

## Social mobilization for school sanitation and hygiene education

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Key words : Sanitation fosters, Personal hygiene, Behavioral change, Behaviors of 4 cleans, Schoolchildren

### Abstract

This research has the following main purposes: to achieve sanitation fosters will take; to raise community awareness of sanitation and hygiene education; to encourage the participation of the entire community (students, teachers, school heads, Parent Teacher Association, School Board of Trustees) in sanitation and hygiene education; to improve unsanitary schools; to encourage the '4 cleans' behaviors through community-planned grassroots projects and improve health and quality of life through these behavior changes; to prevent contamination of water from source to mouth.

### 1. Introduction

School Sanitation and Hygiene Education (SSHE) is a component of the School Health Project to promote health and prevent disease.

SSHE focuses on providing children with an effective and healthy learning environment and changing their hygiene behavior. It also utilizes schoolchildren as change-agents within their community.

Positive hygiene behaviors, including correct use and maintenance of facilities, are systematically promoted among schoolchildren in SSHE. Hygiene-related facilities and resources enable schoolchildren to practice behaviors that control disease transmission. Adequate water, proper sanitation, and hygiene at school allow children to integrate hygiene education into their daily lives inside and outside of school and become lifelong positive habits. These children can become effective messengers and agents for change in their families and the wider community.

SSHE has the following key components: hygiene education leading to healthy behaviors; active and organized children; proper use and maintenance of water sources and sanitation and hygiene facilities; strong links to home and community. Messages taught

focus on personal hygiene, clean water, hand-washing, and sanitary latrine use for better health.

#### 1.1. The Focus of School Sanitation and Hygiene Education

SSHE focuses on the development of life-skills, a healthy and safe school environment, and outreach to families and communities.

Investing in SSHE has many benefits. To begin, adequate water supply, sanitation, hygiene, and waste management in schools reduces the disease burden among children and their families. If school sanitation and hygiene facilities are absent, badly maintained, or improperly used, schools can become a public health hazard. Clean water, sanitary latrines, and the safe disposal of excreta may prevent outbreaks of disease and other health hazards for the school and the community at large.

SSHE also protects children's wellbeing. Being clean, having clean water and proper sanitation facilities, and staying healthy, all contribute to a happy childhood. Healthy children in a hygienic and sanitary school also

learn more effectively.

SSHE can improve gender equality in access to education. The lack of private sanitary facilities for girls can discourage parents from sending girls to school and contributes to girls dropping out of school, particularly at puberty.

Water, sanitation, and hygiene education in schools leads to improved school facilities and promotes lifelong health. The school also becomes a place for children to learn and promote healthy practices at home and in the community.

## 2. Environmental Sanitation

Sanitation is vital for human health. Sanitation is not a single behavior or mechanism, but a mindset or life-style. Sanitation means different things to different people, but its definition must include the safe management of human excreta, usually by means of a toilet that confines feces until they are composted and safe, or are flushed away into a sewer.

Sanitation also includes environmental cleanliness, hand-washing, and garbage and wastewater disposal. Sanitation is crucial to prevent the outbreak of diseases, control environmental pollution, and protect public health. It is, like education and health, a fundamental building block in the fight against world poverty.

### 2.1. The "Total Sanitation" Approach

Efforts have been made in recent years to introduce low-cost, hygienic sanitation into crowded Pauk Khaung Township, Bago (West) Region, Myanmar. An approach known as 'community-led total sanitation' has enjoyed growing success. Instead of exhorting villagers to build and use toilets, public health promoters champion the concept of "freedom from open defecation". Communities were invited to map their 'defecation zones', calculate their output of excreta and the environmental health threat it posed, and take collective action to improve the situation. The approach appealed to residents' sense of self-respect and community ownership of the problem. Actions included naming and shaming promiscuous defecators. Better-off villagers were invited to pay for their poorer neighbors to install their own facilities.

Community-led sanitation improvements can build community pride and cohesion.

The goal of Community-Led Total Sanitation (CLTS) is to establish total sanitation within a community, with the primary objective of completely stopping open defecation. CLTS tries to catalyze a change in sanitation behavior and social norms rather than constructing toilets. CLTS works through a process of social awakening stimulated by facilitators from within or outside the community. CLTS concentrates on the whole community rather than on individual's behaviors.

## 3. The Importance of Hygiene

School Sanitation and Hygiene Education (SSHE) programs in Myanmar have helped to promote hand-washing and hygiene behavior change through hand-washing campaigns featuring celebrities as advocates.

Hygiene education should be part of school health programs, emergency response programs, and community health programs. In the schools, it can be used to empower children as agents of change within their families and communities.

Hygiene education should be a core part of teacher training. Regular refresher training maintains teacher knowledge and awareness. Hygiene education, using a variety of participatory and other learning methods, helps schoolchildren acquire the knowledge, attitudes, and life-skills needed for a healthy lifestyle, particularly with respect to water, sanitation and hygiene.

### 3.1. Hygiene Promotion

Hygiene education also promotes the correct use and maintenance of water and sanitation facilities. A healthy school environment depends on the proper use of the water supply, sanitation and hygiene facilities. These activities should be managed by clear regulations that are planned and enacted by the teachers, schoolchildren and parents.

Hygiene improvement is achieved through access to clean water and sanitary facilities, as well as personal hygiene education. Children are often eager to learn new ideas and so schools can be key in developing

useful life-skills regarding health and hygiene. Hygiene behavior learned at school can lead to life-long healthy habits.

Teachers function as role models, for both the children and the community. In addition, schoolchildren can also influence the behavior of family members, both adults and siblings, and thereby positively influence the community as a whole.

Current and future generations of children must grow up with safe water and good sanitation in their schools and communities. Children who understand the importance of conserving water, hand-washing with soap, and using a clean toilet at home, will help their siblings and parents have a better life.

#### 4. Behavior change strategies for school

Behavior change strategies in the school must help not only children, but also teachers, parents and key decision makers to understand and appreciate good hygiene behaviors.

Effective strategies are critical to the success and sustainability of water, sanitation, and hygiene interventions. Changes must include improvements in hand-washing, sanitation facilities use, and the maintenance of safe drinking water.

The various levels of education and cognitive development of schoolchildren may require multiple behavior change approaches within a single school. Schools are a natural learning environment, so children are likely more receptive to behavior change education implemented at school rather than outside of school. It is theorized that personal hygiene practices in adulthood are largely learned and acquired during childhood, suggesting that changes among schoolchildren can lead to a lifetime of improved practices.

Child-to-child approaches to behavior change are central to behavior change strategies at school. Child-to-child approaches can take the form of direct teaching of children by their schoolmates, similar to peer education models for adult behavior change in the community.

Another fundamental component of school-based behavior change is lifeskill-based education. While traditional education emphasizes knowledge and

attitudes about good hygiene behaviors, lifeskill-based education allows children to practice their proper hygiene knowledge in a variety of real-life settings.

##### 4.1. Health Promotion for "4 Cleans" Program

SSHE has sparked community interest through discussion of the "4 Cleans": clean hands, clean water, clean toilets, and clean food. Face-to-face contact with local celebrities has proven the most effective in getting people, especially schoolchildren, to change their hygiene practices. Hygiene awareness increased and schoolchildren changed behaviors and improved hygiene practices. The 4 cleans program aims to change behavior through grassroots community-developed efforts to promote hygiene and health.

##### 4.2. Healthy Behaviors for Clean Hands

Hand washing with soap saves lives. It is one of the most important messages hygiene education can communicate because it is the simplest and most effective way to prevent diarrheal diseases and acute respiratory infections. Children should learn that washing hands with water alone is not enough; soap should always be used and at critical times: (1) after using the latrine; (2) before touching food or eating; (3) after cleaning a young child or helping a child go to the toilet; (4) after handling garbage and other contaminated materials.

School mealtimes provide a good opportunity for everyone to routinely wash their hands properly with soap. This whole-school practice teaches children and adults that good hygiene is an important and social daily activity.

Every school should have a hand-washing facility near its latrine. There are different types of facilities, including simple devices such as the "punched pipe" system. The punched pipe or tube system is a low-cost hand-washing facility where up to 20 children can wash their hands at the same time using just 2 liters of water. Children can be tasked with making sure water and soap are always available at the hand-washing facilities.

Good hand-washing practices have been shown to also reduce the incidence of other diseases, notably

pneumonia, trachoma, scabies, skin and eye infections, and diarrhea-related diseases like cholera and dysentery. Hand-washing with soap is also a key strategy for controlling the spread of influenza.

There are a variety of ways to teach hand-washing to children in schools and encourage them to demonstrate good hygiene to their families and communities. The challenge is to transform hand-washing with soap from an abstract idea into an automatic behavior performed at home, school and in the community.

Global hand-washing day, first celebrated in 2008, provides an opportunity for school children to reach out to their communities with this life-saving message of hand-washing with soap. On October 15th each year, classrooms, community centers and public spaces are filled with activities to encourage hand-washing. Teachers must understand the importance of hand-washing with soap, and advocacy is needed within the community as well. Although schools can teach children the benefits of hand-washing and the consequences of not keeping their hands clean, if they are unable to practice these improved habits at home, it may take a long time to internalize these changes. It is therefore crucial that parents also know the importance of hand-washing with soap. These efforts must be supported with an adequate supply of soap, a challenge for many schools.

This table shows the data for hand washing activity in primary schools in 4 townships.

In Myanmar, hand washing supplies have been provided by the Department of Educational Planning and Training (DEPT) in cooperation with UNICEF.

Table 1. Hand washing activity

Academic Year	State/Region	Township	Schools	Students	Teachers	Parents+ PTA+ BOT
2009-2010	Ayeyarwady	Pantanaw	16	1,791	71	480
2010-2011	Ayeyarwady	Pantanaw	32	4,416	139	145
		Mandalay	Nay Pyi Taw	3	5,438	222
	Bago	The Gone	112	6,171	490	3,360
		Shwe Taung	125	16,794	1,080	7,255

Source : School Sanitation and Hygiene Education Project (SSHE Project) 2009 to 2011  
Department of Educational planning and Training, Ministry of Education

#### 4.3. Healthy Behaviors for Clean Water

Schoolchildren and teachers need a water supply that is safe, accessible, and of sufficient quantity for drinking, food preparation, and personal hygiene. In an emergency, all water should be treated, even water supplied to schools by relief agencies for drinking. Children should learn: to use water from a reliable source; to never assume water is safe to drink and always treat it; collect, carry, store and use drinking water properly; that contaminated water can harm you and your health; that when safe drinking water is hard to get, relief agencies will help by providing it from tankers and temporary storage tanks.

Children need 1-2 litres of treated drinking water every day. This water should be kept in the classroom or learning space so that children have free access to it. Drinking water should be stored in clean jerrycans or other covered containers with taps to prevent contamination from hands, dirt, and insects.

Where possible, each child should have a cup, water bottle, or other container, for his or her own drinking water. Water is also needed for food preparation, sanitation, and hand washing. Separate consideration should be given to the water needs of any displaced people using the school for shelter.

Because drinking-water supplies are often scarce, people are sometimes forced to draw water from rivers, ponds, leaking pipes, tanks, and wells that are damaged and contaminated. Children using these familiar sources may not realize the danger to their health or personal safety. A water source should be avoided

when: people defecate in or near it; animals use it; objects, corpses, and animal carcasses have been disposed of in it; it is near a damaged latrine; water is no longer treated due to malfunctioning treatment equipment; there has been heavy rain or flooding, and storm-water drainage is poor; dirty surface water has entered springs and wells.

Whenever possible, water for drinking should be obtained from a tanker, specially constructed tanks, water bladders, or pumps constructed and managed by relief agencies. Bottled water may be distributed during emergencies, but this is a temporary solution.

Water should be collected and transported in covered, clean containers without coming into contact with hands. Once in the household, water should be stored in a covered container to prevent contamination. Placing the container out of reach of small children is a good idea. Drinking water should be poured from the container into clean cups.

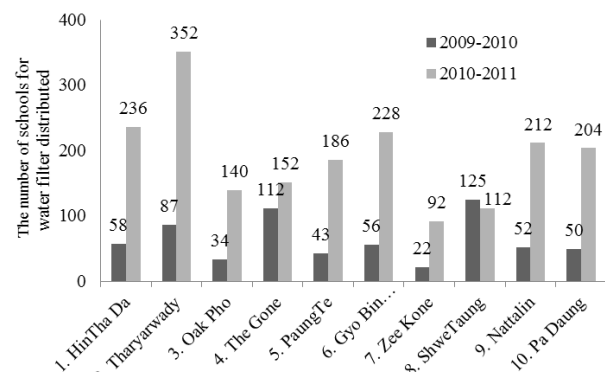
Household water treatment is an important strategy, but ensuring the quality of water at the source remains key. Water should be drawn from a protected groundwater (eg: lakes, wells) or from a treated supply, and be kept safe until consumed. Untreated water from unprotected sources can be made safer by simple means such as boiling or household water treatment systems (e.g. chlorine solution).

Water treatment makes water safe and pleasant to drink. Depending on local circumstances, two types of treatment are common. The first is disinfection by heat (boiling), chemicals (chlorine) or sunlight. The second is filtration, by passing the water through a ceramic or sand filter. Whichever method is used, children should learn how to treat water for drinking. If chlorine tablets are used, children should know the recommended dosage and treatment procedure. If using heat to disinfect, the water should be boiled for at least 10 minutes to make sure all pathogens are killed before consumption.

Boiled water should be stored, handled carefully, and consumed within 24 hours to avoid recontamination. If sunlight is used to disinfect small quantities of water, the bottles should be filled with pre-filtered, clear water and set out in the sun (usually on rooftops) for 6 hours. Where filtration is used (for

example candle filters, sand filters or the two clay-pot system), the filters must be cleaned regularly.

Figure 1 shows the number of schools where water filter supplies were provided by the Department of Educational Planning and Training (DEPT) in cooperation with UNICEF.



State/Region: 1. Ayeyarwady, 2-10. Bago

Source : School Sanitation and Hygiene Education Project (SSHE Project) 2009 to 2011  
Department of Educational planning and Training, Ministry of Education

Figure 1. Number of schools where water filters have been distributed

#### 4.4. Healthy Behaviors for Clean Toilets

As with other hygiene behaviors, such as correct use of toilets, this often requires helping younger schoolchildren and monitoring older ones to ensure that they perform the activity correctly and consistently. There should be one sanitary latrine for every 50 students, with water and soap available to wash hands. Male and female toilets should be completely separate to provide privacy and security.

All toilet designs should include convenient hand-washing facilities so that hand-washing after using the toilet can become a routine for schoolchildren and teachers. Toilets should be hygienic to use and easy to clean. A maintenance routine should be implemented to ensure that clean and functioning toilets are available at all times.

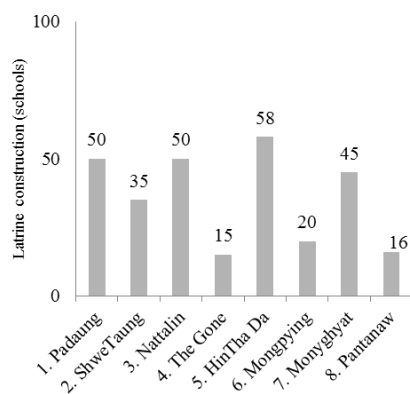
Latrine structures may not be popular with children due to the smell, flies, mosquitoes, or the area being soiled by other users. Dark spaces can be frightening for young children, and girls may fear walking alone to the latrine in the early morning or at night because they risk harassment, violence and rape.

A latrine is more likely to be used if it is clean. Daily maintenance tasks include: cleaning floors, brushing walls, emptying wastebaskets, replacing cleaning supplies, adding ash to the pit (dry pit), checking and replacing soap and water for hand washing, checking proper functioning of doors and locks, and keeping the area around the latrine free from surface water, puddles and rubbish.

Toilets should be cleaned whenever they are dirty, and at least once per day, with a disinfectant being used on all exposed surfaces. Toilets are a prerequisite for a clean, healthy household and community environment, particularly in dense settlements. They are also vital to safeguard environmental quality more broadly, especially the quality of water resources. Cleaning toilets should not be viewed as a form of punishment.

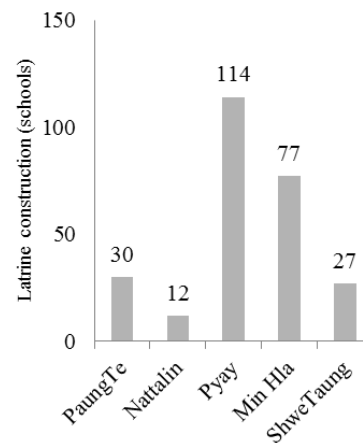
As well as learning how to use a latrine, children should know that it is wrong to defecate in the open, that they should always use a latrine or dedicated area, that disposing of feces properly reduces the risk of disease, and that latrines must be kept clean.

Figure 2 shows the number of schools where latrines have been constructed by Department of Educational Planning and Training (DEPT) in cooperation with UNICEF.



State/Region: 1-4. Bago, 5,8. Ayeyarwady, 6,7. Shan  
 Source : School Sanitation and Hygiene Education Project (SSHE Project) 2009 to 2011  
 Department of Educational planning and Training, Ministry of Education

Figure 2. The number of schools where latrines were construction (2009-2010)



Source : School Sanitation and Hygiene Education Project (SSHE Project) 2009 to 2011  
 Department of Educational planning and Training, Ministry of Education

Figure 3. The number of schools where latrines were construction (2010-2011, Bago Region)

#### 4.5. Healthy Behaviors for Clean Foods

Food should be protected from insects, rodents, and other animals which frequently carry pathogenic organisms and are a potential source of food contamination. Schoolchildren sometimes bring food to school from home. In these cases, the school hygiene committee or equivalent should work with the families of schoolchildren to ensure that food is prepared hygienically and families avoid foods that carry a high health risk if stored at ambient temperature.

Eating utensils should be washed with water and detergent immediately after each use, and then dried. Food sold to children by vendors may be unsafe. School authorities should seek solutions to protect schoolchildren from disease borne by vendor-bought food. Food handlers should be trained in basic food safety. They must wash their hands after handling foods and whenever they start work, change tasks, or return to work after an interruption. Soap and water should be available at all times during food preparation and handling.

## Conclusion

In Myanmar, the school network project was developed into the School Sanitation and Hygiene Education (SSHE) program. SSHE is an environmental sanitation and hygiene project implemented by the Department of Educational Planning and Training (DEPT) under the Ministry of Education (MOE). SSHE includes the construction of sanitary latrines, provision of safe drinking water, hand-washing promotion activities, and the training of primary school teachers and pre-service (student) teachers in participatory hygiene education. Learning materials are supplied by DEPT in cooperation with UNICEF. SSHE helps communities increase awareness and involvement in school activities. Social mobilization around the 4 cleans (clean Toilet, clean Water, clean Hand and clean Food) has been the backbone of the hygiene campaign. Overall, SSHE has achieved improvements across a range of indicators related to the general well-being of the citizenry.

## Acknowledgments

I wish to express my sincere thanks to U Bo Win, Director General, Department of Educational Planning and Training (DEPT) and Professor Seiji Ohsawa, Division of Behavioral Epidemiology, Institute of Human living Science, Otsuma Women's University for their support and guidance.

I am deeply grateful to U Than Naing, Staff Officer

and School Health Project (focal person), Department of Educational Planning and Training (DEPT) for his advice and kind help in completing this paper. Finally, I would like to acknowledge the debt my research owes to the UNICEF WASH program documents.

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(Received April 1, 2015; accepted July 28, 2015)

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