

Technical Note Series

School Water Supply, Sanitation & Hygiene Education: India



Department of Drinking Water Supply
Ministry of Rural Development
Government of India



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सत्यमेव जयते

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Abbreviations and Acronyms



सत्यमेव जयते

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FOREWORD

Children are identified as the best change agents and, can, therefore, play an effective role in creating a healthy and clean environment in the schools as well as in their dwelling places. Schools, after the family, are the best demonstration centers to bring about positive behavioural changes on a sustained basis. Teacher-child-parent-community is a proven route to spread the message of good and accepted hygiene and sanitary practices and hence School Sanitation and Hygiene Education (SSHE) occupies the pride of place in the Total Sanitation Campaign (TSC). The SSHE is a distilled programme to address the various issues of school sanitation which, not only deals with the issues of water supply and sanitation, but also promotes hygiene education for a comprehensive and eventual successful TSC, sufficient focus has to be given to SSHE for which the programme managers are to be well-informed and also have to have a clear understanding of all the issues and aspects of the SSHE. This technical note on school water supply, sanitation and hygiene education has been developed to provide such a fund of information to all concerned with the SSHE. I am sure they will find this extremely useful for an effective implementation of the SSHE Programme.

(Palat Mohandas)

New Delhi
29 January 2004



राकेश बिहारी
संयुक्त सचिव
RAKESH BEHARI
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PREFACE

Covering all rural schools with basic sanitation and drinking water facilities is an important component of the reforms initiative launched by the Department of Drinking Water in the rural water and sanitation sector. Demand driven & community led programmes called Swajaldhara on the drinking water supply and Total Sanitation Campaign (TSC) on the sanitation front are being implemented by the department to accelerate achievement of Millennium Development Goal of halving the rural population without access to safe drinking water and basic sanitation facilities by the year 2015. Hygiene Education and Anganwadi Sanitation have been given prominent importance in Total Sanitation Campaign (TSC). This programme becomes more important in the light of our resolve to cover all the schools with toilet facilities by 2005-2006.

This technical note on water supply, sanitation, and hygiene education has been prepared to help programme implementers in informed decision making and build comprehensive and clear understanding on SSHE. I hope this technical note will impart the needed executive bite to implementation of SSHE programme in an effective manner.

New Delhi
January 23, 2004


(Rakesh Behari)

Introduction

Roots and wings are two priceless gifts we bequeath to children. Schools are the places for nurturing roots (learning) and wings (practice). We have all been children at some point of time. We, therefore, understand how important it is for children to grow up in a safe, secure and healthy environment to learn and face the challenges of the world.

Why school has so much of importance? Schools, after the family, have a vital role to play for the cognitive and creative development of children. School is a socializing institution and stimulates learning environment and positive changes. They are equally important places to address the health issues of children provided that necessary infrastructure is available. Improved health and quality learning are not possible in schools as long as basic hygiene is lacking or sanitary facilities and water supply are missing. And if children do not have the basic knowledge, attitude and habit of good hygiene or cannot practice them, education is neither complete nor effective. Even worse, an unsafe school environment may damage their health especially girl children, who are more vulnerable to malnutrition in most of the cases leading to low enrolment and high drop out incidences.

Children and We.....

- ◆ Children have rights to basic facilities such as school toilets, safe drinking water, clean surrounding and information on hygiene, and other life skills
- ◆ If these conditions are created, they come to school, enjoy learning and learn better and take back the learning to their families
- ◆ Provision of water and sanitation with health and hygiene services are necessary for child survival, protection and development
- ◆ Investing in children is the basis for positive change in the world.

Our Schools- rural context

India has one of the largest numbers of school going children, especially in rural areas. There are about 6.3 lakh rural schools both primary and upper primary with 8 crore school going children¹. As per the NFHS-II, 1998, 75 percent of the children in the age group of 6-14 are attending schools in rural areas. But it is also a fact that only 10-15 percent of schools have the sanitation facilities in their premise. Out of 6.3 lakh primary and upper primary rural schools, only 44 percent have water supply facilities, 19 percent have urinals and 8 percent have lavatory facilities. Only 19 percent have separate urinals and 4 percent lavatory facility for girls. Schools, which have water and sanitation facilities often, suffer from:

- ◆ Non-existent or insufficient water supply & hand washing facilities
- ◆ Toilets are not adapted to the needs of the children in particular girls.
- ◆ Broken, unsafe water supply, sanitation and hand washing facilities
- ◆ Children with poor hygiene and hand washing practices
- ◆ Non-existent and irrelevant hygiene education for children

- ◆ Unhealthy and dirty class rooms and school compounds
- ◆ Improper operation and maintenance of the existing facilities

Under these conditions, schools and community environment become unsafe places where-diseases are transmitted. For example, one of the major problems faced by hundreds of thousands school-age children are infections, primarily from contaminated water and poor sanitation and caused by variety of pathogen and parasites. Parasites consume nutrients from the infected children bringing about or aggravating malnutrition and retarding children's physical development. Infections leading to repeated diarrhoea and respiratory infections often compound the exiting poor health of children resulting in frequent absenteeism from school and affecting learning achievements. They also destroy tissues and organs on which they live causing pain and various longer term health problems. Water and sanitation related diseases that are affecting children include diarrhoea, dysentery, hepatitis, polio, trachoma, and scabies. All of these have compromised children's attendance and performance at school and, not uncommonly, can result in death.

Some Facts on School Water and Sanitation

- ◆ There are 6.37 lakh primary and upper primary rural schools out of which only 44 percent have water supply facility, 19 percent have urinals and 8 percent have lavatory facilities
- ◆ Only 19 percent have separate urinals and 4 percent have lavatory facilities for girls
(Source: 6th All Indian Education Survey, 1993-94)

Some Consequence

- ◆ 5 of the 10 top killer diseases of children aged 1-4 in rural areas are related to water and sanitation
- ◆ About 0.6-0.7 million children die of diarrhoea annually, almost 2000 every day
- ◆ Typhoid, dysentery, gastroenteritis, jaundice and malaria claim the lives of over a fifth of the children aged 1-14 in rural areas
(Source: Central Bureau of Health Intelligence-MoHFW, 1998-99)

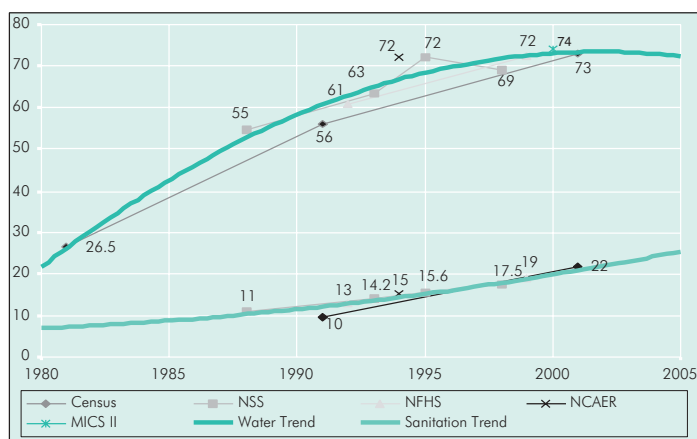
Some Impact

- ◆ High child mortality rate 95 under 5 age group(NFHS-2)
- ◆ Low enrolment rate-7 out of 10 children aged 6-14 years attend primary school (Unicef 1998)
- ◆ High drop rate in particular girls-only 42 percent of the girls and 48 percent of the boys reach class VIII (Indian Child, MoHRD- 2002)

This is further aggravated in the wake of inadequate water and sanitation coverage in our country. As per the latest census data, only 36.4 percent of the total population of the country have latrines within their households. This is even less in rural areas i.e. 21.9 percent and out of this, only 7.1 percent households have latrines with water closest. Similarly, only 34.2 percent households have drainage facilities for the waste water disposal in rural areas. With this hardware availability, the usage behavior is restricted to only 17.5 percent in the rural

population as per the 54th round report of the National Sample Survey published in 1999. By all our account, 65 percent of our population still defecate in the open.

Trends in rural water supply and sanitation usage



Planning Commission-2002

Over all, child friendly water supply and sanitation in schools have great potential to address the water and sanitation needs of the country especially in relation to the healthy development of the children who in turn can act as “change agents” and effect behavioural change on large scale in their respective communities to build household latrines and to use clean potable water for drinking.

Importance of School Water Supply, Sanitation and Hygiene Education (SSHE)

The children of today will be the adults of tomorrow. By focusing on children today, by giving them tools and knowledge to change behaviour, future generations can be stronger and healthier. Schools being the ideal setting for promoting learning and the health of children can serve as a community model for health and environmental care. Thus, school water supply, sanitation and hygiene education programme becomes very important for the following main reasons:

- ◆ Every child has a right to grow in a healthy & clean environment
- ◆ School sanitation & health education stimulates a change in health behaviour and attitude towards adoption of good habit during childhood. What children learn is likely to be applied within their families and will further lead to community development
- ◆ The provision of safe water & sanitation facilities as well as good hygiene education will improve the health of children and may result in a lower drop out rate, especially among girl children.
- ◆ For many children, the school may be their first encounter with working toilets, running water, well ventilated classrooms and clean surroundings. This can have a powerful impact on their vision of what is possible in the world and even in their own communities.
- ◆ The primary and upper primary education system in India is one of the largest in the world with over six lakh primary and upper primary schools, over 30 lakh teachers and students strength exceeding 100 million children (1991-92). This

huge network of schools offers a ready-made infrastructure to be mobilized and used as a resource to influence the parents and hence the community.

- ◆ The school teacher is held in high esteem by the students and is respected not only within the school but in the community as well. The student can develop hygienic habits by emulating the teacher as a model. Also, the school teacher can influence parents and community members on issues related to sanitation
- ◆ The school can also serve as a demonstration center for the adoption of the water & sanitation package by the households and by the community at large.

Importance of School Water Supply, Sanitation and Hygiene Education

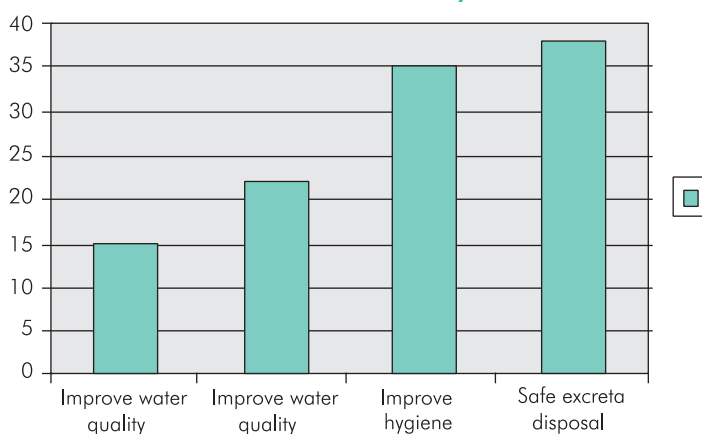
- ◆ Promotes health and hygiene behavior at an early stage of childhood.
- ◆ Improves the health of children and results in a lower drop out rate, especially among girl children.
- ◆ Huge network of schools offers a ready-made infrastructure to influence the students, teachers, parents and hence the community.
- ◆ Children are the change agents, hence, it ensures generational change in the adoption of the health and hygiene behaviour.

Benefits of SSHE

SSHE offers several benefits to children, community, and society at large. It reduces diarrhoea, intestinal worms, and eye infections and possibly reduces malaria and upper respiratory tract infections. Besides, it improves attendance, especially of girls. For example in **Bangladesh, a school sanitation programme increased girls' enrolment by 11 percent** (UNICEF). It forms healthy habits in the future generation of adults and help to improve sanitation and hygiene in home.

Among hygiene behaviour, hand washing, in particular, provides a great health advantage. Hand washing can block the transmission of pathogens (germs and faecal matter) that cause diarrhoea, as these studies given below show. In School and Anganwadi programmes, this is very important. Using latrines without consistent hand washing will not result in the intended health benefits.

Percent Reduction in Diarrhoea by SSHE Interventions



S. Esrey, UNICEF, 1994

This is evident from the example given below on the impact of hand washing (UNICEF) on diarrhoea.

Country	Reduction in Diarrhoea
Burma	30 %
USA	48 %
Bangladesh	35 %

Towards safe future- SSHE

School Water Supply, Sanitation and Hygiene Education (SSHE) is a comprehensive and focussed programme to promote the children's right to a healthy and clean environment, and outreach to families and communities. It is designed to work towards following goals:

- ◆ Effective learning-children perform better if surrounded by hygienic and clean environment
- ◆ Enrolment of girls in particular -lack of private sanitary facilities especially for girls can discourage them to come to school particularly at puberty
- ◆ Reduced diseases and worm infestation- badly kept schools may become health hazards and a place to get sick
- ◆ Environmental cleanliness-prevent pollution and limit health hazards
- ◆ Implementing children's rights-good health and sanitation contribute to happy childhood

Think SSHE..... and Find

- ◆ Drinking water and sanitation services
- ◆ Health and hygiene education
- ◆ School health and de worming
- ◆ Operation and maintenance
- ◆ Clean and green school environment
- ◆ School based monitoring system

Initiatives on SSHE

School Water Supply, Sanitation and Hygiene Education is one of the important concerns in India. This finds prominent place in various programmes of Govt of India, the majority of which are implemented by Dept. of Drinking Water Supply, Ministry of Rural Development and Dept. of Elementary Education & Literacy, Ministry of Human Resource Development.

At present, two programmes of water supply are being implemented under Dept. of Drinking Water Supply, Ministry of Rural Development. They are:

- ◆ Accelerated Rural Water Supply Programme (ARWSP): Schools form one of the important components and funds can be mobilized to meet the requirement of

drinking water supply from it. It is a high (100 percent) allocation-based program and supplements State Govt. with an objective to ensure coverage of all rural habitations in particular to reach the un-reached with access to safe drinking water, sustainability of the systems and sources, and also to preserve quality of water by institutionalizing water quality monitoring and surveillance through a Catchment Area approach. Almost 1 lakh habitations are covered every year.

- ◆ Swajaldhara: Reforms in the rural drinking water sector were adopted in 1999 through Sector Reform Project (SRP) on pilot basis and now have been scaled up throughout the country in the form of Swajaldhara which is a paradigm shift from supply driven to demand driven, centralized to decentralized and service provider to facilitator. It ensures full ownership of drinking water assets to community, which has the power to plan, implement and manage all the water supply schemes with 100 percent responsibility of O&M. Schools are the focus of this programme and State Govts. can implement school programme with support of sub-missions at district and village level. They can also integrate water conservation and rainwater harvesting schemes with drinking water supply schemes.

Dept of Elementary Education & Literacy, Ministry of HRD is implementing two major programmes namely District Primary Education Programme (DPEP), and Sarva Shiksha Abhiyan (SSA) which have the provisions of water and sanitation facilities for schools lacking them. DPEP launched in India in 1994, in 42 districts spread over 7 States – Assam, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu. Later, it was extended to Uttar Pradesh, Bihar, West Bengal, Andhra Pradesh, Orissa, Gujarat and Himachal Pradesh. At present, the programme covers 60 percent of the child population in the country, spread over 176 districts in 15 states and is one of the largest education projects of its kind in the world. The programme aims to achieve the long cherished goal of Universalisation of Elementary Education (UEE) in the country through district-specific planning with emphasis on decentralized management, participatory processes, empowerment and capacity building at all levels. The objectives of District Primary Education Programme are to:

- ◆ Provide all children with access to primary education (class I to V)
- ◆ Reduce primary dropout rates for all students to less than 10 percent.
- ◆ Reduce differences in enrolment, dropout rates, and learning achievement among gender and social groups to less than 5 percent.
- ◆ Raise the average achievement levels of students by at least 25 per cent in language and mathematics and at least 40 percent achievement levels in other subjects.
- ◆ DPEP also seeks to strengthen the capacity of national, state and district institutions and organisations for planning, management and evaluation of primary education.

Providing infrastructure support especially in terms of water and sanitation facilities is one of the focuses to meet the goal of DPEP, which has now been dovetailed with Sarva Shiksha Abhiyan (SSA). SSA is Government of India's flagship programme for the

achievement of Universalization of Elementary Education (UEE) in a time bound manner, as mandated by 86th amendment to the Constitution of India making free and compulsory education to the children of 6-14 years age group, a fundamental right. SSA is implemented in partnership with State Governments to cover the entire country and addresses the needs of 192 million children in 1.1 million habitations. Sarva Shiksha Abhiyan is an effort to universalize elementary education by community-ownership of the school system. It is a response to the demand for quality basic education all over the country. The SSA programme is also an attempt to provide an opportunity for improving human capabilities to all children, through provision of community-owned quality education in a mission mode. SSA has a special focus on girl's education and children with special needs.

Features of Sarva Shiksha Abhiyan (SSA)

- ◆ To open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants.
- ◆ Existing schools with inadequate teacher strength are provided with additional teachers.
- ◆ Capacity of existing teachers to be strengthened by extensive training grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level.
- ◆ Provide quality elementary education including life skills.
- ◆ Provide computer education to bridge the digital divide.

But the actual task is to integrate the rural drinking water, sanitation, health and hygiene education programmes for sustainable and effective implementation. As far as sanitation and hygiene education are concerned, 'Total Sanitation Campaign' (TSC) was launched in 1999, after the restructuring of CRSP, with the inclusion of personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal and waste water disposal. Total Sanitation Campaign also emphasizes more on Information, Education and Communication (IEC), Human Resource Development, Capacity Development activities to increase awareness and generate demand for sanitary facilities.

Sanitation, Hygiene Education and TSC

Govt. is committed to scale up TSC through out the country by the end of 10th Plan with special focus on schools by covering all the govt. rural school by 2005-2006 under the TSC fund and private school by their own resources, and to construct separate toilets blocks for girls in all-co educational schools. Rural School Sanitation is an entry point for wider acceptance of sanitation by the rural people. Keeping this in mind, TSC outlines following objectives for the school sanitation coverage:

- ◆ To provide water and sanitation facilities in the schools so that the children from their early childhood can use the facilities and develop consistent habits of using such facilities.

- ◆ To promote the usage of toilets/urinals among school students, hand washing at right times (before eating, after using toilet, boys & girls share tasks of collecting water and cleaning toilets equally).
- ◆ To promote behavioral change by hygiene education & linking the same to home & community.
- ◆ To develop a system within the schools so that the facilities once created are maintained by the schools without any external support.
- ◆ To build the capacities of all stake holders especially teachers, PTA, PRI etc. ensuring sustainability

TSC Provisions

- ◆ The Central subsidy per unit to be restricted to Rs.12,000/- for a unit cost of Rs.20,000/-. Separate toilets for girls and boys to be provided which are treated as two separate units and each unit is entitled to Central Subsidy upto Rs.12,000/-.
- ◆ Funding for School Sanitation in TSC Project is provided by the Central Government, State Government and Parent -Teachers in the ratio of 60:30:10.
- ◆ More than 10 percent of TSC Project fund can be utilized for School Sanitation. Funds for hygiene education may be utilized from IEC component of TSC.
- ◆ Gram Panchayat can also contribute to 10 percent indicated in the share of Parent-Teachers.
- ◆ Nirmal Gram Purushkar- Gram Panchoyats, Blocks, and Districts can apply if they have achieved (a) 100 percent sanitation coverage of individual households, (b) 100 percent school sanitation coverage, (c) free from open defecation and (d) clean environment maintenance.

SSHE and Convergence of Govt.'s Intervention

In order to meet the said goal to cover all the rural schools by 2005-2006 with drinking water supply and sanitation and hygiene education having special focus on gender and poverty issues, it is necessary that the institutional arrangements be clearly worked for the effective implementation. This programme involves various departments such as Education, Health, Panchayat & Rural Development, PHED, Women and Child Development, Tribal and Social Welfare and some external support agencies like UNICEF and concerned NGOs, PTA, SMC, etc at State and district level. Taking this into account, Govt. is trying to integrate the efforts of various departments for the faster and effective outcomes. In this regard, inter-sectoral linkages may be forged on following basis:

- ◆ **State level Action Plan and Inter-sectoral Linkages:** In each State, State Water and Sanitation Mission (SWSM) has been constituted with representation of various departments such as Education, Health, Panchayat & Rural Development, PHED, Women and Child Development, Tribal and Social Welfare, etc. The SWSM should function as task force and be involved in the development of State level Action Plans highlighting vision, goal, target coverage, implementation, time plan, inputs and outputs, monitoring, etc. The

action plan should reflect the mode and means for fund mobilization for the water, sanitation and hygiene education programme, which may be pooled from TSC, ARWSP, PMGY, SSA, Swajaldhara, Finance Commission Awards, State resources and other agencies.

- ◆ **Setting up District, block and villages level committees:** A decentralized institutional structure is important for the effective decision making, implementation, and monitoring for school water supply and sanitation component. Such structure may be attempted at following levels:
 - ▶ District level committee which will comprise DM, elected representatives, education and health officials, NGOs and others-for overall guidance and supervision for its sustainability, implementation of programme components, monitoring and evaluations, district resource center and persons, MIS, design options, and fund support, time plan, outputs, etc.
 - ▶ Block level committee, which will comprise BDO, elected representatives, Engineers, Education, ICDS and Health officials, NGOs and others for guidance, reporting to the district level committee and troubleshooting.
 - ▶ Village committee which will comprise elected representatives(GP), NGOs, SHGs and others for regular monitoring and maintenance, reporting, etc
 - ▶ School water & sanitation Committee which will involve students and teachers for mobilization, implementation, O&M, school based activities, community linkages, etc

Who are involved in SSHE

- ◆ Students and Teachers
- ◆ Parents and Anganwadi Workers
- ◆ Govt. Departments such as Education, Health, Panchayat & Rural Development, PHED, Women and Child Development and some external support agencies like UNICEF, etc
- ◆ Community groups such as PRIs-GP, School Management Committee, School Watsan Committee, Parent teacher Association. Village Education Committee
- ◆ NGOs, and Self Help Groups

Components of SSHE

SSHE programme has two components as given below:

- ◆ **Hardware Component:** It is the total package of drinking water, hand-washing and sanitary facilities available in and around the school compound.
- ◆ **Software Component:** It includes health and hygiene activities aiming to promote conditions at school and practices of school staff and children that help to prevent water & sanitation related diseases.

Each component has specific activities to be carried out both at planning and implementation level. Detail activity wise description of components are given below:

Activity Items of Hardware and Software Components of SSHE that may be taken up

Hardware	Software
<ul style="list-style-type: none"> ◆ Construction of toilets in all types of Government Schools from TSC funds i.e. Primary, Upper Primary, Secondary and Higher Secondary. Emphasis should be given on toilets for Girls in Schools i.e. one toilet block consisting of one latrine, two or three urinal points (one each for girls and boys) along with a water storage tank and hand washing facilities ◆ To install hand pump in the schools for provision of drinking water where at present there are no such sources with support of other schemes and agencies such as ARWSP /SRP /SSA/ DPEP/ OTHERS ◆ Provisions of hand washing facilities and other materials for example buckets, mugs, soap tray, brush, capacity drum for drinking water etc. ◆ Construction of Drainage system for solid and liquid waste disposal ◆ Construction of garbage pit, soakage pit, cooking storage place for food (if mid day meal programmes are there) ◆ Plantations for neat and clean school compound and lighting, ventilation for clean classroom environment ◆ Rainwater harvesting and water conservation may also be taken up ◆ Repair and maintenance of WATSAN facilities such as latrines, urinal, water points, water storage, hand washing facilities, garbage pit, etc. ◆ Identify leakage, cracks, and breaks and repair them or get done. ◆ Quality in design, and construction ◆ Quality checking and certification ◆ Norms, specifications, standards, checking 	<ul style="list-style-type: none"> ◆ Baseline survey of school- participatory need assessment involving students, teachers, parents & community members ◆ Inter-sectoral coordination: pooling of resources / ideas among Depts. like District Mission, DRDA, PHED ,Education, Health, PR & RDD, Social Welfare & Tribal Department, etc ◆ Formulation of objectives, outputs/results and an action plan ◆ School awareness/IEC -about School Water Supply, Sanitation and Hygiene and seeking participation ◆ The school committee members, students and the public to be motivated to improve the school environment with fencing, planting of trees and to maintain the sanitary block properly with their own contribution. ◆ To organize a campaign in the village through the school for adoption of water points, sanitary latrine, garbage pit, soakage pit, smokeless chulla, water storage tank and other sanitary provisions in the household as a package. ◆ Sensitizing and Training of Engineers / GP/ District Panchayat / RDD on SSHE & managing it and all other key district / block level functionaries ◆ Training & orientation of community and parent groups such as School Management Committees, VEC, PTA leaders, PRs and teachers to train other frontline workers /NGOs/ Masons/ Motivators etc. promoting sanitation and other activities in the community, taking the primary school as a focal point. ◆ Formation of school health clubs to discuss, take responsibility and participate in making provision of water and sanitation facilities in the schools as well as to maintain these facilities. ◆ Health and Hygiene Education Activities among school children on use of water and toilets facilities, hand washing, safe disposal of waste, use of footwear, water and food handling by: <ul style="list-style-type: none"> ◆ School Health Check up and de-worming ◆ Demonstration Activity through life skills ◆ Curriculum development and incorporation ◆ Daily school themes and Exposure visits ◆ Protection and maintenance of WATSAN facilities by SMC/SWSC/PTA which includes resource mobilization and roster of responsibilities (irrespective of caste and class) for making sure all children wash hands with soap after going to the toilet and before eating. Involving children in cleaning the latrines, cleaning water point area and fill water reservoir, checking for leaks, cleaning the compound, etc ◆ Monitoring and evaluation of the programme and its impact with a focus on self assessment by regular follow up and surveillance through weekly visits of District Implementation Committee, school based monitoring system, external assessment, review missions, etc ◆ Linkage to schools with families and community ◆ Documentation of the experience of the school sanitation programme for sharing with others and for further expansion.

The Implementers & Teachersand Resource Centers

The role of the implementers (Project Officials, PR and RD Depts. Health & Education Depts., PHED, and others) and teachers are very important for the success of the SSHE. It is necessary that they are sufficiently trained and motivated to carry out their responsibilities. In this regard, resource centers are identified to build the capacity of States and districts. So far four regional resources centers have been identified (Safai Vidyalaya, Ahmedabad, Rama Krishan Mission Lokashiksha Parishad, West Bengal, Gandhigram Rural University, Tamil Nadu and State Institute of Panchayat & Rural Development, Kalyani, West Bengal) by the Central Govt. (DDWS-GOI). States are also expected to identify State-level resource centers and develop them with necessary support. The resource center will train district level resource persons, teachers, district and block functionaries. Besides, each state and district should have 4-5 identified resource persons to train block level resource persons and teachers from schools. This will not only train them but also equip them with defined roles and activities. The role envisaged for the Implementers & Teacher in SSHE are given below:

- ◆ Conduct situation analysis
- ◆ Build enabling environment
- ◆ Select schools
- ◆ Motivate various players and stakeholders i.e. PTA, PRIs and GP Members, Health & Education Depts., PR and RD Depts., NGOs, students and community, etc.
- ◆ Facilitate conduct of baseline survey for schools
- ◆ Facilitate drawing up of PoA with measurable objectives in outputs and results (behaviour change)
- ◆ Mobilize funds
- ◆ Set up fund flow mechanism
- ◆ Supervise drawing up of IEC
- ◆ Implement capacity development
- ◆ Implement programme
- ◆ Monitoring & Evaluation of the programme
- ◆ Prepare financial reports
- ◆ Send progress reports
- ◆ Do trend analysis
- ◆ Identify problem spots & solutions
- ◆ Hygiene & Health education
- ◆ Operation & Maintenance of the facilities
- ◆ Document success stories and share

SSHE implementation at school- necessary inputs and efforts

School water supply, sanitation and hygiene education programme needs to be implemented carefully. In fact, it is necessary that an implementation plan be prepared at school level to cover: IEC, physical infrastructure, hygiene education, O&M, monitoring, and so on. The plan should inform how the program will be carried out at school and who is responsible for what, with a time line at each point with required inputs. For the effective implementation of the SSHE plan, it should have the followings:

- ◆ **Active Children:** In school sanitation programme, children learn and practice good hygiene habit. Children can also experience working together, being tolerant and building self-esteem. In good programmes, girls and boys are responsible for
 - ▶ Their own personal hygiene
 - ▶ Regular & correct use of facilities
 - ▶ Washing hands after using toilets and before and after eating
 - ▶ Keeping the environment clean
 - ▶ Participating in hygiene education activities, both inside & outside class room

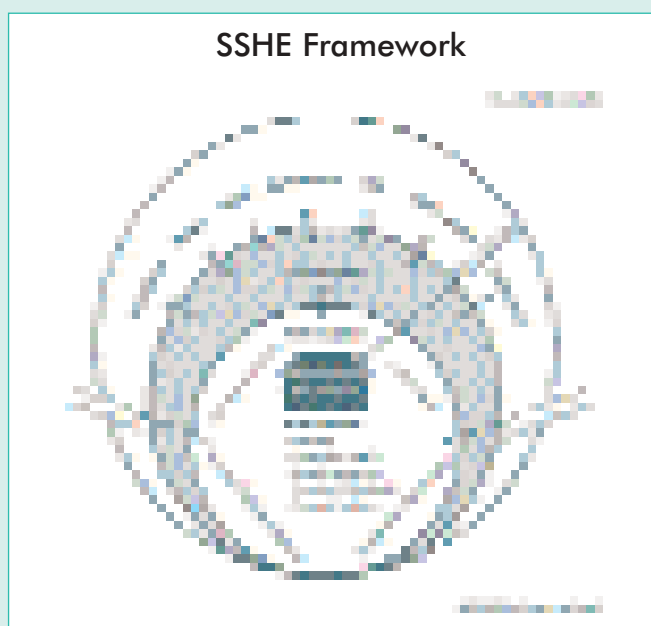
- ◆ **School WATSAN /Health Committee or Club:** These are the institutional arrangements for the children to carry out the water and sanitation programmes in schools. Its size varies from about 10 children to 30 children. Besides this, class based WATSAN/Health Club can also be formed. School WATSAN/Health Clubs have the following activities:
 - ▶ Decision making-Identify hygiene problems in the school & community and make plans for solving these problems. They can also decide the location of the facilities.
 - ▶ To roster the responsibility and ensure children fill the water reservoir, clean around the tank and hand washing facility, checks for leaks, maintain water pot in the class rooms, Children check other children for cleanliness at the beginning of the day. The WATSAN members make sure that all children wash hands before & after eating and after going to toilet, help organize children for cleaning the compound, make sure the classrooms are neat and throw away the trash. In the morning children clean the classroom by turn base. They also ensure that children and teachers clean the latrines on rotation basis.
 - ▶ Child to Child, Child to Home/Community- Member of the committee may ensure older children can help teach younger children. They can monitor the use of facilities by other children. They can persuade the parents for construction of toilets and also teach hygiene habits to their parents. They can participate in village cleaning programmes, visit other schools, organize sanitation demonstrations, and undertake games & competitions

- ◆ **Community & parent participation:** The facilities constructed without the participation of the community will probably not be maintained correctly. So community & parent's participation is a must to ensure the followings:
 - ▶ To have a strong trainees & local groups in the community to support the programme
 - ▶ The parents & community to understands the purpose of the programme
 - ▶ To make decisions about the design construction & location of the facility
 - ▶ To contribute to the project and help in monitoring
 - ▶ To take part in the hygiene education programmes
 - ▶ To pay for the O & M of the facilities

- ◆ **Management groups in schools:** The members of the management group can be Teachers & Head Teachers, School Management Committee, Village education committee, Parent- Teacher Association, Self-Help Groups and other youth groups, Panchayati Raj Institutions, etc. The School Management committee can set up a bank account and help manage construction, rehabilitation, and repairs. The main duties of the committee to:
 - ▶ Monitor the construction of the facilities
 - ▶ Raise money
 - ▶ Control the bank account
 - ▶ Attend meetings
 - ▶ Undertake maintenance & repair

Inputs for good SSHE

- ◆ Active Children
- ◆ Community and parents participation
- ◆ Management groups in schools
- ◆ Trained and active teachers
- ◆ Health and Hygiene Education forming healthy behaviors
- ◆ School water and sanitary facilities
- ◆ Good use and maintenance
- ◆ Linking schools with community and family
- ◆ Monitoring



- ◆ **Trained and active teachers:** One or two teachers should be in charge of the programme. They are usually responsible for:
 - ▶ Working with community groups
 - ▶ Helping to plan the location & design of facilities
 - ▶ Educating children
 - ▶ Organizing children for the activities
 - ▶ Organizing & managing school WATSAN/health committee
 - ▶ Monitoring the programme in the school
 - ▶ Attending meetings & conferences
 - ▶ Educating children outside the school, visiting communities, organize children programme in the community

Elements of Strategy in SSHE

- ◆ Strive for a common goal, common purpose, common policy and common planning
- ◆ Child as the key resource
- ◆ School as Knowledge Center
- ◆ Education for behavior change
- ◆ Teacher as facilitator
- ◆ Alliance Building
- ◆ Result oriented/effective delivery system
- ◆ Community as an equal partner

- ◆ **Facilities availability to be ensured-** The following facilities can be constructed
 - ▶ Toilets & urinals
 - ▶ Hand washing facilities
 - ▶ Water supply facilities
 - ▶ Healthy class rooms & play grounds (lighting, chalk boards, desks & benches etc)
 - ▶ Garbage pit & soakage pit

- ◆ **Health and Hygiene Education forming healthy behaviors:** The objective of school water supply, sanitation and hygiene education is to ensure that the present and future health and education of school children improve through better hygiene behaviour. SSHE should aim for full coverage of school with water and toilet facilities and strategy and activities to promote hygiene practices among school children on use of water and toilets facilities, hand washing, safe disposal of waste, use of footwear, water and food handling. For example, the following activities can be incorporated :
 - ▶ **School health check up and de worming activity** for instance six monthly or yearly de-worming activity may be planned with the provision of regular

visits by PHC Doctors/ANMs for school health check ups. Coordination with Health Dept. may be established.

- ▶ **Demonstration activity** using life skill approach for imparting health and hygiene education on the issues of hand washing both washing hands after defecation and before & after eating, water and food handling, use of footwear, toilet use, personal hygiene cleaning the toilets, cleaning of school campus and plantation in compound, disposal of solid and liquid waste, home and village sanitation, etc
- ▶ **Curriculum development** and incorporation of hygiene education in the curriculum. **Coordination with Education Dept.** may be established. It should be done on child friendly learning and innovative teaching mode.
- ▶ Competition among children to encourage learning through quiz, painting, debates, games, songs, wall painting by children, slogan writing, etc
- ▶ **Daily school themes** on water and sanitation for e.g. on Monday handling of drinking water and Tuesday personal hygiene and so on. Observance of Sanitation Day in a week along with sanitation drive in village and around water sources involving school and community
- ▶ Message in Assemblies on health & hygiene related
- ▶ Exposure visit to schools which have better facilities and use behaviour
- ▶ Linkages between school to family & community

Use of participatory method in SSHE

The best SSHE programmes try to make learning enjoyable. Participatory methods can help in this effort though, the methods must be simple & practical. The following are some of the participatory tools that can be adopted:

- ◆ **Mapping:** Children identify the sanitation problems in the school premises & in the village & make map
- ◆ **Monitoring charts:** Each week children and teachers check a number of hygiene and cleanliness habits or places in the school. These are entered on to a chart where progress can be seen as time goes by
- ◆ **Stories:** The teachers tell stories that give a gap, in the middle or at the end, children think how to fill the gap
- ◆ **Demonstrations:** Child or teacher demonstrates, for example, how to wash hands correctly, how to explain about personal hygiene or tell a younger child about how to use a latrine.
- ◆ **Experiments:** For example, children wash their hands with different things for e.g. soap. ash etc
- ◆ **Posters:** Teachers show a poster that illustrates many hygiene problems and asks children to identify

- ◆ Use of facilities & Maintenance: Maintaining cleanliness in and around water point area and toilet is essential for success of school water and sanitation and hygiene education drive. The O&M responsibilities may be identified and divided among Teachers and Students, Head Teachers and School Inspectors. The students should be assigned tasks by rotation. The role of school watsan committee and school management committee and PTA should be coordinated which in turn ensures the following:
 - ▶ Resource mobilization for O&M funds i.e. for soap, brush, bucket etc. from PTA, SMC, VC, etc, may be on annual basis
 - ▶ Roster of responsibilities(irrespective of caste and class) for making sure all children wash hands with soaps before and after eating and after going to the toilet and involving children in cleaning the latrines, cleaning water point area and fill water reservoir, checking for leaks, cleaning the compound, etc
 - ▶ To ensure school led O&M, creative use of IEC and training
 - ▶ Identifying hygiene problems in the school and community and make plans for solving the problems and filling the water reservoir, cleaning around the tank and hand washing facility, checking for leaks/breaks and reporting
 - ▶ Drawing up maintenance schedules and allocation of responsibility such as who will clean and who will monitor on rotation basis among students. State/Districts may issue a suitable directions on this issue
 - ▶ Manage stock of parts , tools, and supplies
 - ▶ Conduct survey on O&M improvement, meetings and respond with solution against users' complaint

School based O&M

- ◆ Resource mobilization for O&M funds i.e. for soap, brush, bucket, etc.
 - ◆ Children with support of WATSAN Committee identify hygiene problems in the school and community and make plans for solving the problems
 - ◆ Children fill the water reservoir, clean around the tank and hand washing facility, check for leaks/breaks and report
 - ◆ The committee/club members make sure all children wash hands with soaps before and after eating and after going to the toilet
 - ◆ Cleaning the compound, make sure the classroom is neat and throw away the trash. In the morning some children can clean the class, sweep away the cobwebs and so on
 - ◆ Children clean the latrines or organize other children to clean the latrine on a rotating basis
 - ◆ Regular meeting on O&M and improve the system
-
- ◆ Linking school to homes and community: One important objective of the SSHE programme is to reach the home and community. This can take place through several types of activities such as
 - ▶ The school watsan/health committees' activities in villages
 - ▶ Conducting rallies, padayatra, etc in the village
 - ▶ Motivate people to construct & use toilet
 - ▶ Helping to clean home & public places

Case Study 1- Raina, West Bengal

Health & Hygiene education in the Schools of Raina district is a step towards community sanitation. It aims at supporting the primary school children as initiators of change and the primary school as the platform of change. Focusing on community participation, it has achieved remarkable success on the coverage for water supply with 80 percent and for latrines 50 percent. The methodology adopted in hygiene education is effective and very systematic. It was initiated with a participatory baseline survey and monitored by visual charts such as monitoring charts to assess the hygiene status of the children in the schools. Various students have been assigned the role of health soldiers. These health soldiers are asked to report any wrong doings regarding hygiene behavior (e.g. not cleaning latrine after usage) which they may observe during the day, to the teacher.

The same approach has been followed at the household level. In this case, the adult health soldiers are requested to record specific information on existence and use of latrines at home. The visual board is once again brought an interactive behavioral change where guardians are motivated to bring change in the process that also reflect positive behavior which the children take in. There are various capacity building programmes for the action groups comprised of Guardian representatives, WWC members, panchayat members and Anganwadi members. They played vital role to motivate the villagers and to identify specific problems in the presence of PRI members & NGO. NGOs, in particular, have played a major role on monitoring and evaluating schools.

Case Study 2- Mysore, Karnataka

The novel idea of a special sanitation programme for schools began in Mysore district in 1992, with 20 schools. The SSHE Project continued to grow and today covers 1474 schools in Mysore, Tumkur, Chitradurga, Mandya, Raichur, Bangalore (U), and Bangalore (R) districts.

The strategic focus of the project was to combine technology with human resource development and develop a sustainable approach that had children's participation at the core. Emphasis was placed on transformation that brought a visible change, thereby enthusing and galvanizing children, teachers, parents, communities, and local authorities into further action. Also central to the project was the development of quality standards that would enable sustained replication and the build-up of enduring infrastructure.

- ◆ **Monitoring of the progress:** Monitoring helps us to find out the gaps in the project implementation in order to take corrective measures and improve the quality of output. Effective monitoring system will focus on physical progress of water and sanitation facilities, construction safe drinking water and use and personal behavior on health and hygiene of the students and environmental conditions of the schools. There can be conventional monitoring and review through functionaries. In addition to these, independent monitoring and concurrent evaluations are also envisaged with a view to generate timely, reliable and usable information. The modes:
 - ▶ Regular school visits by Panchayat members, BDOs, officials of Health and Education departments, PTA and SMC members
 - ▶ Regular review meetings at different levels

- ▶ School based participatory monitoring using techniques such as monitoring charts, mapping, physicals checks, etc by students and teachers (checklist to be prepared by the students and teachers and school based indicator to be developed)
- ▶ Community visits to schools
- ▶ Quality inspection- review teams
- ▶ Conventional report system (formats and progress reports—monthly and online reporting)
- ▶ Periodic evaluation and assessments for course correction
- ▶ Impact surveys by independent agency such as mid line survey and end line survey
- ▶ Documentation of case studies and success stories

Two levels of indicators which may be monitored and evaluated

◆ Process level as given below

- ▶ Coverage of physical facilities' progress of the construction of the water supply points, school toilets, drainage, hand washing, clean class and compound
- ▶ Percentage of Schools with clean toilet, clean water point area and storage facility, clean and green compound and class, availability of consumables like soap, jug, etc
- ▶ No. of water quality checks done in a year and information to children
- ▶ Percentage of Children who use toilets and practice basic hygiene especially on handling of drinking water, use of toilets and hand washing (before eating, after using toilet with soaps, etc) and share tasks of collecting water and clean toilets (of all caste and classes) equally
- ▶ Percentage of school with health and hygiene education component and related activities
- ▶ No. of teachers, SMCs/PTA, project officials, PRIs and NGOs trained and oriented on the importance of sanitation and hygiene education and have plans
- ▶ Percentage of Teachers who demonstrate good hygiene and sanitation behavior
- ▶ Percentage of the schools able to communicate the hygiene behavior to community
- ▶ Percentage of schools having sustainable system of fund mobilization for O&M
- ▶ Percentage of schools with School WATSAN/Health Committees

2. Impact level indicators as given below

- ▶ Percentage of increase in enrolment especially among girls
- ▶ Percentage of increase in attendance especially among girls
- ▶ Low drop out rate especially among girls
- ▶ Percentage of reduction of diseases especially diarrhea & worm infections
- ▶ Low IMR and Child Mortality Rate
- ▶ Improved nutritional status
- ▶ High literacy rate especially among girls
- ▶ Balanced sex ratio
- ▶ Percentage of children with HH toilets

Sustainability of the School Water and Sanitation Programme

Graduation, which means transfer of ownership, is the first step towards ensuring sustainability. The Water Supply and TSC Project expect to achieve the desired goal of empowering school and community, by transferring all the decision making, project management responsibilities, sanitation services, and facilities to the schools.

Govt is committed to sustain the development in water and sanitation sector through bringing lasting changes in behavior, institutions and policies that lead to positive impact on school going children and community to which they belong. The following principles for sustainability on School Water and Sanitation to be considered:

- ◆ Transfer of O&M of water and sanitation facilities to school management and community
- ◆ Partnership with PRIs/NGOs
- ◆ Fostering community empowerment, unity and joint problem solving capacity on school water, sanitation and hygiene issues
- ◆ Facilitating linkages between Government, NGOs, communities and other stakeholders.
- ◆ Building capacity of school health and sanitation clubs, PRIs, teachers and students to improve and sustain services and systems
- ◆ Govt. is focusing on application of local inputs, appropriate technology, capacity building, and linkage with resource organizations to foster sustainability to the project on school water and sanitation

Summary

School water supply, sanitation and hygiene education have been planned to create healthy schools bringing about behavioral change for lasting impact on children and subsequently community. The Government of India is fully committed to extend proper water, sanitation and hygiene learning coverage to all rural schools to ensure child survival, their protection and development.

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Abbreviations and Acronyms

CRSP	Centrally Sponsored Rural Sanitation Programme
DPEP	District Primary Education Programme
Gol	Government of India
HRD	Human Resource Development
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Ratio
NCAER	National Council for Applied Economic Research
NDC	National Development Council
NFHS	National Family Health Survey
NGO	Non-governmental Organisation
NSS	National Sample Survey
PC	Production Centre
PLA	Participatory Learning Appraisal
RGNDWM	Rajiv Gandhi National Drinking Water Mission
RSM	Rural Sanitary Mart
SHG	Self-Help Group
SRP	Sector Reform Project
SSA	Sarva Siksha Abhiyan
TSC	Total Sanitation Campaign
UN	United Nations
UNICEF	United Nations Children's Fund

