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### **Executive Summary**

Developing good habits during childhood is essential for health and personality. Children in Government School are often form marginalized communities where absence family environment and surrounding would not help much for developing good habits.

The society for Door Step Schools, Pune (DSS) has been conducting kirloskar Wash Initiative aimed to develop such habits, in more than 55 locations reaching out to children from such Communities. DSS has been extending the learning from the WasH Initiative to other schools of Pune Municipal Corporation (PMC) and ZillaParishad (ZP), Pune.

As a part of this process, DSS identified the need to focus on sanitation and eating habits of the children, for their overall development and started a programon creating awareness and providing appropriate training to the children in government schools in the year 2016. DSS called the program as 'Teach Them Young' (TTY). Ensuring availability and usability of infrastructural facilities at schools and teaching sanitation and eating habits to children are the main objective of the program.

The program is implemented in 38 government run schools (PMC and ZP) through DSS representatives since 2016. DSS Staff helps the schools in developing / maintaining infrastructure like toilets, drinking water facilities, ensuring Cleanliness of toilets, before and after mid-day meal. Children are also guided for habits like using enough water after using toilets, washing hands after using toilets and before having food, hygiene habits and discipline during having meals.

An impact study was planned for assessment of the program with the following objectives:

 To observe availability and usability of current infrastructure facilities in schools and compare the scenario before the program

- 2) To assess habits of using infrastructure facilities by students
- 3) To assess use of the mobile app developed by PMC for infrastructure availability and maintenance
- To assess hygiene and cleanliness practices of students while having midday meals
- 5) To know role of student's groups in maintaining the habits
- To understand perceptions of teachers, parents and SMC members regarding the program
- 7) To recommend modifications for improvements in the programs, if required

**Methodology:** The Study indicators needed to have mixed methodology of qualitative and quantitative tools. 10 Schools were selected for the study, based on the criteria of duration of intervention, location, campus, Shifts, administration, and non-presence of Kirloskar Foundation. Secondary data as well as RTE norms were provided by DSS.

Primary data was collected through structured observation and semi-structured interviews of teacher, SMC Member, parents and students of 'balgat' members. Each school was visited twice.

#### Results:

- 1 Availability and Usability of Current Infrastructure Facilities in Schools:
- 1.1 Toilets, urinals and drinking water facilities being the basic facilities which schools should provide, those are mainly considered for the study. Prior to initiation of the program, taps were not available in the toilets. In those schools where available, many of the taps were not functional due to various reasons. The broken pipeline, broken doors of toilets, absence of buckets in the toilets, failed to create a good hygienic and sanitary conditions.

The observation indicates that 100% schools in the sample have separate toilets and urinals for girls and boys. Only three schools fulfil the RTE norm of ratio of

toilet to number of students. Other 7 schools have 50 to 60% toilets out of the required number. Only five schools have urinals 50% or more than the required as per RTE norms. All the schools had enough light in the toilet blocks, safe and maintained approach roads towards toilet blocks.

IN 8 schools toilets and urinals were clean. 2 schools were observed with toilets in unclean condition. Similarly, unclean were observed in a couple of schools. SMC members are satisfied with the cleanliness of toilets and water availability, however, one amongst four parents is dissatisfied with the cleanliness condition and availability of water in the toilets. 88.5% parents reported that their children use the toilets and urinals in the schools. About 12% of them said that because the toilets are dirty children do not use it.

- 1.2 90% of the schools have wash basins, which clean and the water was available.
- 1.3 Drinking Water: Except one school in Hadapsar area which has a community water facility outside the school premises, all the other schools have drinking water taps in schools. No schools have sufficient taps as per to RTE norms. Only one school has clean area near the drinking water tank. The water is safe for drinking according to the SMC members.
- 1.4 Mid-day Meal: mid-day meal is placed and served in clean surrounding and in desired quantity in all the 10 schools. 50% of schools have a separate place for having meals, in the remaining schools the food is served in corridor or ground, which is unhygienic. 13.7% parents have expressed their dissatisfaction regarding place of having meals, however, all the SMC members are satisfied with the arrangements.

Regarding quality of mid-day meals, Only 3 (5.8%) parents out of 52 expressed their dissatisfaction about quality of food. 9 (17.3%) parents said that their children do not like the food. The SMC members expressed satisfaction regarding quality of food, and the discipline followed by students before and during having meals. Only

one SMC member in 18 expressed that children get bored by eating the same menu rice every-day.

- 2. Habits of children for Proper Use of Infrastructure Facilities in Schools:
- 2.1 Habits of children regarding water usage in toilets could be observed only in two schools physically where all the children using toilets were flushing enough water.
- 2.2 Except the habits of spilling the food out of the plates, all other discipline was observed. Children were washing hands before eating, removing footwear, following queue for taking meal, sitting in row and praying. Habits of spilling food is proportionately high and picking it up ant putting in the dustbins is proportionately low. In one school, plates were provided by the school and children were washing plates themselves and there was a student monitor to supervise the habits. Conversation with parents also indicates that habits are followed at home and the study shows similar trend. 80% parents admitted that the school has a major role in children following these habits. 67.5% parents said that, along with the school, children are taught these habits at home also.
- 3. Perceptions of stake –holders (Teachers, SMC members and Parents about the program:
- 3.1 Activates and Efforts Taken by DSS-Perception of school principals and Teachers:

19 Teachers including 10 principals of the schools were involved in the study. 80% teachers reported that the DSS primarily undertook the work of repair or renewal of the available infrastructure. Smooth availability of water especially in toilets was an issue before. 60% teachers said that DSS worked on the issue.

Teacher have also reported the initiatives of DSS such as providing information to students through various methods like stories and films, making charts and instruction boards for display, teaching students about using toilets, hand washing

demonstrations, checking cleanliness of toilets etc., for proper usage and maintenance of the infrastructure.

Disciplinary habits developed among students by DSS are much appreciated by the teachers Initiatives on following discipline during mid-day meals include giving instructions and information to students in various ways regarding hand washing, sitting in row for having meals, praying before meals, not to spill the food, picking up the spilled food, not to waste food in plates, etc.

# 3.2 Changes Perceived as a result of 'TTY" program-by Teachers, SMC members and Parents:

SMC member have mostly admired the changes in cleanliness of toilets, followed by water availability in the toilets during last 2-3 years. Teachers have equally reported that the situation with respect to clean toilets, water availability and repair and maintenance of toilets has improved. Improvement in quality of food is an important change perceived by SMC members. According to teachers, discipline in student during mid-day meals is the main change that took place in the past 2-3 years. Improvement of habits related to personal hygiene and sanitation and maintaining cleanliness in the school is appreciated both the SMC members and teachers.

## 4 Role of Balgat in TTY program:

In TTY program, DSS created 'Balgat' in each school. 'Balgat' is a club of children formed in each school to monitor proper use of infrastructural facilities by students. A mixed group of students from each school are selected by DSS staff and teachers and a Balgat is formed for that school.

Conversation with Balgat members reveals that they have understood their role.

Their responsibilities include instructing and monitoring of students for keeping the toilets and school clean and following hygiene and cleanliness practices. Balgat members expressed that they faced a problem with senior students who generally ignored their instructions. They took Principal's help to overcome the issue. By and

large, the balgat members enjoyed the responsibilities given to them. While working as a member of the Balgat they understood the importance of hygiene and sanitation for maintaining health. They expressed their happiness to work as a Balgat member because they felt that the hygiene discipline is important and that they want their school be known as a disciplined school. They felt satisfied as their work is appreciated by various stake-holders.

### 5 Use of Mobile App in TTY Program:

The PMC Education Borad has developed a dedicated 'app' for PMC schools to manage maintenance issues of school infrastructure facilities. 73.7% of teacher (14) said that they have used the 'app'. Out of them, 71.4 % (10) have got the information and training and help in using the app form DSS.

DSS have actively used the 'app' in all 38 schools beyond the sample size of this study. During this usage, 353 issues were raised by DSS during the past 3 years. The issues were mainly too related to the health department, electricity department and construction department and construction department of PMC. 75.1% of the issues raised by DSS to PMC are resolved.

### 6 Utility and continuity of TTY Program- Teachers and the SMC Member's Opinion

The all teachers reported that the program is beneficial for the school for changing the hygiene habits and behavior of the children. They expressed that, as a result of DSS program, these habits are deeply-rooted in the children by now. All the SMC members also reported that the program is beneficial for inculcating hygiene habits. In order to ensure that the habits already formed are continued by the children in future and also in order to see that the new students develop these habits as and when they join, the teachers felt that the training by DSS to the teachers is needed. 26.3% teachers recognize that it is the teacher's role and most of them said they need DSS training and help so that they can take-over the responsibilities. Another 42.1% teachers opined that this is team work and not only teachers but children

and their parents also should be equally involved in the activities. 84.2% teachers communicated the need of the program in future too.

#### Conclusion:

To conclude,

- 1) DSS program 'Teach Them Young' is well accepted by schools and appreciated by various stake- holders.
- The hygiene and cleanliness habits of children have improved as a result of running TTY program in the schools. IT has created a better learning environment.
- 3) There is a gap between the requirement and the actual availability of infrastructural facilities in terms of toilets, urinals and drinking water taps. Efforts need to be made that will lead to bridge the gap.
- 4) A separate place could be allotted for the mid-day meals in the school wherever needed. If not, the place where mid-day meals is served need to be hygienic.
- 5) TTY program is currently running smoothly under the direct intervention of DSS. The overall opinion of the stake-holders of the schools is that DSS should continue the intervention in future also.
- 6) The program may be extended to various PMC and ZP schools for a larger positive impact on health and behavioral development of children.

### Introduction

#### 1.1 Background:

Habits forms the foundation of an individual's personality. Good habits will bring positivity in one's life and is equally important for good health. Habits are actions and behavior that one performs subconsciously and they are not easy to break.

Childhood is the best time to inculcate habits. They can easily learn what is told to them, and put them to use. Therefore, it is easier to inculcate good habits in them whilst they are young and agile minded. Schools are the best medium through which the habits can be inculcated. Among young children as almost equal part of the available time of children's day is spent in the schools.

Government schools are enrolled with children from lower socio-economic strata. Many a times there is lack of family environment to develop good habits. Even if parents make efforts to develop good habits among children. There are chances that are influenced by the surroundings and show reluctance in adapting them

### 1.2 The Society of Door step Schools:

The Society for Door Step Schools (DSS) is working in the PMC schools with the goal of addressing literacy amongst marginalized sections of the society. Problems faced by public school system like non-enrollment, wastage, stagnation and low quality learning of enrolled children are the issues addressed through DSS programs.

# 1.3 Teach Them Young Program of DSS:

DSS has been conducting kirloskar WaSH initiative aimed to develop such habits, in more than 55 locations reaching out to children from such communities. DSS has been extending the learning from the WaSH initiative to other schools of Pune Municipal Corporation(PMC) and Zilla Parishad (ZP), Pune.

As a part of this process, DSS indentified the need to focus on sanitation and eating habits of the children, for their overall development and started a program on creating awareness and providing appropriate training to the children in government schools in the year 2016. DSS called the program as 'Teach Them Young' (TTY). Ensuring availability and usability of infrastructural facilities at schools and teaching sanitation and eating habits to children are the main objectives of the program.

While working with the children in Government school, DSS identified the need to fouse n sanitation and eating habits of the children as a part of their overall development. It was observed that students in government school come from similar social and financial background with similar habits about health and hygiene, cleanliness and nutrition. As mentioned above, if sanitation and eating habits are not developed at the right age, the children grow up unaware and unconcerned about these important parts of life. Hence DSS decided to focus on creating awareness and providing appropriate training to the children in government schools, at the right age through TTY.

### 1.4 Components of TTY:

The TTY program is implemented in two levels:

### 1.4.1 Ensuring availability and usability of infrastructural facilities at schools:

- a) Availability of toilets for boys and girls; according to norms, separate toilets for girls
- b) Availability of water in the toilets
- c) Cleanliness of toilets
- d) Availability of pure drinking water
- e) Sufficient access to water-number of water taps, height of the basin etc.
- f) Separate and clean area for eating
- g) Safe and clean playground for children

- h) Boundary walls and entry gate for safety of children
- i) There should be no stink in schools

# 1.4.2 Teaching sanitation and eating habits to children and following up throughout the year

- 6.1 Conducting training sessions for students to teach
  - **6.1.1** Using ample water after using toilets
  - 6.1.2 Washing hands after using toilet and before eating
  - 6.1.3 No spilling or throwing away food given as mid-day meal
  - **6.1.4** Eating in a clean and dust-free area
  - **6.1.5** Closing the water tap properly after use to save water
- **6.2** Displaying board to identify separate toilets, drinking water, eating area etc.
- **6.3** Displaying charts showing good sanitation and eating habits, related pictures, scientific information etc.
- **6.4** Forming students groups to monitor maintenance and proper use of sanitation facilities at schools.
- **6.5** Involving teachers, parents and school management committee (SMC) member in implementation of this program.

The program is implemented through DSS representatives in schools. Mid-day meals are monitored every day. They help the schools in developing maintaining infrastructure like toilets, drinking water facilities, ensuring cleanliness of toilets, before and after mid-day meal.DSS staff also guide children for develop habits like using enough water after using toilets, washing hands after using toilets and before having food, sitting in a row for food, saying prayer before having food. Importance of good eating habits and cleanliness is told to children. The mid-day meal is monitored daily.

Children are even encouraged to avoid wastage caused by spilling or halfway leaving food.

Following table 1.1 gives a clear idea about implementation of the program activities in the schools:

Table 1.1: Implementation Plan of the program Activities:

	Activities	Details
1	Checking of toiles	Daily checking of toilets and urinals for cleanliness
	and urinals	Checking working condition of taps and doors of the toilets
		Checking water availability in the toilets and urinals
		Updating daily records of toilets and urinals
		Informing concerned authorities about improper infrastructure through
		mobile app.
2	Parent's meeting:	Ask children to use toilets for defecation
	information of	Ask children to use water after toilet usage
	good habits of	Ask children to wash their hands before having meals
	children in	Introduce proper habits to children e.g. take the food in required quantity
	parents meeting	and not to spill the food.
		Instead of plastic tiffin, give steel tiffin to children
		Give only chapatti and sabji in the tiffin, avoid giving junk food like maggi
3	Film Show	Film show for children
		Discussion on films
		Discussions on importance of hand-washing and when to wash hands
		Discussions on why and how to use toilets
		Drawing on the cleanliness
4	Competitions	Forming children groups in the school(balgat) with the objective of
		developing hygienic practices among children
5	Forming	Make children to sit in the row
	children's groups	Ask children to wash hands
		Checking of toilets
		Ask children to take the food in required quantity

## 1.5 Current Study:

The program is stared in 2016 and implemented in 38 government schools so far. With the intervention of 2.5 years DSS expressed a need of evaluation of the program. Main aim of evaluation is to know the impact and scope before further development of the program.

### Objectives of the impact assessment are as follows:

- 1 To observe availability and usability of current infrastructure facilities in schools and compare the scenario before the program
- 2. To assess habits of using infrastructure facilities by students
- 3. To assess use of the mobile app developed by PMC for infrastructure availability and maintenance
- 4. To assess hygiene and cleanliness practices of students while having mid-day meals
- 5. To know role of students group in maintaining the habits
- 6. To understand perceptions of teachers, parents and SMC members regarding the program
- 7. To recommend modifications for improvements in the programs, if required

# 2. Methodology:

**2.1. Indicators:** Certain indicators were decided based on the objective of impact assessment study. Following table gives an overview about indictors and methodology proposed for the impact assessment.

Table 2.1: Indicators for the study

	Objective	Indicators	Type of data	Data collection
			collected	Tools
1	To observe availability	% of infrastructure available in	Quantitative	Structured
	and usability of current	working condition in the		Observation tool
	infrastructure facilities in	sampled school		
	schools and compare	2.% schools having all the		
	the scenario before the	necessary infrastructure in		
	program	working condition		
2	To assess habits of	% schools where children	Quantitative	Structured
	using infrastructure	following desirable habits of		Observation tool
	facilities by students	using infrastructure facilities		
3	To understand hygiene	% schools where children	Quantitative	Structured
	and cleanliness	following desirable hygiene		Observation tool
	practices of students	and cleanliness habits		
	while having mid-day	Teacher/principal's and		
	meals	parents perceptions about		
		change in habits		
4	To understand	Perceptions of teachers,	Quantitative	Semi-structured
	perceptions of teachers,	parents and SMC members	Qualitative	Interview
	parents and SMC	about effectiveness of the		Schedule
	members regarding the	program		
	program			
5	To assess use of the	% % Schools used app	Quantitative	Secondary data
	mobile app developed	Proportion and types of		Records of DSS
	by PMC for	complaints made by various		

	infrastructure availability	stakeholder including DSS		
	and maintenance	staff		
		% complaints resolved		
		School staff and SMC		
		members experience about		
		using app		
6	To know role of	Students perception and	Qualitative	Semi-structured
	students groups in	experience about performing		Interview
	maintaining the habits	their role		schedule for
				Balgat students
7	To recommend	Gaps can be emerged from		
	modifications for	the data		
	improvements for			
	improvements in the			
	programs, if required			

- **2.2 Type of Study:** There was no control group for this Study. The impact was assessed following the same cohort.
- **2.3 Sampling:** Although the program is implemented 38 School for 2 or more years; two schools are sharing same premises. This way there are 18 locations. The criteria for selection of schools was as follows.
- 1 **Duration of intervention:** Schools where intervention was done for two or more years are considered.
- 2. **Location of schools:** Most of the geographical location represented in the sample to avoid bias
- 3. **Campus:** Two schools from same campus were avoided as they share the same infrastructure.

- 4. **Shifts:** The schools work in the morning and afternoon shifts. Schools from both the shifts were selected to avoid bias.
- 5. **Administration:** Schools run only by Pune Municipal Corporation were selected as schools run by Zillah Perished are in the rural areas.
- 6. Schools in which Kirloskar Foundation do not have any activity were selected to avoid bias.

As the number of schools intervened is small, 25% sample i.e. 10 Schools were selected for the study.

### 2.4 School Profile:

Table 2.2: Name, Location and Number of Schools:

Sr.No	School Name	Location	School Number
1	Amruta Shetiba Dashavtari Maharaj	Vaiduwadi	88G
2	Kai. Venutai chavan Primary School	Sutarwadi	135B
3	Samrat Ashok vidyalaya	Karvenagar	117B
4	Ramchandra Patlu Chaudhary vidyalay	Warje	101G
5	M.N.P School	Bavdhan	82B
6	Baburao Madhavrao Tingare Prathamik	Dhanori	164B
	Sala		
7	Lata marutarao sopan kale	Kalepadal	12B
8	Late Nivaruti Tukaram Pawar Prathamik	Vitthalnagar	207B
	Vidyalay		
9	Sant Tukaram Prathamik Vidyalaya	Pashan	55B
10	Hanumantrao Ganpatrao Jagatap School	Hingane	168B

An effort was made to select specially boys' and girls' school however, most of the schools are converted to Co- education schools and hence only one girls' school was selected in the sample.

#### 2.5 Data collection:

- Data was collected by trained investigators of kirloskar Foundation, during Jan-Feb 2019
- A written intimation was presented in each school by DSS staff and the investigators.
- Each school was paid two visits. First visit was a surprise visit without prior
  intimation to the school as well as to the DSS staff. Structured observation
  schedule was filled on the first visit. This visit was also used for planning of
  the second visit so that the respondents i.e. parents and SMC members
  could be invited in the school.
- **2.6 Tools and techniques used:** Semi- structured questionnaires were used for quantitative data
- **2.7 Sources of Data:** Secondary data is made available from DSS records. Primary data was collected from-
  - Observation of Investigators: Structured observation schedule was filled by the
    investigators to ensure availability and usability of infrastructure in 10 schools.
     The data is compared with the baseline secondary data to know the impact of
    the program.
  - Teachers: Two teachers from schools; one of them is principal of the school: teachers reported their opinion about the need of the program, effectiveness and benefits of the program. Total teachers interviewed were 19 out of which 10 were the principal of the school and 9 were most involved teachers in the program.
  - School Management Committee Members: Two school management committee membes (Mostly parents and teachers are available) Total 18 SMC members

were interviewed. In two schools, the interviewers could meet only one SMC member.

- Parents: As the age group of children intervened is young, there are chances
  that the data reported by them will be biased. Hence parents 5 parents of
  students from 3<sup>rd</sup> and 4<sup>th</sup> standard students were involved as these students
  have received the intervention for two years. Altogether 52 parents were
  interviewed from 10 schools.
- Students of Balgat Members: 10 FGDs were conducted with Balgat members in all the 10 schools.

# 2.7.1 Profile of Respondents:

> Age and sex Distribution of Respondents: Following table illustrator's age and sex distribution of the respondents from each category.

Table 2.3: Age and Sex of the Respondents:

Variable	Categories	Parents	Teachers	SMC members	Total
		(N=52)	(N=19)	(N=18)	( N=89)
Sex	Male	3	0	3	6
	Female	49	19	15	83
Age	<=25	14	0	0	14
Groups	26 to 35	30	4	10	44
	36 to 45	6	3	8	17
	46 to 55	0	9	0	9
	>55	2	3	0	5

Among the parents interviewed, 90% were mothers. School management committee consists of parents, teachers and local leaders. However, the investigators could not meet the local leaders. Hence almost all the SMC members interviewed are either parents or teachers.

Table2.4 Educational Background of Parents and SMC Members:

Categories	Parents (N=52)	SMC members
		(N=18)
Illiterate	12	2
Primary (1-4)	6	0
Secondary (5-9)	17	3
SSC	10	6
HSC	6	4
More than HSC	1	3
18Total	52	18

Data Management and Analisis: Ms Exeal is used for data is encondingand anliysis

# Results

Results of the impact study are assessed according to objective and indicators set for the study.

# 3.2 Availability and Usability of current Infrastructure Facilities in Schools:

Availability of infrastructure facilities in school has considerable impact on school environment. It is one of the most important indicators for assessing whether the schools are providing a promising learning environment for children. It is a major factor for regular participation of students and finally resulting in improvement in their learning levels. Toilets, urinals and drinking water facilities are mainly considered for this particular study as these are the basic important facilities school should provide. Unsatisfactory condition of toilets and urinals and lack of safe drinking water are demotivating factors for children and their parents.

# 3.2.1 Infrastructure Availability and Usability Conditions in Toilets in the sampled schools:

Requirement of infrastructure based on RTE norms, were provided by DSS. RTE has recommended that each school should be equipped with separate toilets for boys and girls, safe and adequate drinking water facility to all children. According to observation, all the 100% schools in the sample have Separate toilets and urinals for girls and boys.

According to norms there should be one toilet per 40 children, however only three schools fulfill the norms. Other 7 schools have 50 to 60% toilets out of the required number. Following table 3.1 show details of the toilets available in the schools:

Table 3.1: Number of Toilets Available in the schools

Srno	Place	School mumber	Total no of toilets observed	Required no of toilets according to RTE norms	% of actual toilets	Ratio of toilet to children
1	Vaiduwadi	88G	2	3	66.7	57
2	Sutarwadi	135B	4	6	66.7	49
3	Karvenagar	117B	4	6	66.7	70
4	Warje	101G	5	5	100	65
5	Bavdhan	82B	16	8	200	20
6	Dhanori	164B	9	13	53.8	62
7	Kalepadal	12B	5	15	60	120
8	Vitthalnagar	207B	5	5	100	32
9	Pashan	55B	12	24	50	22
10	Hingane	168B	4	15	60	56

The table describes M.N.P school in Bavdhan has constructed a new toilet block recently; hence it is showing double the proportion of toilets than required.

Along with sufficient number of toilets in the schools, availability of taps in working condition, water availability in the toilets and doors in good condition is also equally important to make the toilets usable. Table 3.2 throws a light on these essential criteria

Table 3.2: Criteria for Toilets being Usable:

Sr	criteria	Observed	SMC Members	Parents Opinion
no		data	Opinion	
1	Availability of taps in all the toilets	9 (90%)	NA	NA
2	Availability of water in all the toilets	10 (100%)	100%	76.9%
3	Clean toilets	8 (80%)	94.4%	73.1
4	Availability of doors in proper	9 (90%)	NA	NA
	condition			
5	Cleaning toilets more than once per	7 (70%)	NA	NA
	day			

All the schools had enough light in the toilet blocks, safe and maintained road towards toilet block.

Only one school reported that the cleaning is done thrice in a day. Another school has also reported that there is CSR support in terms of human resource for cleaning the toilets.

Unclean toilets were observed in two schools as the toilets were stinking and there was garbage lying in the toilets. In one of the schools, although it appeared that the toilets were cleaned recently but still the cleaning was not done properly.

> Opinion of SMC Members and parents about Toilet Availability and Usability:

As per the table 3.2 SMC members are satisfied with the cleanliness of toilets and water availability, however, one amongst four parents is dissatisfied with the cleaning conditions and availability of water in the toilets. 88.5% parents reported that their children use the toilets and urinals in the schools. Rest of them said that because the toilets are dirty children do not use it.

# > Scenario before the Program:

Prior to initiation of the program, taps were not available in the toilets. In those schools where available, those were not in the condition of water supply. The broken pipeline, broken doors of toilets, absence of buckets in the toilets, failed to create a good hygienic and sanitary conditions.

# 3.2.2 Avalability and Usability of Urinals in the sampled schools:

Availability of actual number of urinals, expected number of urinals according to RTE norms and ratio of urinals to students is illustrated in the following table.

Table 3.3: Number of Urinals Available in the Schools:

Sr	Place	School	Total no of	Required no.of	% of actual	Ratio of urinals
no		number	urinals:	urinals as per	urinals	to students
			observed	RTE norms		
1	Vaiduwadi	88G	8	10	80	14
2	Sutarwadi	135B	8	19	42.1	24
3	Karvenagar	117B	10	18	55.6	28
4	Warje	101G	10	17	58.8	32
5	Bavdhan	82B	13	23	56.5	25
6	Dhanori	164B	10	39	25.6	56
7	Kalepadal	12B	5	47	10.6	120
8	Vitthalnagar	207B	0	14	0	0
9	Pashan	55B	28	68	41.2	9
10	Hingane	168B	8	16	50	28

Only five schools have urinals 50% or more than the required as per RTE norms. Ratio of one urinal to be used by number of students is too high in school number '12B' at kale Padal. At all the place urinals and toilets are in the same block.

Similar to toilets, urinals were also observed for its usability. Following table display the conditions of urinals for usability:

Table 3.4 Criteria for usability of urinals

srno	Criteria	Observation	SMC	Parents
		data (n=10)	Member	Opinion
			Opinion	
1	Availability of water in all the Urinals	9 (90%)	94.4%	76.9%
2	Clean urinals	8 (80%)	100%	69.2%
3	Use of Phenyl in urinals	5 (50%)	NA	NA
4	Sufficient light in urinals	9 (90%)	NA	NA
5	Safe and maintained roads towards	9 (90%)	NA	NA
	urinals			

In one school investigators reported that although urinals were clean, the block was stinking a lot. In another school there was lot of water accumulated in front of toilet block which made the road unsafe.

Alike toilets, parents positive perception about cleanliness of urinals is low than SMC members. 9.6% directly reported that the urinals are not clean and 21.2% are ignorant about the situation.

# 3.2.3 Availability of wash Basins:

Wash basins are needed mainly to wash hands after using the toilets and urinals. 9 out 10 schools show availability of wash basins. All those basins were clean and water was available there.

# 3.2.4 Drinking Water Availability

Along with toilet facilities, availability of safe drinking water is one of the basic rights of children. Except the school in vaiduwadi, all the other schools have drinking water taps in schools. However, Ratio of drinking water taps for number of students is as follows:

Table 3.5 Availability of Drinking Water Facility

Sr.no	Place	School number	Total no of dr.water taps:observed	Required no.of.dr water taps according to RTE norms	% of actual Taps	Ratio of dr.water taps to children
1	Vaiduwadi	88G	0	14	0	0
2	Sutarwadi	135B	1	15	6.7	195
3	Karvenagar	117B	12	15	80	23
4	Warje	101G	8	14	57.1	41
5	Bavdhan	82B	8	26	30.8	40
6	Dhanori	164B	8	31	25.8	70
7	Kalepadal	12B	9	36	25	67
8	Vitthalnagar	207B	2	11	18.2	80
9	Pashan	55B	8	34	23.5	32
10	Hingane	168B	4	13	30.8	56

No schools have sufficient taps as per the RTE norms. Maximum proportion of taps are observed in 101 G. According to RTE norms, there should be 6 taps for 100 children. Thus 1 taps should be utilized by 16-17 children. Therefore, above table underlines the fact that there is insufficient drinking water taps in the schools.

Along with insufficiency only one school has clean surrounding near the drinking water tank.

Quality of drinking water was inquired with SMC members. All of them stated that drinking water in schools is safe.

#### 3.2.5 Mid-Day Meal:

Mid-day meal scheme is run by the Government with an objective of improving nutritional status of children in Government schools. The meal is prepared by small saving group members and brought to the schools.

One of the components of TTY program is introducing discipline and cleanliness during serving and consuming meal. DSS representatives have taken efforts for proper arrangements of mid-day meal i.e. clean surrounding of serving area and clean place for consumption of food. The person serving the meal was also educated about keeping the food at proper place and serving it in required quantity.

# 3.2.5.1 Arrangements of Meals:

Observations regarding arrangements of mid-day meal show that mid-day meal is placed and served in clean surroundings and in required quantity in all the 10 schools.

5 out of 10 schools have a separate place allotted for having meals. Those are a hall, a separate class-room or a temple shed which locked otherwise. Rest 50% schools either serve the meal in the corridor or on the ground. Investigators reported those places as improper for consuming meal as these places are otherwise used for walking with footwear. The places are swept before having food but not cleaned with water.

7 (13.5%) parents expressed their unhappiness with the place of having mid-day meal which is mostly corridor or open place. They opined that the place is dirty and dust comes in the food.

However, the SMC members opined that the school has made separate arrangements for having meal and the arrangements are good. All SMC expressed their satisfaction about arrangements and discipline followed for mid-day meal.

# 3.2.5.2 Quality of Mid-day Meals:

Only 3 (5.8%) parents out of 52 expressed their dissatisfaction about quality of food 9 (17.3%) parents said that their children do not like the food. Rest of them was satisfied about mid-day meal.

Out of 52 parents, 11 (21.2%) parents made complaints/suggestions in mid-day meal out of which 8 parents reported that the complaints were solved. The complaints are mainly about quality of food and cleanliness in cooking and serving the food.

8 (15.4%) parents mentioned that they volunteered in mid-day meal in schools. Following table shows the help offered by parents in mid-day meal.

Table.3.6: Help offered by Parents in Mid-day meal:

	Frequency (N=8)	Percent
In kitchen	2	25.0
Served children	4	50.0
Managed children	3	37.5
Took Prayer	1	12.5

The SMC members expressed satisfaction regarding quality of food, and the discipline followed by students before and during having meals. Only one SMC member in 18 complained about menu in mid-day meals as children get bored by eating the same menu (rice) every-day.

One SMC member out of was unaware of anything about mid-day meal.

### 3.3 Habits of children for proper Use of Infrastructure facilities in schools:

Even if the infrastructure facilities and the systems are developed well, proper usage of those is very important from maintenance point of view as well as for good health and hygiene. Therefore, children are also educated about healthy and positive habits regarding usage of infrastructure facilities in the schools.

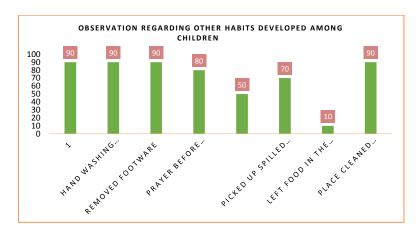
### 3.3.1Habits Of Using Toilets and Urinals in schools:

Habits of children regarding water usage in toilets could be observed only in two schools physically as children were feeling embarrassed before the investigators to use the facilities. In those two schools all the children using toilets were flushing enough water. In other schools, the condition of the toilets and urinals indicted use of water after using.

### 3.3.2 Cleanliness Habits Pertaining to Mid-day Meal:

Along with sanitary habits, other habits of children especially, for consuming mid-day meal were worked upon. Those are not only cleanliness but also disciplinary habits which would surely help the children in their future lives. Direct Observation was performed to assess this component. Development of habits in actual is understood through the following figure 3.1:

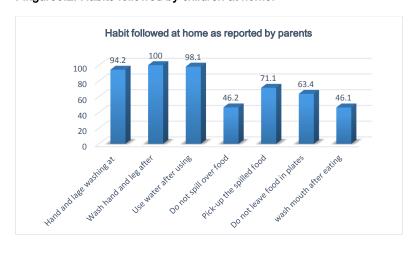
Figure 3.1 Observation regarding other Habits Developed among children



Except the habits of spilling the food out of the plates, all other discipline was observed well in place.

Parents were also asked about the children's behavior at home as the objective is that the habit should be percolated deeply and should from part of routine life. Then only it would serve the purpose. Following figure 3.2 indicates children's behavior at home.

Fingure 3.2: Habits followed by children at home:



The figure when compared with the previous figure shows the similarity in the trend. This indicates that the intervention has made an impact on the children.

Parents were also probed for school's role in developing the habits. Almost 80% parents admitted that the school has a major role in this. However, 67.5% also says that along with the school, children are taught these habits at home also. Following figure 3.3 throws the light on the perceptions of parents about habit development.

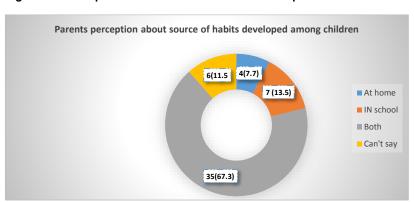


Figure 3.3: Perceptions of Parents about Habit Development

# 3.4 Perceptions of Stake-holders (Teachers, SMC members and Parents about the Program:

The program activities are not only benefitted the students but also teachers have directly benefitted through the program. Along with, parents have indirectly benefitted as the disciplined children would reduce their workload.

# 3.4.1 Activities and Efforts Taken by DSS as Reported by the school Principals and Teachers:

Primarily, principals of the schools were contacted by the investigators as it was informed that the principals are directly involved in the program. However, in all the schools except M.N.P school at Bavdhan, one more teacher who looks after the program was interviewed. In all, 19 teachers opined about the program.

All the 100% teacher reported the 'Reading classes as the major activity of DSS. 'Teach Them Young' is not perceived as a separate program but it is mostly one of the many activities of DSS in the school.

## 3.4.1.1 Efforts for Improving Infrastructure:

All the Teachers were asked about the efforts taken by DSS staff to improve the infrastructure especially, toilet block and drinking water; 5 of them could not report anything. Two from these five are principal of the school. School 55 B at Pashan, which is one of those schools, even the teacher could not say anything. Similarly, in school 168 B at Hingane, although, the principal could not mention anything. The teacher has reported the use of app for complaints regarding improper infrastructure.

Table 3.8: Efforts of DSS for Proper Usage and Infrastructure (Multiple Answers)

Efforts for Cleanliness (n=19) (Multiple Answers)			
	Frequency	%	
Providing information to students through various methods	11	57.9	
like stories and films			
Teach students about how to use toilets	10	52.6	
Wash hands	5	26.3	

Prepared notice boards and displayed	5	26.3
Choking cleanliness of toilets and overall school	4	21.1
Provided bucket and soaps	2	10.5
Formation of 'Balgat' and instructed in meeting	1	5.3

More than 50% of the teachers have reported that information about proper usage of toilets and hand-washing and other information was spread through various methods by the book fairies. Notice board are mentioned by around 25%.

When probed that whether the students were made aware about using toilets and urinals properly, usage of water after using toilets and hand-washing with soap after using toilet,18 out of 19 teachers and 100% SMC members agreed. Only one teacher said that she do not know about it.

Although 'Balgat' meaning group of students who would take responsibility of cleanliness and discipline; are formed in all the schools only one teacher has realized it.

### 3.4.1.3 Efforts for Improving Mid-day Meal and Disciplinary Habits:

The data shows that disciplinary habits developed among students are much appreciated by the teacher's rather than improvements in the system of serving midday meal. Very few teachers have mentioned the help of DSS in arranging separate place for having meals, taught cleanliness to the serving person and providing dustbins for putting left-over food.

Following table 3.9 illustrates disciplinary habits developed by DSS as perceived by teachers:

Table 3.7: Efforts of DSS for Improving School Infrastructure (Multiple Answer)

Efforts of DSS for Improving School Infrastructure (n=14)

	Frequency	%
Repair/ renew of current/ available infrastructure	12	80
Smooth running of water	9	60
Register/ follow up of complaints	5	33.3
Took efforts for new construction	2	13.3

Repair or renewal of available infrastructure includes repair of toilet door and windows, waterproofing of toilets, electricity supply in toilets blocks, etc. Along with this, another major responsibility bared by DSS Staff is smooth running of water especially in toilets. Because of damaged pipeline, there was interrupted water supply in the toilets. The taps were not in working condition. Considerable efforts were taken to make the water supply smooth.

There is an app developed by pune Municipal Corporation for registration of complaints regarding infrastructure in the schools. 33.3% teachers reported that DSS took efforts for registering complaints on app or follow-up of the complaints.

# 3.4.1.2 Efforts for Proper Usage of the Infrastructure:

As it is discussed above, maintenance of improved infrastructure by proper usage and keeping clean is another initiative taken by DSS. Following table 3.8 illustrates teachers' perception about efforts taken by DSS staff for proper usage and maintaining cleanliness of the improved infrastructure in the schools.

Table 3.9: Disciplinary Habits Developed by DSS as Perceived by Teachers:

Efforts For MDM (n=19)		
	Frequency	%
Hand-washing	14	73.7
Sit in row for having meal	11	57.9
Pick spilled food and throw in dust bin	6	31.6

Not to spill and waste food	5	26.3
Teach Prayer	5	26.3
Other habits	4	21.1
Check quality of food	2	10.5
Separate sitting arrangements	1	5.3
Taught cleanliness to person serving the food	1	5.3
Provide dustbin for left-over food	1	5.3
Notice board and display	1	5.3

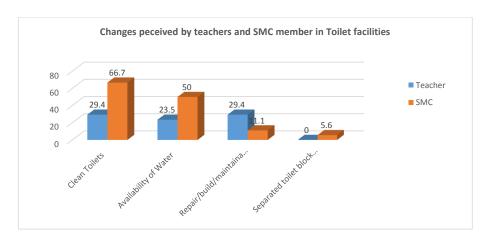
However, 100% teachers and SMC members reported that the information on following discipline during mid-day meals is given to the students by DSS staff and children are following it.

# 3.4.2 Changes Perceived by Teachers, SMC members and Parents as a result of 'TTY' Program:

# 3.4.2.1 Changes in Toilet Facilities:

Teachers and SMC members were asked whether they perceive any changes in the toilet facilities before 2-3 years and now. Out of 19, 2 teachers were no there 2-3 years before in the same school. They could not respond to the question. Four teachers have not responded anything to the question. So, 14 teachers have responded to the question asked.

Following figure 3.4 shows the perceived changes by teachers and SMC members in the toilet facilities.

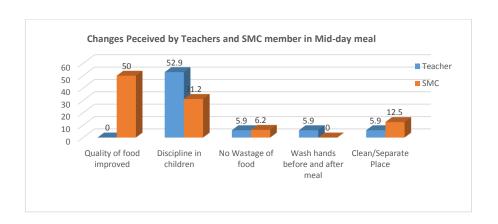


As the figure indicates, SMC members have responded more spontaneously Cleanliness of toilets is much appreciated and noted difference by both the groups. However, repairs and/ or renovated toilets blocks and availability of water are predefining factors responsible for cleanliness.

# 3.4.2.2 Changes Perceived in Mid-day Meal:

Following figure 3.5 indicates the changes perceived by teachers and SMC members in mid-day meal during last 2-3 years

Figure 3.5: Changes Perceived by Teachers and SMC members in Mid-day Meal



Improvement in quality of food is reported only by SMC members as they are actively involved in improving quality of food. They visit the kitchen monthly and observe the meal. Teachers have not reported about quality of food.

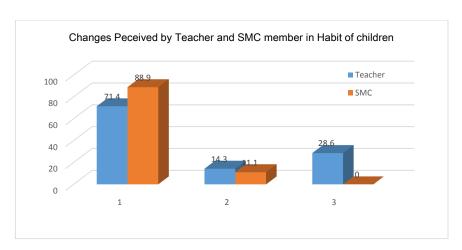
The data shows that teachers have most appreciated the development of disciplined behavior. This included children coming in queue, sitting in rows, finishing everything that is served, etc.

# 3.4.2.3 Changes Perceived in Habits of Children:

Both teachers and SMC member agreed that there is considerable difference in habits of children. The habits are mostly related to personal hygiene and sanitation and maintaining

Cleanliness in the school. Improvement in discipline is reported only by teacher. Following figure 3.6 illustrates the data.

Figure 3.6: Changes Perceived by Teachers and SMC member in Habits of children



Parents have also agreed to this fact that children have developed good habits pertaining to personal hygiene and sanitation. 46(88%) parents expressed that there is a difference in the habits of children during last 2-3 years.

100% teachers feel that the habits are very well learned by children and ingrained among them.

### 3.4 Balgat

Balgat are the child clubs that are formed in each school to monitor the proper use of infrastructural facilities by the students. This way the students would develop the sense of ownership and responsibility towards the school infrastructure.

On an average there are 10 balgat members in each school. It is a mixed group of girls and boys from different classes and seniorities. DSS staff and teachers together select the student.

A conversation was held with the balgat members in all the school, with a purpose to assess their own understanding towards it and role they are performing currently.

Balgat members were asked about the purpose for their group Formation. The response indicate that they have understood their role in a proper way. Most of them

replied that the group is formed to maintain discipline and cleanliness in the school by instructing students. In one of the schools, the children innocently replied that they are selected because they are clever and have good qualities.

Their work responsibilities include not only instruct the students for keeping toilets clean, washing hands after toilet usage, not to wash hands at drinking water taps, following the disciplinary rules, keeping the classrooms clean; but also making charts for information about hygiene and sanitation. In one of the schools they have also mentioned that they meet the parents of children and request them to send them in schools.

However, although children told the duties they perform; almost all of them mentioned that other students do not listen to them, especially the elder students. This challenge is managed by informing the seniors, principals or other teacher or DSS staff about those children. Some of them have also reported that previously the students showed ignorance for following the instruction but now there is no such problem; they are used to it. Other students are also instructed during assembly.

Making students to pay the fine is also one of the solutions mentioned in one of the school.

All the children reported that they enjoy this work as many of them have really cared for good health and they have understood the importance of hygiene and sanitation. They also know the importance of discipline and wish that their school should be known as a disciplined school.

They also enjoy the work as this selection is a kind of an appreciation for them. If they are disciplined, people praise them.

The investigators noticed that the balgat members were really active and they are really convinced about the importance of their work. Only in one school, investigators find that the group is not at all active on the visit day.

### 3.5 Use of Mobile App:

Education board of Pune Municipal Corporation has developed an 'app' for registering complaints/ issues related to infrastructure facilities in the school. School authorities are supposed to use the app.

13 (68.4%) school teachers have reported that they have ever raised the issues related to school infrastructure to the concerned authorities such as regional office, PMC ward office or commissioner. Those issues were regarding water taps, electricity and toilet block in the school. Majorly of the issues were raised in writing.

Then the teacher were probed about use of app for raising issues. 14(73.7%) of them said that they have used the 'app'. A considerable proportion that is 6 (42.9%) of them have got the information and training from DSS. However, four of them also reported help of DSS in using the app. Following is the help offered by DSS for using the app:

DSS help in using app

Give Information Training
Registration fo App
Download App
issues Raised

Figure 3.7: DSS' help in using the app:

90% of those who have taken help of DSS for using the app, have reported that the issue is resolved.

DSS has also maintained data regarding issues raised through app since 2016. Following table throws a light on the issues raised and resolved by DSS regarding school infrastructure.

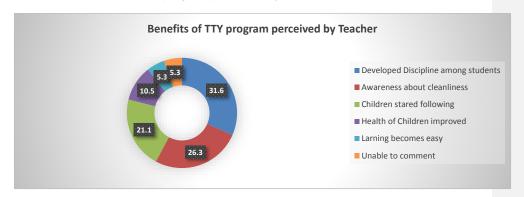
Table 3.10: Issues raised and resolved by DSS regarding school infrastructure through the app

Year/Department	Construction	Health	Electricity	Total
2016-17	70	12	8	70
2017-18	55	51	17	156
2018-19(till Dec	65	36	6	107
18)				
Total	223	99	31	353
Issues resolved	71.3	81.8	80.6	75.1

# 3.6 Opinion of Teachers and the SMC Members about the Program:

Teachers were asked about the benefits to the Teach Them Young Program to the school as they perceive. All the teachers reported benefits in terms of children's changed behavior rather than available and usable infrastructure facilities. Following figures 3.8 demonstrates benefits perceived by teachers.

Figure 3.8: Benefits of TTY program perceived by Teacher



All the teachers expressed that the good habits are deep-routed among children. They were also asked the ways to sustain the outcome of the program. One amongst four teachers feels that it is solely teachers' duty and if they are trained to do all the activities that DSS staff or book fairy does, they can-over the responsibilities.

8 teachers (42.1%) opined that this is team work and not only teachers but children and their parents also should be equally involved in the activities. 2 teacher said that DSS is also needed for schools and teachers for sustainability.

84.2% teacher communicated the need of the program in future too. According to them the program is very good, it is good for child development and children learn so many new things in a new way. They have recommended the program in other schools. There are no suggestions except one teacher mentioned the time constraints.

Similarly, all the SMC members also reported that the program is beneficial and it should be continued in future.

#### 4. Conclusions and Recommendations

To conclude

- (1) DSS program Teach Them Young is well accepted by schools and appreciated by various stake-holders
- (2) The hygiene and cleanliness habits of children have improved as a result of running TTY program in the schools. It has created a better learning environment.
- (3) There is a gap between the requirement and the actual availability of infrastructural facilities in terms of toilets, urinals and drinking water taps. Efforts need to be made that will lead to bridge the gap.
- (4) A separate place could be allotted for the mid-day meals in the school wherever needed. If not, the place where mid-day meal is served need to be hygienic.
- (5) TTY program is currently running smoothly under the direct intervention of DSS. The overall opinion of the stake-holders of the schools is that DSS should continue the intervention in future also.
- (6) The program may be extended to various PMC and ZP schools for a larger positive impact on health and behavioral development of children.

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