

EXECUTIVE SUMMARY OF THE FINDINGS OF THE STUDY ON SWACHH VIDHYALAYA

Safe drinking water, sanitation and hygiene are very important ingredients for healthy and good standard of life for every human being. Eighty-eight percent of all diseases are caused by unsafe drinking water, poor sanitation and poor hygiene across the globe. Currently, 2.5 billion people in world i.e. 40 per cent of world population defecate in open due to lack of adequate facilities for sanitation. As its consequences, it affects their health as well as the environment. Consumption of contaminated drinking water, improper disposal of human excreta, and lack of personal and food-related hygiene and improper disposal of solid and liquid waste has been major causes of many diseases in India and it is estimated that around 30 million people suffer from water-related diseases (Blackwell, 2004).

The Government of India has been taking persistent efforts for the improvement of sanitation since 1951. Water supply and sanitation were added to the national agenda during the first five-year plan (1951-56). Central Rural Sanitation Programme (CRSP) was launched in 1986 in the Ministry of Rural Development with the objective of improving the quality of life of rural people and to provide privacy and dignity to women. The programme provided large subsidy for construction of sanitary latrines for BPL households. The Bharat Nirman Programme was another important step to taken towards building up a strong Rural India by strengthening the infrastructure.

The Government of India started targeted interventions and strategies for improvement in sanitation, and it gained strength from the middle of 1999 onwards. Another important programme for improvement of sanitation is Total Sanitation Campaign (TSC) which was launched in April 1999 to promote increased affordability. It also lays emphasis on school sanitation and hygiene education for bringing about attitudinal and behavioural changes for relevant sanitation and hygiene practices from a young age. Swachh Bharat Abhiyan is a very recent intervention of the Indian Government launched on 2nd October 2014 to achieve Clean India by 2nd October 2019, to eliminate open defecation by constructing toilets for households, communities, to eradicate manual scavenging and introduce modern and scientific municipal solid waste management practices and to enable private sector participation in the sanitation sector.

Schools can play an important role in bringing about behavioral changes and promoting better health as children are potential agents of change in their homes through their knowledge and use of sanitation and hygiene practices learned at school. Therefore the Government of India has identified school sanitation as an important issue and it has been taking many initiatives and interventions to promote WASH at schools. The RTE Act 2009 laid down the norms and standards (including drinking water and sanitation) separate toilets for boys and girls, safe and adequate drinking

water facility for all children. The Supreme Court also gave direction to all states to priorities school toilets and drinking water.

Bal Swachta mission is one of the initiatives launched by the Government of India on 14th November 2014 to create awareness about cleanliness among children. Another important and latest intervention is Swachh Bharat: Swachh Vidyalaya which is the national campaign driving 'Clean India: Clean Schools'. A key feature of the campaign is to ensure that every school in India has a set of functioning and well maintained water, sanitation and hygiene facilities. The technical components include drinking water, hand washing, toilet and soap facilities in the school compound for use by children and teachers. The human development components are the activities that promote conditions within the school and the practices of children that help to prevent water, hygiene and sanitation related diseases. The Ministry of Human Resource Development, Department of School Education and Literacy worked intensively to mobilize the support of corporates and NGOs this National Mission.

RINL Initiatives:

The RINL has taken up Swachh Vidhyalaya programme in 2014-15 to supplement the interventions made by the Indian Government in terms of physical (i.e. infrastructure) and the human aspect (the awareness building) on school sanitation. The RINL has constructed or repaired 86 toilets spanning across 33 schools under Swatcha Vidhyalaya. These toilets were constructed by the Sarva Siksha Abhiyan under the supervision of RINL officials.

With a staunch belief that children are the change makers of the community, awareness drives on sanitation were undertaken in the schools. A comprehensive module on awareness in schools was undertaken wherein; "Swachhta Shapath" was delivered. As part of Bal Swachhta Jagruti the RINL has conducted awareness programmes to 2400 children from 21 schools for spreading knowledge about good Hygiene practices in Visakhapatnam district. The Audio visual medium containing the information relating to the ill effects of open defecation and necessity of curbing open defecation, importance of hand wash after meals and significance of using toilets and Keeping the surroundings clean and maintaining good personal hygiene was shown to the children as part of the programme. Everyday healthy habits like hand washing, keeping the toilet clean, good personal hygiene practices are promoted.

The Objectives of the study are to compare the sanitation facilities before and after RINL interventions in the schools; to collect data on enrollment, attendance, and absenteeism rates; to examine the condition of the constructed toilets and other maintenance issues; to highlight the impact of sanitation facilities provided on student's performance; to assess the adequacy of sanitation facilities; to find the status of waste management system in schools; and to assess the level of awareness of students on WASH and consequences of poor sanitation

Sample:

After negotiations with the CSR officials of RINL the researcher has finalized the sample by using simple random sampling and the research team selected 10 schools for the study out of 33 schools comprising 33 per cent of the total universe. In these schools RINL constructed 21 new toilets and renovated 12 toilets. The researcher adopted mixed method approach in collecting data for the study.

Major findings or conclusions of the study:

The study has taken in 10 schools as sample out of 33 schools in which RINL constructed or renovated toilets. The schools were selected in consultation with CSR department. One of the main criteria for selecting the 10 schools is that in these schools the awareness programmes were conducted in addition to the physical infrastructure relating to sanitation. In these schools the toilets were physically verified, the research team interacted with teachers, heads of the schools, parents and students. An interview schedule was also administered. The study arrived at the following conclusions.

- Recognizing the need to improve girl's education and the need for providing separate toilet for girls in schools the RINL has constructed 21 toilets exclusively for girls in the 10 schools. The number of separate toilet facilities for girls increased from 6 to 21. Construction of more toilets for girls reflects the RINL's commitment for gender equity.
- It has been observed that all the toilets constructed by the RINL in the sampled schools have good ventilation and ventilators facilitated the removal of bad odors. All the toilets have floorings laid with tiles.
- There has been adequacy of toilets in the primary schools while there has been inadequacy of toilets in the high schools.
- All the toilets constructed by RINL are functional and students have reported that the toilets are being used by the students.
- All of the toilets constructed by the RINL have hand washing structure or designated hand washing space facility within the toilet room.
- Sanitation facilities for children from different ages require different dimensions than those for adults. It has been observed that most of the toilets constructed by RINL were child friendly except in one primary school in Santhinagar where the children are facing difficulty in using western model toilet.

- All the toilets constructed by the RINL have clear signage for each gender and they are at the entrance of the each toilet and they are written both in Telugu and English.
- Except the toilets constructed in Islampeta school, all the constructed by RINL guarantee privacy to the girl children and all the toilets have fixed doors. In the Z.P.H.School of Islampeta the girls' toilet was constructed beside the boys' toilet and both boys and girls have to approach the same place for urinals and boys pass through the entrance of girls' toilet which creates inconvenience to the girls.
- No dust bins, soap, sanitation kit, towel are available in the toilets. The students from secondary schools especially girl children are facing problems during menstrual time.
- In all of the toilets one or two mugs and buckets are available but not enough to meet the demand during peak usage timings of the toilet.
- Out of 10 schools 5 schools have no sanitary worker or scavenger to clean the toilets. Two schools have workers supported by Reddy's Foundation.
- All the schools toilets are locked after school hours, during Sundays and other holidays. The keys are always available to the students on school day.
- The study observed that in all the schools committees exists among children. But majority (80 percent) of the committees is not active in performing their roles and responsibilities.
- An overwhelming majority (92 per cent) of the students expressed satisfaction with the improvement in the infrastructure relating to sanitation.
- RINL provided access of toilets to these schools and contributed a lot in prevention of open defecation.
- After construction of toilets by RINL the toilet-student ratio has increased but still the ratio is low as per SSA norms.
- There are no hand washing facilities outside the toilets and unavailability of soap majority of the students is not practicing hand wash.
- The awareness levels of the students after attending 'Bal Swachhta Jagruti' programme has gone up. In our focus group discussions all the students have answered all the questions related to the importance of hand wash after defecation, hand washing before eating any food item, importance of keeping the surroundings clean. Awareness programmes impacted the overall cleanliness and ambiance in the school.

- Students and teachers perceived there has been change in the hygienic behavior of the students both at schools and at homes.
- Majority (87 percent) of the students are aware about germs and diseases caused of it, benefits of hand washing with soap before eating and after using toilet; but lack of material supply and motivation children are not implementing their knowledge.

Impact

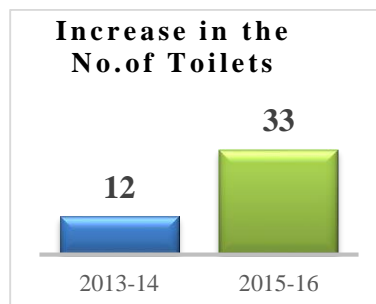
Increasing female education is an important priority in India and Government of India launched Beti Bachao, Beti Padhao Yojana to increase the sex ratio of girls and to increase education among girls. Girls lag behind boys in school enrollment, and female schooling is thought to be important for a variety of development outcomes (Behrman and Rosenzweig 2002; Behrman and Wolfe 1989; Wolfe and Behrman 1987; Glewwe 1999). Poor school sanitation facilities have been cited as a factor that can push children, particularly girls, out of school. Recognizing the need to improve girl's education and the need for providing separate toilet for girls in schools the RINL has constructed 21 toilets exclusively for girls in the 10 schools the study has covered. The number separate toilet facilities for girls increased from 6 to 21. Construction of more toilets for girls reflects the RINL's commitment for gender equity and it promotes increase in enrolment of girls, reduction in the absenteeism and dropouts.

- With the construction of toilets by the RINL there has been quantum jump in the number of toilets available to the students from 12 to 33 in absolute terms and in terms of percentage, there has been increase of 175 percent in the number of toilets.

No. of toilets in existence before and after construction of toilets by RINL

Total Strength of 10 Schools	No. of Toilets in existence	
	Before	After
3853	12	33

Graphical representation of increase in the no. of toilets.



Impact of Toilets at a glance

S.No	Variable	Before	After	Paired T-test	
				T-Value	P-Value
1	General enrollment	3577	3853	-4.348	0.002*
2	Girls enrolment	1911	2038	-7.667	0.000*
3	Attendance (%)	91.5	93.8	8.060	0.000*
4	Dropout (%)	4.3	1.6	7.856	0.000*
5	Health (No. of children falling sick during last year)	1.8	1.2	3.674	0.005*

*Significance

There is an improvement in general enrolment, girls' enrolment and attendances, health conditions of children and also decrease of dropout. The paired T-test shows that there has been an association between these variables and provision of toilets.

- Girls' enrollment recorded an increase of 6.6 percent after construction of toilets. The results of this study collaborate the findings of other studies (UN-Water 2008, IRC 2007, IRC 2009a) which reported a high correlation between the provision of adequate sanitation facilities in schools and the improvements in education indicators for girls.

Sanitation and Girls enrollment and attendance:

S.No.	Name of the school	Total children	Before*	After*
			Girls	Girls
1	Z.P.H.School, Islampeta	612	279	295
2	M.P.P School, Duvvada	46	23	28
3	Z.P.H.School, Kanithi	917	437	442
4	Z.P.H.School, Akkireddipalem	310	146	160
5	Z.P.H.School, Nadupuru	1374	722	775
6	Z.P.H.School, Gangavaram	328	142	157
7	M.P.P.School, Sramikanagar	57	28	31
8	M.P.P.School, Drivers colony	106	57	63
9	M.P.P.School, Bhagavandas colony	64	29	31
10	M.P.P.School, Santhinagaram	109	48	56
	Total	3923	1911	2038

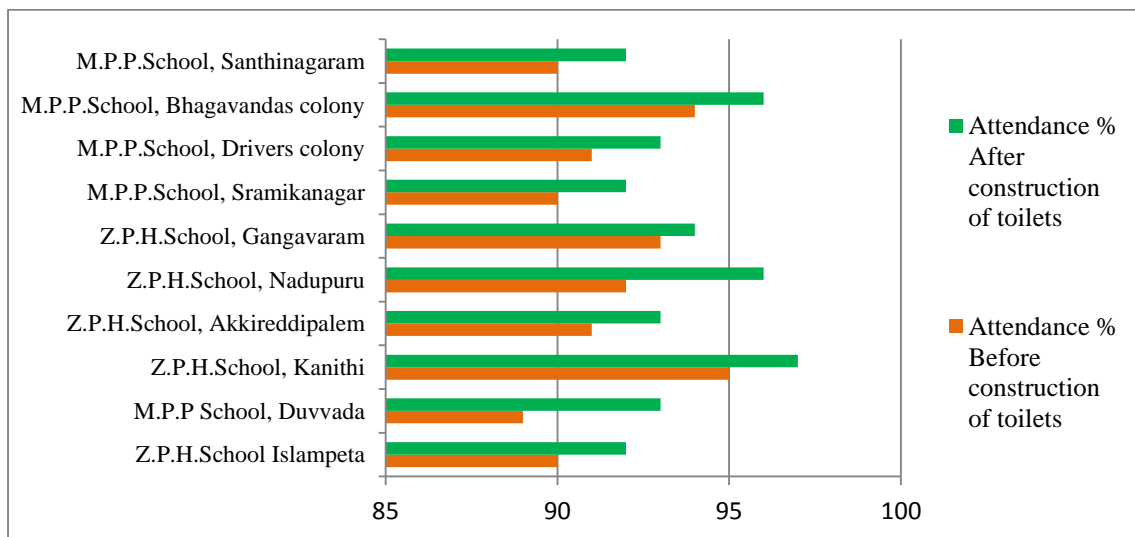
*Before construction of toilets *After construction of toilets

Graphical representation on Girls enrolment before and after RINL initiatives



- There has been improvement in the attendance levels of the school children particularly among girls. The girls’ attendance recorded a raise from 91.5 to 93.8.
- All the schools have reported more than 95% of attendance and after construction of toilets, there has been an improvement in the attendance of the children from five to eight per cent.

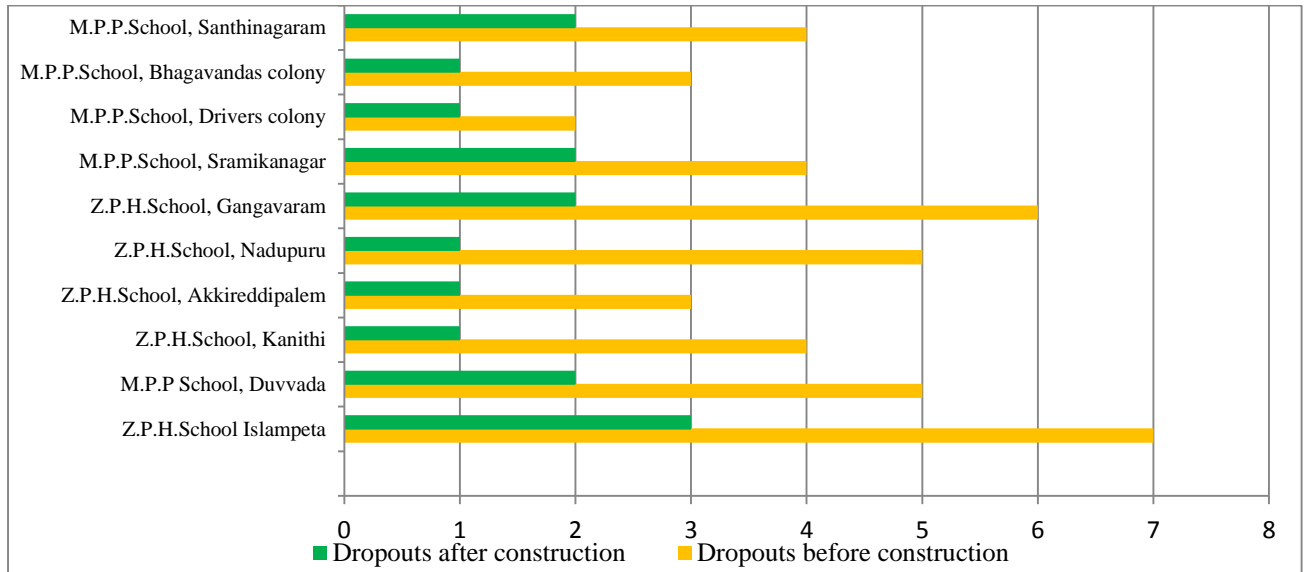
Graphical representation on Attendance before and after RINL initiatives



- Dropout of children was found falling from 4.3 to 1.6 percent after construction of toilets. The school head masters have reported that the dropout rate is very marginal and transfer of children from one school to another due to migration is happening in the schools.

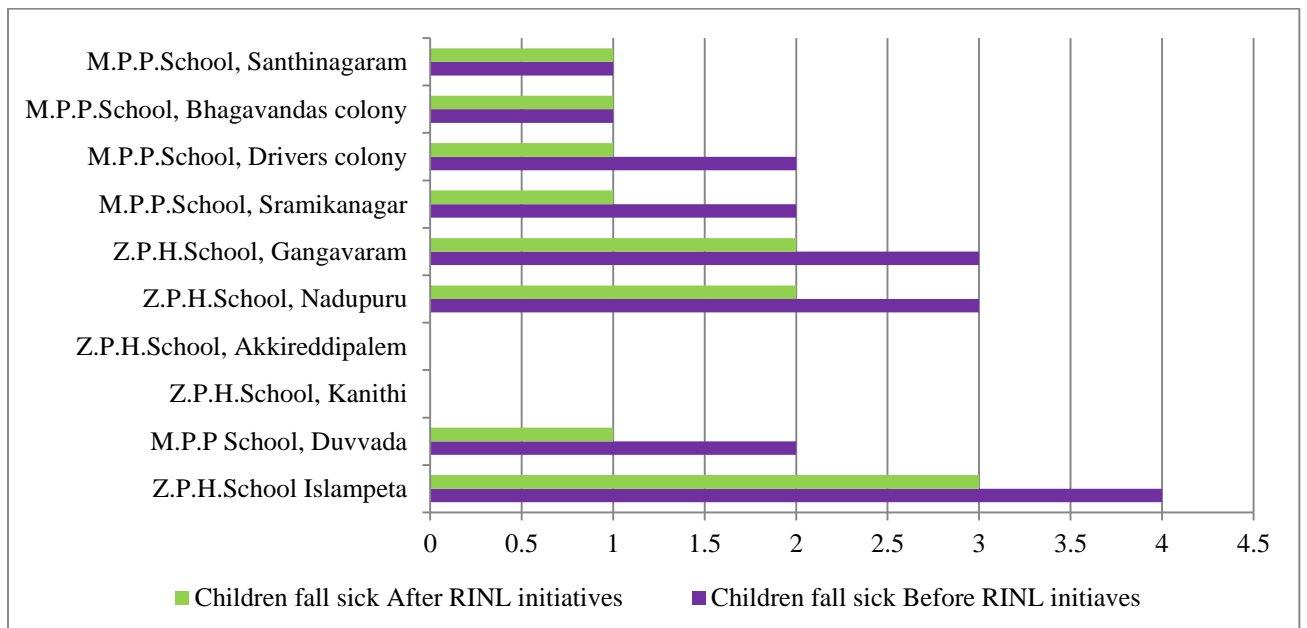
- No dropout of children was found in the schools. Transfer of children from one school to another due to migration was reported by the heads of the schools of parents.

Graphical representation of dropout rates before and after RINL initiatives



- The percentage of children falling sick has also come down from 1.8 to 1.2 in the sample schools. After construction of toilets the reported cases of children falling sick due to insanitary and unhygienic conditions has come down.

Graphical representation of health status of children before and after RINL initiatives



- An overwhelming majority (97 percent) of the students expressed satisfaction with the improvement in the infrastructure relating to sanitation.

- Students and teachers perceived there has been change in the hygienic behavior of the students both at schools and at homes.
- RINL provided access of toilets to these schools and contributed a lot in prevention of open defecation

Recommendations to RINL:

- Before constructing toilets the corporates should also follow the guideline for the construction of toilets like ratio of toilets for boys and girls and privacy of the girls.
- It has been recommended that the corporates can provide a worker for sanitation purposes and the worker salary can be met from the CSR funds. So that the goal of clean toilets can be met.
- Sanitary disposal unit should be provided in toilet established at secondary schools to provide privacy and protect the modesty of girls menstruating at a sensitive age. It is found that no dust bins are available in the toilets and majority of the schools are not providing any sanitary napkins at schools.
- Emphasis should be given to prepare more IEC material in local language like audio-visual aids as part of the sanitation and hygiene promotional activities in school. Awareness to children on water, sanitation and personal hygiene improves their health, school enrolment, attendance and retention and paves the way for a new generation of healthy children.
- RINL should develop reward mechanism for students and teachers who have done a good job as a sanitation promoter. This will encourage both children and school management to come forward in promotion of sanitation.
- It can be suggested with the field experience is that the construction of toilets alone may be insufficient to end open defecation and promote hygiene behaviors among children. While water and toilet facilities may exist in many schools, the functionality of such facilities, as well as their sustained use by the student community must be examined. Periodic visits should be organized by the RINL officials to monitor the operation and Maintenance of the toilets in schools.
- RINL can introduce solar energy in all the schools for an uninterrupted power supply to ensure better running water to toilets and to reduce power bills burden on schools.

General recommendations:

- Government should provide necessary support like annual maintenance fund for the maintaining cleanliness of the toilets. The government should also allocate special grant or fund to the schools for maintenance of the toilets and drinking water facilities or otherwise increase the annual maintenance grant.

- The schools should also take initiatives to form student clubs to shoulder the responsibility of maintenance of the toilets.
- As Television and mass media plays an important role in creation of awareness and spreading of information the government should take interventions to use TV and media to create awareness on water, sanitation and hygiene.
- WASH should be included as one of compulsory subject in school curriculum along with giving an experience of theory and practice for having a better understanding. It is important that hygiene education is incorporated in the school curriculum. Opinions differ as to whether it needs to become a subject in its own right, or whether it should be integrated into various parts of the curriculum, such as natural science and civic education.
- A strong monitoring mechanism should be developed to keep a check on the sanitation conditions inside the school along with water quality assurance by the school administration.
- Workshops and events should be organized in schools by involving not only students but parents as well so that a message could be steered from children all way downstream to the households/ community. Teachers must be made fully aware of the value of hygiene behaviours and must be equipped with innovative ways to encourage them in students. Thus training to teachers on sanitation and hygiene education with a focus on enhancing the awareness, skills and attitudes of the teachers on sanitation and hygiene education is necessary.
- Schools should work closely with surrounding communities and identify more workable and sustainable ways to locally finance water treatment, soap provision, construction, and repair of WASH facilities in schools.
- Government should undertake the training of teachers in hygiene promotion, establish WASH groups for pupils, and provide hygiene learning material in schools especially targeting community and grant schools.
- Students should be actively engaged throughout the construction process to seek their feedback. Once built, consider adding a practical demonstration on proper toilet use by teachers.
- Annual Maintenance Contracts can be given, which will include regular maintenance of facilities, regular supply of cleaning materials, consumables like soap, disinfectants, brooms, brushes, buckets etc. The AMC may include identification of repair tasks and arrangement for repair facilities. Alternatively some local arrangements can be made, which can include appointment of local sweepers/cleaners, appointed by the school/district, who are provided with a regular supply of consumables.
