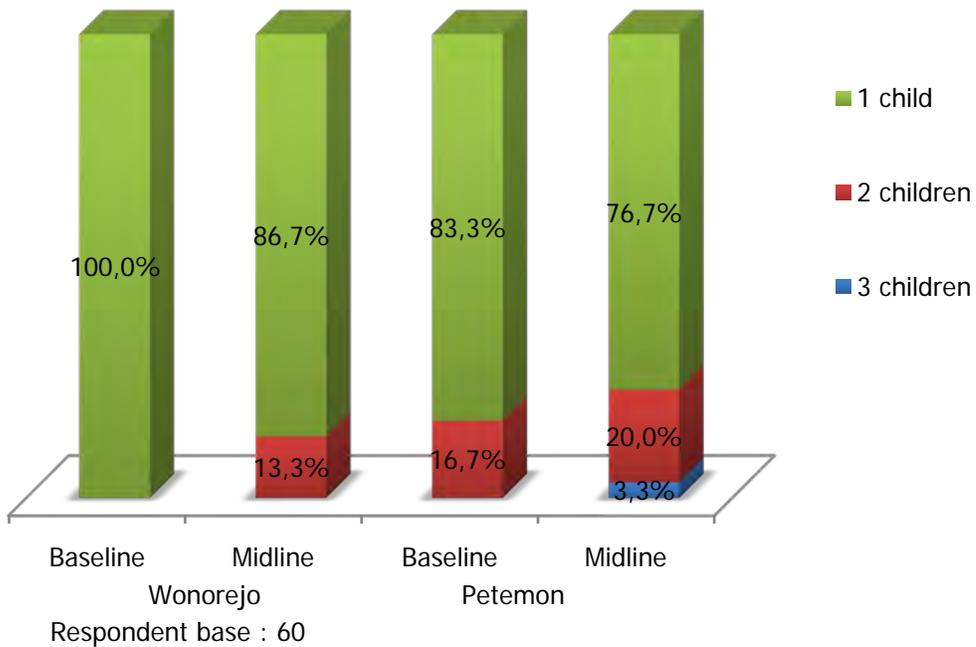


Figure 3.2  
Number of Under-5s per Household



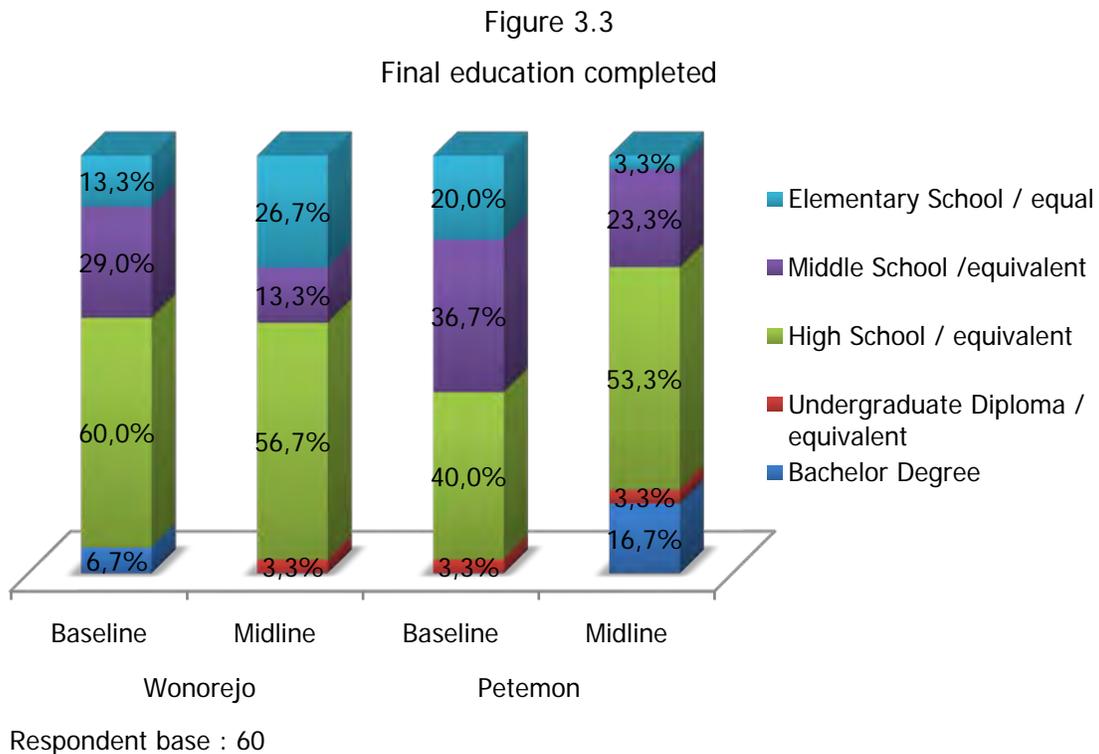
### D. Respondent Profile – Education

As regards the educational background of the respondents selected in Surabaya, an overall majority (40.6%) of them had completed high school (or equivalent), while the second largest group (29.4% of respondents) had graduated from elementary school (or equivalent).

In Wonorejo, 56.7% of respondents had graduated from high school (or equivalent), while 26.7% had graduated from elementary school.

The percentages in Petemon were almost the same, with 53.3% graduating from junior high school (or equivalent). However, in second place was junior high school (or equivalent), from which 23.3% of respondents had graduated.

The following graph shows the educational attainments of respondents in Wonorejo and Petemon sub-districts.



### E. Respondent Profile – Socioeconomic Class

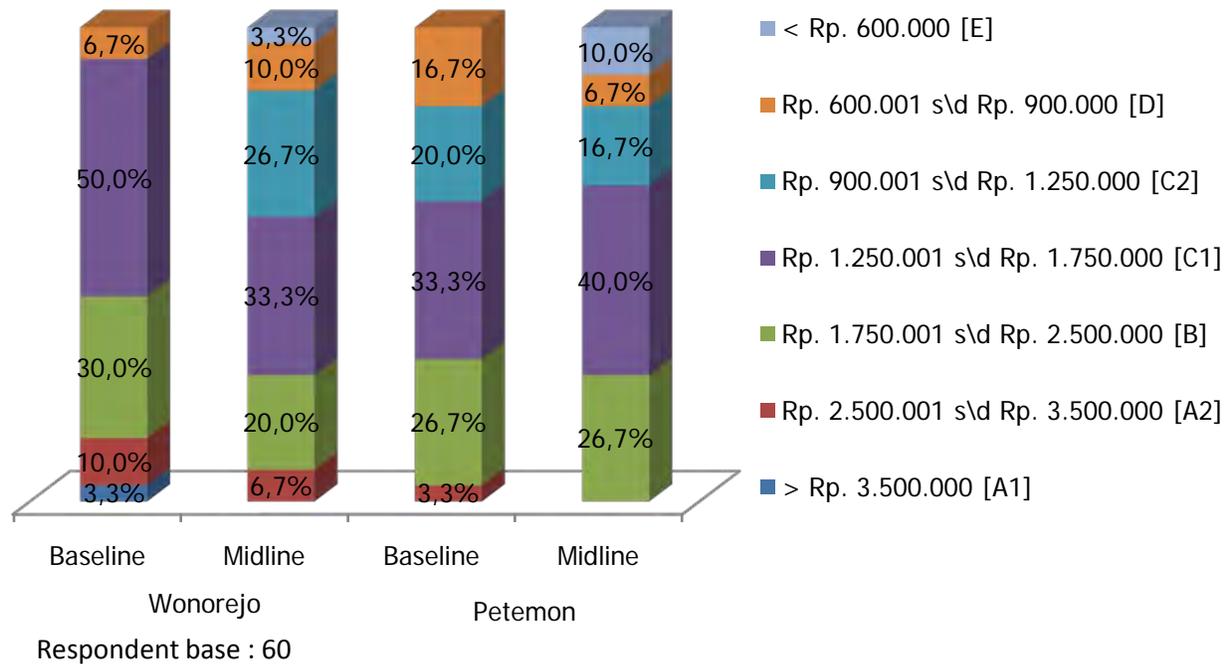
Based on average monthly expenditure at the time of the midline survey in Surabaya, the socio-economic stratification of both sub-districts was found to be the same. A total of 36.7% of respondents belonged to socioeconomic class C1 (average expenditure of Rp 1,250,001 and Rp 1,750,000), while in second place 23.3% were respondents belonging to socioeconomic class B (average expenditure of Rp 1,750,001 – Rp 2,500,000). More specifically, both in Wonorejo and Petemon, the majority of respondents belonged to socioeconomic class C1 (33-40%). In Wonorejo, 33.3% of respondents were in socioeconomic class C1, while in second place on

26.7% was class C2 (average expenditure of Rp 900,001 to Rp 1,750,000). Similarly in Petemon sub-district, the majority of respondents belonged to socioeconomic C1 (40%), while, in second place, 26.7% belonged to class B (average expenditure of Rp 1,750,001 to Rp 2,500,000).

The socioeconomic classes of the respondents in each sub-district are as shown below:

Figure 3.4

Average Household Expenditure Per Month



Staying on the issue of socioeconomic class, the following is a description of the home ownership situation, and observations concerning the homes occupied by respondents.

Overall, 66.7% of respondents said that they owned their own homes. By sub-district, in Wonorejo the percentage of home ownership was 73.3%, while 26.7% of homes were rented. Meanwhile in Petemon, 60% of respondents owned their own homes, while 23.3% of homes were rented, 13.3% of respondents lived in houses owned by family members, and the remaining 3.3% lived in their parents' homes.

As regards observations on the condition of the houses lived in by the respondents, overall in Surabaya the most common form of flooring was ceramic tiles (76.7% - the percentage was the same in both sub-districts).

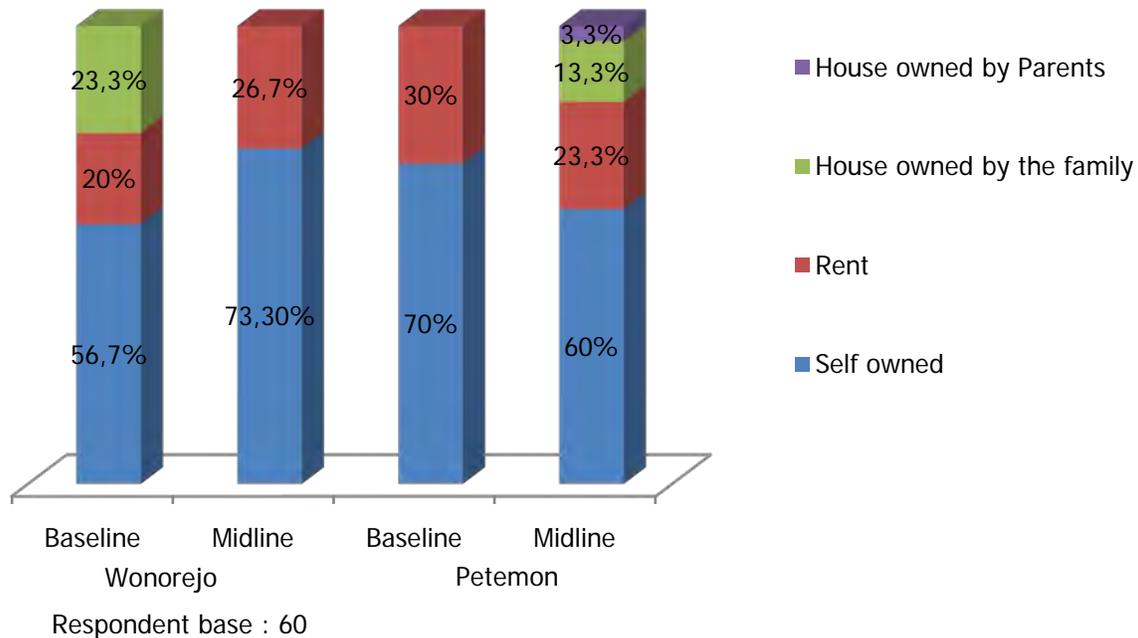
As regards roofing material, 80% of homes used tiles in Surabaya, with the figures being 70% for Wonorejo and 90% for Petemon.

Cement was the most common material used for walling in Surabaya (45.6%). By sub-district, in Wonorejo 96.7% used cement for walls, while the remainder used plywood. By contrast, in

Petemon, the majority of respondents (76.7%) used bricks for their walls, while cement was in second place (20%).

The following chart shows the situation as regards home ownership status in the survey areas in Surabaya:

Figure 3.5  
House Ownership

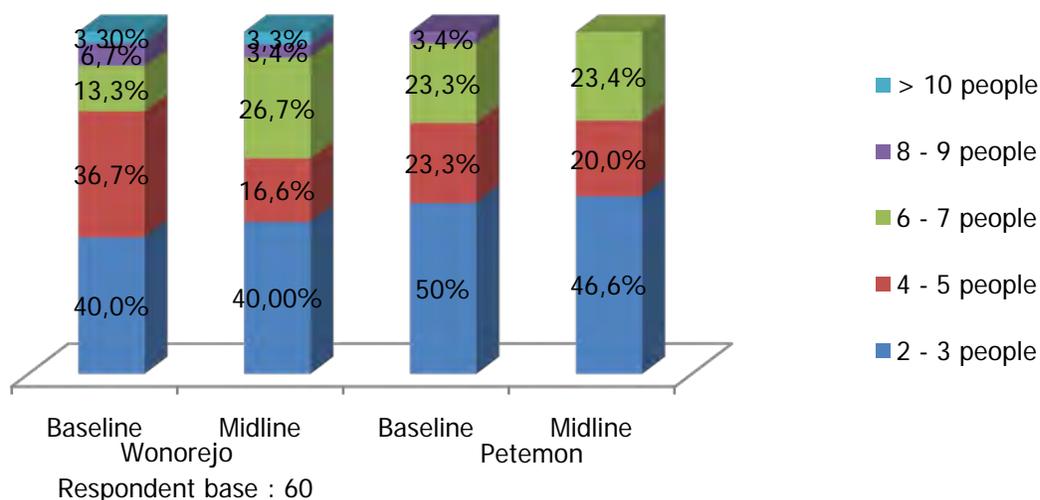


In general, the respondents in Surabaya at the time of the midline survey did not only live in nuclear families (husband-wife-children). Besides under-5s, there were also 2-3 people who lived in the respondents' homes (20%-23%). By sub-district, in Wonorejo a total of 20% respondents lived with 2-3 people, while in Petemon 20% of respondents lived with 2 people over the age of 5, while 26.7% lived with 3 people over the age of 5.

The following graph shows the number of people who lived with respondents (besides under-5s) in the two sub-districts of Surabaya:

Figure 3.6

## Number of Persons Over Age of 5 Living in Home



## F. Respondent Profile Summary

A summary of the characteristics of the respondents in each of the sub-districts surveyed in Surabaya is shown in the following table:

Table 3.1

## Respondent Profile Summary

Characteristic	Wonorejo	Petemon
Age (majority)	46.7% 25 – 35 years of age	66.7% 25 – 35 years of age
Education (majority)	56.7% graduated from high school	53.3% graduated from high school
Number of under-5s (majority)	86.7% 1 under-5 13.3% 2 under-5	76.7% 1 under-5 20% 2 under-5
SES (majority)	33.3% C1 26.7% C2	40% C1 26.7% B
Home Ownership (majority)	73.3% owner occupied	60% owner occupied

## Wonorejo

The respondents were generally young homemakers (25-35 years of age) who had been educated up to high school level or equivalent (56.7% of total respondents). They occupied their own homes (73.3%) and had an average monthly expenditure of between Rp 1,250,001 and Rp 1,750,001 (33.3%), while 26.7% had an average monthly expenditure of between Rp 900,001 and Rp 1,250,000.

A total of 86.7% of the respondents cared for one under-5, while 40% shared their homes not just with immediate family members (wife-husband-child), but with between 2-3 other family members (besides the under-5s).

## Petemon

The majority of respondents in Petemon (66.7%) were homemakers (caregivers to under-5s) of between the ages of 25 and 35 who had been educated up to high school level or equivalent (53.3% of total respondents). The majority also occupied their own homes (60%) and had an average monthly expenditure of between Rp 1,250,001 and Rp 1,750,000 (40%), while 26.7% had a higher average monthly expenditure of between Rp 1,750,000 and Rp 2,500,000.

A total of 76.7% of respondents cared for 1 under-5, while 746.6% shared their homes only with members of their immediate family (husband-wife-child), and without other 2-4 other family members (besides under-5s).

The following discussion of the findings is based on the strategic objectives of High Five Program (as explained in Part I of this survey).

## Part IV

### Program Implementation

#### A. Effectiveness

On the level of involvement of the public, private sector and community in developing and implementing plans to improve water availability, and sanitation and hygiene practices (coded as IR1 – program’s success indicator).

##### 1. Role of High Five Program in coordinating partnership strategies as part of SSK (Strategi Sanitasi Kota - Surabaya City Sanitation Strategy)

The role of High Five Program in integrating CBTS into the SSK was not very pronounced as the Surabaya SSK had already been established before High Five Program commenced its work. However, as the partner of the City Working Group in implementing the SSK, High Five Program provided assistance by:

- ✓ Helping the City Working Group’s CBTS program by focusing on changing behavior, intensive community empowerment work and monitoring the implementation of CBTS activities.

*“The Health Agency itself was happy that High Five was present as it was able to help us. We were also confused at the beginning as to what CBTS was all about. So, the presence of High Five was a great help ... they provided us with training on garbage management using composters and to establish garbage banks ... waste from the drains could also be reused to feed catfish” (Municipal Health Agency)*

*“... we wouldn’t have been able to monitor (the implementation of CBTS activities) directly on a sustained basis – whether it was still functioning properly or whether its functions had changed. That is perhaps one of our weaknesses. But High Five was able to do it continuously ...” (Revenue Agency)*

- ✓ Collaborating with related agencies on:
  - Synchronizing data (with the local government water utility) on mains water customers in the High Five Program areas and households that were not linked to the mains water supply, coordinating operations with the City Working Group so as to produce synergies and avoid overlapping.

*“ ... They synchronized data with PDAM (Perusahaan Daerah Air Minum - Regional Water Utility Company) (on water sources used by the residents of the selected sub-districts) as they were present on the ground there. All we knew was who the PDAM customers were ...” (PDAM)*

*“High Five was one of the programs operating in the municipality, and so it accelerated sanitation development. They worked closely with the municipal government ... so High Five was a coordinated program, that was the concept from the outset ...” (City Working Group)*

- Provided training to sanitarians

*"They also provided frequent training to sanitarians from Puskesmas (Pusat Kesehatan Masyarakat - Community Health Clinic) all around Surabaya ..."*  
(Municipal Health Agency)

There was a strong possibility of incorporating the type of partnership model that had been developed by High Five Program into the SSK given that High Five Program had been successfully applied both in the community and with its work partners.

*"... There is a strong possibility because their strategy was very good, their approach to the people was also successful based on the kind of partnerships that are underway at the present time. They made the people aware ... also the evaluations in the hotels served as a reward for the Working Groups for their hard work, it can be compared with the experience of Working Groups in other areas ... "* (Wonorejo sub-district head).

## 2. Replication of High Five Program Sub-district Program by local governments and/or NGOs

While the Surabaya Municipal Health Agency has conducted socialization and outreach work on CBTS (including readying a team of CBTS workers), there appears to be quite a lot of enthusiasm for the replication of the CBTS program based on the High Five Program model (particularly in RWs in the vicinity of the RWs where High Five Program conducted its CBTS program). This was due to the obvious improvements that took place in the selected RWs in the High Five Program sub-districts, the successful approach adopted by High Five Program towards the public and other stakeholders.

*"... the health agency had already done things ... like, if we were invited to sub-district A to provide information on sanitation, we would also talk about CBTS, and this was implemented by the Puskesmas sanitarians. We also provided training to facilitators to promote CBTS. So 1 team of facilitators would consist of 5 people, composed of sanitarians, sub-district officials, PKK (Pembinaan Kesejahteraan Keluarga - Empowerment Family Welfare), sanitation volunteers, and community leaders in the area. Meetings of the sanitation volunteers took place once a year ..."* (City Working Group)

*"... the other RWs in Wonorejo wanted it (replication of the High Five CBTS program), but the focus is still on the 3 RWs (RW 4, 6, and 7). But for our activities, we involved 6 RWs. All of the RWs that weren't touched by High Five Program, they all wanted it. Our workers weren't convincing when talking to the people, but the workers from High Five were really zealous ..."* (Wonorejo Sub-district Head).

*"... in reality, our problem is how to convince people to accept it (changing their behavior/practices, like convincing people who leave near a river to build septic tanks). So, this program was really good. If it could be expanded, it would benefit even more people. That would be better than just benefitting 2 sub-districts (City Working Group).*

However, as High Five Program was focused on changing behavior, there was no doubt that it would face difficulties if replicated. These difficulties included:

- ✓ Need for sustained efforts

*"... You can't do it overnight, it has to be done gradually, it has to become routine. That's how success will come about. As proof, there are those who became willing to build toilets after being provided with information on CBTS ..."*  
(Sub-district Working Group)

- ✓ Working Group members who lacked the self-belief to "progress"

*"... if the cadres provided information, the people wouldn't be convinced, but if they were provided by information by High Five (people in replication areas), then the people would be all for it ..."* (Wonorejo Sub-district Head)

### 3. Level of financial support from private sector and community partners

As the focus of High Five Program is on behavioral change, rather than physical construction, there was a lack of funds available when they were needed by the CBTS program to finance the construction of infrastructure and facilities. This was however properly explained and communicated to Sub-district Working Group members. Nevertheless, as funds were needed during implementation for the construction of infrastructure and facilities, there was a need for the public to raise funds themselves. As a result of the changes in thinking and behavior that were brought about in connection with sanitation and hygiene, the public turned out to be willing to do so.

*"... After the final round of socialization, they (the residents of the selected RWs) voluntarily built their own latrine and bathing facilities with assistance from High Five. They were mobilized and motivated by the presence of the CBTS program ..."* (Petemon Sub-district Head).

While High Five Program did not provide funding, it provided help by putting people in touch with private sector firms that operated Corporate Social Responsibility (CSR) programs related to environmental and hygiene issues.

*"... High Five really helped us a lot. For example, the building where I live was also facilitated by High Five so that third parties provided funding for the physical construction work. That septic tank was built at a cost of more than 25 million rupiah. The local people could only provide 700,000 rupiah. So High Five helped us even though they didn't provide us with funding. But what they did do was put us in touch with third parties ..."* (Sub-district Working Group)

*"... High Five Program worked to make people aware, while others like SCTV helped with the physical construction of the toilets through their PundiAmal program. Thus, the two worked together, one made people aware while the other helped with the physical work. So, this made people willing to help. This area is not only densely populated, but people's incomes are below average. So, the construction work kept on being delayed. But then someone came along who was willing to build, with the payment to be made by installment. As a result, people were interested and it went ahead ..."* (Wonorejo Sub-district Head).

On the duplication of hygienic behavior and improving sanitation through participatory programs at the community level involving stakeholders, social networks and community members (coded as IR2 – program’s success indicator).

### 1. Promoting hygiene and sanitation in the schools

As one of the High Five Program focuses for involving the schools in the High Five Program sub-districts, an intensive training program was provided to teachers and 5 students. After the children had been trained, they were encouraged to survey their areas and see for themselves the consequences of a dirty environment. In addition, from their perspective of student awareness of CBTS, the student partners were the most frequently recalled source of information by the elementary school respondents, besides the members of the High Five Program team.

The teachers who received training saw that, besides direct approaches to the public, it was also appropriate to use approaches through the schools, bearing in mind that the schools had a role to play in influencing the surrounding community. Through the schoolchildren, it was to be hoped that they would bring the knowledge they had gained into the community and thereby help effect change in their families (sourced from the children) and in this way create a ripple effect in the community at large.

*“... In my view, it’s better to undertake such activities in the schools as the schools are a reflection of the community, the behavior of the public is reflected when the children are at school. The children bring the practices of their families into the schools, so that when they are at school we can inform them. We should be able to change them in a coordinated way (through socialization and training) so that it is easier to effect change in society (the behavior of the children reflects the behavior of their families) ...” (teacher who received training).*

One of the considerations involved in the selection of the elementary schools was the number of children attending the school. The more children, the greater the potential for disseminating information in the community. In addition, the impact on the school itself was also taken into consideration. If at the outset the school lacked hand washing facilities, it was hoped that after the activity hand washing facilities would be provided.

*“ ... Because it had a lot of students, who could then influence their environments. Hand washing with soap, describing healthy environments, voluntary work in the school, trash separation (reasons for selecting activities). There were a lot of activities aimed at the children ... they used to eat directly without washing their hands, leaving them vulnerable to germs. Making them aware of the importance of hand washing with soap can have a major beneficial impact on health ...” (Wonorejo Sub-district Head)*

When High Five Program targeted elementary school children as one means of disseminating information on the CBTS pillars, early childhood education centers also became the target of school activities (by the Surabaya City Working Group).

*"... We encouraged all components of the community, we trained teachers right down to the kindergarten level. We conducted socialization on a number of occasions to kindergartens, for example, by providing examples of hand washing with soap in still water, like in a bucket. Thank goodness, although we didn't reach all, we did manage to reach about 90% ..." (Petemon Sub-district Head).*

## 2. Media Support for Hygiene and Sanitation

The role of the media is important in communicating messages about sanitation and hygiene, although not many media outlets make such issues a priority or even report on them regularly.

*"... In reality, the influence of the media is very strong – at the decision-making level it is very strong. That's what happened. High Five wasn't just talking to sub-district heads so as to make them more aware of sanitation. We were also working with the media. If the media was covering an event, then the district head would have to attend. That's the role of the media, very strong. Our friends in the media were very, very helpful ..." (District Leader).*

Another function of the media in communicating hygiene and sanitation issues was to help motivate other sub-districts (outside of the High Five Program sub-districts) to take the initiative in doing the same so as to resolve hygiene and sanitation problems.

*"... so that the public knew about the programs that were being carried out – the media can focus on the hygiene and sanitation programs being undertaken in the sub-districts. In this way, the public become more familiar with these programs. It also helps provide an example to other sub-districts so that they will replicate the programs..." (Petemon Sub-district Head).*

*"... It was essential. CBTS was covered by SCTV, SBO (Suroboyo tv station), SSFM (local radio station), they also covered voluntary community work and so forth. If we were too dependent on the government, we would have achieved nothing, it would have taken ages. With the presence of NGOs, supported by the media, things got done quickly. The help of the media is essential for socialization. We could have moved ahead without the media, but the progress would have been slow ..." (Wonorejo Sub-district Head)*

According to the Communications and Information Agency, government program were normally communicated through various media, but the High Five Program activities were not sufficiently covered by the media. The agency said that this was because the interaction with High Five Program was "light" and was confined to coordination, rather than official collaboration.

*"... High Five could have moved beyond coordination if things had been put on a more systematic level (formal collaboration, whereby the agency acted as its partner, for example) so as to be able to participate in city government programs. Systematic in the sense of what could later be developed in this regard ..." (Communications and Information Agency)*

As one yardstick of the success of High Five Program in applying a participatory approach to stakeholders, social networks and community members, High Five Program Surabaya established good relations with the media through the forming of a community of journalists concerned with environmental and sanitation issues. As an manifestation of High Five Program's concern for the media, journalistic training was also provided so as to improve the professionalism of journalists in their respective fields.

*"... There were never any obstacles faced regarding the media because in Surabaya we had a community of journalists ... before the establishment of the community, there had never been much interest in sanitation. But we (High Five) introduced sanitation to the community and they took things from there. I was recently invited by our friends to appear on an RRI (Radio Republik Indonesia – public radio station) talk show on sanitation. So they have become actively involved in sanitation issues, without having to be coaxed any longer by us ..."*  
(District Leader)

In promoting hygiene and sanitation issues, the media are also able to encourage the Municipal Government to be more responsive in acting on behalf of city residents, particularly as regards hygiene and sanitation issues.

*"... A significant change took place (after the media became involved in sanitation issues). Previously, the government didn't care about the conditions in which people were living. The arrival of donor agencies, let's put it like that, to help bring about change on the ground eventually led to the government getting involved. Before they didn't care. If a foreign aid agency wanted to help back then, the government would let them, but had no interest in getting involved. But now they want to be involved. That's a significant change since the establishment of the government of Bambang DH (Mayor of Surabaya) ..."* (Other Partner – Journalist).

Other planned support from the media for hygiene and sanitation issues in collaboration between High Five Program and the KJPL (Komunitas Jurnalis Peduli Lingkungan - Community of Concerned Journalists for the Environment) includes training for members of the public so as to improve writing skills so that they can serve as citizen journalists. Such training is needed so as to educate the public about hygiene and sanitation issues.

*"... We will train people to publish a regular news bulletin as part of the CBTS campaign. This will be going ahead soon. The focus of the KJPL is on education. We educate the public at environmental, hygiene and sanitation issues. We don't provide much direct mentoring on the ground. But if needed, we will do so. We will provide training to members of the public on how to become citizen journalists ..."* (Other Partner – Journalist)

Another component of IR2 – the extent to which households understanding the importance of the CBTS pillars – will be discussed in the quantitative report, while the number of households that have adopted positive behaviors and improved their hygiene and sanitation practices will be dealt with in the section on effectiveness.

On the empowerment of communities to ensure sustainable demand and access to safe water, hygiene and sanitation facilities at the household and community levels (coded as IR3 – program’s success indicator).

## 1. Preparation and collection of proposals by communities/groups/schools

One of the indicators of the success of High Five Program in Surabaya is the preparation and collection of proposals to help with the implementation of the CBTS program. Not all of the Sub-district Working Group members who attended the focus groups were aware of this aspect, although they were aware that High Five Program acted as a mediator between the community and other relevant parties (both private sector and municipal government). Nevertheless, the LKMK (Lembaga Ketahanan Masyarakat Kota – ICity Community Resilience Institution) had intended to make proposals, although they were never collected.

*“... There was a plan, but the proposals were never put in ... the LKMK ...”  
(Petemon Sub-district Head)*

The principal constraint faced by the LKMK in making proposals was technical in nature. To date, they are still at the discussion stage.

Both the City Working Group and the Sub-District Working Groups appreciated the role of High Five Program in mediating between the community and private sector organizations with CSR programs for fund-raising purposes. However, at the advocacy level, their efforts were confined to putting the Sub-District Working Groups in contact with the municipal government or private sector organizations. However, the Sub-District Working Groups were not trained on how to comply with the existing procedures when seeking assistance, such as how to submit their proposals, seek meetings, and to negotiate with the responsible parties.

## 2. Use of Behavioral Change Communication (BCC) Materials in Socialization Process

High Five Program’s BCC materials, which were shown during the FGD, were familiar to all of the Sub-District Working Group members, who were able to identify their functions and uses. All of the materials were deemed effective in helping the members of the Working Groups in conducting socialization and in monitoring the Sub-District Working Groups.

*“... They were really helpful, like in Petemon sub-districts, where only 3 RWs were focused on, we had a Healthy Walk (event) for the entire sub-districts. The stickers were also very helpful as they showed people what CBTS was all about, about the 5 pillars. So, they were very helpful...” (Sub-District Working Group)*

*“... The (CBTS pillars) ... were affixed to the houses ...” (Sub-District Working Group)*

## B. Effectiveness

According to the stakeholders, the CBTS Program, which has now been underway for 1.5 years in Surabaya, should achieve its objectives. Besides considering what has already been achieved (by comparing the findings of this survey and those of the 2012 baseline survey), this survey also assessed the extent to which:

1. People's awareness and knowledge of clean and healthy behaviors as part of the 5 CBTS pillars, and how to make effective approaches, have increased.

High Five Program conducted intensive and continuous socialization of clean and healthy practices using various means, both involving training and direct example (practice). It was acknowledged not only by the Sub-District Working Groups, but also the City Working Group (during the FGD), that what had been done by High Five Program had been far from easy. The results, both qualitative and quantitative, showed that there had been an improvement in the knowledge and information of people (and also Sub-District Working Group members) related to clean and healthy lifestyles.

Among the factors operating against the adoption of clean and healthy practices was the fact that they had been doing things the wrong way since time immemorial. Thus, the information and knowledge that High Five Program disseminated was something new, and sometimes was at odds with what people thought was "right". Example of things that people thought were right but which were in fact incorrect are:

- ✓ Channeling waste from a private toilet into a nearby river

*"It's easy and cheap just to flush it into the river. They have a toilet, but the problem is it discharges into the river ..."* (Working Group)

- ✓ Dumping garbage directly into the river

2. Changing behaviors in connection with clean and healthy practices as part of the 5 CBTS pillars

The High Five Program, if compared with other sanitation programs, stresses the style of approach to the public, emphasizing outreach and encouragement, so as to make people more receptive to change. While fully aware that changing behaviors is never easy, the High Five Program approach not only provides training but also concrete examples, thus making people more willing to change their mindsets and behavior.

*"... The High Five Program is focused on its approach to the community. It isn't like other sanitation programs, which are more focused on outreach. By contrast, the High Five approach to the community is based on encouragement, by making people aware so that they will change their behavior ..."* (Other Partner – Academia)

*"... One example – whereas previously people dumped trash everywhere, in the end they realized that the trash had serious consequences, like floods, contaminating the environment. So they started separating garbage, collecting it. The area is now quite clean ..."* (Sub-District Working Group)

3. For the volunteers, the CBTS program undertaken by High Five Program provided information and knowledge on:

✓ Basic sanitation

The training and support materials provided by High Five Program to the volunteers made it easier for them to disseminate information to people in the High Five Program sub-districts. It also provided the volunteers with a lot of knowledge on basic sanitation.

*"... Essentially, whatever was available (like outreach materials, encouragement materials, information on disease transmission cycles, flipcharts, stickers), we were always given it ... " (Sub-District Working Group)*

✓ How to make effective approaches to people

The volunteers were aware that they were not only receiving support in the form of increased knowledge about sanitation, but also about how to approach people more effectively. As regards their "mental quality," the volunteers felt that this also increased.

*"... We often received training, attended discussions, advocacy sessions, advocacy training, socialization. To be honest, being part of High Five meant that we mixed a lot with well-educated people. We saw how they approached people, communicated with people, and we learned from this ..." (Sub-District Working Group)*

*"Since I joined High Five, I've become more patient ..." (Sub-District Working Group).*

### **a. Challenges and Their Potential to Result in Non-Achievement of Program Objectives**

As the nature of the High Five CBTS program is closely related to behavior, meaning that it is orientated towards changing people's mindsets and actions, the principal challenge faced was the reaction elicited from the people themselves. The following are some aspects related to people's reactions to the Sub-District Working Group in the High Five Program sub-districts.

1. The response of people when invited to take part in High Five Program was constrained by (i) lack of time to attend meetings; (ii) a small number of residents were apathetic, or even tried to turn other residents against High Five Program.

*"... We got together at 7 pm, but we were often late..." (Sub-District Working Group)*

*"... it was not possible to involve the people of the housing complex as they were busy so it was difficult for them to attend meetings ..." (Sub-district Head)*

*"... We provided encouragement, but there was one provocateur who got all heated, he even affected us ..." (Sub-District Working Group)*

*"... There was one guy who was really egoistic, he claimed I was paid, got facilities. He was a provocateur ..." (Sub-District Working Group)*

Among the arguments used by a small group of people to discourage others from participating in the CBTS program were the following:

- ✓ The volunteers are paid, and this is a waste of government money, which should be used for public purposes in the hygiene and sanitation fields. In reality, the volunteers were not paid and did what they did out of a sense of vocation and commitment to the ideals of High Five Program.
- ✓ The rumormongers were only prepared to become involved if they were paid as they were convinced that the program had a lot of money to spend.

2. The funding available under the High Five Program for the construction of facilities is inadequate.

According to both the Sub-District Working Groups and the municipal government, the funding provided by High Five Program for the development of sanitation facilities is too small, and that it is difficult for the community self-funded model to work giving that most of the people in the relevant sub-districts are living close to the poverty line. People who are genuinely poor are not capable of funding the development of infrastructure, including the development of sanitation infrastructure.

*"... building such an installation is expensive, they would need help ... it would be great if High Five were able to help ..." (Sub-District Working Group)*

There were a number of constraints that arose in Surabaya that were primarily internal to the Sub-District Working Groups and their relations with local people. Such constraints had the potential to disrupt the High Five Program. Examples are as follows:

3. It was not easy to find residents to act as unpaid volunteers. Even though a person had been active in the area in a particular program, this was no guarantee that he or she would be willing to work as a volunteer for the High Five Program. Constraints included lack of time (busy with work or in the home), or the person concerned wanted to spend more time with his or her family and so was unwilling to devote any more time to volunteerism.

*"... I knew that Ibu (Ms) Ninik could disseminate information in the community because she was involved in all sorts of activities, like senior citizens, PKK, youth organizations, but she didn't want to ..."*

4. Even after the volunteer/Working Group teams had been established, this was no guarantee that everything would run smoothly. There was still the possibility of team members "dropping out" over the course of the program due to time constraints.

*"... At the relevant times he had to work as a teacher, so he had to drop out. The problem was, it was not easy finding a replacement for him..." (Sub-District Working Group)*

5. The Sub-District Working Groups lack self-confidence in providing encouragement in their areas. As a result, they were often dependent on the High Five Program team.

*"... They were really dependent on High Five. What I mean is, when they were encouraging people, they often lacked self-confidence to do it themselves. So we had to help them..." (District Leader)*

6. In the particular case of program implementation in the schools, the communication appeared to lack intensity. This had an impact on the project's success in changing the mindsets of the schoolchildren.

*"... there was a lack of intensity. High Five should have had meetings every two months. God willing, this would have changed mindsets more quickly. Because what we need is to work harder to change people's mindsets (in the vicinity of the schools, including the students), we need more students to be involved. To date, there has only been 5 in each school. It should be increased to 10, then things would move more quickly ..." (teacher who received training)*

As regards the City Working Group, the constraints on achieving the High Five program objectives were as follows:

7. Lack of collaboration between the High Five Program Surabaya and the relevant local government agencies, like the Communications and Information Agency. The collaboration was deemed to be inadequate as it was still on an unofficial basis and lacked intensity. Thus, the Communication and Information Agency did not fully understand what High Five Program was doing, and as a result did not know what it could do to help.

*"... High Five could not rise above the coordination level (with the Communication and Information Agency) ..." (Communication and Information Agency)*

*"... I would have liked to see our partners regularly coming here so that that we could share information. As it was, there was a lack of information .sometimes when we called, there was no one to talk to us. We were invited to coordinate at the SKPD (Satuan Kerja Perangkat Daerah - Regional Working Units) meetings... so before taking action, what we need is a report on the desk ..." (Provincial Health Agency).*

8. The High Five Program work area was considered relatively restricted when compared with the overall work area of the Surabaya Government.

*"... it should have been rolled out on a bigger stage by High Five. While this might have implications for quality, at least the majority of people in Surabaya would know about the 5-pillars program. So in future, the pilots should not be confined to two areas, but should be expanded to 4 or even 10 areas, given that there are a large number of sub-districts in Surabaya ..." (City Working Group)*

## **b. Steps that Can Be Taken to Prevent the Challenges Resulting in Non-Achievement of Program Objectives**

The constraints described above need to be responded to quickly by High Five Program so that it can achieve its objectives. Among the responses that are urgently needed are the following:

- High Five Program should intensify its relations with the relevant municipal agencies, like the Communication and Information Agency. Such collaboration should stress the respective roles of each side, and what is agreed upon between the parties should be set down in black and white. This is necessary if the role played by the Communication and Information Agency is to be expanded in voluntarily and sincerely supporting the High Five Program CBTS program in Surabaya by more intensively and effectively disseminating information to the public.

*"... High Five should not just be about coordination, but should be more systematic so that it can participate in municipal government programs ... systematic in the sense of identifying what can be developed in the future in this respect ... "* (Communication and Information Agency)

- As regards matters related to the work patterns and activities of the Sub-District Working Groups, general speaking the volunteers have taken action to overcome the challenges faced, including by:

- Making approaches to those in the community who spread false and destructive information, and explaining that the volunteers work free of charge, rather than being paid out of public funds that should be used for other purposes.

*"... We made the approaches ... Since High Five started, we've learned to be patient. At the outset however, we used to get angry..."* (Sub-District Working Group)

- Coordinating with the field team if a volunteer planned to leave the program for the purpose of finding a replacement, or a new Sub-District Working Group member who would be willing to voluntarily commit his or her time to the High Five Program.

*"... It wasn't easy to find replacements, I was difficult for me. So I always coordinated with Ibu Ratih, the coordinator in Surabaya, if we needed to find someone new ..."* (Sub-District Working Group)

*"... What we wanted for the Working Group were people with a social conscience, people who were really willing to volunteer their time ..."* (Sub-District Working Group)

- When High Five Program is about to end its program in the selected sub-districts, the volunteers in the Working Group need to be prepared so that the program can continue after High Five Program leaves. In this respect, High Five Program needs the support both of government and NGOs.

*"... I think it can continue and support for the sanitation program, even beyond sanitation, can be increased, we're ready to help ..."* (Municipal Revenue Agency)

*“High Five can continue on a sustainable basis, helping people, even after the system they have been operating to date changes...” (Municipal Revenue Agency)*

As regards the efforts to prepare the volunteers on the Sub-District Working Groups so that the program can be sustained, the following issues need to be considered:

- ❑ An extension of the High Five Program’s duration

*“... It needs to be extended (the program’s duration) so as to make people better aware...” (Wonorejo Sub-district Head)*

- ❑ The provision of training to the volunteers on both soft skills (how to approach, interact with and influence people) and hard skills (knowledge of sanitation and hygiene) so that the program can be sustained by the community.

*“Training, what’s important is that we can help the people understand ...” (Sub-District Working Group)*

The provision of training on soft skills and hard skills will have both a direct and indirect on the self-confidence of the Sub-District Working Group volunteers and better equip them to speak when providing encouragement, socialization and so forth.

After they have been trained, they will also need additional formal training on public speaking, similar to what has already been provided by the High Five Program team.

*“... we also encourage them, we encourage them on the ground. They lack self-confidence, so we say, ‘go on, you can do it, just think of High Five ...’; we always encourage them. We push them a little bit, we encourage them to speak first, but maybe we take over later. But we always continue to encourage them ...” (District Leader)*

- ❑ Teaching the community how to raise funds for facilities, for example, approaching the government so as to obtain funds or take over some program that has already been underway.

*“... So , like the PNPM (Program Nasional Pemberdayaan Masyarakat Mandiri – National Program for Community Empowerment) in the DKN (Dewan Kehutanan Nasional-The National Forest Council) is already involved in sanitation, it can provide part of the paving, this could be in the sanitation sector, although it’s difficult to get funds ... ” (Sub-District Working Group)*

- ❑ Teaching the community how to connect with other relevant parties who are willing to collaborate by providing funding for the development of public facilities (such as universities, etc)

*“ .. it would be great if High Five could help, perhaps they could help by getting assistance from the government (for the development of public facilities) ...” (Sub-District Working Group)*

*"... we need third parties to help, like Pundi Amal SCTV, to help with the physical work, so as to heighten the awareness of the public ..."* (Wonorejo Sub-district Head)

### c. Role of High Five Program in Integrating CBTS into the SSK Program

SSK was prepared in 2010 as one of the outputs of the urban sanitation acceleration program. It was designed jointly by the Working Groups in the relevant municipal agencies based on the SKPD of each agency. The process was coordinated by Bappeda (Badan Perencanaan Daerah – Local Development Planning Board) (now known as Bappeko – Badan Perencanaan Pembangunan Kota Surabaya – Surabaya City Development Planning Board).

*"... back then at the start, we mediated with the City Sanitation Working Group to obtain information in the form of the sanitation white book. So there is already a SSK for Surabaya. So Surabaya already has a Sanitation Working Group, which involves a large number of SKPD agencies related to sanitation. This was required by the central government ..."* (District Leader)

As the SSK was prepared prior to High Five Program's arrival in Surabaya, High Five Program has no official role to play in integrating CBTS into the Surabaya SSK. In addition, the SSK is more closely related to PHBS (Perilaku Hidup Bersih Sehat – Healthy and Clean Living Behavior) because at that time CBTS was not a familiar concept. PHBS was better known and more popular as the program was designed by the Ministry of Health. CBTS only became a familiar concept at the end of 2010.

*"... the Health Agency's STBM program started in 2012 and was based on Minister of Health Decree No. 5 of 2008. This was primarily aimed at rural areas, and was only expanded into urban areas in 2012. So it was something new in the cities, although it had long been underway in the villages..."* (City Working Group)

❖ Hygiene and sanitation programs that had been operated in the High Five Program sub-districts and in Surabaya Municipality in general include:

- USRI (Urban Sanitation and Rural Infrastructure in collaboration with Public Works, this program was focused on the supply of drinking water).

*"... While High Five Program collaborated with the Ministry of Health, USRI was one sanitation program, but operated by Public Works. STBM was promoted through USRI, development through USRI, and was funded by the World Bank ..."* (City Working Group)

- APPSANI (Asosiasi Pengelola dan Pemberdayaan Sanitasi Indonesia - Indonesian Association for Sanitation Management and Empowerment), which carried out a program to promote the construction of compatible concrete septic tanks (not requiring a lot of land), which could be paid for by installment.
- INDI, which carried out work in connection with the sanitation master plan.
- Green & Clean (promotion, competitions based on liquid and solid waste management).

- Collaboration between Sub-District Working Groups (excluding the City Working Group), World Vision and Wahana Visi on hygiene and sanitation at the sub-district level. World Vision focused on environmental cleanliness efforts (such as mutual self-help and voluntary work to keep residential areas clean), while Wahana Visi focused on developing educational facilities.

*"... World Vision Surabaya provided rice, tissue, nuts ... was involved in organizing voluntary work ..."* (Sub-District Working Group)

*"... the people of Wonorejo really need the help of High Five, because it is a densely populated area – if I compare High Five with Wahana Visi, which was also from America, their programs are very different. They provided milk, rice and so forth, the people were encouraged to keep the streets clean, but it wasn't educative. But High Five Program is educative and provides solutions ..."* (Wonorejo Subdistrict Head)

- CLTS (Community Led Total Sanitation) was mentioned by the City Working Group (but was not familiar to the Sub-District Working Groups). This was stated as being similar to what High Five Program was doing in connection with CBTS.

*"... the CLTS program was not the same in each area. They tried to encourage people by providing examples, such as, what would happen if we continued to practice open defecation, if feces entered the water, who would want to drink it. Things like that. Its implementation was more gradual in nature ..."* (City Working Group)

- IUWASH (mentioned only by the Provincial Health Agency) was operated in close coordination with the Provincial Health Agency. They provided training on entrepreneurial sanitation, facilitator training, also facilitate partnerships.

*"... compared with other partners, IWASH focused on community sanitation through the provision of entrepreneurial training in the sanitation sector, providing training to facilitators, providing training on facilitating with partnership, things like that. Maybe High Five is doing similar things, we don't really know as we rarely meet. However, IWASH came here regularly, we were in close touch ..."* (Provincial Health Agency)

#### ❖ Improvements Brought About by High Five Program

The High Five Program was considered to have played an important role in changing the mindsets and behavior of people in the selected sub-districts. After having been provided with socialization and training, people were now more hygienic and aware of the need to maintain environmental hygiene.

- Assisting the City Working Group's CBTS program in changing behavior

*"... The Health Agency is very happy that High Five has been able to assist us. We were at first confused by what was meant by CBTS. So the High Five Program was a major help to us ..."* (Municipal Health Agency)

*"... There has been a change in people's behavior since High Five arrived on the scene. There were similar programs before but they never worked well. So, High Five's arrival resurrected the effort. The change in behavior has occurred because High Five made people aware and provided outreach, and also the Working Groups regularly remind people to always adhere to clean and healthy practices. Sometimes people forget and have to be reminded. The change in behavior is not due solely to High Five, however, but also to other parties, such as Green & Clean (an NGO), which originally introduced the program, Pundi Amal SCTV, and the municipal government itself. However, High Five has played the dominant role ... "* (Wonorejo Sub-district Head)

- People now willing to voluntarily separate garbage

*"... yes, there've been changes. For example, toilet waste is no longer contaminating the drains and river as people now have their own toilets and septic tanks, constructed with the people's own money. They also now regularly collect and separate garbage as they know it has economic value as it can be turned into compost ..."* (Wonorejo Sub-district Head)

- Empowering the community by enhancing people's incomes

*"... the volume of garbage has fallen, people now know not to dump it willy-nilly. All garbage can be used to generate income ..."* (Sub-District Working Group)

- Controls exercised by community groups

*"one of the reason is self awareness, now we are discussing about involving the community, automatically we don't have to remind them anymore, from their own community they should now know not to do this and not to do that. So they are reminded by their community hence we don't have to remind them anymore"*

*(Pokja Kelurahan)*

## C. Efficiency

As regards efficiency, the most appropriate sources are those from within High Five Program itself, namely, those responsible for implementing the CBTS Program in their respective areas. The following are the results of an interview with the High Five Program District Leader in Surabaya.

### a. Use and Allocation of Resources for Program Implementation

In the implementation of the CBTS program by High Five Program in the selected sub-districts, funds were allocated based on the annual plan (and the monthly breakdowns). The proposed program activities for the following year were submitted by each district/city to High Five Program head office in Jakarta. Obviously, the proposed programs were discussed with other districts before being submitted to Jakarta. The program plan and the required resources were also based on the objectives that it was wished to achieve.

*"... Each year we produced a work plan. In Surabaya, for example, we planned what we were going to do in the following year, with details of proposed*

*activities and the required budget for each month. We would set out how much we needed for activity A, for activity B, this was done for each month over the course of one year ...” (District Leader)*

Although detailed budget plans for each month had been prepared, this did not result in inflexibility during implementation. It was possible to accelerate or decelerate activities in line with developments in the field, or in connection with the programs being carried out by other parties.

*“... we submitted proposals for a full year to High Five Jakarta. But this did not mean that things were set in stone. Activities could be accelerated or postponed, and the budget could be adjusted accordingly ...” (District Leader)*

With regard to program funding, High Five Program, which was funded by USAID, was regarded by the people affected by the program as having access to very large funds. However, people were informed that the program was aimed at changing behavior rather than funding infrastructure development and that it was not a very heavily funded program. As a result, people began to understand the real situation.

*“... At the start when we launched our program, the impression among the people was that High Five, as an outside body associated with USAID of America, had a lot of money and would have a lot of programs in the sub-districts. But from the outset we told them that we had no money, we had only so much resources, that we were focused on changing behavior. In this way the people eventually came to realize that our program did not involve a lot of expenditure ...” (District Leader)*

While there was enough money to provide things like equipment so as to be able to pursue normal operations, there were funding limitations as regards personnel. As a result, it was not possible to undertake a number of activities (such as monitoring and evaluation) due to a lack of personnel. There were also problems with a lack of administrative personnel.

## **b. Comparison Between Use of Resources and Achievement of Program Objectives**

If we compare the use of resources and achievement of program objectives, the ratio in Surabaya stood at between 70% and 80%. This means that some resources went unused as a result of changes in plan on the ground. These changes in plan resulted from some activities not being capable of being undertaken until such time as approaches, both formal and informal, had been made to the relevant municipal agencies.

*“... Like I said, we had an achievement rate of 70-80% in Surabaya. The hope is that we will be able to strengthen people's resolve so that they will be able to carry out these activities at their own behest, without having to rely on High Five Program. The second thing that is still a challenge for me at the municipal level is how to make them see sanitation as an integrated issue so that CBTS is not just the responsibility of the Health Agency but rather of everyone. We are still in the process of making formal and informal approaches to the City Working Group so as to bring this about...” (District Leader)*

### c. Program Adaptation and Implementation

Adaptations in the program occurred due to external factors, including other relevant stakeholders (particularly the City Working Group). This had consequences for the allocation of available resources. While expenditure exceeded the budget, the overrun was not significant.

*“... spending, there wasn’t a big difference. The difference overall was reasonable and quite small. It wasn’t like an overrun from 10 million (rupiah) to 100 million (rupiah). If it goes from 10 to 9 million (rupiah), or from 10 million to 12 million (rupiah), that’s acceptable.” (District Leader)*

*“... for example, when we invited the mayor, the plan was for just a small event. But in the end thousands of people turned up. This wasn’t in line with the plan. Originally we had expected 1,000 (people), but 2,000 (people) turned up. While this was unexpected, it was nevertheless positive. It was because our work with the people was dynamic so that we couldn’t always predict outcomes ...” (District Leader)*

Taking into consideration all aspects related to the allocation of resources vis-à-vis the achievement of program targets, the High Five CBTS program in Surabaya may be said to have been efficiently implemented from the qualitative perspective as it optimized the use of available resources and achieved up to 80% of the program targets. As regards the increase in the number of personnel in the High Five Program Surabaya team, it is to be hoped that the level of program achievement will increase significantly during the remainder of its duration.

## D. Sustainability

### a. How do the stakeholders perceive the High Five Program methodology compared with CLTS?

At the Sub-District Working Group level, people were not familiar with CLTS, even though they had experience of a variety of sanitation programs in their areas. By contrast, the members of the City Working Group (particularly the Health Agency) were familiar with CLTS. High Five Program was considered to be identical to CLTS, although it was stated to be more responsive/sensitive in its approach to the community. The differences in the High Five Program approach to the community that were considered favorably were as follows: (i) it did not lecture the people; and (ii) it did not provide assistance, but encouraged people to fund their own needs in the hygiene and sanitation fields.

*“... High Five was similar to CLTS, but probably more advanced. CLTS was not applied in the same way in each area. They tried to encourage people by providing examples, such as, what would happen if we continued to practice open defecation, if feces entered the water, who would want to drink it. Things like that. Its implementation was more gradual in nature. We had to explain things, check out locations. So, High Five was more advanced, better suited to encouraging people, more responsive to the people...” (City Working Group)*

## **b. Feedback from stakeholders on the Method Applied by High Five Program**

Both the City Working Group and the Sub-District Working Groups were aware of how the High Five Program commenced, that is, by inviting the participation all components of society in the High Five Program areas (youth, religious leaders, local administrators, residents, and even children). This was followed by encouragement: mapping, surveying the area, FGDs and the establishment of the Working Groups. The Working Groups (both at the city and sub-district levels) were aware of the activities on which High Five Program was focused, namely, changing people's mindsets and behavior in connection with the CBTS program.

The City Working Group and Sub-District Working Groups were of the view that High Five Program was very helpful and that it had played a major role in changing behavior, which they acknowledged was not easy (in fact, some said it was impossible) through training, continuous mentoring, the furnishing of practical examples, and monitoring.

For the private sector organizations involved in providing financial assistance to High Five Program, they had selected High Five Program as they had a positive view of what High Five Program was doing in Surabaya.

*"... It was focused. It was carried out by real experts, and we were also involved. I was involved in everything, from the training material up to the outcome of training in the field. In my view, other private sector organizations could do like this. We were invited to see how High Five provides training to candidate motivators in the community, and to see their practices in the field. This encouraged the private sector to participate as it was not just about theory and money. They are kept abreast of everything from the very outset ... "* (Private sector partner)

The fact that the High Five Program approach was participatory also encouraged other partners (NGOs) to get involved.

*"... in my view, High Five has a different type of network. For example, if they have a meeting, they invite people from the municipal government, academics, NGOs, and the public at large. That's good. When other programs hold meetings, the only invite working group and no one else. The working group then go back into their own sub-districts. But High Five invites academics, and people from the relevant municipal agencies – health, sanitation and environment, and also representatives of the public ..."* (Other Partner – NGO)

*"... I felt it was very good (the way in which High Five forges partnerships with other stakeholders). I read about it in the media, on the Internet, I heard from my colleagues about High Five. When I crosschecked by email, the Web, especially Google, the news was good. High Five Program's networking is very good. I saw Ibu Risma arrive, I also felt welcome. Not just because there were a number of ITS (Institut Teknologi Subaya – Surabaya Technology Institute) alumni working with High Five, but also because of the environmental work being done by High Five. It wasn't just because of the alumni. What was being*

*done by High Five, what we were doing, there was no miscommunication as far as I could see ...” (Other Partner – Academia)*

How High Five Program trained its trainers (during the seminars organized by High Five Program) was also viewed positively by the Other Partners (in this case, NGOs), and this had an impact in the forging of close and solid partnerships.

*“... What I saw when I attended a training seminar, I myself was trained as a facilitator by High Five, the seminar was better and more interesting, interactive, so that the members of the audience didn’t become bored. None of the others do it like that. Normally people are treated as objects, but High Five Program treated them as subjects, training subjects ...” (Other Partner – NGO)*

Appreciation of High Five Program on the part of the stakeholders was also evident from the willingness of people to attend the events organized by High Five Program.

*“... I really appreciate High Five’s activities. On the official side, their events were well attended by government people, particularly by those from agencies related to hygiene and sanitation – people from the Health Agency, Education Agency, Public Works. They were also good at networking, they really understand how to work together with others. And High Five also took concrete action. When they invited the public, they also invited youth. They involved a number of schools to promote simple things like washing hands with soap. So, that was on the official/formal side, when they themselves acted in a semi-formal manner. But they were also able to give serious education on washing hands with soap. This could reduce deaths from diarrhea by 30-40%. So, I thought it was great ...” (Other Partner – Academia)*

However, the implementation of CBTS by High Five Program in Surabaya in the eyes of other partners (in this case journalists) did not sufficiently involve young people.

*“ while their programs were good, they need to intensify their campaigning and socialization work on a sustainable basis. This is not being done optimally right now, especially among the youth. It’s still not enough. This would touch the people directly ...” (Other Partner – Journalist)*

### **c. Contribution of High Five Program to Development of AMPL (Air Minum dan Penyehatan Lingkungan – (Working Group on Water and Sanitation) Working Group’s Functions**

High Five Program’s work (although confined to only 2 sub-districts in Surabaya) was deemed to have helped enhance the development of the Working Groups. Synchronization in the performance of various duties (the City Working Group verified that High Five Program had provided mentoring in connection with with the implementation of the CBTS program) was one of the contributions of High Five Program, according to the Surabaya City Working Group. The success of High Five Program in providing mentoring for the implementation of the CBTS program was verified by the Health Agency.

*“... for example, whether or not a sub-district is open defecation free needs to be verified. So, we conducted surveys to see if this was the case. For instance, not one person should be defecating in the river. So this year, the Health Agency,*

*using its existing budget, plans to verify whether sub-districts that are stated to be open defecation free are in fact open defecation free ...” (Health Agency)*

#### **d. Possibility of Program Replication**

This aspect is dealt with in IR1 on “Replication of High Five Program Sub-district Program by local governments and/or NGOs.”

### **E. Relevance and Appropriateness**

Our information on relevance and appropriateness was obtained from a number of different sources: the High Five Program team, community leaders (sub-district heads), Working Groups (City and Sub-district), teachers and households. The following are the results of the interviews with the sources.

#### **a. How is the Participatory Approach Carried Out?**

People were familiarized with the participatory approach in the selected sub-districts from the very outset of the program. Invitations were sent out to attend social mapping events, and these received a warm response from the public. The invitations were addressed not just to adults, but also to youth and even children.

*“... There was no criteria. After socialization at the district level, the sub-districts, together with the sub-districts heads, gave lists of RWs that suffered from sanitation problems. This was followed by social mapping in each of these RWs, involving men, women, teenagers, children. Whoever was interested and whoever was concerned with these issues then worked closely with us. We had no criteria. What was important was that they had to be willing to work for the community ...” (District Leader)*

*“... Everyone in the RT was invited, it was also attended by the mayor, by representatives of the Municipal Health Agency, local residents, everyone attended ...” (Sub-District Working Group)*

*“... I was invited by High Five to the first event in the sub-district, I was also there for 2 days at the restaurant on Jl. Kedungsari ...” (teacher who received training)*

After groups had been formed during the meetings, they jointly conducted a mapping process to describe their areas and the conditions in those areas.

This participatory approach was of great benefit in supporting the successful implementation of the CBTS program, bearing in mind that all components of society were involved. As a result, they were prepared to work hard so as to ensure the success of the CBTS program and the resolution of hygiene and sanitation problems in their areas.

*"... Like I said earlier, High Five had a wide perspective on how to motivate people, how to mobilize people, how to empower people. They provided physical help to the people so as to help change people's mindsets about hygiene ..."*  
(Petemon Sub-district Head)

*"... Other similar programs in the past suffered from differences in opinion among community leaders so that the programs were constrained. However, High Five's approach to the people from the outset was more effective..."*  
(Wonorejo Sub-district Head)

As regards the making of decisions when problems arose, High Five Program was also deemed to have involved the stakeholders.

*"... Yes, for example, the Sub-district Head, the RW heads and so forth, were all informed by letter. The LKMK was also involved in decision-making. They also provided training in Bogor. Also for program evaluation, we were invited to a hotel in Surabaya. This shows that High Five involved local community leaders ..."* (Wonorejo Sub-district Head)

*"... Yes, there was no way High Five could have taken decisions directly without involving the Sub-district Head. So the Sub-district Head, after being informed by High Five, would coordinate with our partners, LKMK, RWs, RTs. Without their assistance, the program could not have operated. So High Five needed them (RTs, RWs) to help. It would have been impossible for them to work on their own ..."* (Petemon Sub-district Head)

The participatory approach was successfully implemented by High Five Program in Surabaya, and this resulted in many benefits. As stated by volunteers in the Sub-District Working Groups, people came to feel responsible for sanitation problems in their own areas (and the decisions taken in respect thereof) as a result of High Five Program's participatory approach.

*"... they highlighted problems in their own areas ..."* (Sub-District Working Group)

*"...So, they started to focus on their own problems ..."* (Sub-District Working Group)

*"... they became motivated and they began to know what they needed. We (the Sub-District Working Group) only accommodated what they said. We identified solutions together with the volunteers. That's how it worked. So, it was the people themselves. By contrast, we used to tell them that they needed a toilet, needed this, needed that. It's not like that anymore. It's the people themselves who say it now (that they need a toilet) ..."* (Sub-District Working Group)

## **b. Determining Hygiene and Sanitation Priorities**

In Surabaya, where the level of awareness of hygiene and sanitation issues was already high, and where people were familiar with garbage management so that garbage banks had already been set up and communal garbage processing facilities established, the arrival of High Five Program helped to focus people's minds on the 4 pillars.

However, it was only after a number of High Five Program socialization events on CBTS that people became aware that there were still problems related to the other pillar in Wonorejo and Petemon, such as the fact that there continued to be households that lacked private toilets and that toilet waste was still being discharged into the river. Nevertheless, at the outset High Five Program focused on the four pillars as an entry point.

*“... in Surabaya, when we talk about CBTS, people also referred to the four pillars related to garbage. It was like that at the beginning, but that was OK. We also focused on the 4 pillars related to garbage – there were a lot of garbage banks already in Petemon and Wonorejo sub-districts, as the government had been focusing heavily on this issue. But as time went on, we informed people that CBTS consists of 5 pillars. So in the end they came to realize that there were still a lot of households without private toilets, still a lot of communal toilets, still a lot of toilets discharging into the drain. This was also a priority. So, we started with the 4 pillars. We continued to socialize pillars 2 and 3, but in the end they realized that pillar 1 was a problem. Meanwhile, pillars 2 and 3 also continued to receive attention ...” (District Leader).*

If each of the individual programs implemented under the different CBTS pillars are evaluated, then it may be said that High Five Program worked on all of the CBTS pillars. However, implementation was still small in scope and so what High Five Program has done to date cannot be considered capable of resolving all sanitation and behavioral problems in the selected sub-districts.

*“... Because not all community leaders were involved, besides the original sampling (RWs 4, 6, and 7) community leaders still need to be made aware. This will take time. If it is successful, then they will come on board. But it will take time to make them aware. Overall it hasn't solved all of our hygiene and sanitation problems, but it is still running. It has produced results, people have started to be able to do things for themselves. They have started to order toilets from High Five, which they can pay for by installment ...” (Wonorejo Sub-district Head)*

In addition, sanitation issues also concern support infrastructure and facilities, something that was not a focus of High Five Program, which was primarily orientated towards changing mindsets and behavior. That fact that High Five Program was not involved with the development of infrastructure and facilities led to a perception that High Five Program could not fully resolve sanitation problems in the selected sub-districts in particular, and in Surabaya city in general.

*“... when we talk about sanitation, we should not just be focused on toilets, but rather on a program run by the municipal government, that is undertaken by all of the related local government agencies – the Sanitation and Parks Agency, Highways Agency, which is responsible for drainage, waste and garbage management. So, when we talk about sanitation, it's not just enough to focus on the residents ...” (City Working Group)*

*"... High Five provided a great deal of assistance with the 5-pillars program. But if we look at the bigger picture, Surabaya consists of more than just Petemon ..."*  
*(Petemon Sub-district Head)*

### **c. Inclusion of Gender and Environmental Issues in Program Implementation**

Environmental and gender issues have been a continual focus of attention in the implementation of the CBTS program in Surabaya, where, automatically, the role of women on the ground was predominant, as evidenced by the fact that the majority of volunteers were women, as well as the fact that the majority of people approached by High Five Program were also women. This was because women were better suited to making approaches and to conducting socialization work in the community (particularly among mothers) as they played a strategic role in household management. The media that was employed was also very much women focused, such as the use of 'arisan' (social gathering often involving informal savings and credit schemes) get-togethers for socialization purposes.

It was also natural that the environment should be an important consideration in decision-making on the ground in connection with the resolution of hygiene and sanitation problems. When resolving the problems under pillar 1 (on toilets and septic tanks), land was an important issue due to the densely populated character of the High Five Program sub-districts. People were encouraged to come up with solutions, and these were then communicated for discussion with the High Five Program team. In this way, High Five Program was able to consider the choice of locations based on the availability of land and environmental issues.

### **d. Most strategic approach in identifying needs of stakeholders**

High Five Program Surabaya made maximum efforts to get all stakeholders involved in the implementation of the CBTS program. However, the desired outcomes were not always achieved, particularly as regards communication and cooperation with the City Working Group. This was due to the fact that the related local government agencies (except for the Health Agency) were under the impression that the implementation of the CBTS was not relevant to their respective areas of responsibility (for example, the Public Works Agency, PDAM, etc) so that High Five Program was always told to coordinate solely with the Health Agency.

*"... Coordination with the Health Agency was easy, they were also open and ready to help facilitate High Five. However, the fact that CBTS was always put at the door of the Health Agency was a problem for us as regards its integration into the 'home work' process and in connection with time considerations ..."*  
*(District Leader)*

As regards other stakeholders, such as work partners (private sector, universities, NGOs), the choice of who to consult and who to collaborate with on particular issues was made after a particular sanitation issue had been identified, having regard to the relevance of the partners particular area of expertise.

*"... Why choose them? Why? Because, for example, CIBI (Cita Bina Insani Foundation), which had the Bina Mandiri Waste Bank, they were the only ones, they were the ones who could most help the public to get to the waste bank, and were able to provide comprehensive mentoring..." (District Leader)*

*"... Puskota Ubaya (Pusat Pemberdayaan Komunitas Perkotaan - Center for Urban Community Empowerment) because they have long been known as an NGO that is aware of environmental issues ..." (District Leader)*

*"... We are working more with ITS because they are also involved in the CBTS process. So it's only fitting that previously when we were running the hand washing with soap campaign that we sent them the installations. We paid for the design, but not for the workmen. We just provided the materials and they did the rest ..." (District Leader)*

## Part V

### Evaluation of Program Outcomes

#### Hygiene and Sanitation Practices under the Five CBTS Pillars

##### A. Open Defecation Free

The majority (more than 80%) of respondents (both in Wonorejo and Petemon) said that the last time they defecated was in their own private toilet. The situation in Wonorejo was the same as it was at the time of the 2012 baseline survey, while in Petemon at the time of the baseline survey, 10% of respondents (including other adults in the household) used a shared toilet or communal toilet the last time they defecated.

In Petemon, 100% of respondents said they used flush toilets discharging into a septic tank, although observations revealed that only 93.3% of toilets discharged into a septic tank (with the remainder discharging directly into the river or not known where they discharged).

A total of 83.3% of respondents in Wonorejo last defecated in their own private toilets connected to a septic tank, while the remainder used a shared toilet. Based on observations, a total of 86.7% of toilets in Wonorejo discharged into septic tanks, while the remainder (13.3%) discharged into the river.

The above data reveal that there has been an increase in the proportion of residents with their own toilets discharging into a septic tank (during the two years since the time of the baseline survey and midline survey). However, Wonorejo and Petemon were still not free of open defecation.

The following presents data on last place of defecation based on respondent claims and observations:

Table 5.1  
Observations on Discharge of Toilet Wastewater

Description	Wonorejo	Petemon
Respondent Base	30	30
Location of last defecation – by claim		
Flush toilet discharging into septic tank	83.3%	100%
Last defecation in communal toilet, toilet without septic tank	16.7%	-
Place of final discharge of toilet wastewater – observations		
Septic tank	86.7%	93.3%

Description	Wonorejo	Petemon
River/lake/sea	13.3%	3.3%
Not visible	-	3.3%

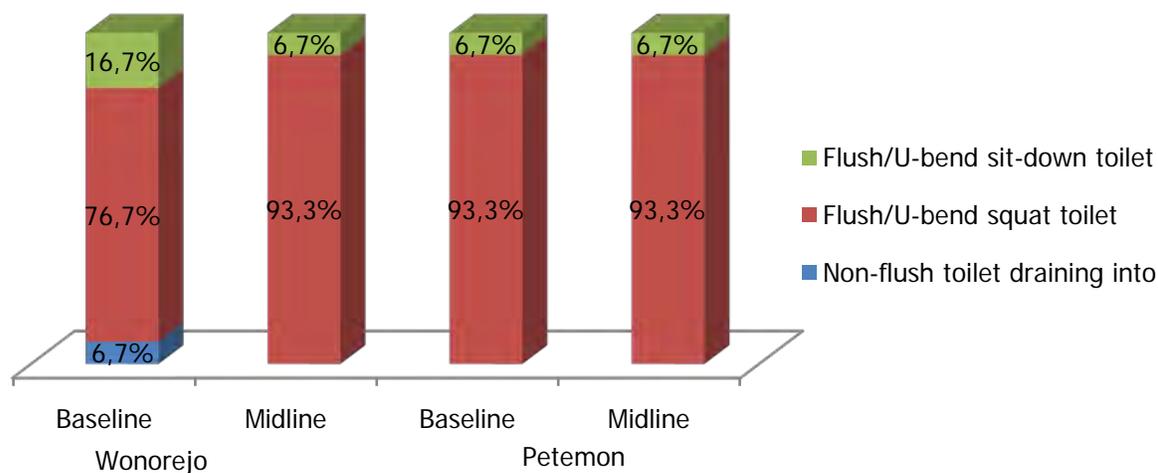
### Toilet Conditions in General

Based on observations in the field, it was found that almost all households that had under-5s (81.7%-93.3%) used U-bend toilets (both squat and sit-down). In Wonorejo, the households that originally used drop toilets (6.6% at time of the baseline survey) all used u-bend toilets at the time of the midline survey (in 2013). The use of u-bend sit-down toilets declined by 10% from 16.7% in 2012 to only 6.7% in 2013.

In Petemon, the types of toilets used were the same at the time of the baseline survey in 2012 and the midline survey in 2013, namely, 93.3% squat toilets and the remainder sit-down.

Figure 5.1

Type of toilet - Observation



Respondent base : 60

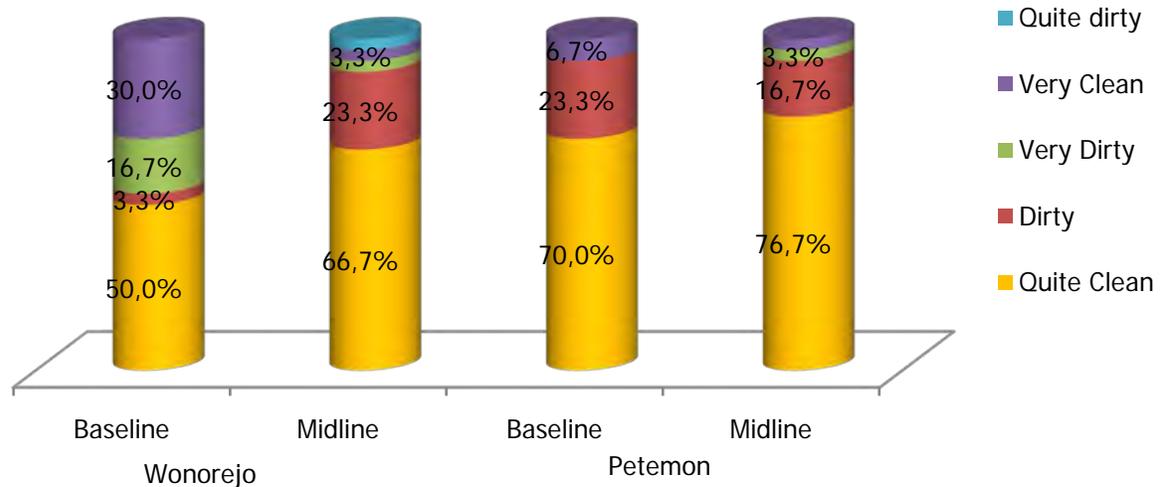
Still based on observations, overall the majority (90%) of toilets were in the home in both Petemon and Wonorejo. In Petemon, the remaining 10% were between 2 and 5 minutes away, while in Wonorejo the remaining 10% were between 2 minutes and 7 minutes away.

As regards the condition of the toilets, they were found to be quite clean (66.7% in Wonorejo and 76.7% in Petemon), while 30% were categorized as dirty in Wonorejo and 20% in Petemon. A comparison of toilet conditions in between the baseline survey and midline survey reveals that there was an improvement of 11.7% in Wonorejo and 8.4% in Petemon. While the

size of the improvement was greater in Wonorejo based on observations, overall toilets were found to be cleaner in Petemon.

Figure 5.2

Toilet Condition - Observation



Respondent base: 60

Table 5.2 below presents a more detailed description of toilets in households (with under-5s) in Surabaya.

Overall the condition of toilets in the two High Five Program sub-districts in Surabaya (at the time of the 2013 midline survey) was better than at the time observations were conducted during the 2012 baseline survey. Among the improvements are the following:

- Cleanliness (free of feces and sanitary napkins). Only one respondent in Petemon was found to have feces in the toilet. Similar, there was also a reduction in the number of toilets with flies (only found in Wonorejo, but decreased from 6.7% in 2012 to 3.3% in 2013).
- In both of the High Five Program sub-districts, only 6.7% of respondents lack running water in the tap. In Wonorejo, this marked an improvement of 20% compared to the baseline survey. In Petemon, 93.3% of respondents had running water in their taps at the time of both the baseline survey and midline survey.
- A water scoop was present in all of the toilets. By contrast, 13.3% of the respondents in Wonorejo and 3.3% in Petemon did not have a scoop in the toilet at the time of the 2012 baseline survey.

The following table describes toilet conditions based on observations (at the time of the baseline survey and midline survey)

Table 5.2  
Toilet Conditions – Observations

Condition of Toilet		Wonorejo		Petemon	
		Baseline (n= 30)	Midline (n=30)	Baseline (n= 30)	Midline (n=30)
Feces in or on wall of toilet	Yes	10%	-	16.7%	3.3%
	No	90%	100%	83.3%	96.7%
Sanitary napkin in vicinity of toilet	Yes	-	-	-	-
	No	100%	100%	100%	100%
Flies in vicinity of toilet	Yes	6.7%	3.3%	13.3%	-
	No	93.3%	96.7%	86.7%	100%
Water available (if tap, running water in tap)	Yes	73.3%	93.3%	93.3%	93.3%
	No	26.7%	6.7%	6.7%	6.7%
Water scoop available	Yes	86.7%	100%	96.7%	100%
	No	13.3%	-	3.3%	-
Bucket/water container available	Yes	86.7%	100%	96.7%	83.3%
	No	13.3%	-	3.3%	16.7%
Dry cloth/towel available	Yes	43.3%	50%	40%	80%
	No	56.7%	50%	60%	20%

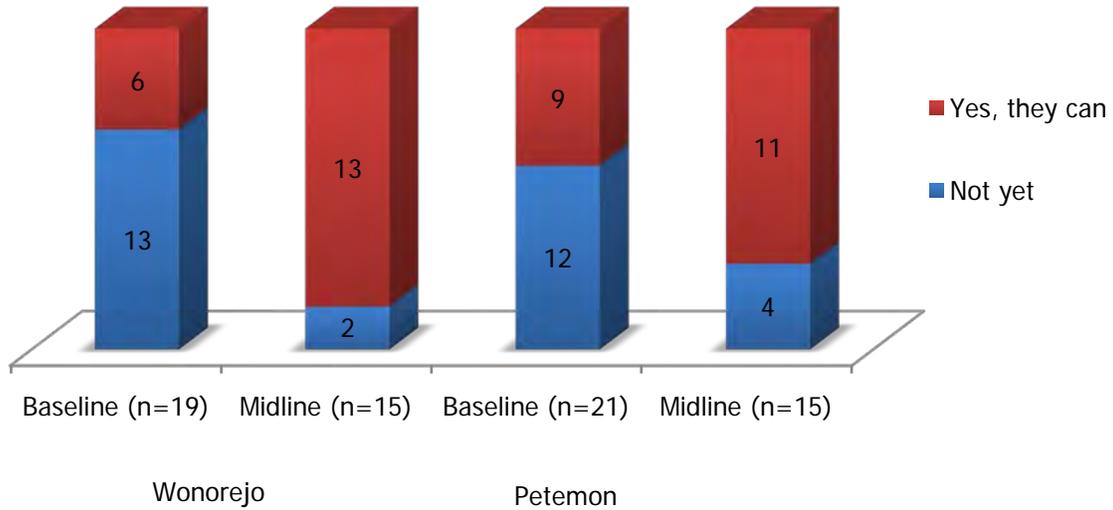
As an additional criteria for assessing the first CBTS pillar in households with children under 3, at the time of the baseline survey in both Wonorejo and Petemon, less than half of respondents with under-3s said that their infants were toilet trained.

By the time of the midline survey in 2013, there had been an increase in the number of under-3s who were toilet trained, with more than half of respondents with under-3s saying that their infants were toilet trained.

Figure 5.3 below shows the number (in absolute terms as the base number of respondents with under-3s was less than 30) of under-3s who are toilet trained.

Figure 5.3

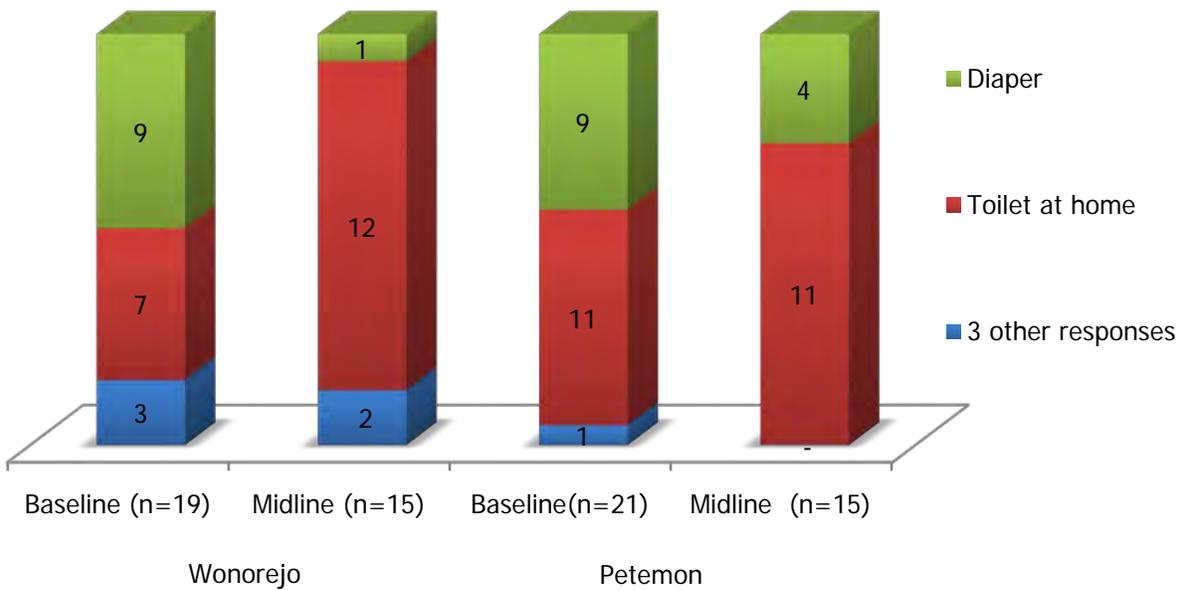
If you have children from the age of 0 – 3, can they defecate on their own on the toilet?



With regard to the last place of defecation of under-3s, disposable diapers were the last place where the under-3s who were not toilet trained defecated, while those who were toilet trained last defecated in to toilet (with the respondent for each sub-district being below the minimum sample size of 30 individuals).

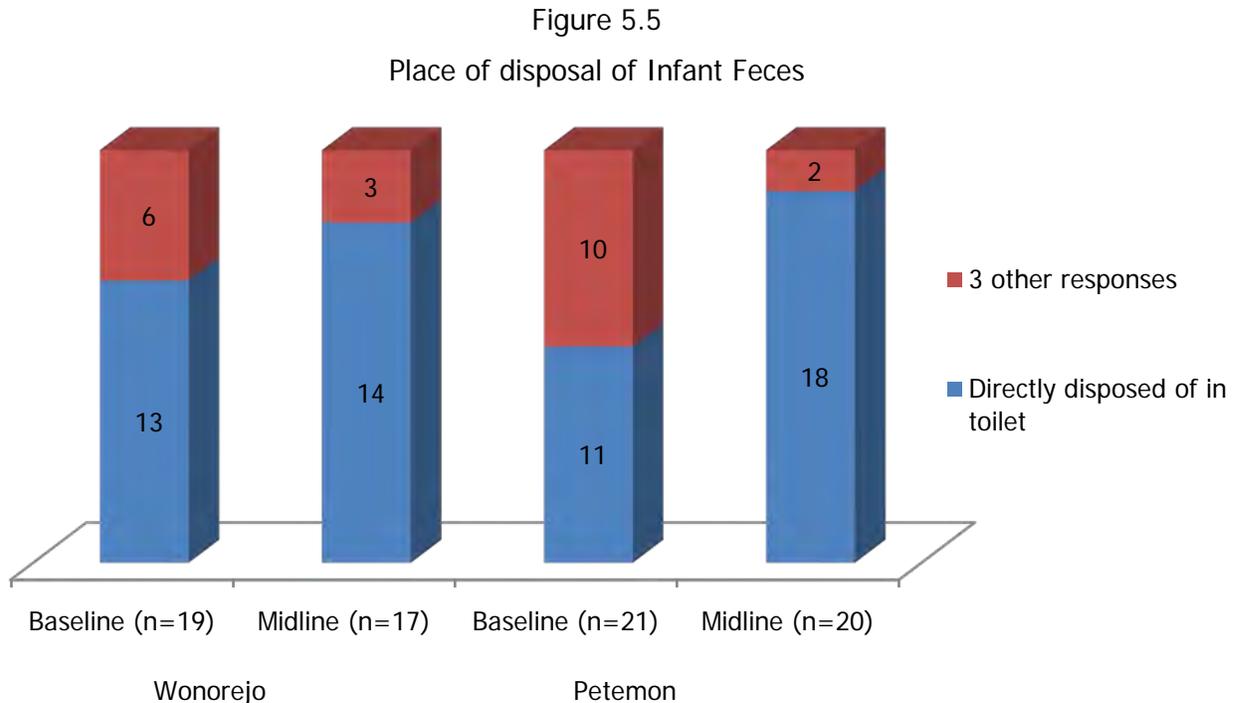
Figure 5.4

Last location of defecate



As regards where the feces of under-3s who last defecated in a place other than the household toilet were disposed of by caregivers, as will be seen from Figure 5.5 (in absolute terms as the base number of respondents was less than 30), in Wonorejo more than half of the caregivers (14 individuals) directly disposed of the feces into the toilet, while the remaining 6 directly disposed of the diapers, without first cleaning, in the trash can. Similarly in Petemon, almost all the caregivers (18 out of 20 individuals) disposed of the feces directly in the toilet, while the remainder disposed of the diapers, without first cleaning them, in the trash can.

Figure 5.5 shows where infant waste was disposed of by caregivers:



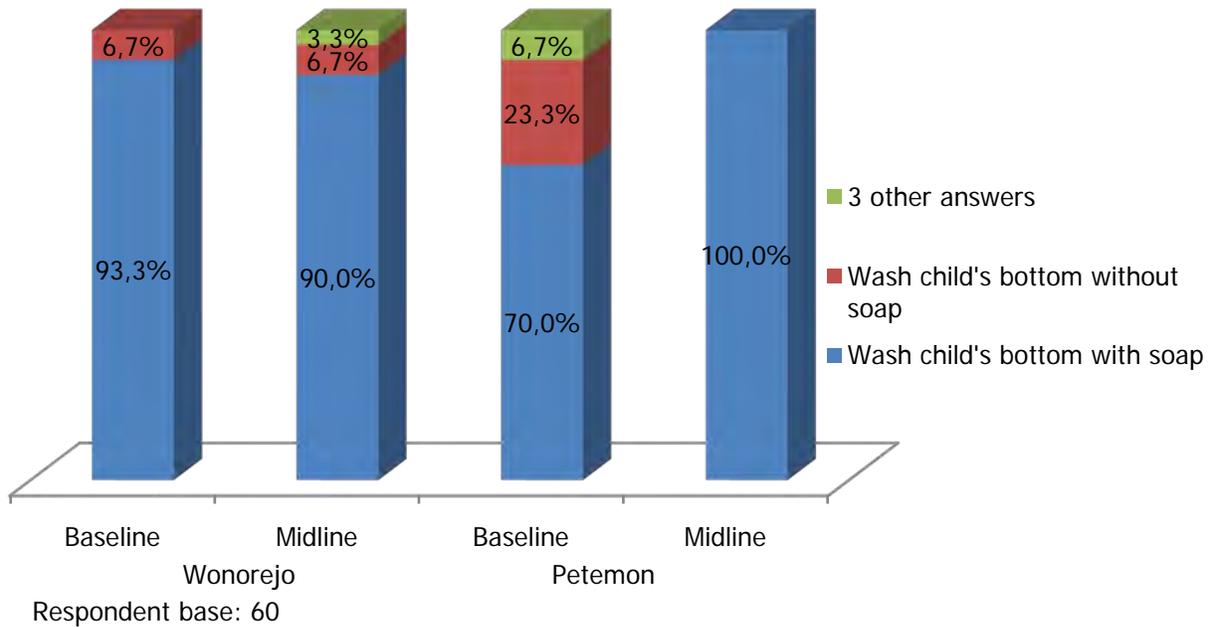
The 2013 midline survey in Surabaya found that infants aged 3-5 were toilet trained, with the types of toilet being used being flush toilets discharging into septic tanks, flush toilets discharging into the river, and communal toilets (in Wonorejo). In Petemon, all children aged 3-5 defecated in flush toilets leading to septic tanks.

In the 2013 midline survey in connection with children aged 3-5, the situation was almost totally open defecation free (save for 1 caregivers who said that her flush toilet was not connected to a septic tank).

How caregivers treated children after defecation is as shown in the following chart :

Figure 5.6

What Respondents Do after Children Defecate



Petemon showed a relatively significant change when compared to Wonorejo in connection with cleaning baby's bottom with soap after defecation. In Wonorejo, there were still caregivers who cleaned baby's bottom without soap after defecation, while one caregiver said that she washed her hands.

The table below sets out a summary of the data on the first CBTS pillar. It shows that while neither Wonorejo nor Petemon can be said to be open defecation free, there has been a significant improvement in pillar 1 as regards knowledge and behavior about defecation in appropriate places (including as regards the use of private toilets with septic tanks).

In a number of respects, Petemon demonstrated relatively greater progress when compared with Wonorejo, such as: number of homes whose toilets discharge into septic tanks, number of children with toilet training, and how caregivers clean their infants after defecation.

**Summary of First Pillar Findings: Open defecation free**

Table 5.3

First Pillar Indicator: Open defecation free

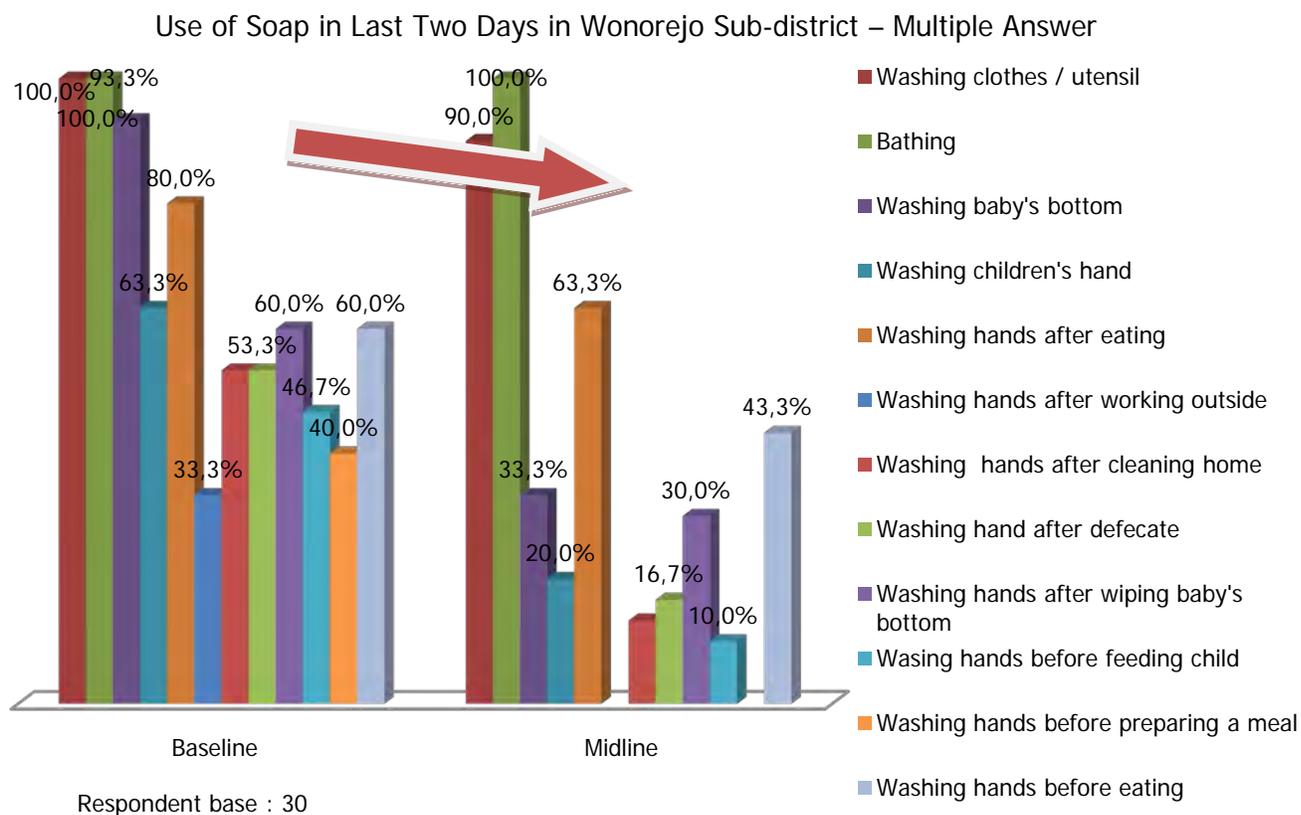
Indicator	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
<b>Location where caregiver last defecated</b>				
Respondent base	30	30	30	30
Private toilet	83.3%	-	90.0%	-
Flush toilet with septic tank	-	83.30%	-	100%
<b>Place where children aged 0-3 last defecated</b>				
Respondent base	19	15	21	15
Diapers	9 persons	1 person	9 persons	4 persons
Household toilet	7 persons	12 persons	11 persons	11 persons
3 other responses	3 persons	2 persons	1 person	-
<b>Place where feces of children aged 0-3 are disposed of – MA</b>				
Respondent base	19	15	21	15
Directly into toilet	13 persons	14 persons	11 persons	18 persons
Cleaned first, dirty water disposed of in household toilet	2 persons	1 persons	5 persons	-
5 other responses	4 Persons	2 persons	5 persons	2 persons
<b>Location where children aged 3-5 defecate</b>				
Respondent base	13	13	17	15
Private toilet	13 persons	-	17 persons	-
Flush/U-bend toilet connected to septic tank	-	13 Persons	-	15 persons

Indicator	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
<b>What is done after children defecate</b>				
Respondent base	30	30	30	30
Baby's bottom cleaned with soap	93.3%	90.0%	70.0%	100.0%
Baby's bottom cleaned without soap	6.7%	6.7%	23.3%	-

### B. Hand-Washing with Soap

In order to ascertain the extent to which respondents practiced hand washing with soap over the last 2 days, they were given multi response questions and responses related to bathing and clothes washing were ignored. The situation as regards washing hands with soap in Wonorejo sub-district is as shown in the following chart:

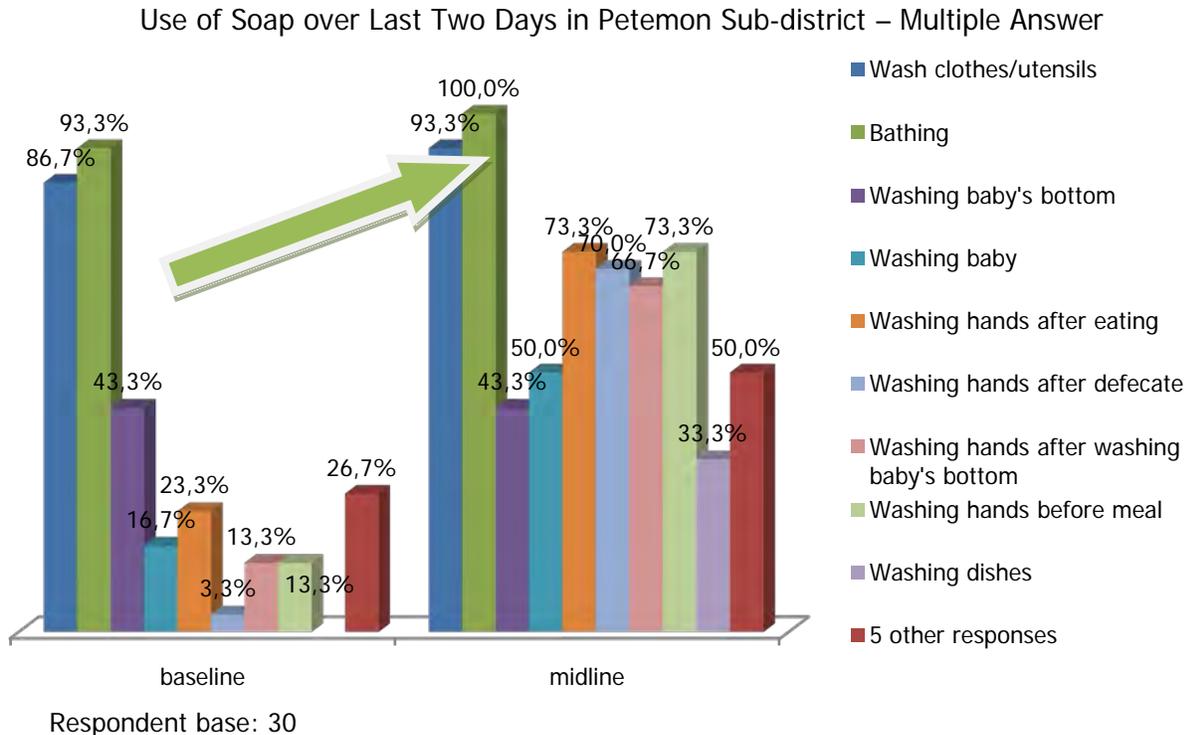
Figure 5.7



The above chart shows the practices of caregivers in Wonorejo at the time of the 2012 baseline survey and 2013 midline survey. Overall, it will be seen that there has been a decline in the prevalence of washing hands with soap. This has occurred not just at critical times, but also outside of such times. For example, hand washing with soap before eating was practiced by 60% of respondents in 2012, but by only 43.3% in 2013. Similarly, in 2012 a total of 93.3% of caregivers used soap to clean baby's bottom, but only 33.3% said they did so in 2013.

Hand washing with soap practices in Petemon are as shown in the following chart:

Figure 5.8

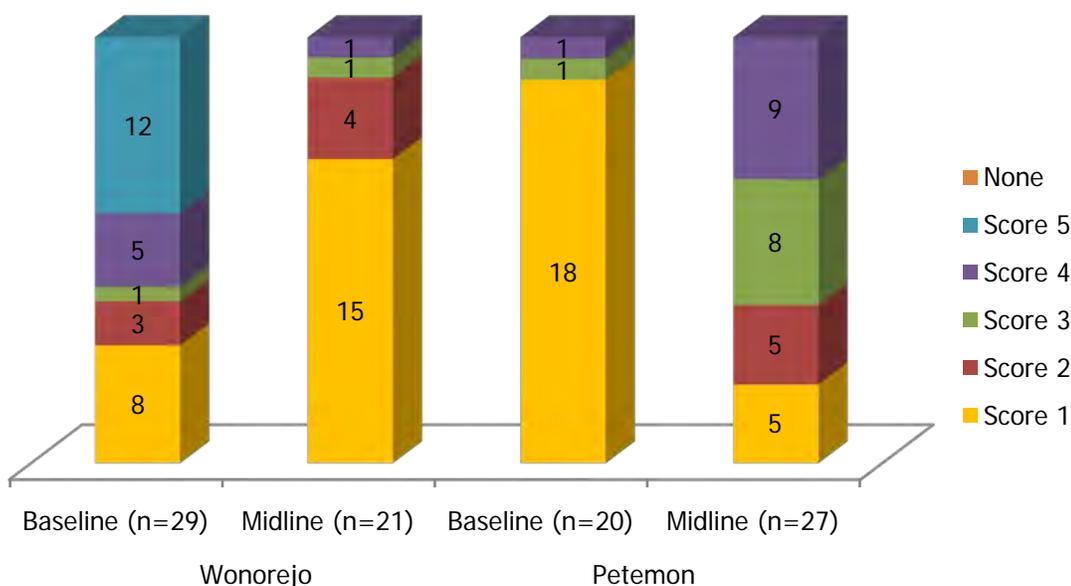


Unlike in Wonorejo, in Petemon the prevalence of hand washing with soap showed a relatively big increase. For example, in 2012 only 13.3% of respondents washed their hands with soap after cleaning baby's bottom, but this proportion had increased to 66.7% in 2013. Further, only 3.3% of respondents washed hands with soap after defecation in 2012, but this had increased to 70% by 2013.

Each interviewed caregiver to an under-5 was assessed on washing hands with soap at five critical times, namely: (i) before eating; (ii) after feeding child, (iii) after defecation, (iv) after cleaning child's bottom, and (v) before preparing food. Based on a score of 1 for each of the above behaviors, the maximum score receivable was 5. The following graph shows the overall scores (in absolute terms as the base number of respondents was less than 30):

Figure 5.9

Scores for Use of Soap at 5 Critical Times in Last 2 Days



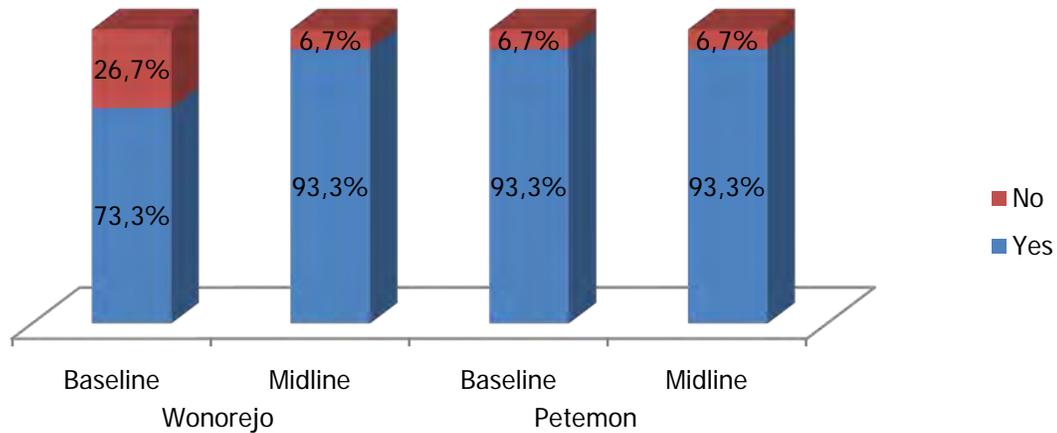
As will be seen from Figure 5.9 above, the 2013 midline survey in Wonorejo found that the number of respondents who washed hands with soap at the 5 critical times had fallen since the time of the baseline survey, when 12 respondents did so. However, by the time of the midline survey, no respondent did so. This was accompanied by an increase in the number of respondents who only did so at 1 of the critical times (up from 8 to 15). Meanwhile, only 1 respondent did so at 4 out of the 5 critical times. Similarly in Petemon, 9 respondents only did so as 4 out of the 5 critical times. Overall in both Wonorejo and Petemon, none of the respondents washed hands with soap at all 5 critical times.

Another indicator for evaluating the second pillar of CBTS in connection with the practice of washing hands with soap is the availability of running water and soap. This is assessed based upon observations in the bathroom or when respondents wash their hands.

As regards availability of running water in Wonorejo, there was an increase of 20% (73.3% in 2012 compared with 93.3% in 2013), while in Petemon the percentage was the same as in 2012 (93.3%).

Figure 5.10 shows the availability of running water in toilets in the surveyed sub-districts:

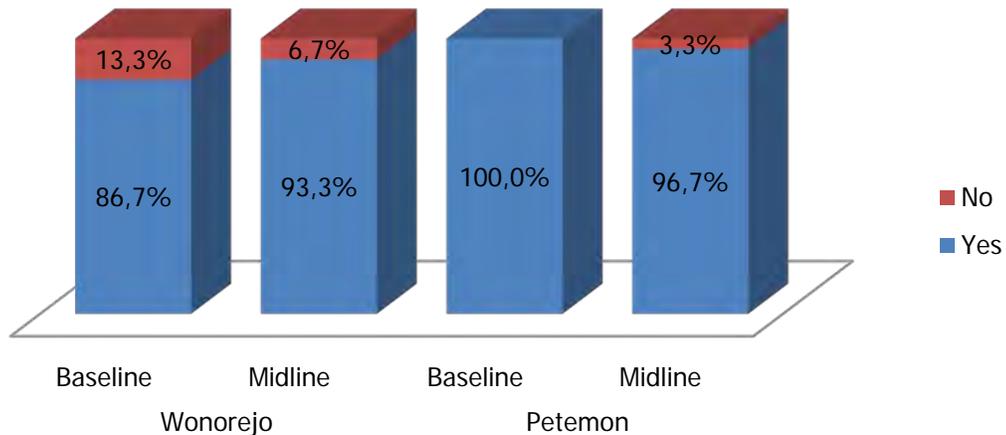
Figure 5.10  
Availability of Running Water



Respondent base: 60

Besides the availability of running water, the availability of soap in the toilet (for washing hands) is another indicator of the practice of washing hands with soap. The situation as regards the availability of soap (for washing hands) in the toilet or the place where the dishes are washed is as shown in Figure 5.11 below:

Figure 5.11  
Availability of Soap



Respondent base: 60

A comparison of the findings at the time of the baseline and midline observations reveals that Wonorejo once again experienced a regression (6%) as regards the availability of soap (for washing hands and for washing dishes in the kitchen), while Petemon experienced a regression of 3.3%.

An overall summary of the data for the second CBTS pillar in Wonorejo and Petemon at the time of the baseline survey and midline survey reveals that there has been a decline in the proportion of caregivers who wash their hands with soap at the 5 critical points. Meanwhile as regards toilet conditions, observations revealed that there has been a relative increase in the availability of running water and soap for hand washing.

### Summary of Second Pillar: Practices of washing hands with soap

Table 5.4

Indicators Showing Practice of Washing Hands with Soap

Indicator	Wonorejo		Petemon		
	Baseline	Midline	Baseline	Midline	
<b>Respondent base</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	
<b>Use of soap in last 48 hours– Multiple Answer</b>					
Washing hands before eating	80.0%	<b>63.3%</b>	23.3%	<b>73.3%</b>	
Washing baby's bottom	93.3%	<b>33.3%</b>	43.3%	<b>43.3%</b>	
Washing hands before washing baby's bottom	60.0%	<b>30.0%</b>	13.3%	<b>66.7%</b>	
Washing hands before eating	60.0%	<b>43.3%</b>	13.3%	<b>73.3%</b>	
Washing hands after defecation	53.3%	<b>16.7%</b>	3.3%	<b>70.0%</b>	
Washing child's hands	63.3%	<b>20.0%</b>	16.7%	<b>50.0%</b>	
Washing hands before cleaning home	53.3%	-	3.3%	-	
Washing hands before feeding child	46.7%	<b>10.0%</b>	3.3%	<b>20.0%</b>	
Other responses	-	26.7%	-	50.0%	
Washing clothes or utensils	100.0%	90.0%	86.7%	93.3%	
Bathing	100.0%	100.0%	93.3%	100.0%	
<b>Observations</b>					
Availability of water (if tap, running water from tap)	Yes	73.3%	<b>93.3%</b>	93.3%	93.3%

Indicator		Wonorejo		Petemon	
		Baseline	Midline	Baseline	Midline
Respondent base		30	30	30	30
		No	26.7%	6.7%	6.7%
		Yes	86.7%	93.3%	100.0%
Availability of soap		No	13.3%	6.7%	3.3%
		Yes	86.7%	93.3%	96.7%

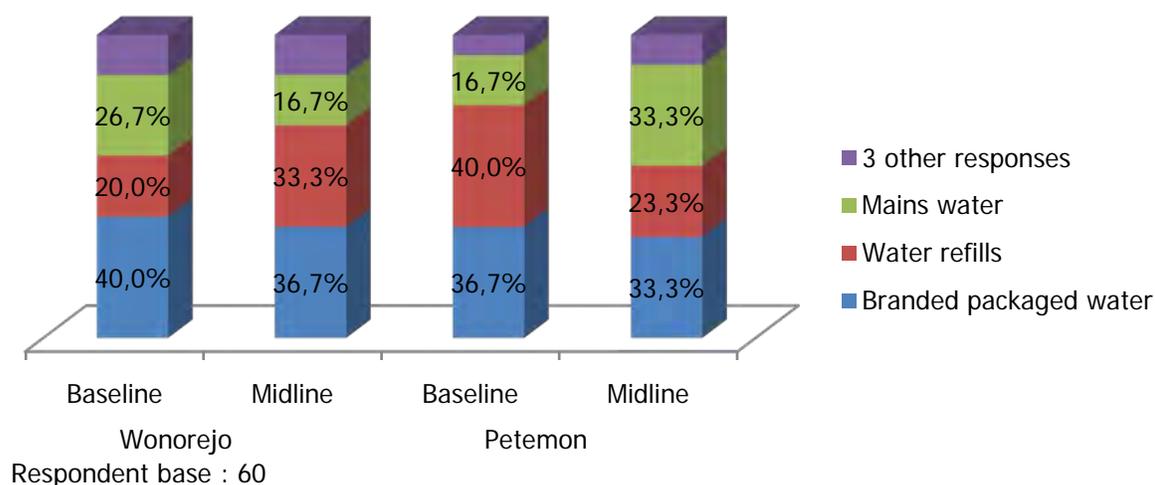
### C. Safe Drinking Water Treatment and Storage

The next CBTS pillar is safe and healthy drinking water treatment. The following is a description of the water sources most commonly used in the households (with under-5s) in the two sub-districts of Wonorejo and Petemon. At the time of the baseline survey in 2012, the biggest proportion of households used branded packaged water for drinking purposes. This situation persisted at the time of the midline survey in 2013.

Branded packaged water was the first choice of 36.7% of households in Wonorejo and 33.3% in Petemon. Besides branded packaged water, 33.3% of households in Petemon used mains water, while 33.3% of respondents in Wonorejo preferred to use water refill jars.

The principal sources of drinking water used in households (with under-5s) are as shown in the following graphs:

Figure 5.12  
Sources of Drinking Water

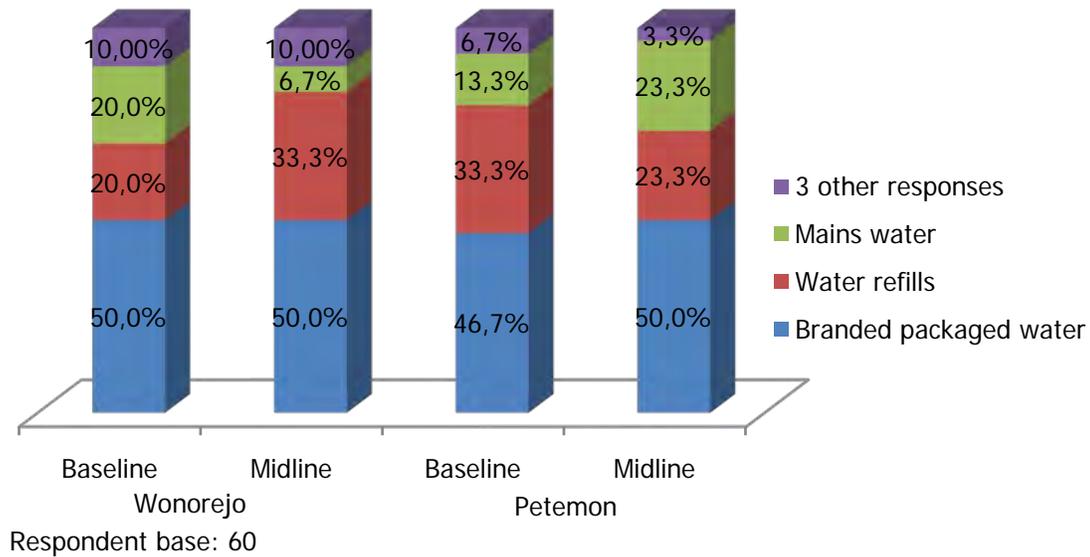


Also with regard to the sources of drinking water used by households, there now follows a description on the sources of drinking water used by households with under-5s. The principal choice was branded packaged water both at the time of the baseline survey and at the time of the midline survey. In Wonorejo, 50% of respondents said that they used branded packaged water as a source of water for their under-5s, while in second place, 33.3% of respondents said they used water refills. Similarly in Petemon, 50% of respondents used branded packaged water as the principal source of water for their under-5s, while in second place were water refills and mains water – both on 23.3%.

The following chart shows the principal sources of water used by under-5s:

Figure 5.13

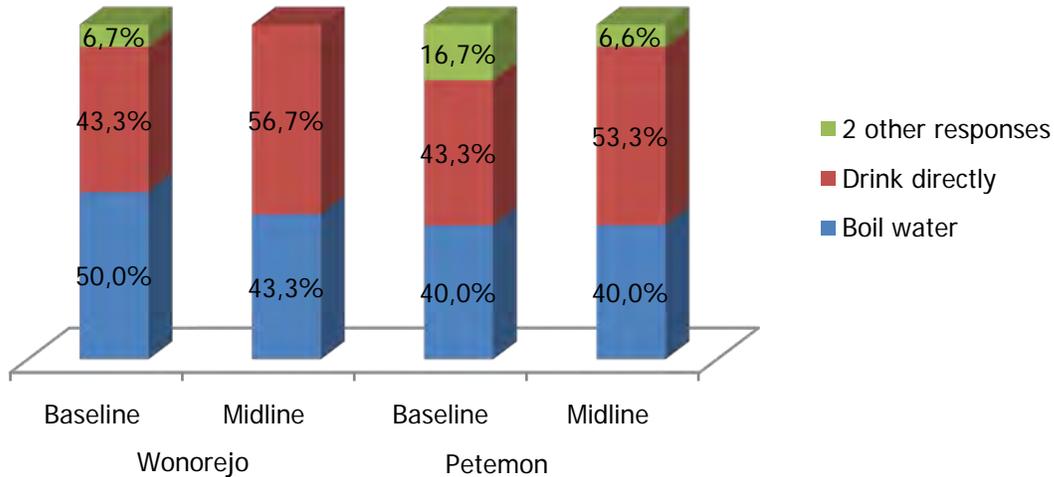
Sources of Drinking Water for Under-5s in the Home



Based on the sources of water used, Figure 5.13 shows what caregivers in the surveyed sub-districts do (or do not do) so as to improve the quality of drinking water before consumption. Water refills and branded packaged water were excluded from data processing, and only mains water, water from bore wells, water purchased from itinerant water vendors and water from covered wells were included in the data processing so as to produce the following graph:

Figure 5.14

What is done (to improve quality) before Consumption  
(Excludes branded packaged water and water refills)



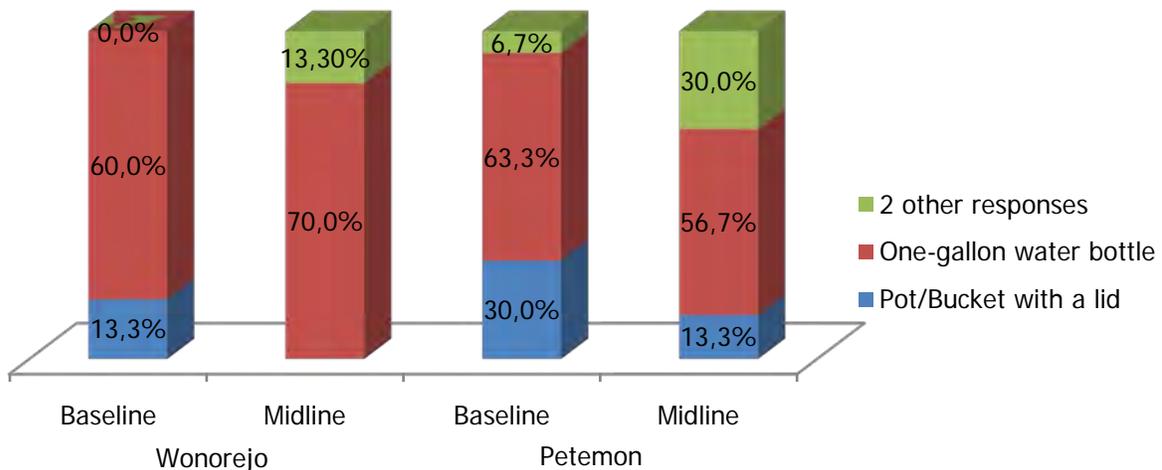
Respondent base : 60

All of the caregivers in Wonorejo and Petemon said that boiled water from the mains, wells and excavated wells (as well as from itinerant water vendors) before consuming it.

The following graph shows where drinking water is stored in households (with under-5s) in the surveyed sub-districts.

Figure 5.15

Drinking Water Storage Places



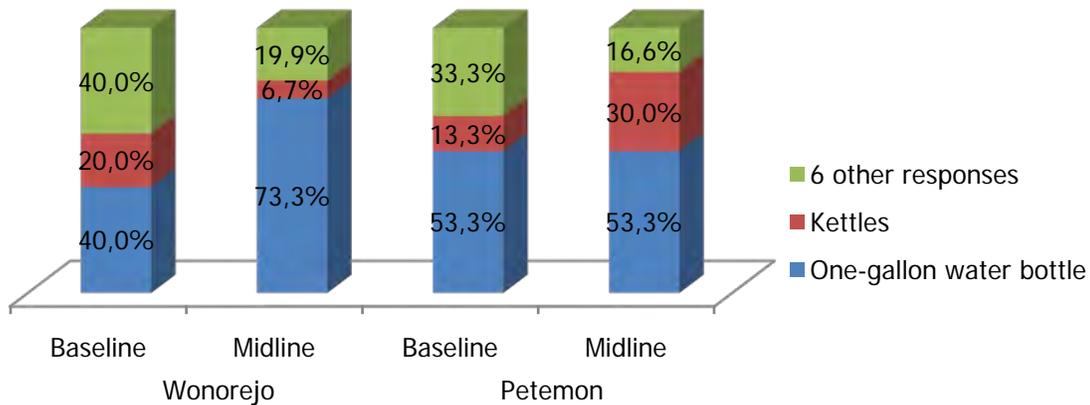
Respondent base : 60

Based on Figure 5.15, it may be concluded that one-gallon water bottles were the most common drinking water storage places in Surabaya both at the time of the baseline survey and

the midline survey. In more detail, 70% of respondents in Wonorejo used one-gallon water bottles to store their drinking water, while the equivalent figure in Petemon was 56.7%.

Figure 5.16

Places Used to Store Drinking Water – Observations

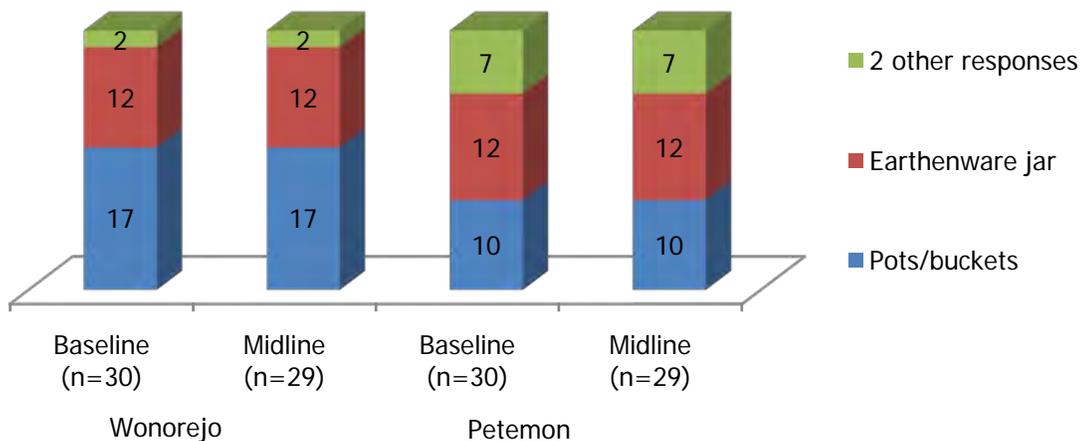


Respondent base : 60

Besides the claims of respondents, observations were also conducted to ascertain where respondents really stored their water. Based on these observations, the findings of which are shown in Figure 5.16, it was found the one-gallon water bottles were the most common choice for storing water in both Wonorejo (70%) and Petemon (53.3%). A small proportion used kettles in which to store water (Wonorejo 6.7% and Petemon 30%).

Figure 5.17

Places used to store water for cooking - Observations



The place where respondents store water for cooking is also one of the appraisal indicators. Figure 5.17 (in absolute terms as the base number of respondents was less than 30), which is based on observations, shows that more than half of respondents in Wonorejo use covered pots/buckets to store water, while some households store their water for cooking in a covered earthenware jar.

Covered earthenware jars are the favorite choice of almost half the respondents in Petemon, while a number of other respondents prefer a covered pot/bucket.

The following table presents the findings of observations on the receptacles used by respondents, the process of treating water and how they take drinking water.

Table 5.5  
Observations on Drinking Water Storage Receptacles, Processing and Presentation

Indicator		Wonorejo		Petemon	
		Baseline (n=30)	Midline (n=30)	Baseline (n=30)	Midline (n=30)
Receptacle with	Narrow aperture	76.7%	96.7%	73.3%	93.3%
	Wide aperture	23.3%	3.3%	26.7%	3.3%
Hard/non-cloth material	Yes	100%	53.3%	96.7%	66.7%
	No	-	46.7%	3.3%	33.3%
How about hands when taking water	Touch	-	1.7%	3.3%	13.3%
	Don't touch	100%	98.3%	96.7%	86.7%

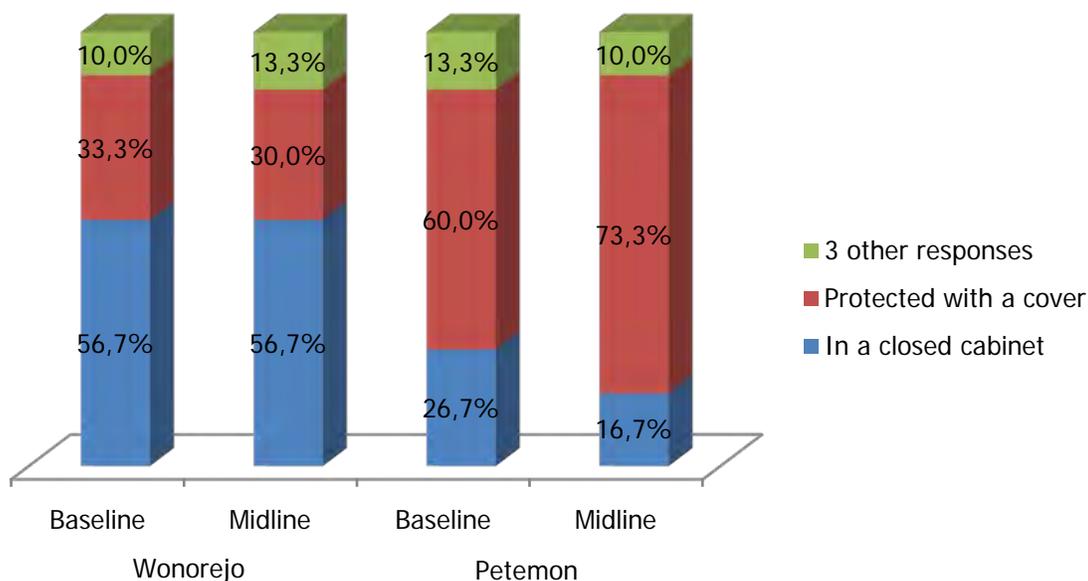
From Table 5.5 above, it will be seen that the use of receptacles with narrow apertures has increased to 90% of respondents, compared with the baseline survey.

Nevertheless, this increase was accompanied by a declined in the proportion of respondents who use covers made from hard material. During the baseline survey 100% of respondents from Wonorejo used hard covers, but this percentage had fallen to 46.7% at the time of the midline survey. A similar finding was made in Petemon, where the figure fell from 96.7% to 66.7%.

As well as a decline in the use of hard materials to cover receptacles, there was also a decline in the proportion of respondents who did not touch water when taking it. At the time of the baseline survey in Wonorejo, not one respondent said that his or her hands touched the water when taken it. However, at the time of the midline survey, 1.7% of respondents said that their hands came into contact with the water when taking it. Meanwhile, the figures for Petemon were only 3.3% at the time of the baseline survey, but 13.3% at the time of the midline survey.

We will now discuss the places where prepared food is stored until being served, as shown in Figure 5.18 below:

Figure 5.18  
Places where food is stored – Observations



Respondent base : 60

As at the time of the baseline survey, the majority of Wonorejo respondents (56.7%) stored prepared/ready to consume food in a closed cabinet, while 30% left it on the table, protected with a cover.

In Petemon, 73.3% left it on the table, protected with a cover (same as at the time of the baseline survey), while only 16.7% kept it in a closed cabinet.

### Summary of the Third Pillar: Household Safe Water Treatment and Storage Practices

The indicators for the third pillar of CBTS are summarized in the following table:

Table 5.6  
Indicators for Third Pillar: Safe Water Treatment

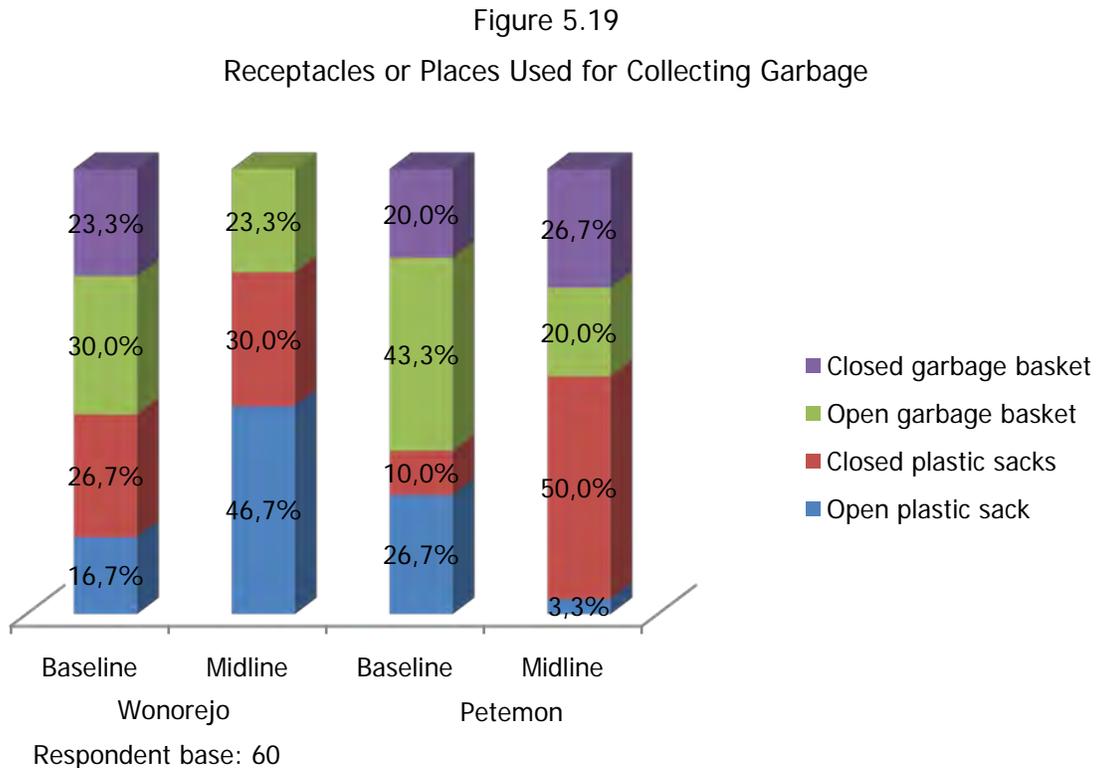
Indicator	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
<b>Respondent base</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
Treatment of water prior to consumption (from mains, well)				

Indicator		Wonorejo		Petemon	
		Baseline	Midline	Baseline	Midline
<b>Respondent base</b>		<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
Boil Water		50.0%	43.3%	40.0%	40.0%
Consume Directly		43.3%	56.7%	43.3%	53.3%
3 Other Responses		6.7%	-	16.7%	6.6%
Observations					
Receptacle with	Narrow aperture	76.7%	96.7%	73.3%	93.3%
	Wide aperture	23.3%	3.3%	26.7%	6.7%
Hard/non-cloth material	Yes	100%	96.7%	96.7%	93.3%
	No	-	3.3%	3.3%	6.7%
How about hands when taking water	Touch	-	96.7%	-	3.3%
	Do not touch	100%	3.3%	100%	96.7%
Places where prepared food is kept – top 3 answers					
In closed cabinet		56.7%	56.7%	26.7%	16.7%
Protected by cover		33.3%	30.0%	60.0%	73.3%
Left uncovered on table		10.0%	13.3%	13.3%	10.0%

### D. Percentage of households that practice solid waste management

The next CBTS pillar is household waste management. All of the surveyed households (with under-5s) in Surabaya said that they had a place for disposing of garbage in their homes. In more detail, in Wonorejo the garbage receptacle most frequently used was an open plastic sack (46.7%), while in Petemon 50% of respondents used closed plastic sacks.

Figure 5.19 shows the various responses elicited on household garbage disposal:



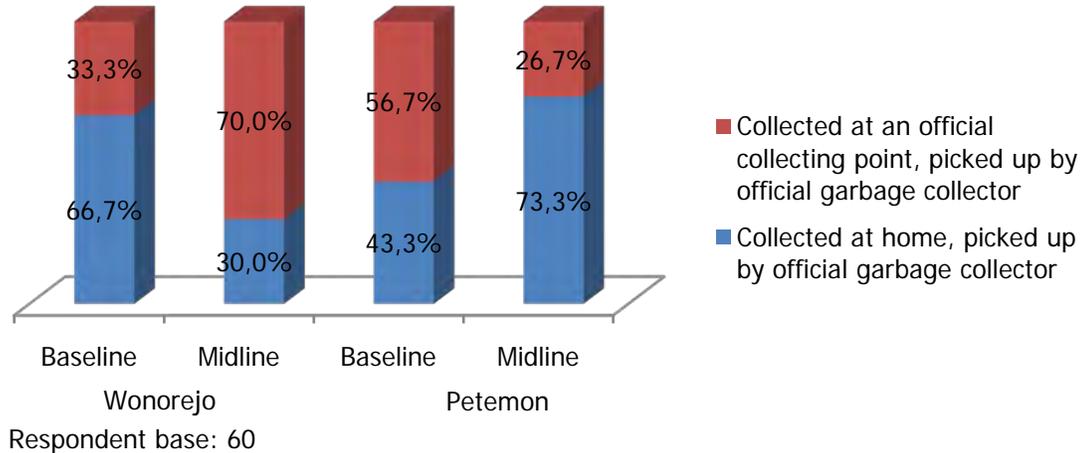
The practices of the respondents in Surabaya at the time of the midline survey as regards garbage disposal tended to be quite orderly, with all of the respondents in both Wonorejo and Petemon using official garbage disposal services (whether the garbage was first collected in the home or at a collection point to be taken away by garbage men. More specifically, 70% of the respondents in Wonorejo disposed of their garbage at a collection point, while 30% collected their garbage in the home before it was taken away by garbage men.

In Petemon, 73.3% of respondents first collected their garbage in the home before it was collected by garbage men, while the remainder dumped it at an official collection point.

The following graph shows how the respondents dispose of their garbage:

Figure 5.20

Disposal of waste / garbage

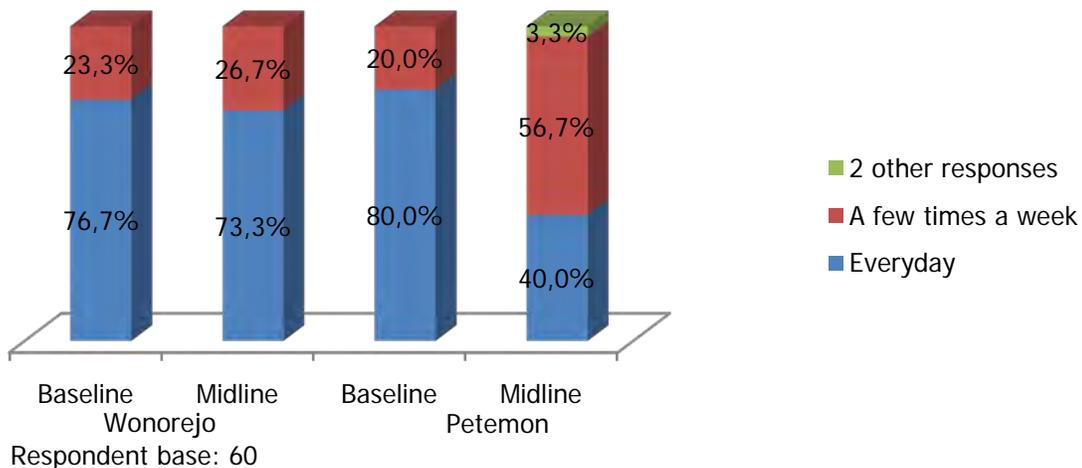


In the particular case of those who used the services of official garbage collectors (whether going house to house or collecting garbage at an official collection point), the frequency of collection was quite varied. In Wonorejo, 73.3% said that the garbage was collected routinely every day, while the remaining 26.7% said it was collected a couple of times a week. Meanwhile in Petemon, 56.7% said that the garbage was collected a number of times a week, while 40% said it was collected routinely each day.

The frequency of garbage collection by official garbage collectors is as shown in Figure 5.21 below:

Figure 5.21

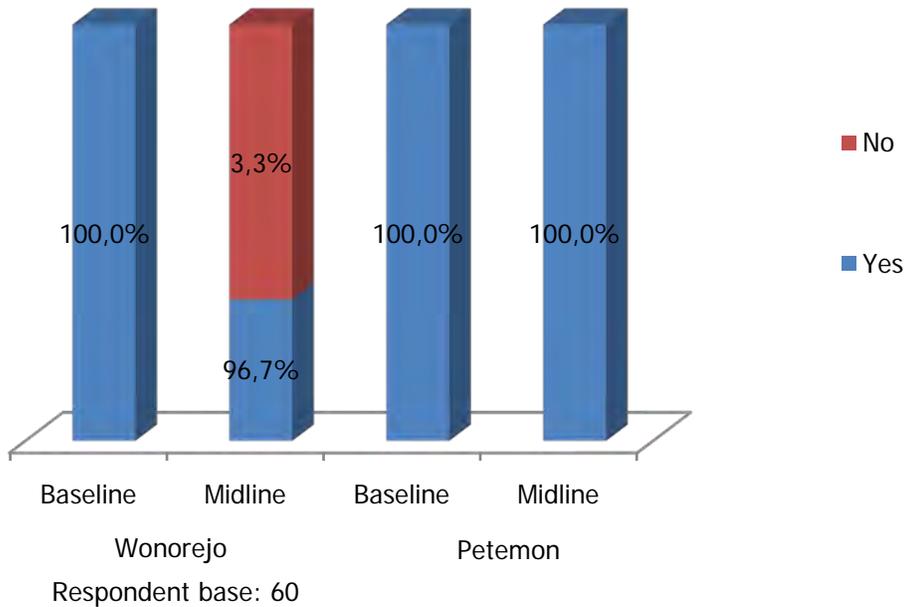
Frequency of Garbage Collection



Almost all of the households in Wonorejo and Petemon paid for garbage collection, with only 3.3% of respondents in Wonorejo saying that they did not pay garbage collection fees. Meanwhile in Petemon, 100% of respondents said that they paid for garbage collection.

Figure 5.22

Do You Pay for Garbage Collection?

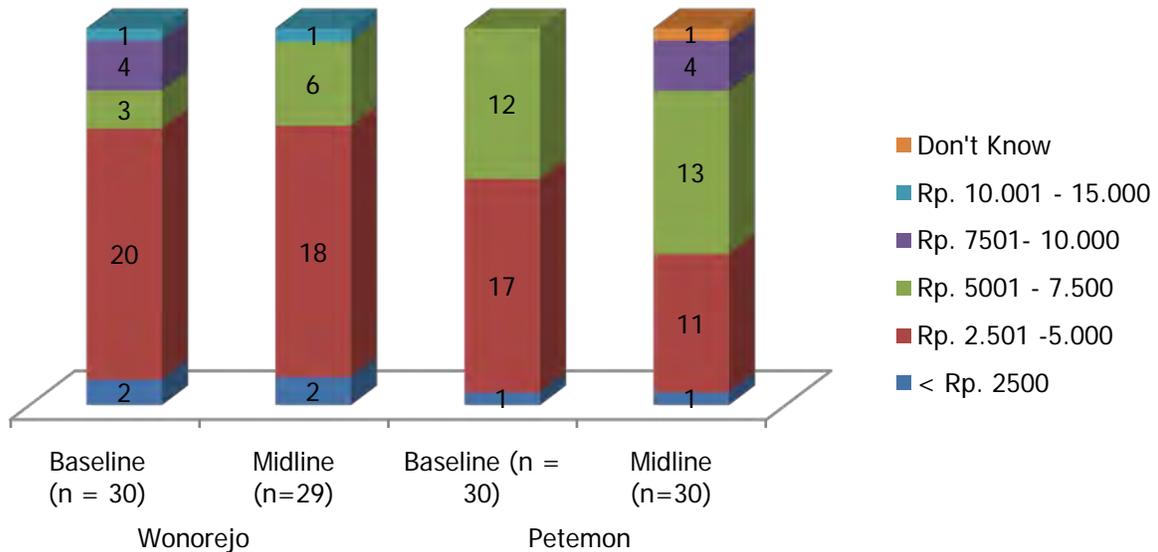


As regards how much respondents had to pay, in Wonorejo it ranged between Rp 2,501 and Rp 5,000 for more than half of the respondents, while the second highest range was between Rp 5,001 and Rp 7,500. The highest range (paid by one respondent) was between Rp 10,001 and Rp 15,000. However, there were also 2 respondents who paid less than Rp 2,500.

In Petemon, more than half of respondents paid between Rp 5,001 and Rp 7,500, while the next biggest number of respondents (11 in total) paid between Rp 2,501 and Rp 5,000. Only 1 respondent paid less than Rp 2,500 while there were 5 respondents who paid more, of which 4 paying between Rp 7,501 and Rp 10,000 and 1 paying between Rp 10,001 and Rp 15,000.

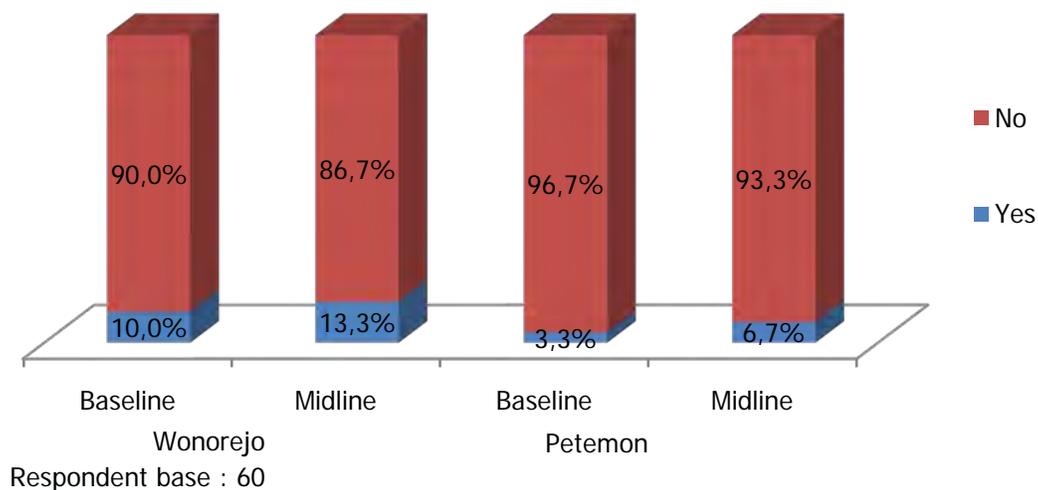
The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.23  
Expenditure on Garbage Collection



The majority of households in Surabaya (both at the time of the baseline survey and at the time of the midline survey) did not practice separating garbage into biodegradable and non-biodegradable, which was only done by a small number of households. In Wonorejo, of 30 respondents, only 13.3% normally practiced garbage separation, while in Petemon the figure was only 6.7%.

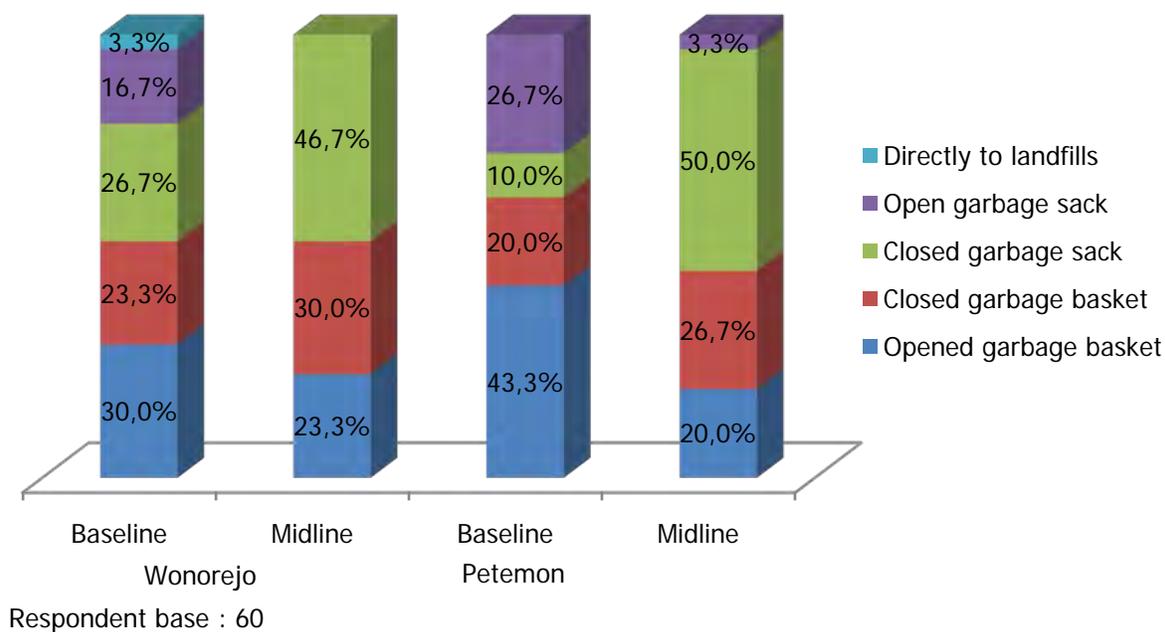
Figure 5.24  
Is Organic and Inorganic Garbage Separated?



Based on the observations as to the receptacles used to collect garbage in the home, the biggest proportion of respondents in both Wonorejo and Petemon used closed plastic sacks (with the percentages being 46.7% and 50% respectively). The second most popular choice were closed garbage baskets in both Wonorejo and Petemon, with the respective figures being 30% and 26.7%.

Figure 5.25

Receptacles Used for Collecting Garbage – Observations



### Summary of Fourth Pillar: Solid Waste Management Practices

The following table summarizes the findings in respect of the fourth CBTS pillar indicators:

Table 5.7

Fourth Pillar Indicators: Solid Waste Management Practices

Indicator	Wonorejo		Petemon	
	Baseline (n=30)	Midline (n=30)	Baseline (n=30)	Midline (n=30)
Garbage Disposal Places – 3 top answers				
Stored in home, then collected by garbage collection official	66.7%	70.0%	43.3%	73.3%

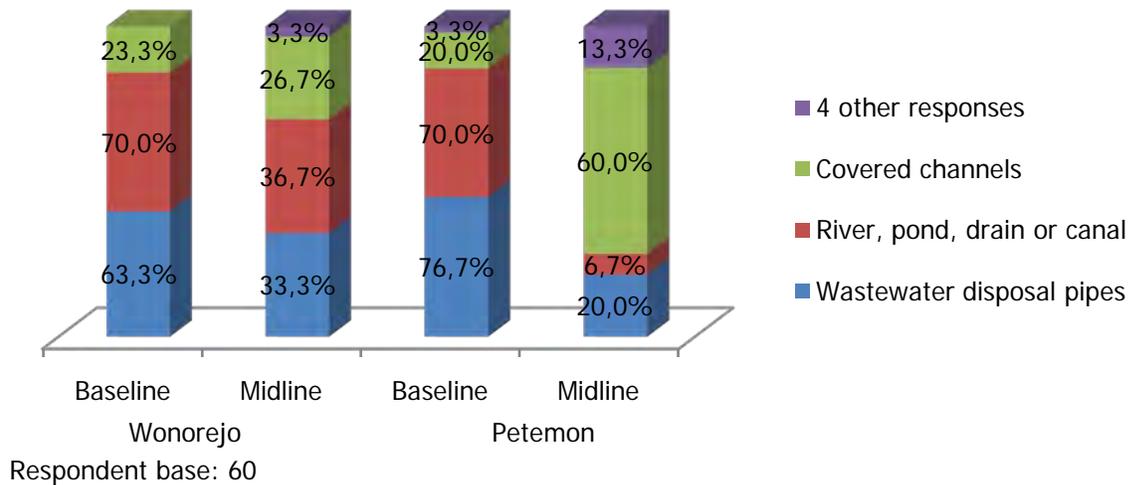
Indicator	Wonorejo		Petemon	
	Baseline (n=30)	Midline (n=30)	Baseline (n=30)	Midline (n=30)
Stored at joint collection point, then collected by garbage collection official	33.3%	30.0%	56.7%	26.7%
Garbage Separation?	Yes	90.0%	86.7%	3.3%
	No	10.0%	13.3%	96.7%
Receptacles used for collecting garbage – observations – 3 top answers				
Uncovered garbage basket	30.0%	23.3%	43.3%	20.0%
Covered garbage basket	23.3%	30.0%	20.0%	26.7%
Closed plastic sack	26.7%	46.7%	10.0%	50.0%
Open plastic sack	16.7%	-	26.7%	3.3%
Brought directly to garbage disposal point	3.3%	-	-	-

### Proper Wastewater Management

The final CBTS pillar is proper household wastewater management. A number of indicators were used to evaluate people's behaviors in this respect in Surabaya. The findings of our observations on wastewater disposal are shown in the following graphs:

Figure 5.26

Disposal of kitchen wastewater – Observations



In Wonorejo, as shown in Figure 5.26, the biggest proportion of households at 36% disposed of their wastewater (from kitchen, bathroom and washing clothes) in the river, pond, drain or canal, while 33.3% did so through wastewater disposal pipes.

Meanwhile in Petemon, more than half of respondents (60%) disposed of wastewater using covered channels, while 20% did so using the sewerage system. Only 6.7% of respondents in Petemon discharged their wastewater in the river, pond, drain or canal.

Figure 5.27

Discharge of Wastewater from Bathroom – Observations

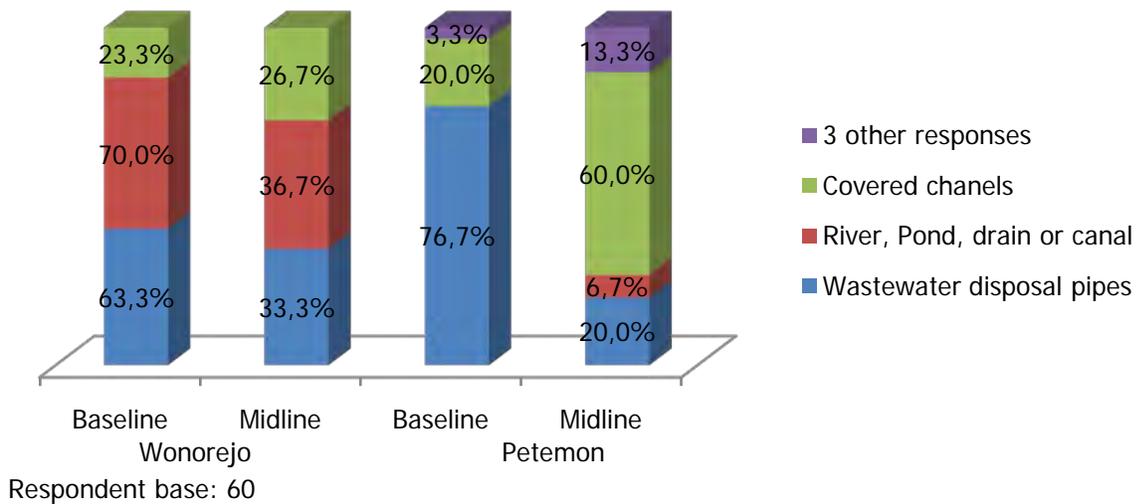
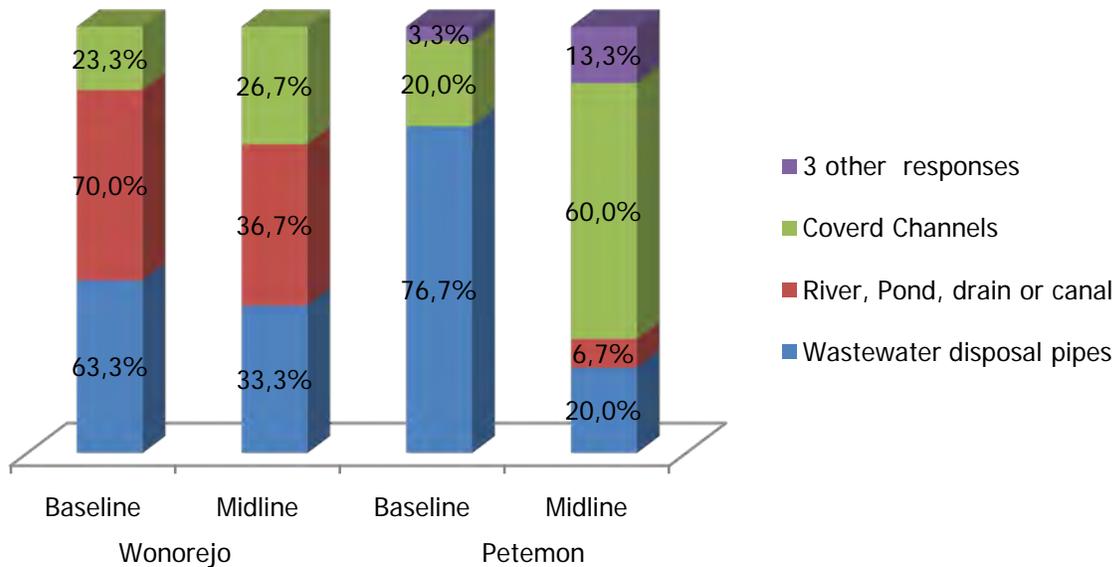


Figure 5.28

Discharge of Wastewater from Clothes Washing – Observations



Respondent base : 60

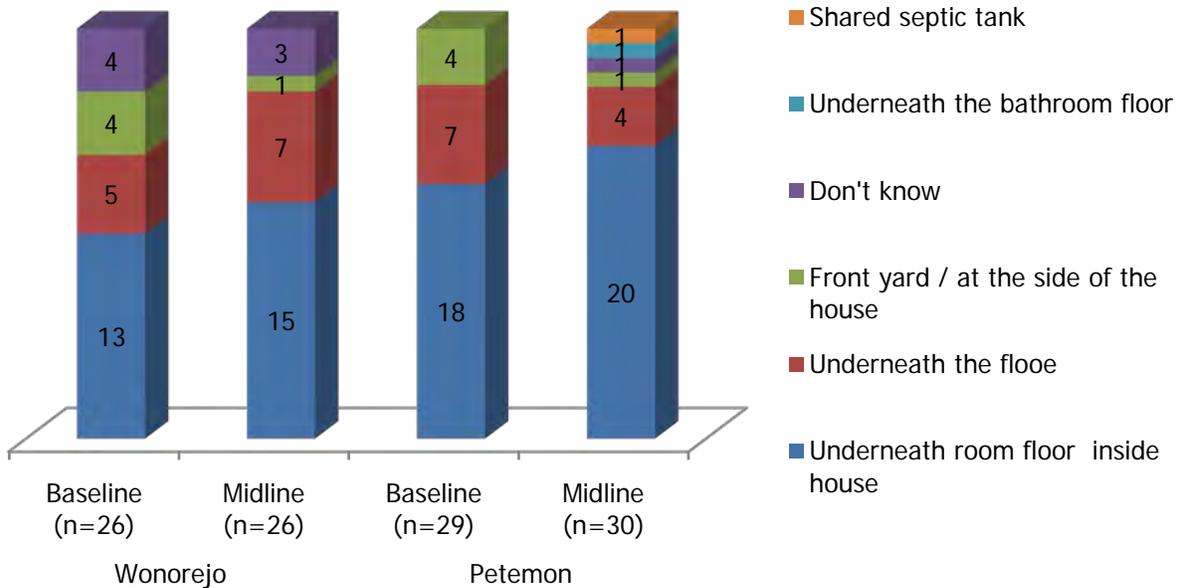
We will now discuss the location of septic tanks in the survey areas in Surabaya. The most common location in both Wonorejo and Petemon was underneath the floor of the house (same as at the time of the baseline survey). The principal reason for this was a lack of space in the two sub-districts. More specifically, in Wonorejo more than half (15 out of 26) households had their septic tanks underneath the floor. Besides the backyard, there was also one household that had its septic tank in the front yard/to the side. Three other respondents in Wonorejo did not know where their septic tank was located.

In Petemon, the situation was almost the same as in Wonorejo. The majority of households (both at the time of the baseline survey and the midline survey) had their septic tanks underneath the floor due to lack of space. Only 4 households had their septic tanks located in the back yard. In addition, 1 house each was found to have its septic tank underneath the bathroom floor and in the front yard/at the side of the house, while 1 household had a shared septic tank, and another household did not know where its septic tank was located.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.29

Location of Septic tank – confined to those that have septic tank

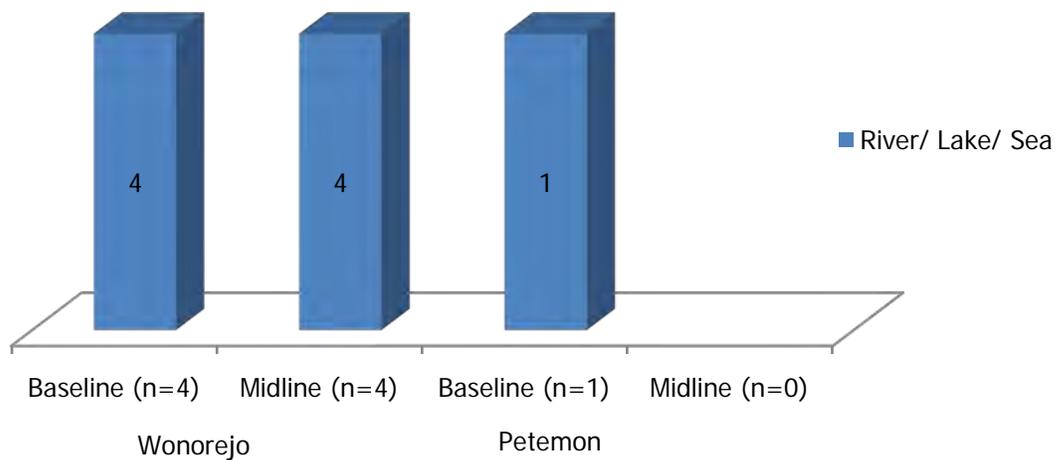


As regards those who did not have septic tanks, observations on the ground, as shown in Figure 5.30 (in absolute terms as the base number of respondents was less than 30), revealed that the wastewater was discharged into the river/lake.

The following figure shows where toilet waste is discharged in the case of those who do not have septic tanks:

Figure 5.30

Final place of disposal of Toilet Wastewater (by those that lack septic tanks) – Observations



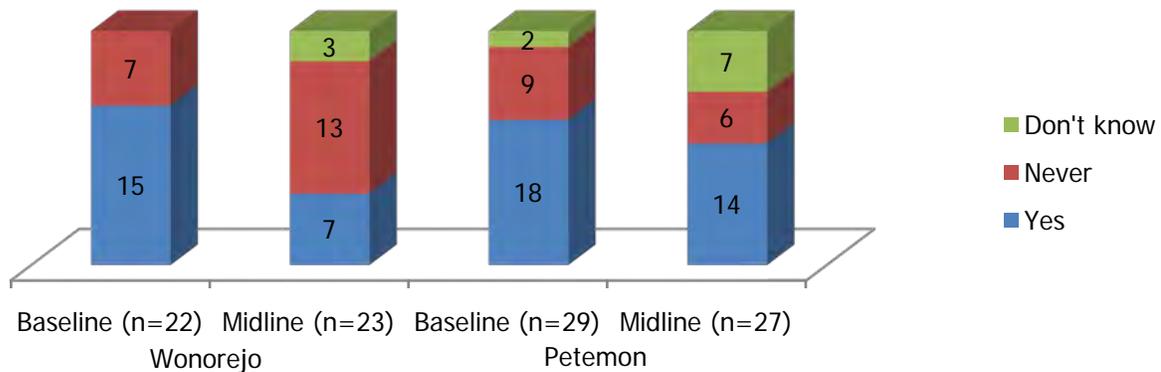
Among the households that have septic tanks, only in Petemon did the biggest proportion of residents have them regularly cleaned. In Wonorejo, unlike at the time of the baseline survey (when the biggest proportion of households said that they had cleaned their septic tank on one occasion or another), at the time of the midline survey more than half said that they never cleaned their septic tanks. Only 7 respondents said that they had ever cleaned their septic tank, while 3 said that they did not know whether their septic tank had ever been cleaned or not.

Meanwhile in Petemon, only 6 respondents said that they had never emptied their septic tanks, while 7 others said that they did not know if it had ever been emptied. Meanwhile, the majority of respondents in Petemon (14) said that their septic tank had been emptied at one time or another.

Figure 5.31 (in absolute terms as the base number of respondents was less than 30) below shows the situation as regards the emptying of septic tanks in the 2 sub-districts:

Figure 5.31

Has your septic tank ever been emptied?

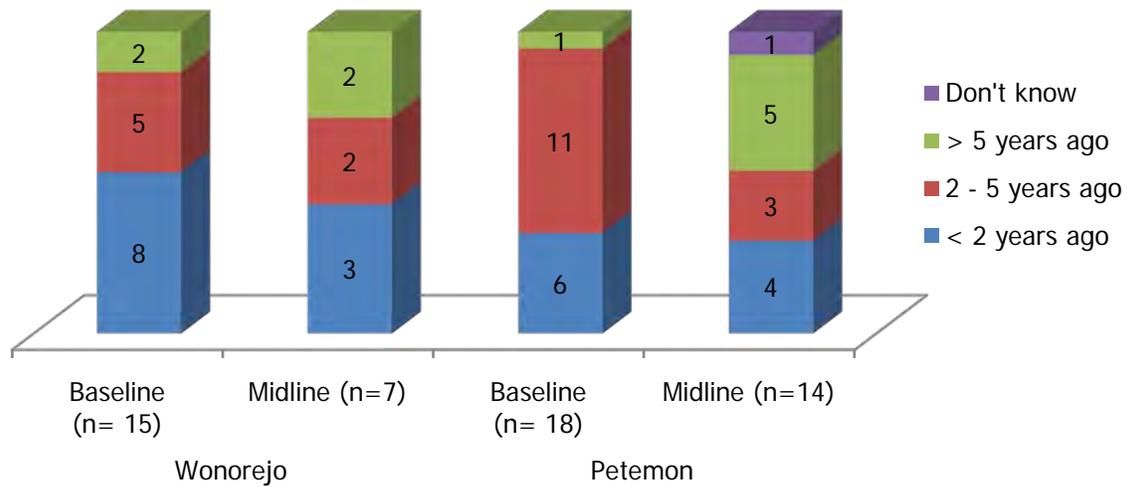


For those who said that their septic tanks had been emptied at one time or another, Figure 5.32 (in absolute terms as the base number of respondents was less than 30) shows that last time that it was emptied. In Wonorejo, 3 respondents said that their septic tanks had been emptied less than 2 years ago, while 2 others said that the last time their septic tank had been emptied was between 2 and 5 years ago. Two others said that their tanks had been emptied less than 5 years ago.

In Petemon, the last time the septic tanks of the biggest proportion of respondents had been emptied was longer ago than in Wonorejo. At the time of the midline survey, 5 respondents said that it was less than 5 years ago, while 4 said that it was less than 2 years ago. Two others said that it was between 2 and 5 years ago, while 1 did not know if his septic tank had ever been emptied or not.

Figure 5.32

When was the last time your septic tank was emptied?



Of the households in Wonorejo and Petemon who said that their septic tanks had been emptied at one time or another, almost all of them said that they used the services of professional septic tank cleaners. The situation at the time of the midline survey in Wonorejo was the same as at that of the baseline survey, namely, all of the households who septic tanks had been cleaned in Wonorejo used the services of professionals using a suction truck to clean their tanks.

In Petemon, only one household did not use a suction truck, with this respondent said that he used the services of hired workmen.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.33

Who emptied your septic tank the last time?

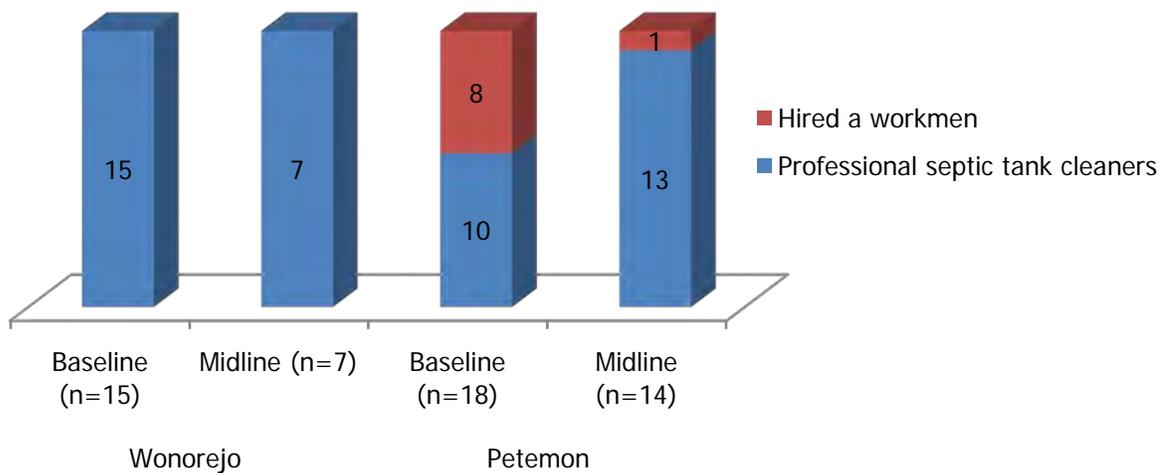
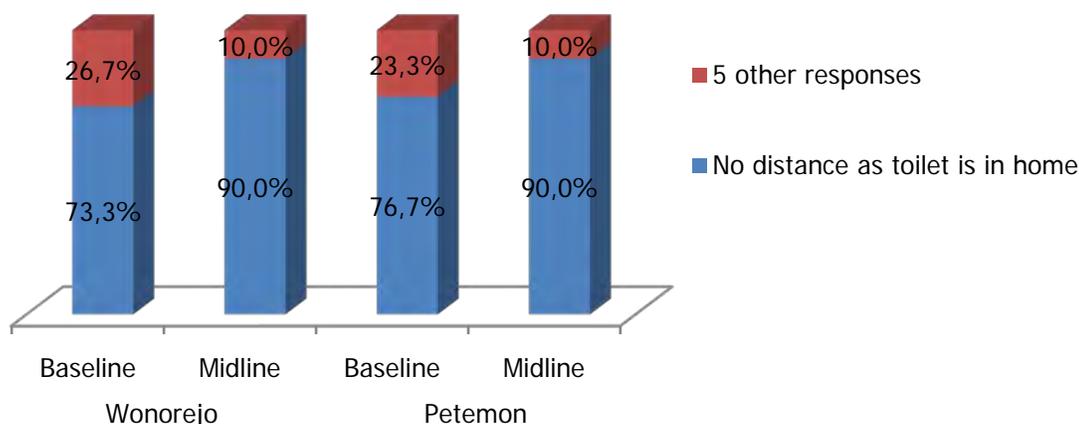


Figure 5.34  
Distance from Home to Public Toilet



Respondent base: 60

Figure 5.34 above shows the distance from the home to the toilet normally used by respondents. In the midline survey, the majority of respondents (90%) did not need any time to get to the toilet as the toilet was located in their own homes. This percentage marked an increase compared with the baseline survey, when more than 70% of respondents had toilets located in their own homes.

In Wonorejo, 10% said that they needed between 3 and 15 minutes to reach the toilet, while in Petemon, 10% said that they needed between 2 and 5 minutes.

### Summary of Fifth CBTS Pillar: Wastewater management practices

The following table sets out a summary of household wastewater management practices:

Table 5.8

Fifth CBTS Pillar: Wastewater management practices

Indicator	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
<b>Respondent base</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
Place where kitchen wastewater is disposed of– 3 top answers				
Wastewater disposal pipe	63.3%	33.3%	76.7%	20.0%

Indicator	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
<b>Respondent base</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
River, pond, drain, canal	70.0%	36.7%	70.0%	6.7%
Covered channel	23.3%	26.7%	20.0%	60.0%
4 other responses	20.0%	3.3%	60.0%	13.3%
Place where bathroom wastewater is disposed of – 3 top answers				
Wastewater disposal pipe	63.3%	33.3%	76.7%	20.0%
River, pond, drain, canal	70.0%	36.7%	-	6.7%
Covered channel	23.3%	26.7%	20.0%	60.0%
3 other responses	-	-	3.3%	13.3%
Place where wastewater from clothes-washing is disposed of – 3 top answers				
Wastewater disposal pipe	63.3%	26.7%	76.7%	6.7%
River, pond, drain, canal	70.0%	36.7%	70.0%	6.7%
Covered channel	20.0%	30.0%	20.0%	83.3%
4 other responses	-	6.6%	3.3%	3.3%
Has septic tank?	Yes	4	3	2
	No	26	25	28
Place where feces is disposed of – observations – 3 top answers				
Septic tank	86.7%	86.7%	93.3%	93.3%
4 other responses	13.3%	13.3%	6.6%	6.6%

The following table sets out a summary of the indicators for all five CBTS pillars in the sub-districts that were surveyed.

Table 5.9

## Summary of Indicators for all Five CBTS pillar

Indicator	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
First Pillar: open defecation free				
<b>Last place where caregiver defecated– 3 top answers</b>				
Respondent base	30	30	30	30
<b>Private toilet</b>	83.3%	-	90.0%	-
<b>Flush toilet draining into septic tank</b>	-	83.3%	-	100.0%
2 other responses	16.7%	16.7%	10.0%	-
Place of defecation for children aged 0 – 3				
Respondent base	19	15	21	15
<b>Disposable diapers</b>	9	1	9	4
<b>Household toilet</b>	7	12	11	11
3 other responses	3	2	1	-
Place of disposal of feces of children aged 0 – 3 – MA				
Respondent base	19	15	21	15
Directly into the toilet	13	14	11	18
First cleaned, then dirty water disposed of in private toilet	2	1	5	-
5 other responses	4	2	5	2
<b>Place of defecation of children aged 3 – 5</b>				
Respondent base	13	13	17	15
<b>Private toilet</b>	13	-	17	-
Flush/u-bend toilet draining into septic tank	-	13	-	15

Indicator	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
No children aged 3-5	16	2	12	-
2 other responses	1	-	1	-
What was done after child defecated				
<b>Washed child's bottom with soap</b>	93.3%	90.0%	70.0%	100.0%
<b>Washed child's bottom with soap</b>	6.7%	6.7%	23.3%	-
3 other responses	-	3.3%	6.6%	-
Second Pillar: Hand washing with soap at at least 2 out of 5 critical times				
Use of soap in last 48 hours – MA				
<b>Washing hands after eating</b>	80.0%	63.3%	23.3%	73.3%
<b>Washing clothes/utensils</b>	100.0%	90.0%	86.7%	93.3%
Cleaning baby's bottom	93.3%	33.3%	43.3%	43.3%
Bathing	100.0%	100.0%	93.3%	100.0%
<b>Washing hands after washing baby's bottom</b>	60.0%	30.0%	13.3%	66.7%
<b>Washing hands before eating</b>	60.0%	43.3%	13.3%	73.3%
<b>Washing hands after defecating</b>	53.3%	16.7%	3.3%	70.0%
Washing child's hands	63.3%	20.0%	16.7%	50.0%
Washing hands after cleaning house	53.3%	-	3.3%	-
<b>Washing hands before feeding child</b>	46.7%	10.0%	3.3%	20.0%
<b>Other Responses</b>	-	26.7%	-	50.0%
With scoring				

Indicator		Wonorejo		Petemon	
		Baseline	Midline	Baseline	Midline
Score 0		-	-	-	-
Score 1		8	15	18	5
Score 2		3	4		5
Score 3		1	1	1	8
Score 4		5	1	1	9
Score 5		12	-	-	-
Observations					
<b>Is water available (if there is tap, is it running?)</b>	Yes	73.3%	93.3%	93.3%	93.3%
	No	26.7%	6.7%	6.7%	6.7%
<b>Is soap available?</b>	Yes	86.7%	93.3%	100.0%	96.7%
	No	13.3%	6.7%	-	3.3%
Third Pillar: Household safe water treatment and storage					
<b>Treatment of water before consumption (water from mains/well)</b>					
<b>Boil water</b>		50.0%	43.3%	40.0%	40.0%
<b>Directly drink</b>		43.3%	56.7%	43.3%	53.3%
3 other responses		6.7%	-	16.7%	6.6%
Observations					
<b>Receptacle with</b>	Small aperture	76.7%	96.7%	73.3%	93.3%
	Wide aperture	23.3%	3.3%	26.7%	6.7%
<b>Hard material/not cloth</b>	Yes	100%	96.7%	96.7%	93.3%
	No	-	3.3%	3.3%	6.7%
<b>What about hands when</b>	Touch	-	96.7%	-	3.3%

Indicator		Wonorejo		Petemon	
		Baseline	Midline	Baseline	Midline
taking water?	Do not touch	100%	3.3%	100%	96.7%
<b>Place where ready-to-consume food is kept– 3 top answers</b>					
In closed cabinet		56.7%	56.7%	26.7%	16.7%
Protected by cover		33.3%	30.0%	60.0%	73.3%
3 other responses		10.0%	13.3%	13.3%	10.0%
Fourth Pillar: Solid waste management					
<b>Place of disposal of garbage – 3 top answers</b>					
Gathered in home, then collected by official garbage collector		66.7%	70.0%	43.3%	73.3%
Gathered at shared collection point, then collected by official garbage collector		33.3%	30.0%	56.7%	26.7%
Separation of Garbage	No	90.0%	86.7%	3.3%	6.7%
	Yes	10.0%	13.3%	96.7%	93.3%
<b>Means of collecting garbage – observations – 3 top answers</b>					
Open garbage basket		30.0%	23.3%	43.3%	20.0%
Closed garbage basket		23.3%	30.0%	20.0%	26.7%
Closed plastic sack		26.7%	46.7%	10.0%	50.0%
Open plastic sack		16.7%	-	26.7%	3.3%
Directly at garbage disposal point		3.3%	-	-	-
Fifth Pillar: Wastewater management					
<b>Place where kitchen wastewater is discharged – 3 top answers</b>					
Wastewater disposal pipe		63.3%	33.3%	76.7%	20.0%
River, Pond, Drain, Canal		70.0%	36.7%	70.0%	6.7%

Indicator	Wonorejo		Petemon		
	Baseline	Midline	Baseline	Midline	
<b>Covered channel</b>	23.3%	26.7%	20.0%	60.0%	
4 other responses	20.0%	3.3%	60.0%	13.3%	
<b>Place where bathroom wastewater is disposed of – 3 top answers</b>					
<b>Wastewater disposal pipe</b>	63.3%	33.3%	76.7%	20.0%	
<b>River, Pond, Drain, Canal</b>	70.0%	36.7%	-	6.7%	
<b>Covered channel</b>	23.3%	26.7%	20.0%	60.0%	
3 other responses	-	-	3.3%	13.3%	
<b>Place where wastewater from clothes-washing is disposed of – 3 top answers</b>					
<b>Wastewater disposal pipe</b>	63.3%	26.7%	76.7%	6.7%	
<b>River, Pond, Drain, Canal</b>	70.0%	36.7%	70.0%	6.7%	
<b>Covered channel</b>	20.0%	30.0%	20.0%	83.3%	
4 other responses		6.6%	3.3%	3.3%	
<b>Have septic tank?</b>	No	4	3	2	-
	Yes	26	25	28	30
<b>Place where feces is disposed of – observations – 3 top answers</b>					
Septic tank	86.7%	86.7%	93.3%	93.3%	
4 other responses	13.3%	13.3%	6.6%	6.6%	

## E. Role of Community Members as Informants

Table 5.10a below shows the sources of information on CBTS in the community.

Both in Wonorejo and Petemon, RT heads/administrators and Posyandu/Sub-district and PKK workers were the parties who were considered to play the greatest role in disseminating information on CBTS to the public.

- RT heads/administrators were considered to play a role in disseminating information on proper defecation and garbage management practices.
- Teachers played a role in disseminating information on the importance of washing hands with soap to the community.

Table 5.10a

Sources of information on the 5 CBTS Pillars in Surabaya – Multiple Answer - Spontaneous

Environmental Health Topic	Petemon (respondent base: 30)				First time when provided with information
	Give name of person and that person's relationship with respondent				
	Name	Number of Respondents	Relationship	Method of information provision	
Defecation in proper place	Bidan (Midwife) Suri	4	Volunteer	Arisan meeting	January 2013
	Don't know	4	Ibu RT	House-to-House visit	February 2013
	Bidan (Midwife) Santi	4	Ibu RT	Arisan meeting	March 2012
	Bapak (Mr) Teguh	4	RT/RW	Meeting with residents	January 2013
	Bapk (Mr) Kasiyoto	4	RT/RW	House-to-House visit	October 2012
Washing hands with soap	Don't know	4	Teacher	Practice/examples	When younger
Treatment of household drinking water	Ibu (Ms) Puput	4	Don't know	Practice/examples	March 2012
Garbage disposal	-		-	-	
Household wastewater management	-		-	-	

Four respondents said that they had received information from Bidan Suri and Bidan Santi on proper defecation practices in January 2013. The information was conveyed during arisan

meetings. Bapak Teguh also provided information to residents of the neighborhood in January 2013 by going door to door. Meanwhile, Bapak Kasyito provided information to residents during meeting in October 2012. In addition, 4 respondents said that the “Lady RT” (whose name she did not know) also visited residents homes in February 2013 to provide them with information on proper defecation practices.

As regards outreach on hand washing with soap, 4 respondents said that they had received messages on this from their teachers when they were young (there was no indication as to the names of the teachers involved or precisely when they were taught). Meanwhile in March 2012, 4 respondents said that they had received outreach on the treatment of drinking water from Ibu Puput (they were unaware of her position or role). The information had been presented through teaching.

Based on Table 5.10b below, it was seen that in Wonorejo, the role played by community members in providing information on the CBTS pillars was as follows:

- RT administrators played a role in conveying messages on proper defecation and garbage management practices
- Midwives from the Health Agency also played a role in providing information on proper defecation practices.
- Posyandu representatives were stated by respondents to have provided information on washing hands with soap
- The PKK chairman, in addition to providing outreach on washing hands with soap, was also stated to have provided information on household solid waste management.
- Sub-district representatives were also stated to have played a role in conveying messages on household solid waste management.

Table 5.10b

Sources of Information on 5 CBTS Pillars in Wonorejo – Surabaya Multiple Answer - Spontaneous

Environmental Health Topic	Name	Wonorejo (respondent base: 30)			First time when provided with information
		Give name of person and that person’s relationship with respondent			
		Number of Respondents	Relationship	Method of information provision	
Defecation in proper place	Don’t know	4	Ibu RT	Arisan	January 2013
	Ibu Mesni	4	Ibu RT	Posyandu meeting	December 2012
	Midwife Nuraini	4	Midwife	Posyandu meeting	September 2012

Environmental Health Topic	Name	Wonorejo (respondent base: 30)			First time when provided with information
		Give name of person and that person's relationship with respondent			
		Number of Respondents	Relationship	Method of information provision	
	Don't know	4	Health Agency	Residents' meeting	September 2012
Washing hands with soap	Ibu Santo	4	Posyandu	Practiced during baby weighing	February 2013
	Don't know	4	PKK Chair	Arisan PKK	March 2012
	Don't know	4	Don't know	Outreach at elementary school	December 2012
Treatment of household drinking water	Bapak Ahmed	4	Husband	Outreach at elementary school	December 2012
Garbage Management	Don't know	4	Sub-district authorities	Socialization in sub-district	February 2013
	Ibu Makmur	4	PKK Chair	Arisan meeting	March 2012
	Ibu Tri	4	Volunteer	PKK	December 2012
	Ibu Jodi	4	Ibu RT	PKK Arisan Meeting	Don't know
Treatment of household wastewater	Don't know	4	Don't know	Arisan meeting	December 2012

Four respondents said that they had received information on proper defecation practices through the Lady RT during an arisan meeting in January 2013. Ms. Mesni said was referred to by the 4 respondents as have provided such information during a Posyandu meeting in December 2012. Midwife Nurani also provided outreach on proper defecation practices at the Posyandu during a meeting held in September 2012. Meanwhile, a meeting of residents in September 2012 was availed of by a representative from the local government health agency (no name recalled) to convey messages in proper defecation practices.

According to 4 respondents, they received information on hand washing with soap from Ibu Santo from the Posyandu when practicing baby weighing in February 2013. In addition to Ibu Santo, the 4 respondents also said that the PKK Chair (whose name they did not know) had provided outreach on hand washing with soap during an arisan meeting at the PKK in March 2012. Furthermore, they said that they had received information in December 2012 at an elementary school via a person whose name and position they were unaware of.

Four respondents said that they had been taught about how to treat drinking water by their husbands during an outreach event at the elementary school in December 2012. Meanwhile, respondents said that they had received outreach on the management of solid household waste from the sub-district representative during a socialization event on garbage management in February 2013. Four respondents said that they had been provided with information on household solid waste management during a PKK arisan meeting in February. The messages had been conveyed by the PKK Chair and Ibu Jodi.

An 'arisan' meeting in December 2012 was also stated by 4 respondents as providing a venue for the socialization of household solid waste management.

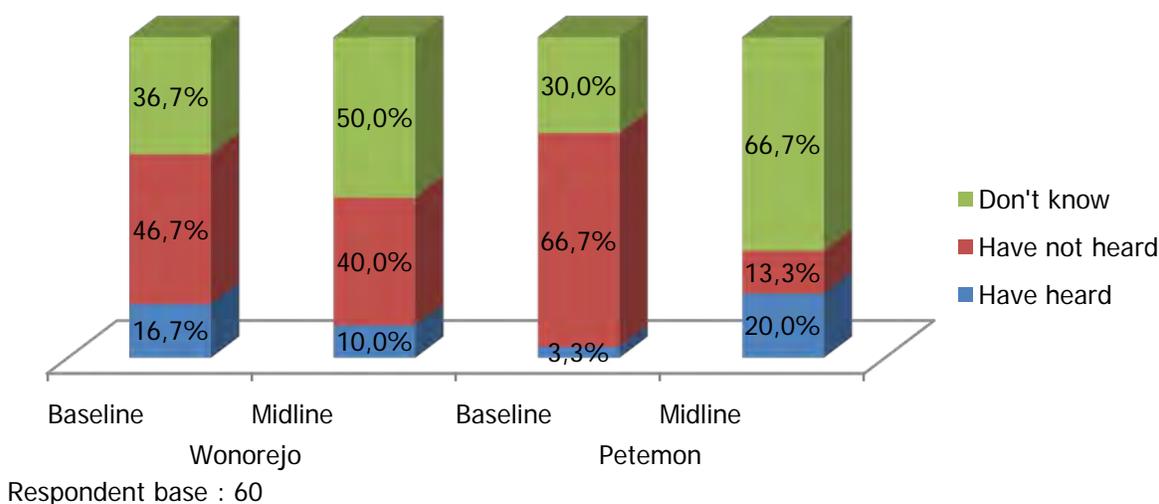
## F. Healthy Life Practices

### Knowledge

As will be seen from Figure 5.35 below, the level of awareness among the residents of Wonorejo and Petemon was very low, relatively speaking. This is shown by the fact that only 20% of residents (both at the time of the baseline survey and midline survey) had ever heard of the CBTS. In Wonorejo, out of 30 respondents, only 3 had heard of CBTS, while at the time of the midline survey 40% of residents of Wonorejo said they had never heard of CBTS, while 50% said that they didn't know/forgot. A similar situation was found in Petemon, where only 20% of the total respondents said that they had heard of CBTS. The majority (66.7%) said that they didn't know/forgot whether they had heard of CBTS or not, while 13.3% said that they had never heard of it.

Thus, it is only to be expected that people are unable to carry out what is being promoted by the CBTS program given the high proportions that have not received information on the program.

Figure 5.35  
Have you Heard of CBTS?



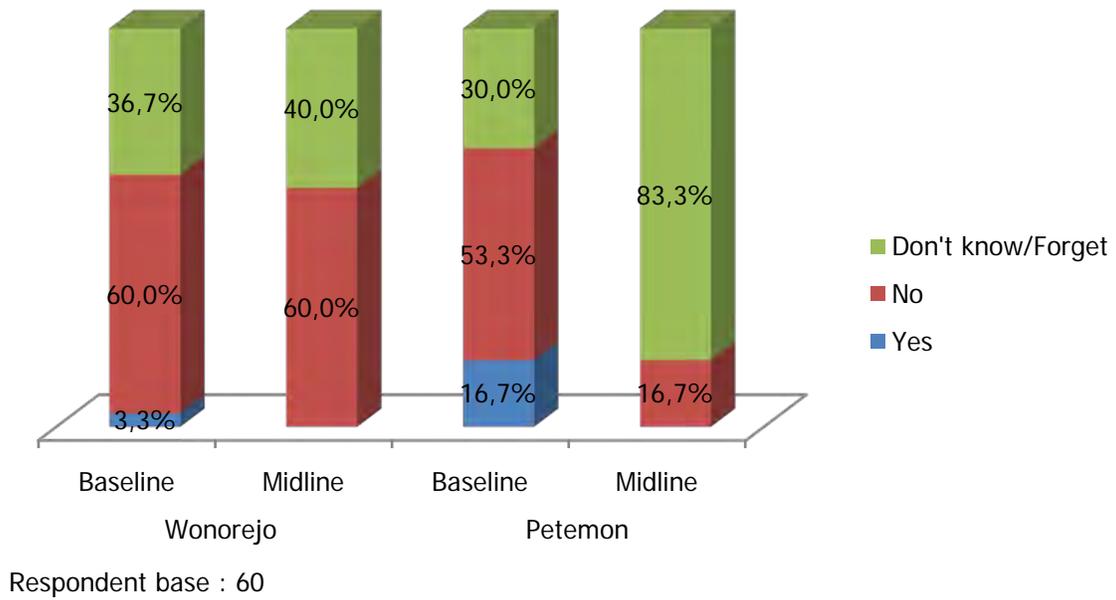
Also with regard to awareness, Figure 5.36 below provides a picture of the level of people's concern for PHBS. At the time of the baseline survey, it was found that 16.7% of the residents of Petemon and 3.3% of the residents of Wonorejo had heard of PHBS. Nevertheless, at the time of the midline survey, not one resident was found who said he or she had heard of PHBS (both in Wonorejo and Petemon).

Of the 3 residents in Wonorejo who said that they had heard of CBTS, 2 of them said that they had obtained information on CBTS through training provided by the local government's Health Agency, while the other respondent said that they had obtained the information through activities carried out an NGO.

In Petemon, of the 6 people who had heard of CBTS, 2 of them said that they had done so through outreach at school, while 4 others had done so through activities carried out by an NGO, from brochures, during activities at school and at PKK arisan meetings.

With a respondent base of 9 from Wonorejo and Petemon (and multiple response questions), those who acknowledged they had heard of CBTS said that it referred to stopping open defecation (8 persons), bathing twice a day with soap (3 persons), garbage management (3 persons), cooking food properly (2 persons), and treating drinking water and water for household use. The remaining respondents (3 persons) said that CBTS was concerned with resolving sanitation problems.

Figure 5.36  
Have you ever heard of PHBS



People's knowledge of sanitation can be specifically evaluated by assessing the level of agreement with a number of prepared questions, as discussed further below.

### Attitude

The data set out in Table 5.11 below is based on closed-ended responses on a scale of 1 to 4, where 1 expresses strong disagreement and 4 strong agreement with the following 10 health related statements that were presented to respondents.

Table 5.11  
Perceptions of Residents about Health

Statement	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
Every family should have its own toilet	3.5	3.4	3.6	3.7
Open defecation is not a problem for me	<b>1.6</b>	<b>2.1</b>	1.5	1.5
Hand washing with soap before eating is bothersome	<b>1.8</b>	<b>2.0</b>	1.9	1.7
We don't need a septic tank if we can dump feces directly into the river/drain	1.8	1.8	1.7	1.3
Wastewater from clothes washing can be discharged/dumped anywhere as it is quickly absorbed	2.0	2.0	1.7	1.6
Separating garbage is only a waste of time and does no good	2.2	2.0	<b>2.4</b>	<b>3.0</b>
My neighbors garbage is no concern of mine even though it goes everywhere	2.0	2.0	<b>2.1</b>	<b>1.8</b>
Preventing blockages in the drains is also my concern as a resident of this sub-district	<b>3.3</b>	<b>2.1</b>	<b>3.2</b>	<b>2.1</b>
As long as there are not too many, flies do no harm if they land on food	<b>1.8</b>	<b>3.0</b>	<b>1.6</b>	<b>1.3</b>
There no need to worry about cleaning drinking water receptacle as they are always full of water anyway	1.9	1.8	<b>1.8</b>	<b>1.5</b>

Scale of 1 to 4, where 1 = strongly disagree, and 4 = strongly agree

We will now discuss the issues identified as regards the health behaviors of residents of Wonorejo:

1. At the time of both the baseline survey and midline survey, the residents of Wonorejo had a high level of awareness, as evidenced by the fact that a high proportion of them agreed that every family must have its own toilet.
2. The residents of Wonorejo at the time of the baseline survey saw open defecation as a problem in their area (1.6). However, there had been a quite significant increase by the time of the midline survey ( $p < 0.05$ ), showing that an increasing number of people did not agree with open defecation (average increase to 2.1).
3. Both at the time of the baseline survey and the midline survey, the residents of Wonorejo regarded washing hands with soap before eating as not being burdensome. There was an average quite significant increase ( $p < 0.05$ ) between the time of the baseline survey and that of the midline survey (1.8 to 2.0).
4. The residents of Wonorejo (both at the time of the baseline survey and the midline survey) did not agree with the statement that *a septic tank is not necessary if toilet wastewater can be discharged into a river/drain*.
5. The resident of Wonorejo, both at the time of the baseline survey and the midline survey, did not agree that water from clothes washing should be allowed to be discharged haphazardly.
6. The statement that *separating garbage is just a waste of time* was not approved on average by the people of Wonorejo, both at the time of the baseline survey (2.2) and the midline survey (2.0) – no significant difference was detected.
7. On average the residents of Wonorejo at both the time of the baseline survey and the midline survey took the view that improperly disposed of garbage from a neighbor's was also their concern.
8. Based on the baseline survey, the residents of Wonorejo agreed that the maintenance of drains is their joint responsibility as residents. However, at the time of the midline survey there had been a significant decline ( $p < 0.05$ ) in those agreeing with this statement.
9. At the time of the baseline survey, the resident of Wonorejo did not agree with the statement, *As long as there are not too many, flies do no harm if they land on food*. However, at the time of the midline survey, the perceptions of the residents had changed significantly towards agreement.
10. The residents of Wonorejo did not agree that water receptacles need not be cleaned. This was true at the time both of the baseline survey and midline survey, and no significant difference was detected.

We will now discuss the issues identified as regards the health behaviors of residents of Petemon:

1. At the time of both the baseline survey and midline survey, the residents of Petemon had a high level of awareness, as evidenced by the fact that a high proportion of them agreed that every family must have its own toilet (there was an average difference but not significant).
2. The residents of Petemon at the time of both the baseline survey and midline survey saw open defecation as a problem in their area.
3. Both at the time of the baseline survey and the midline survey, the residents of Petemon did not regard washing hands with soap before eating as being burdensome. While there was an average decline, it was not significant increase.
4. The residents of Petemon at the time of the baseline survey said they did not agree with the statement that *a septic tank is not necessary if toilet wastewater can be discharged into a river/drain*. By the time of the midline survey, they tended to strongly disagree (1.3).
5. The resident of Petemon, both at the time of the baseline survey and the midline survey, did not agree that water from clothes washing should be allowed to be discharged haphazardly (no significant difference).
6. At the time of the baseline survey, residents tended to almost not agree with the statement that *separating garbage is just a waste of time*. By the time of the midline survey, there had been a significant change ( $p < 0.05$ ) with people now tending to see garbage separation as a waste of time.
7. Both the time of the baseline survey and the midline survey, the residents of Petemon did not agree with the statement that improperly disposed of garbage from a neighbor's was not their concern.
8. Based on the baseline survey, the residents of Petemon agreed that the maintenance of drains is their joint responsibility as residents (3.2). However, at the time of the midline survey there had been a significant decline in those agreeing with this statement.
9. At the time of both the baseline survey and the midline survey, the residents of Petemon did not agree with the statement, *As long as there are not too many, flies do no harm if they land on food*. However, there was quite a significant difference on average ( $p < 0.05$ ) between the findings at the time of the baseline survey and at the time of the midline survey.
10. At the time of the baseline survey the residents of Petemon did not agree that water receptacles need not be cleaned. At the time of the midline survey, there had been a significant change ( $p < 0.05$ ), with residents coming to increasingly disagree with the statement.

## Residents, Community and Sanitation

The table below shows residents' responses (closed-ended responses) to a series of 10 statements designed to gauge whether there is a sense of community among residents and administrators in their neighborhoods. The responses are ranked on a scale of 1 to 4, where 1 = fully sure, and 4 = not at all sure.

The general picture painted by the responses to the 10 questions in Wonorejo is as follows:

1. At the time the baseline survey was conducted, it was found that the respondents of Wonorejo were almost certain (2.7) that people in their neighborhood were aware of the importance of environmental health and hygiene. By the time of the midline survey, there had been quite a significant increase ( $p < 0.05$ ) to 3.1, meaning that people increasingly believed in the accuracy of the statement.
2. Based on the findings of the baseline survey and midline survey, respondents in Wonorejo felt quite confident that residents of the sub-district felt a strong sense of community in maintaining environmental health and hygiene (no significant difference).
3. The evaluation of the baseline survey showed that they were confident (3.1) that people in their neighborhood wanted to work so as to improve the quality of the environment. By the time of the midline survey, the residents remained confident in the accuracy of the statement (3.0), although a statistical count showed a significant difference ( $p < 0.05$ ).
4. The respondents in Wonorejo felt confident (3.0) that residents would expend money voluntarily to pay for the cost of improve environmental health and hygiene. When the findings of the midline survey are evaluated, it will be seen that the level of confidence in this statement increased to 3.1 (although the increase was not significant statistically).
5. If advice is given by the sub-district authorities for whatever reason, both the baseline survey and midline survey findings in Wonorejo show that residents are almost confident that such advice will be followed (no significant difference).
6. The respondents in Wonorejo, both at the time of the baseline survey and midline survey, felt confident (2.9) that residents living in their neighborhood would be glad to participate in neighborhood cleanup drives.
7. The evaluation of the baseline survey data shows that the respondents feel confident (3.0) that the sub-district authorities will be zealous about organizing neighborhood cleanup drives. However, the midline survey data reveals a decline of 2.8 in this regard (although the difference is not significant), so that overall respondents are almost confident about the accuracy of the statement.
8. It may be concluded that both at the time of the baseline survey and the midline survey, the residents of Wonorejo do not overly regard environmental hygiene and sanitation as the responsibility of the sub-district authorities.

9. Both at the time of the baseline survey and the midline survey, the residents of Wonorejo believed (3.0) that community leaders would support environmental hygiene and sanitation activities.
10. The residents of Wonorejo at the time of the baseline survey were not overly convinced (2.8) that if religious leaders were to disseminate messages on environmental hygiene and sanitation that the public would comply with such messages. However, by the time of the midline survey, there had been a significant change ( $p < 0.05$ ) and the public now felt confident (3.0) that such messages would be complied with.

As regards Petemon, the average responses of the respondents may be described as follows:

1. At the time the baseline survey was conducted, it was found that the respondents of Petemon were certain (3.0) that people in their neighborhood were aware of the importance of environmental health and hygiene. By the time of the midline survey, this figure had increased to 3.2 (although the increase was not significant statistically).
2. Both at the time of the baseline survey and midline survey, respondents in Petemon felt confident that residents of the sub-district felt a strong sense of community in maintaining environmental health and hygiene.
3. In addition, the respondents in Petemon, both at the time of the baseline survey and the midline survey, said that people in their neighborhood wanted to work together so as to improve the quality of the environment.
4. The baseline survey data showed that respondents in Petemon felt confident that residents would expend money voluntarily to pay for the cost of improving environmental health and hygiene. Meanwhile, the midline survey found that the level of confidence in this statement had increased to 3.3 (although the increase was not significant statistically).
5. If advice is given by the sub-district authorities for whatever reason, the baseline survey found that residents were confident (3.0) that such advice would be followed. However, analysis of the midline survey data showed that this level of confidence had declined to 2.8. As this decline was not significant, it may be concluded that people continued to believe that such advice would be followed.
6. The respondents in Petemon at the time of the baseline survey said they felt confident (3.3) that residents living in their neighborhood would be glad to participate in neighborhood cleanup drives. By the time of the midline survey, they were still confident, although the average level had declined (not significantly) to 3.1.
7. Both the baseline survey and midline survey data shows that the respondents feel confident that the sub-district authorities will be zealous about organizing neighborhood cleanup drives (no significant difference between the two surveys).
8. At the time of the baseline survey, the respondents said that they were not overly convinced that the sub-district authorities were responsible for environmental hygiene and sanitation. However, at the time of the midline survey there had been quite a significant increase ( $p <$

0.05) in the level of confidence of respondents that the sub-district authorities are also responsible for environmental hygiene and sanitation.

9. Both at the time of the baseline survey and the midline survey, the residents of Petemon believed that community leaders would support environmental hygiene and sanitation activities.
10. The residents of Petemon at the time of the baseline survey were not overly convinced (2.8) that if religious leaders were to disseminate messages on environmental hygiene and sanitation that the public would comply with such messages. However, by the time of the midline survey the public felt confident that such messages would be complied with.

Table 5.12

## Residents Perception of Community

Statement	Wonorejo		Petemon	
	Baseline	Midline	Baseline	Midline
The people here are aware of the importance of environmental hygiene and health	<b>2.7</b>	<b>3.1</b>	3.0	3.2
The people here have a strong sense of community, particularly as regards maintaining environmental hygiene and health	2.8	2.9	3.1	3.1
The people here are willing to work together to improve health conditions	<b>3.1</b>	<b>3.0</b>	3.1	3.1
The people here are willing to voluntarily pay contributions/charges to improve environmental hygiene and health	3.0	3.1	3.1	3.3
The people here are willing in all cases to follow the advice of sub-district officials	2.9	2.8	3.0	2.8
The people here are highly motivated in participating in environmental hygiene activities	2.9	2.9	3.3	3.1
The sub-district authorities are highly motivated in organizing environmental hygiene activities	3.0	2.8	3.1	3.3
The people here consider environmental hygiene and health to be the responsibility of the sub-district authorities	2.5	2.3	<b>2.3</b>	<b>2.9</b>

Statement	Wonorejo		Petemon	
Community leaders support environmental hygiene and health activities	3.0	3.0	3.0	3.1
If religious leaders recommended environmental hygiene and health activities, residents would comply	<b>2.8</b>	<b>3.0</b>	2.7	2.9

Scale of 1 to 4, where 1 = fully sure, and 4 = not at all sure

## Practices

In the practices section, residents were asked about 7 things related to health. In general, their responses revealed that:

- ✓ In Wonorejo, there has been an overall improvement in people's behaviors and awareness in connection with hygiene, as reflected in the decline in open defecation, discharge of toilet wastewater into the drains/water channels, undisciplined garbage disposal, and the incidence of blocked drains.
- ✓ The midline survey found that the proportion of respondents with water problems had increased (although the increase was not significant). However, the majority of respondents (more than 60%) said they had no problems with water sources.
- ✓ Overall, the types of behavior that give rise to health and hygiene at the time of the midline survey were more frequently found in Petemon. However, at the least the incidences of undisciplined garbage disposal, blocked drains and undrinkable well water (despite being treated) had declined.
- ✓ Overall, the most pressing problem in Petemon was Dengue fever, with 73.3% of respondents saying that cases of Dengue had occurred in their neighborhood. This marked an increase over 50% at the time of the baseline survey.

Table 5.13

### Behaviors that can cause health and hygiene problems

Prevalent*	Wonorejo						Petemon					
	Baseline (n = 30)			Midline (n = 30)			Baseline (n = 30)			Midline (n = 30)		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Defecation in place other than toilet	26.7%	60.0%	13.3%	13.3%	86.7%	-	13.3%	86.7%	-	13.3%	86.7%	-

Prevalent*	Wonorejo						Petemon					
	Baseline (n = 30)			Midline (n = 30)			Baseline (n = 30)			Midline (n = 30)		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Feces discharged into drains/water channels	43.3%	56.7%	-	20.0%	80.0%	3.3%	20.0%	76.7%	-	30.0%	66.7%	3.3%
Unsanitary environment due to undisciplined garbage disposal	63.3%	36.7%	-	56.7%	43.3%	-	73.3%	26.7%	-	53.3%	46.7%	-
Blocked drains or water channels	53.3%	43.3%	3.3%	30.0%	63.3%	6.7%	76.7%	23.3%	-	20.0%	80.0%	-
Well water not fit for drinking even after treatment	16.7%	80.0%	3.3%	30.0%	63.3%	6.7%	26.7%	66.7%	6.7%	20.0%	80.0%	-
Dengue fever	13.3%	80.0%	-	20.0%	76.7%	3.3%	50.0%	50.0%	-	73.3%	26.7%	-
Difficulties with clean water	3.3%	96.7%	-	20.0%	80.0%	-	13.3%	86.7%	-	13.3%	86.7%	-

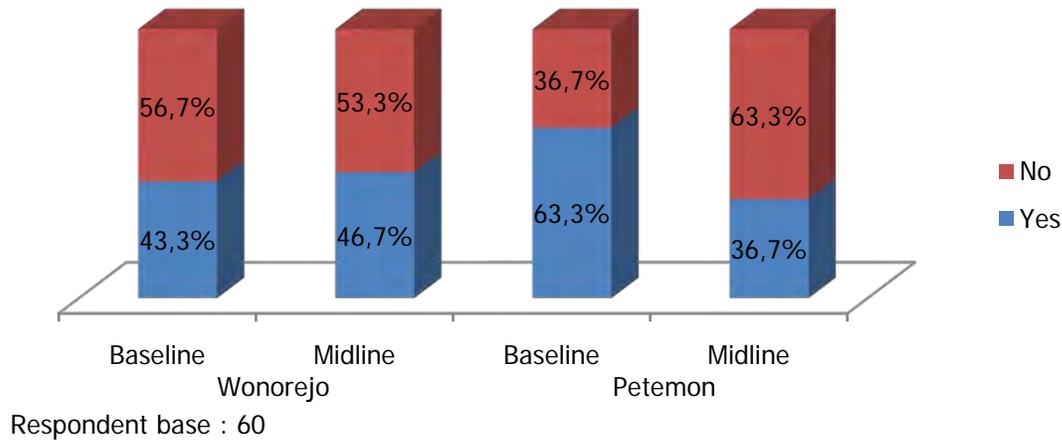
### Diarrhea

The percentage of under-5s who suffered from diarrhea in Surabaya is quite high. In Wonorejo, 43.3% of respondents said that their under-5 had suffered from diarrhea at some time. At the time of the 2013 midline survey in, this figure had increased slightly to 46.7%.

In Petemon, the proportion of under-5s who had suffered from diarrhea at the time of the midline survey had declined, with 36.7% of respondents saying that their under-5s had suffered from diarrhea at one time or another (previously 63.3%).

Figure 5.37

Has Your Under-5 Ever Suffered from Diarrhea?

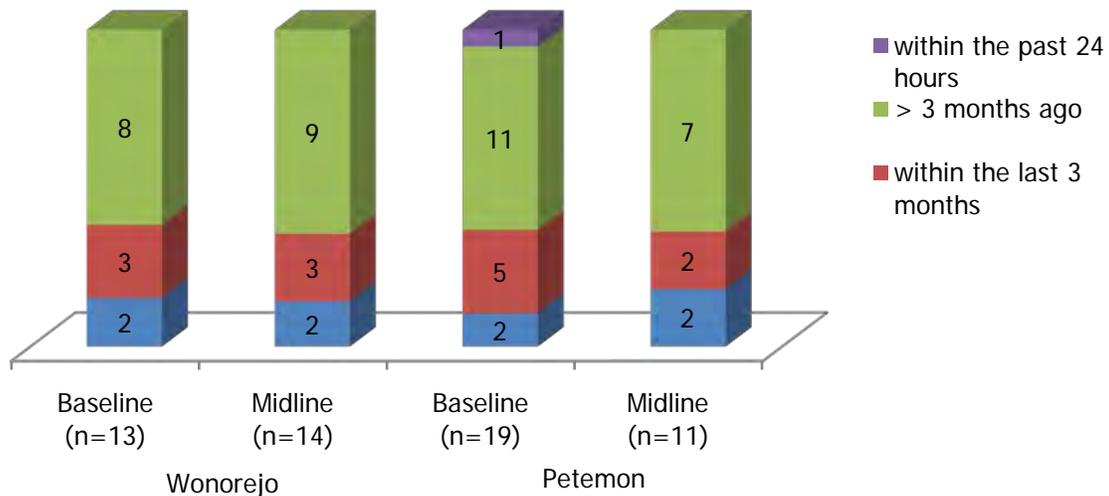


Based on the last time when under-5s had suffered diarrhea, in both Wonorejo and Petemon, both at the time of the baseline survey and midline survey, the majority of respondents said within the last three months. A small proportion said that their under-5s had suffered diarrhea between 1 week and 3 months ago.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.38

Last Time your Under-5 Suffered from Diarrhea

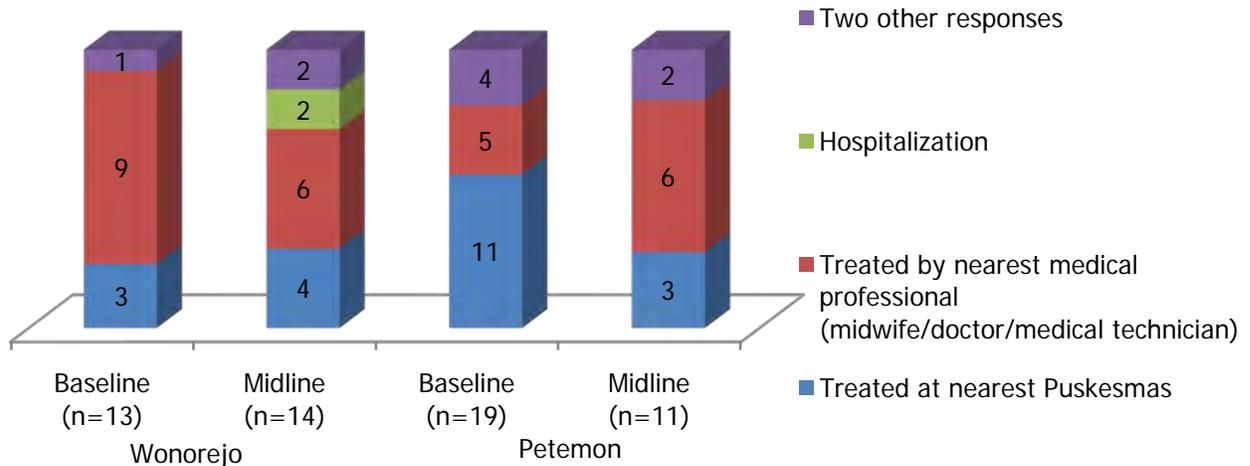


When their under-5s suffered diarrhea, more than half of respondents in Wonorejo and Petemon opted to bring the child to a medical professional (midwife/doctor/medical technician). Out of a total of 14 respondents in Wonorejo, 6 brought their sick children to the nearest medical professional, while 4 others brought their children to the Puskesmas. Meanwhile in

Petemon, out of a total of 11 respondents, 6 brought their under-5s to the nearest medical professional when they suffered diarrhea. Only 3 brought them to the Puskesmas for treatment.

The figure below is in absolute terms as the base number of respondents was less than 30.

Figure 5.39  
Treatment of Diarrhea

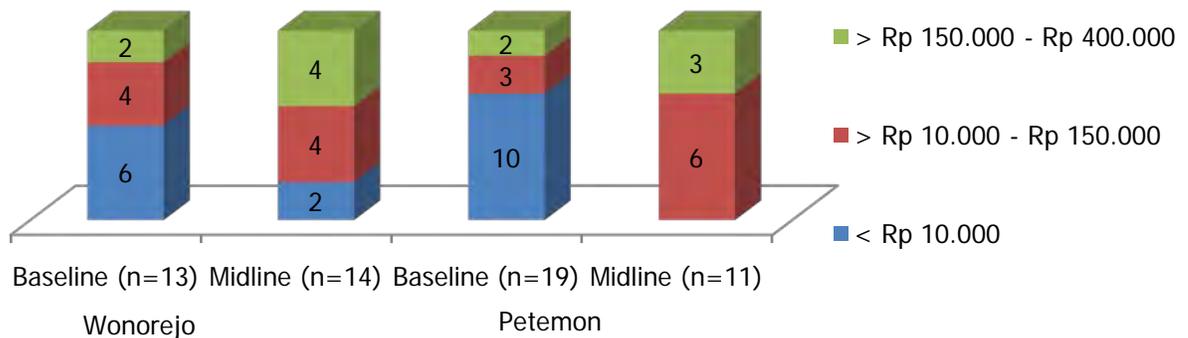


As regards the total cost of treatment (including transportation, care and medication):

- In Wonorejo, 4 respondents said that they spent quite a lot of money (Rp 150,000 – Rp 400,000) when their children were sick with diarrhea, while 4 others expended between Rp 10,000 and Rp 150,000. There were also 2 respondents who said they spent less than Rp 10,000.
- In Petemon, the most common range was Rp 10,000 – Rp 150,000, although three people said they spend more than that.

The following chart shows the costs incurred in the treatment of diarrhea among under-5s (in absolute terms as the base number of respondents was less than 30):

Figure 5.40  
Overall Cost of Treatment (transportation, consultation, medicine)



## Part VI

### Children Baseline – Elementary School

#### A. Perceptions of children regarding conditions that impact on healthy and clean life practices

During this process, the respondents were provided with stimuli in the form of pictures, where each CBTS pillar and non-CBTS pillar aspect was represented by two pictures. The stimuli also included pictures showing 'healthy children laughing', 'children bathing together in a well', and so forth. Each of these was represented by 2 pictures. A number of pictures showing the opposite were also presented (dirty/contrary to the CBTS pillars). Once again, each situation was represented by 2 pictures.

Of the pictures that were shown, two pictures showing 'washing hands with running water and soap' were the 2 top choices, with 90% and 80% of the children selecting these as showing examples of clean and healthy lifestyles. The children at all age levels and all sexes chose these activities. The following choices were selected by at least 20% of respondents:

Figure 6.1

8 top responses for conditions that are deemed clean and healthy



Base responden 30 – MA

'The washing hands' picture was more often selected by respondents between 10 and 12 years of age, compared with the other pictures. This may be influenced by a number of factors, such as: (1) recent campaign for washing hands with soap in the targeted schools so that the awareness of children about the importance of washing hands with soap was high – only 91.7% of the children (out of 26.7% of the children) who said they had heard of the term CBTS

associated it with washing hands with soap; (2) washing hands was a practice that was taught as standard by the adults around them (parents and teachers) so as to maintain healthy and hygiene.

As with the 2 pictures showing ‘washing hands with soap’ that were most frequently selected as the two top answers, the next choices were pictures showing ‘covering food’, which were selected by 66.7% and 63.3%.

After the two top choices (‘washing hands’ and ‘covering food’), the picture of a ‘dispenser against a background of a clean kitchen’ was the next choice (33.3%). The next choices were the picture showing ‘a child defecating in a sit-down toilet’ (30%) and ‘a squat toilet’ (also 26.7%). In addition, ‘a clean squat toilet’ was selected by 20% of respondents as representing a clean and healthy life.

All of the choices of the children tended to correlate with the five CBTS pillars. Nevertheless, when the children were questioned about their awareness of CBTS, more than half of the respondents (70%) said that they had never heard of the term.

### 1. Children’s Understanding of CBTS

When the elementary school respondents were asked, 70% said they had never heard of CBTS, while around 30% had heard of the term.

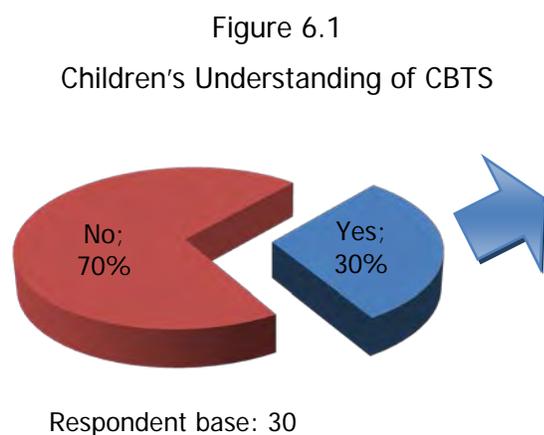


Table 6.1  
Understanding of CBTS by Grade

CBTS	Grade 4	Grade 5	Grade 6	Total
Yes	2	3	4	9
No	8	7	6	21
Total	10	10	10	30

Comparing the information on respondent grades and their knowledge of the term CBTS, there appears to be a correlation between grade and awareness -- the fact that a child is in a higher grade means that he or she will be more likely to be aware than a child in a lower grade.

Further, when the 9 respondents who said they were aware of CBTS were asked what they know about the concept, only 6 were able to state that the abbreviation stood for “Community

Based Total Sanitation,” while the 3 others did not know or had forgotten. When probed further about their knowledge of CBTS, the following information was obtained:

Table 6.2  
What More Do You Know About CBTS?

Knowledge of CBTS – Multiple Answer	Number of Respondents *
Washing hands with soap	7
Stopping open defecation	4
Consists of 5 pillars	2
Garbage Management	2
Treating and Storing Drinking Water Safely	1
Treatment of household wastewater	1
Clipping nails	1
Washing Hands	1
Maintaining cleanliness	1
Manage meals and drinks at home	1
<b>Respondent Base: 9</b>	

\* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

Washing hands with soap was the practice most frequently identified with CBTS (other than the term CBTS itself). There were also those who stated the number of CBTS pillars and a number of different pillars (like CTPS, stopping open defecation, safe treatment and storage of drinking water and household waste management).

A number of pictures were shown to the respondents and they were asked to select those that reflected CBTS. The following are their choices:

Figure 6.2

Pictures Showing CBTS – Multiple Answer

Choice 1: 8 resp



Choice 2: 7 resp



Choice 3: 6 resp



Choice 4: 6 resp



Choice 5: 3 resp



Choice 6: 3 resp



6 Other Responses: 6 resp.

Respondent Base: 9

Resp: respondent

The most popular CBTS pillars (the ones most frequently remembered, and therefore the relevant pictures most frequently selected) were as follows: (1) 'Washing hands with soap'; (2) 'covering food and safe treatment of drinking water'. Another pillar, 'managing household wastewater', was selected by 3 respondents, while others, mentioned by 1 respondent each, were 'defecating in a toilet' and 'a closed earthenware water jar'. Other pictures (outside of CBTS) that were selected by one respondent each were 'bathing', 'dirty hands' and 'playing with friends'.

As regards where the 9 children who knew about CBTS had received their information, the following responses were obtained:

Table 6.3

Information on CBTS Obtained From:

Person Providing Information on CBTS – Single Answer	Person's Name	Number of Respondents *
From school principal	Ibu Sri Lestari	1
From older classmate	Nurul Aziza	2
From friend	Nurul Aziza	1

Person Providing Information on CBTS – Single Answer	Person’s Name	Number of Respondents *
From younger classmate	Nurul Aziza	1
From High Five Program Promoter	Mamik, Citra, Raihis, Nujrum	1
From teacher	Ibu Ika	1
From sticker posted up at school	-	1
School outreach	School outreach	1
Respondent Base: 9		

\* Number of respondents is stated in absolute terms/frequency as number was below minimum of 30

As regards how information was presented to the respondents, the respondents said that informant Ibu Nurul Aziza had provided information directly to them less than a month ago (around February 2013). Ibu Ika (a teacher) had informed the respondents about CBTS around 3 months ago (around December 2013), while the school principal had told the respondents about CBTS while urging them to maintain cleanliness (the respondents could not remember precisely when this had taken place).

The High Five Program Promoters (*Kakak Pembina High Five Program*) had explained High Five Program to the respondents in their class less than one month ago (around February 2013). One respondent had found out about High Five Program from stickers put up in the school, which he had seen for the first time about 2 months ago (January 2013).

The following are the responses of the elementary schoolchildren in connection with their perceptions of various activities related to CBTS activities.

While in general the child respondents in Surabaya were familiar with various practices related to defecation, such as the importance of defecation in the right place, the causes of diarrhea and the dangers of diarrhea to children, it should also be noted that there were a relatively large number of children who were not aware (33-40%) of the dangers that arise from infectious diseases transmitted through feces. The responses of the children on their perceptions related to human feces/excrement are as shown below:

Table 6.4

## Perceptions of Children Related to Defecation

Description	Correct	Incorrect
Defecation in a toilet that has a proper waste disposal system will reduce the incidence of diarrhea	83.3%	16.7%
Human feces contain germs that can cause diarrhea	60%	40%
No need to wash hands with soap after defecation	6.7%	93.3%
Infant feces can be injurious to health	66.7%	33.3%
<b>Respondent Base: 30</b>		

As regards various activities that are not appropriate in connection with defecation in the home or school environment, their responses are presented in the table below.

The responses of the elementary school children show that many unhealthy and unhygienic practices continue to be prevalent in their school and home environments. A total of 43.3% said that open defecation continues to occur around their homes, although it was almost non-existent in the school environment. Similarly, 40% said that feces continued to be disposed of in water channels/drains around their homes.

Table 6.5

## Children's Explanations on Inappropriate Defecation Behavior in their Home and School Environments

Do any of the following things happen:	At Home (%)		At School (%)	
	Yes	No	Yes	No
Defecation outside of toilet.	43,3	56,7	3.3	96.7
Disposal of feces into drain/water channel	40	60	0	90
<b>Respondent Base: 30</b>				

The quite significant differences in respondents' sanitation behavior in the school and home environments may be due to: (a) the time spent by respondents in the school environment is much less than in the home environment – thus, the description of behaviors around the home is more accurate than in the school environment; or (b) residents' behavior is much more hygienic around the schools.

Last place of defecation

A total of 93.3% of respondents said that their last place of defecation was in the toilet at home or at school. However, 6.7% said that it was a pond near their home/school. After defecation, 50% said that they directly cleaned themselves with soap and water, 26.7% said they directly washed their hands, and the remaining 23.4% had four other responses: "cleaning themselves with water", "washing hands with soap", and "did nothing".

Defecation in school

All of the students (100%) had urinated at one time or another in school (36.7% in the student bathroom and 63.3% in the student toilet), but only 50% said they had defecated at one time or another at school, and all did so in the student toilet.

A total of 50% of students said that urinating/defecating at school was different than at home for the following reasons:

Table 6.6

Thing that make urinating/defecating at school different from at home

No.	Difference	Number of Students*
1.	No soap	4
2.	Dirty/smelly	5
3.	No enough water	3
4.	Have to queue, take turns with other students	2
5.	4 other responses	4
<b>Respondent Base: 15 students</b>		

Pillar 2: Washing hands with soap

\*The table above is in absolute terms as the base number of respondents was less than 30.

The knowledge of the children regarding the benefits of washing hands with soap after defecation was better than their knowledge of the first CBTS pillar ('spread of disease through human feces').

Table 6.7

Perceptions of Children Regarding CTPS-related Activities

Description	Right	Wrong
Washing hands with water alone is enough to clean off disease-spreading germs	16.7%	83.3%

Description	Right	Wrong
We don't need to washing hands with soap after defecation unless our hands are sticky	6.7%	93.3%
<b>Respondent Base: 30</b>		

As regards availability of water, 40% said that they had experienced difficulties with water for bathing and washing in their home environments, but only 26.7% said they had done so in their school environments.

Table 6.8

Children's Description of Water Availability At Home and At School

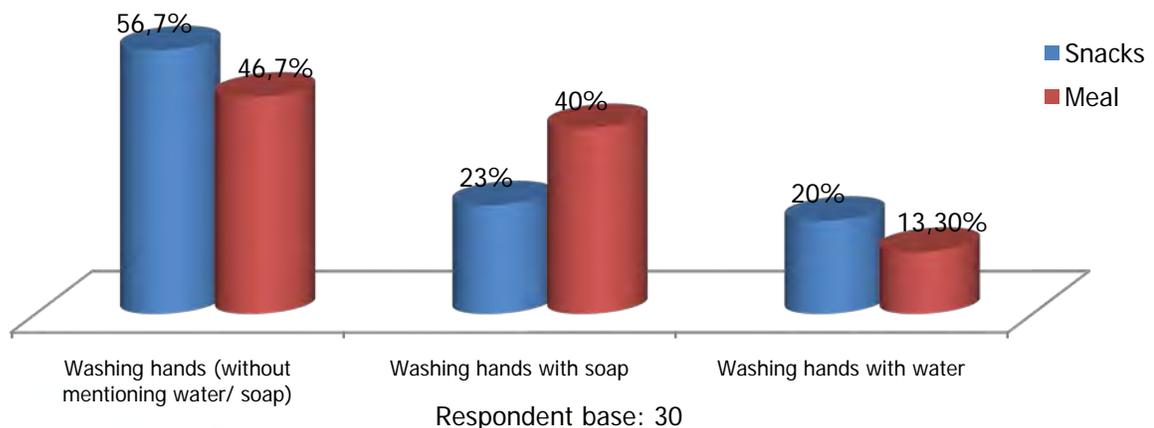
Have you ever experienced any of the following?	At Home (%)		At School (%)	
	Yes	No	Yes	No
Foul smelling or tasting drinking water	26,7	73,3	16,7	83,3
Difficulties with availability of water for bathing or washing	40	60	26,7	73,3
<b>Respondent Base: 30</b>				

Washing Hands in the Home

A total of 96.7% of respondents ate lunch at home, while only 3.3% did so at school. All of the respondents ate dinner at home. The following are their responses on their behavior before eating (both snacks and meals):

Figure 6.2

Behavior Before Eating (Snacks and Meals)



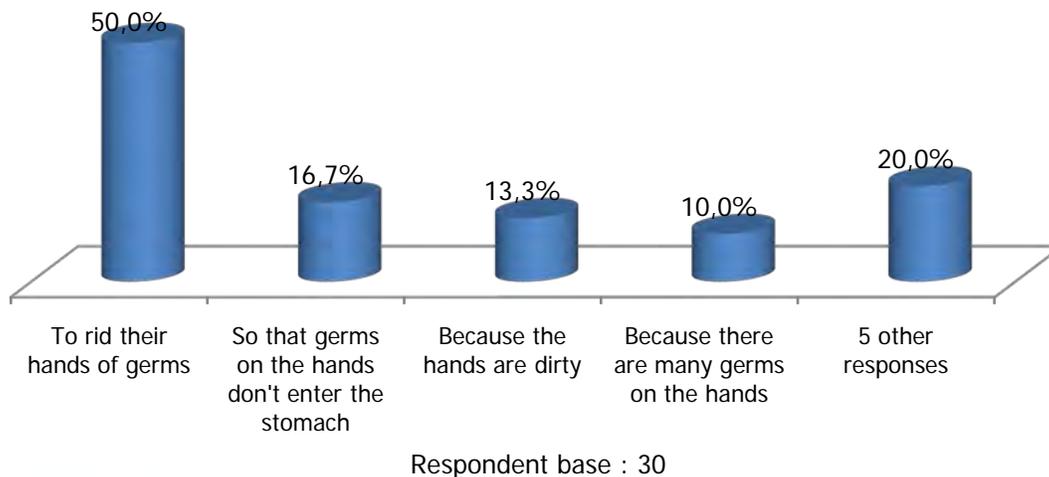
The majority of respondents (56.7%) said they just washed their hands (without mentioning water/soap) before eating snacks. The above table also shows differences in behavior prior to eating, with 40% of respondents saying that they washed their hands with soap before eating a meal, while only 23% did so before eating a snack. The table below summarizes the situation as regards washing hands before eating a meal and a snack:

Table 6.9  
Hand Washing Practices Before Eating (Meals and Snacks)

Group	SURABAYA
Children who always wash their hands with water but without soap (before eating snack or main meal)	63,3%
Children who always wash their hands with soap (before eating snack or main meal)	13,3%
Children who have better hand-washing practices before eating main meals compared with snacks	16,7%
Children who never wash their hands before eating	3,3%
Respondent base: 30	

The reasons given by respondents for washing their hands before eating were as follows:

Figure 6.3  
Reasons for Washing Hands Prior to Eating



Using open-ended questions, it was found that the main reason for washing hands before eating was to rid the hands of germs (50% of respondents). The remaining responses varied, but were also concerned with germs, while there were also 4 other responses: so as not to get a stomach ache, not to get diarrhea, not to get sick and not to have sticky hands.

The primary source of information on the importance of washing hands before eating so as to avoid germs was teachers in school (46.7%) and parents (43.3%).

The other situations when they practiced hand-washing with soap were (1) after defecating (50%), (2) after playing (33.3%); (3) after urinating (33.3%) and before sleeping (25%). The remainder consisted of 8 other responses, namely: after eating, after handling animals, after handling dirty things, after holding baby, etc.

A total of 100% of respondents said that they had facilities at school for washing hands, while 63.3% said that they always washed their hands before eating at school, and 36.7% said that they sometimes did so.

As regards the practice of hand washing with soap, 33.3% of respondents did it correctly (rubbing the palm and between the fingers with water and soap), while 23.3% rubbed between the fingers (without rubbing the palm) with water and soap, and 20% rubbed between the fingers with water alone. The remainder did not use water and soap.

### Pillar 3: Clean and healthy treatment of drinking water

A total of at least 60% of the elementary school respondents were aware of the importance of treating water before consumption, as well as treating food before consumption. Nevertheless, they still need more information on the risk of diarrhea from untreated water, and the dangers of consuming untreated vegetables. Their responses as regards their knowledge of the risks of diarrhea and bacteria from untreated vegetables, and the spread of germs by flies, are as shown in the following table:

Table 6.10  
Perceptions of Children About Activities Related to Defecation

Description	Right	Wrong
Eating untreated vegetables is healthy, and you don't need to worry about germs	36,7%	63,3%
Drinking untreated water can cause diarrhea	70%	30%
The legs of flies carry thousands of germs that can be spread from place to place	80%	20%
<b>Respondent base: 30</b>		

Although the elementary school respondents had quite good knowledge about the need to treat water before consumption, 36.7% of respondents referred to the drinking of untreated water at home.

Table 6.11

Children's Descriptions of Drinking Water Treatment At Home and At School

Have any of the following things happened?*	At home (%)		At School (%)	
	Yes	No	Yes	No
People drank untreated water	36,7	63,3	16,7	83,3
<b>Respondent base: 30</b>				

\*There were 'don't know' responses

As regards sources of water at school, 86.7% of respondents said that they purchased it at school, while only 6.7% brought it from home. Of the 86.7% who purchased it at school (20 students), 16 purchased branded packaged water (in both plastic cups and bottles), while others purchased ices (both branded such as Marimas, Sisri and Pop Ice, and unbranded). Seventeen respondents purchased drinks in the school canteen, while the remainder did so in stalls outside the school.

#### Pillar 4: Garbage Management

Based on observations conducted in the schools, uncovered garbage bins were the most common places (90%) where students disposed of the packaging from their snacks (whether consumed during playtime or in the classroom).

#### Pillar 5: Solid and Liquid Waste Treatment

As regards the wastewater disposal channels in the places where the respondents lived, 4 pictures were used, consisting of 2 pictures showing clean drains and 2 pictures showing dirty drains. These elicited the following responses from the elementary school children:

Table 6.12

Condition of Wastewater Disposal Channels in Place Where You Live

Picture Number	Picture	Water Channel Category	Percentage
11		Clean	40%

Picture Number	Picture	Water Channel Category	Percentage
12		Clean	20%
13		Dirty	40%
14		Dirty	-
Respondent Base: 30			

## B. Perceptions of Children of Environmental Cleanliness at School and at Home

The elementary school respondents in Surabaya were dominated by children whose schools were within Wonorejo (25 respondents out of a total of 30 in Surabaya). Of these, more than half (66.7%) said that their school environment was quite clean, while 30% said that their school environment was very clean. Of 5 respondents from Wonorejo Elementary School No. 2, one said that his school environment was not clean/dirty. The following table shows the children's responses:

Table 6.13

Children's Perceptions of Environmental Cleanliness

Perceptions of Environment	School	Home
Quite Clean	66.7%	83,3%
Very Clean	30%	10%
Dirty	3.3%	6.7%
<b>Respondent base: 30</b>		

Although 96.7% of respondents perceived their school environment to be clean (quite clean and very clean), and only 6.7% felt their home environments to be dirty, nevertheless all (100%) said that environmental cleanliness at school and at home needed to be improved (53.3% and 40% said, respectively, that it needed to be greatly improved).

A number of behaviors found in the children's environment (school and home) were acknowledged by almost all respondents (more than 60%) as being inappropriate, such as adults discarding garbage in the open, which could lead to blocked drains (60% in the home environment, and much cleaner in the school environment – only 26.7% had seen blocked drains around their schools), and the continued occurrence of floods during the wet season. A total of 70% of respondents said that diarrhea was still found in both their home and school environments.

Table 6.14

## Children's Descriptions of Inappropriate Actions Related to Cleanliness in the Home and School Environments

Have any of the following things happened:	At home (%)		At school (%)	
	Yes	No	Yes	No
Adults incorrectly disposing of garbage	80	20	40	60
Blocked water channels or drains	60	40	26,7	70
Dengue Fever	60	40	26,7	73,3
Flooding every wet season	80	20	80	20
Frequent outbreaks of diarrhea	70	30	73,3	26,7
<b>Respondent base: 30</b>				

Sickness Episodes in the Last Month

A total of 46.7% of children had been absent from school on account of sickness in the last month (February 2013). The illnesses experienced were as follows:

Table 6.15

## Illnesses Experienced in Last 2 Months – Multiple Answer

No.	Illness Experienced	Number of respondents*
1	Fever	2 persons
2	Temperature	8 persons
3	Stomach ache	2 persons
4	Headache	3 persons

No.	Illness Experienced	Number of respondents*
6	Cough	2 persons
7	Typhus	2 persons
8	6 other illnesses	6 persons
<b>Respondent base: 14 persons</b>		

\*The table above is in absolute terms as the base number of respondents was less than 30.

As regards diarrhea in the last 2 weeks (end February 2013), 36.7% of children had experienced it, while 63.3% had not experienced diarrhea in the last 2 weeks. According to the children, the causes of diarrhea were as follows:

Table 6.16

Causes of Diarrhea in Last 2 Weeks – Multiple Answer

No.	Cause	Number of respondents*
1	Eating spicy food	8 persons
2	Eating too many snacks	2 persons
3	2 other causes	2 persons
<b>Respondent base: 11 persons</b>		

\*The table above is in absolute terms as the base number of respondents was less than 30.

**Attachment**  
**Observations on Schools**  
**Target Schools and General Conditions**

TARGET SCHOOL	Number of Students	Number of Teachers	Number of toilets	School Floor	School Roof	School Walls
SDN PETEMON	600	25	5	Ceramic floor tiles	Roof tiles	Cement
SDN WONOREJO 7	405	15	2	Tiles	Roof tiles	Cement
SDN WONOREJO 5	271	26	3	Tiles	Asbestos	Cement
SDN WONOREJO 4	189	10	4	Ceramic floor tiles	Asbestos	Cement
SDN WONOREJO 2	245	15	3	Ceramic floor tiles	Roof tiles	Cement
SDN WONOREJO 1	373	18	4	Ceramic floor tiles	Roof tiles	Cement

SDN: Sekolah Dasar Negeri - state elementary school

**Target Schools and CBTS Pillar 1 – 1**

TARGET SCHOOL	TYPE OF TOILET	PLACE OF FECES DISPOSAL	CONDITION OF SCHOOL BATHROOMS	DISTANCE FROM WELL TO SEPTIC TANK/DROP TOILET	DISTANCE FROM WELL TO NEIGHBORING SEPTIC TANKS
SDN PETEMON	U-bend	Septic tank	Quite clean	No well	No well
SDN WONOREJO 7	U-bend	Septic tank	Quite clean	No well	No well
SDN WONOREJO 5	U-bend	Septic tank	Quite clean	No well	No well
SDN WONOREJO 4	U-bend	Septic tank	Quite clean	25 steps	12 steps
SDN WONOREJO 2	U-bend	Septic tank	Quite clean	20 steps	60 steps
SDN WONOREJO 1	U-bend	Septic tank	Quite clean	No well	No well

SDN: Sekolah Dasar Negeri - state elementary school

## Target School and CBTS Pillar 1 – 2

TARGET SCHOOL	GENERAL CONDITION OF TOILET													
	FECES PRESENT		GARBAGE PRESENT		FLIES PRESENT		WATER AVAILABLE		SCOOP PRESENT		WATER RECEPTACLE PRESENT		TOWEL PRESENT	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
SDN 06 497	x	✓	x	✓	x	✓	✓	x	✓	x	✓	x	✓	x
SDN PETEMON	x	✓	x	✓	x	✓	✓	x	✓	x	✓	x	x	✓
SDN WONOREJO 7	x	✓	x	✓	x	✓	✓	x	✓	x	✓	x	x	✓
SDN WONOREJO 5	x	✓	x	✓	x	✓	✓	x	✓	x	✓	x	✓	x
SDN WONOREJO 4	x	✓	x	✓	x	✓	✓	x	✓	x	✓	x	x	✓
SDN WONOREJO 2	x	✓	x	✓	x	✓	✓	x	✓	x	x	✓	✓	x
SDN WONOREJO 1	x	✓	✓	x	x	✓	✓	x	✓	x	✓	x	x	✓

SDN: Sekolah Dasar Negeri - state elementary school

## Target School and CBTS Pillar 2

TARGET SCHOOL	PLACE WHERE STUDENTS WASH HANDS							
	RUNNING WATER		CLEAR WATER		DRY TOWEL AVAILABLE		DRY TOWEL AVAILABLE	
	YES	NO	YES	NO	YES	NO	YES	NO
SDN PETEMON	✓	x	✓	x	✓	x	x	✓
SDN WONOREJO 7	✓	x	✓	x	x	✓	x	✓
SDN WONOREJO 5	✓	x	✓	x	✓	x	✓	x
SDN WONOREJO 4	✓	x	✓	x	x	✓	x	✓
SDN WONOREJO 2	✓	x	✓	x	✓	x	x	✓
SDN WONOREJO 1	✓	x	✓	x	✓	x	x	✓

SDN: Sekolah Dasar Negeri - state elementary school

**Target School and Pillar 3**

TARGET SCHOOL	FOOD CONTAINER IN CANTEEN	HOW IS FOOD PRESENTED IN CANTEEN	TYPE OF SCHOOL CANTEEN	HAND WASHING FACILITY IN CANTEEN	
				YES	NO
SDN PETEMON	Covered	Some covered, some uncovered	"Wet foods" on sale	✓	x
SDN WONOREJO 7	Covered	Covered	"Wet foods" on sale	✓	x
SDN WONOREJO 5	Covered	Covered	"Dry foods" on sale	✓	x
SDN WONOREJO 4	Covered	Some covered, some uncovered	"Wet foods" on sale	x	✓
SDN WONOREJO 2	Covered	Covered	"Wet foods" on sale	✓	x
SDN WONOREJO 1	Covered	Covered	"Wet foods" on sale	✓	x

SDN: Sekolah Dasar Negeri - state elementary school

**Target School and Pillar 4 – 1**

TARGET SCHOOL	NUMBER OF GARBAGE BINS	TYPE OF GARBAGE BIN	CLEANLINESS OF SCHOOL	FINAL DISPOSAL OF GARBAGE	GARBAGE SEPARATED?	
					YES	NO
SDN PETEMON	4	Uncovered basket	Very clean	Permanent covered container	✓	X
SDN WONOREJO 7	10	Uncovered basket	Quite clean	Permanent covered container	✓	X
SDN WONOREJO 5	9	Covered basket	Quite clean	Basket - outside	✓	X
SDN WONOREJO 4	12	Covered basket	Quite clean	Basket – in yard	✓	X
SDN WONOREJO 2	13	Covered basket	Quite clean	Basket - outside	✓	X
SDN WONOREJO 1	9	Covered basket	Quite clean	Basket - outside	✓	X

SDN: Sekolah Dasar Negeri - state elementary school

**Target School and Pillar 4 – 2**

TARGET SCHOOL	CLEANLINESS OF CANTEEN	TYPE OF GARBAGE RECEPTACLE IN CANTEEN	REGULARITY OF GARBAGE COLLECTION	ARE FOOD LEFTOVERS SEPARATED	
				YES	NO
SDN PETEMON	Very clean	Uncovered basket	Everyday	✓	x
SDN WONOREJO 7	Quite clean	Uncovered basket	Everyday	✓	x
SDN WONOREJO 5	Quite clean	Uncovered basket	Everyday	x	✓
SDN WONOREJO 4	Quite clean	Uncovered basket	Everyday	✓	x
SDN WONOREJO 2	Very dirty	Uncovered basket	Everyday	x	✓
SDN WONOREJO 1	Quite clean	Uncovered basket	Everyday	x	✓

SDN: Sekolah Dasar Negeri - state elementary school

## Target School and Pillar 5

TARGET SCHOOL	METHOD OF WASHING DISHES IN CANTEEN	WHERE DOES WASTEWATER FROM CANTEEN GO	IS THERE A FILTER WHERE DISHWASHING TAKES PLACE?		WHERE DOES WASTEWATER GO	
			YES	NO	BATHROOM	WASH-HAND BASIN (if any)
SDN PETEMON	Washed with soap, rinsed in clean water	Covered channel	✓	x	Covered channel	Covered channel
SDN WONOREJO 7	Washed with soap, rinsed in clean water	Covered channel	✓	x	Covered channel	Covered channel
SDN WONOREJO 5	Washed with soap, rinsed in clean water	No wastewater discharge	x	✓	River, pond, drain, canal & covered channel	Wastewater discharge pipe
SDN WONOREJO 4	Not available	River, pond, drain, canal & covered channel	x	✓	River, pond, drain, canal	Not available
SDN WONOREJO 2	Washed with soap, rinsed in clean water	Covered channel	x	✓	Discharge pipe	Covered channel
SDN WONOREJO 1	Washed with soap, rinsed in clean water	Covered channel	x	✓	Covered channel	Covered channel

SDN: Sekolah Dasar Negeri - state elementary school