

Background

Five of the ten top killer diseases of children aged 1- 5 in rural areas are related to water and sanitation and about 0.6-0.7 million children die of diarrhea annually, almost 2000 every day. The scenario is no less among 5-10 years of rural kids. Often these children miss their schooling hence leading to large scale school drop outs. It is evident across the country and so too in the state of Karnataka. It is imperative to focus on these children's health so that they perform better in schools. The good way to achieve this is to bring about behavior change among children through imbibing better hygiene and sanitation practices. It can only be accomplished through providing sanitation facilities at schools and spreading awareness about hygiene and health among children. Thus, a comprehensive "School Sanitation, Health and Hygiene Education Programme was initiated by UNICEF and State Education Department with the inputs from CEE (Centre of Environment Education) run RCE Bengaluru in schools of Karnataka. This was further strengthened by the Government of India's commitment to scale up School Sanitation and Hygiene Education program all government rural schools with water, urinal/toilet facilities and promotes health and hygiene activities special focus on girl child.

Since 2008, RCE Bengaluru has been closely working with its partners to improve sanitation and hygiene practices in schools through material development, capacity building / training, construction of hand washing units, hygiene camps, follow ups, monitoring, evaluation and documentation.

Improvement of water, sanitation and hygiene education in schools provides safe drinking water, builds good sanitary facility and establishes appropriate hygiene habits. However, the impact is much bigger than that because it supports through:

- a) Improved school attendance and health
- b) Greater girls participation in school
- c) Positive hygiene behavior
- d) Outreach to families and communities, through the participation of students in hygiene promotion
- e) It is directly related to the physical, mental and social health development.

The School sanitation and hygiene education (SSHE) is also an essential component of the **Swacha Bharat Abhiyan** (Total Sanitation Campaign) and **Swachh Vidyalaya** which includes provision of toilet infrastructure and hand washing facilities in schools and hygiene education, to promote behavioral change amongst children. SSHE recognizes the role of children as the best change agents in absorbing and popularizing new ideas and concepts of sanitation not only in their schools but in their families and neighborhood.

SWACHA Shale

Swacha Shale is one such SSHE programme initiated by the RCE Bengaluru in **Solur Hobali of Magadi Taluk, Ramanagara District** that aims at providing WASH facilities in school and sensitizing students and teachers on WASH issues. Providing proper WASH (Water, sanitation and Hygiene) facility in school is essential for effective learning and prevention of disease prone to school aged children.

A multistage assessment was done before initiation of the Swacha Shale to study basic WASH facilities available in school. The baseline survey reveals that even though the 98% of the school have the gender segregated toilets and urinals, most of the school lack the hand wash unit for washing hands which is one of the key basic facility needed in the school.

Hand washing an issue: Hand washing with soap at critical times—such as after defecation and before handling food—has been shown to significantly reduce the incidence of diarrhea. Hand washing with soap is has been cited as one of the most cost effective interventions to prevent Diarrhoeal related deaths and disease (Cairncross and Valdmamis 2006). Despite this benefit, rates of hand washing with soap at critical times are very low throughout the developing world. As part of school sanitation issues, hand washing with soap behavior can be generated and sustained among the school children using innovative promotional approaches.

Many studies also show that Handwashing with soap is a simple and effective measure to prevent transmission of fecal–oral disease and other infectious diseases in school-age children. Therefore, encouraging hand washing practices in schools helps in reducing the incidence of diarrhea among children and also raising the status of schools lack quantity, quality and usage of sanitation facilities through Swacha shale proramme was the main goal.

Priority areas are identified for WASH in school

- Identify key gaps, challenges & priority areas for action relating to WASH in schools of Solur and develop a timely micro plan
- Strengthen the monitoring system and promote sustainable WASH
- Base line survey will include the information of schools having WASH facilities
- Orientation of the Head Master or Teacher in charge on WASH issues
- Organizing Hygiene education camps in schools to create awareness in school, SDMC and community level
- Providing Hand wash infrastructure to selected school as a one of the basic WASH facility along with other minor repairs

Project activities and Achievements

Field assessment

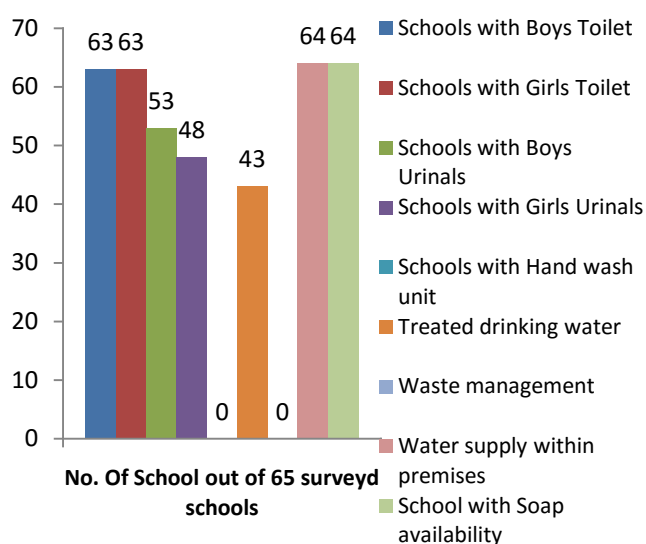
Assessment of the overall survey reveals that 98% of the schools of solur have gender segregated toilets and urinals with drinking water facility. But most of the schools lack the functional hand washing units and **soap for washing hands which is one of the best methods to prevent disease among school age children.** Lack of Hand wash unit infrasturcture in schools also resulted in less awareness among the children about benefits and uses of regular hand washing.

Due the lack or inadequate education and skill on Hyigene and sanitation students were least concerend about their personal hygiene and also surrounding.

Educational Material

As a part of this initiative, educational materials were developed that included – display posters, teachers training module and children camp module. These educational materials developed by RCE-Bengaluru emphasized primarily on personal health and hygiene practices, exploration of water-

Chart 1: filed assessment report



sanitation situations in the immediate environment and school by the students, and appropriate ways to wash hands, use toilet, handle and purify water.

Teachers training module: In order to incorporate, it is a tool for teachers at schools benefiting from the program to educate their students on Water, Sanitation and Hygiene. The manual also addresses operation and maintenance of WASH issues that play an important role in students' health and well-being.

Children camp module: Hygiene education camp in schools is considered to be one of effective methods of sensitizing the children on the importance of sanitation and hygiene practices wherein school children directly addressed on WASH issues. Hence the camp module was developed by the RCE Bengaluru to sensitize the students on WASH issues which now the incorporated into their regular routines.

Capacity building of teachers

Capacity building of the teachers on WASH issues was done through the Orinetation programme held in Solor Hobali on 25th August 2014. The selected 74 schools headmaster/ teachers in charge from the school was be given one day orientation by RCE team on the project activities and the need for promoting hand washing practices and the hand washing units in schools.

They were also shared with the low cost hand washing unit designs and accounts procedure related to the construction. After the orientation, MoU between RCE Bengaluru and the school authorities was drafted and signed whereby school shall take up the responsibility of constructing the hand washing units.

Meeting with the HM, SDMC and other community members

RCE members visited to schools and hold an interaction with the school authorities such as teachers and SDMC members about the project objectives and the establishment of hand washing units. The designs of hand washing units were shared with them to finalize the design that suits to them locally. The meeting was essential to sensitise even the community members along with teachers on the importance of the hand washing practice and Hygiene education in school.

On hearing the project objective and its importance SDMC members and teachers provided full on support for the project rite from the implementation of the project to completion of the Hand wash unit construction.

Hygiene education camp

Hygiene education camp consists of two main components: one component is the provision of WASH facilities in schools. The other component is a school education that promotes practices helping to prevent water and sanitation-related diseases and teaches the wise use of water and favourable hygiene behaviour in the future generation of adults.

At this camp RCE team had a meeting with all the stakeholders (SDMC, Teachers and HM) to discuss on the need requirements for improving wash facilities and also take a decision in correcting the wash facilities in school. Students on other hand executed hands on activities to understand the importance of wash and the need for using wash facilities in schools.

During this camp following interventions were undertaken

- Mapping of existing school sanitation facilities and school practices
- Orientation on personal hygiene and hand washing practices
- Minor repairs of sanitation facilities in schools
- Operationalize school cabinets

Major outcomes of the camps are:

- In Solur in total 46 camps were conducted covering 681 students
- 98% of the students were sensitized on the health benefits of hand washing and personal hygiene
- 80% Students follow the 5 steps during hand wash with soap in 2 critical time before having food and after using the toilets
- 46 schools have the cabinet for monitoring daily hand wash practice among children in school
- Students are encouraged to transfer the hygiene education to the parents and community people.

Infrastructure development in schools under the Swacha Shale

Hand wash unit: Hand washing with soap is the major mode to prevent transmits of school age diseases. Most government schools lack hand wash units which is one of the primary WASH facility and needs to be in every school along with toilet for better health of children. Under Swachh Shale concept of hand washing and its importance is promoted among students and is closely monitored by teachers before the mid day meals in schools. This is done through demonstration of activities and conducting hand wash drives in schools.

On a pilot basis, RCE Bengaluru with the support from UNICEF, **hand washing units with water connection were constructed in more than 55 rural schools in Solur Hobli near Bangalore and made it functional.** This has resulted in inculcation of hand washing practices using soap among the students. **An evaluation indicated that there is a reduction in the incidence of diseases among students.** The absentees due to health reasons rate reduced from 20% to 5% in 90% of the Swachh shale initiated schools showing the importance of hand wash for betterment of health.

Construction of Hand wash unit: The following steps was followed for the construction of hand wash units in school

- **Visit to school, Discussion and planning**
RCE Bengaluru team visited finalized 50 schools and a meeting was convened in each school with headmaster, teachers, students, CRP, SDMC and community members on the construction of hand washing units. In each meeting, following issues were discussed:
 - space availability and the convenience for washing units for students
 - structure that suits school better among the models developed by RCE
 - availability of water, local materials and funds
 - height of the kids
 Upon discussion, minutes of the decisions are recorded and construction of hand washing units was approved.
- **Cost estimation format**
A format for budgeting construction of hand washing unit was developed . Upon estimation sent by schools, funds were released to schools. An average of Rs 10,000 is allocated for each school towards this activity.
- **Follow up**

Based on the submission of estimate format, advance was released to schools and a regular follow was undertaken by RCE team to initiate the construction of hand wash unit.

- **Facilitation of hand wash unit construction**

Once the advance was released the construction of hand wash unit was initiated by the school as per the models felt convenient to them depending upon the space availability, strength of the school, water facility, funds and other parameters. Till date 55 schools have built hand wash unit and made functional.

Toilets: Gender segregated toilets in schools and preventing open defecation in village is an important aspect for healthy life and to avoid many fecal transmitted diseases. On this aspect RCE Bengaluru in association with school authorities facilitated to make toilets functional through small repairs by community and using schools funds. Hygiene camps were conducted in schools to improve the school toilets units.

Greening of the campus: Waste water is generated from hand washing and also from cooking at the school. This water when diverted can aid in growing vegetables at school campus. Organic waste gets accumulated from the leftover food is used to compost for manure to be used for growing vegetables. **With the school sanitation initiative 60% of the schools have established kitchen garden cum fruit garden in school.** The fruits and vegetables grown are used for mid day meals and is served to the children as an additional nutrition.

Waste management: Both dry and wet waste is generated from dry leaves, waste paper and food leftover etc. The dry waste generated in campus is utilized for converting into manure and manure is used for kitchen garden making the campus zero waste zone. In most schools, compost pits are established for waste management. In this regard, orientations were provided to school pupil on waste management issues and established waste pits with support from rural community.

Three star approach

The Three Star Approach for WASH in Schools designed to improve the effectiveness of hygiene behavior change in which schools implementing better WASH practice will be rewarded on the star basis. In this approach, schools are encouraged to ensure that all students wash their hands with soap, have access to drinking water, and are provided with clean, gender-segregated toilets at school every day. Once minimum WASH standards are achieved, schools can move from one to three stars by expanding hygiene promotion activities and improving infrastructure, especially for girls, and will ultimately achieve the national standards for WASH in Schools. RCE With help of Education Department selected **5 schools from solur for best WASH practice implementing school.**

Orientation for MDM and ZP conclave

As the part of success of the Swacha shale in Solur, One day conclave for ZP Presidents, two day orientation programme for MDM officials and an annual event of Solur schools was planned at Eagleton Hotel Conference Hall on 12th and 13th March 2015 to share the learning's and experiences of Swacha Shale with ZP Presidents, MDM Officials and reward 5 selected schools of solur by the Ramanagara Zilla Panachayath President supported by RCE Bengaluru.

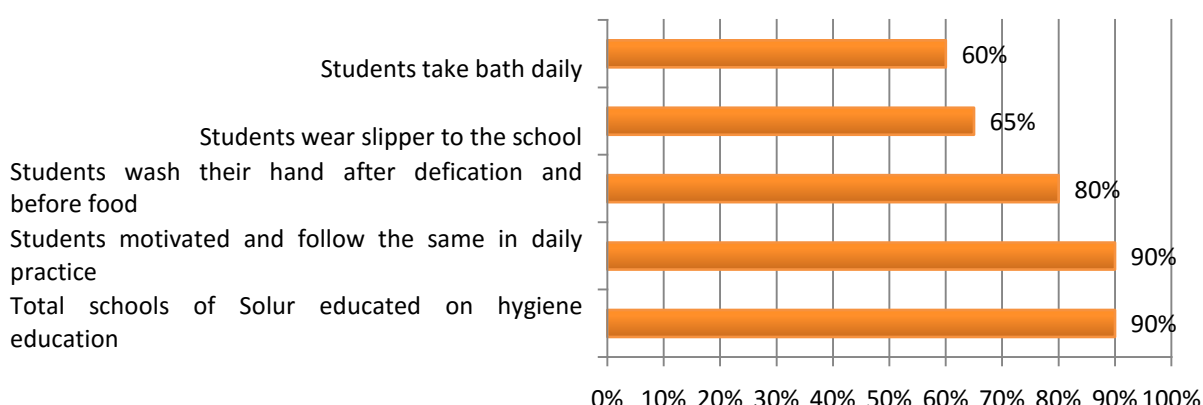
The programme witnessed the participation of over 150 people including 10 District ZP Presidents, about 30 Mid Day Meal (MDM) members, over 50 teachers and 10 students from Solur Hobli. The main intension of the programme was spread the awareness of WASH issue to the other districts of the state also.

Major Outcome of the programme

Behaviour changes

WASH in schools has led to behavioral changes among children whereby students regularly wash their hands, use toilets and avoid open defecation, maintain cleanliness at the campus and waste is segregated. An estimate of 70% children are motivated from this programme have communicated the same to their parents. The below graphical representation highlights the behavioral changes seen among the children due to WASH interventions from sample schools survey done through reviews, interactions and feedback provided by the school teachers.

Chart 2: Behavioural changes among students from camp based on teachers review and feed back



Hygiene and Sanitation level of the school have been improved from no star to one star level

Before Swacha Shale-No Star	After Swacha Shale-One Star
In selected 55 Schools there was no proper hand wash units available in school	In all the 55 school hand wash unit have been constructed and made functional
Absentees due to health reason are more	Number of absentees due to health reason have been reduced
Only 8 to 10% of the school had kitchen garden in school campus	80% of the School have kitchen garden in the campus
—	Waste water from hand wash unit have been utilized for the gardening of school The school which lack space for gardening have diverted the waste water to drainage
Non functional school cabinet	Functional school cabinet with assigned roles and responsibility of each one of them 90% of the School have separate 2 monitors for regular monitoring of the hand wash by students

Scale up

Inspired by the positive results from the initiative of Swacha shale in solur, the Education Department of Karnataka has scaled up this initiative under their mid day meal schemes in about **7000 schools across the state.**

The RCE Bengaluru will offer a technical support to the programme in various districts for construction of hand wash unit as well as orientation of the teachers.

PHOTO GALLERY



Launch of the Swacha Shale programme in Solur Hobali



Capacity Building of teachers through orientation



Low cost Hand washing unit model design developed by RCE Bengaluru



Meeting with stakeholders and SDMC members about Implementing SWACHA shale programme



Constructions of Hand wash unit and its follow-up and inspection by the RCE



School Students of Solur Hobali involved in transmitting knowledge of Hand wash and its benefits to the community through procession (Jatha)



Hand Wash unit Inauguration event under Swacha Shale programme



A visit to schools of Solur Hobali by the UNICEF and Education Department



Children hygiene education camp



Two day orientation to MDM official and One day Zilla Panchayth Official conclave

Simple hand washing infrastructure and dedicated time before mid day meals in daily schedule

