

# TEACHER'S GUIDE ON PRIMARY SCHOOL SANITATION AND HYGIENE EDUCATION

(Translated from Bangla version)



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# INTRODUCTION

At this stage, all primary education officers and Sub Assistant Engineers (SAE) of DPHE of the Upazillas were trained. These trained individuals visited the schools and after discussing with the school management selected the right technology for that school.

In 2000, as a strategic move, the school sanitation programme was renamed as School Sanitation and Hygiene Education (SSHE) program. Thus the SSHE program strategy was changed and modified gradually and approved by the government in 2001.

At present, the SSHE programme is spread throughout all the primary schools in selected Upazillas of the districts under "Sanitation, Hygiene, Education and Water-supply (GOB-UNICEF)" project.

Now a days- nationally and internationally- supply of safe water and sanitation are accorded emphasis and a national strategy has already been formulated for implementation at the national level. Water and sanitation has been considered very important in the National poverty reduction strategy papers as well. Besides, among Millennium Development Goals safe water and sanitation achievement's target level have been determined. It has been noticed that safe water and sanitation also plays an important role in achieving other millennium development goals.

Due to the importance of the above mentioned factors and the strategic changes in SSHE, it became inevitable to change the previous teacher's guide .So the manual has been revised and modified and is being presented in a new format.

We hope that this new edition will be very helpful to the teachers and that it will be possible to realize the SSHE program through its use.



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# PURPOSE AND METHOD OF USING THE SCHOOL PACKAGE AND THE TEACHER'S GUIDE

The Primary Education Directorate under the Ministry of Primary and Mass Education, Department of Public Health Engineering with the support of UNICEF, published a School Package on Sanitation and Hygiene Education for the students of class one to five. This guide has been developed to help the teachers to successfully carry out teaching-learning activities on the topics covered in the school package.

## **After studying the manual the teachers will be able to know about the following topics:**

- ▶ The objectives of the Primary School Sanitation and Hygiene Education programme
- ▶ The importance of Sanitation and Hygiene Education in primary schools
- ▶ The Millennium Development Goals regarding the promotion of safe water and sanitation system
- ▶ The following are elements of Sanitation and Hygiene Education programme:
  - School level Plan
  - Hygiene education
  - Activities of Student brigade, and
  - Installation and maintenances (if necessary) of water source and sanitation facilities in school
- ▶ Detail about safe water, sanitation, hygiene, environment and tree plantation and will also gain skills on teaching-learning regarding these issues

# SUBJECT MATTERS INCLUDED IN THE SCHOOL PACKAGE

## **Class One** (Teacher's guide)

### **KALIM CHACHAR PORICHONNO PATHMALA**

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Clipping nail with nail cutter, brushing teeth with tooth brush and daton, rules of hand washing, covering food, drinking and cooking water, using arsenic free tube-well water for cooking and drinking, introduction of hanging, open and sanitary latrine.

## **Class Two** (Teacher's guide)

### **KALIM CHACHAR PORICHONNO PATHMALA**

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Personal hygiene practice and maintaining a clean environment, convenience of sanitary latrine, safe water, rules for washing hands, causes of Diarrhoea and ascariases and its prevention.

## **Class Three** (Teacher's guide)

### **KALIM CHACHAR PORICHONNO DHADHAMALA**

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Cleanliness

Use of sanitary latrine

Rules for washing hands

Rules for storing drinking water

# CHAPTER 1

# ACTIVITY (SSHE)



## **5. Ensure the development of maternal health**

- Reduce the maternal mortality rate by three-fourth

## **6. Prevent HIV/AIDS, Malaria and other diseases**

- Stop the spread of HIV/AIDS and reducing its rate
- Reduce the rate and stop the spread of Malaria and other major diseases

## **7. Ensure a lasting environment**

- Entering a policy within the national policy to ensure a lasting development., starting to compensate on environmental resources
- Half, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.
- Reducing by half the number of people deprived from receiving lasting sources of safe water.
- Improving the living standards by a significant amount of at least 100 million people living in slums by the year 2020.

## **8. Building a global participation for development**

- Establish open trade and finance, which will be directed according to rules, which will be logically presumptive and will not discriminate against anyone. This will also include a promise for good governance, development and reduction in poverty.
- Fulfilling the special needs of least developed countries. These needs include entry rights without taxes and quotas on their exports, writing off further the debts of indebted poor nations, cancellation of bilateral government loans and further donations by countries that promised to reduces poverty.
- Fulfilling the special needs of developing, landlocked and small-island nations.
- Confronting the credit problems of developing nations through taking steps at the national and international level, so that taking loans lasts in the long run.
- Based on the assistance with developing nations, establishing employment for youths.

Because of the lack of safe water and inadequate sanitation system or non-existence of sanitation system, these diseases can easily attack children. Two major reasons for under five child mortality in Bangladesh are diarrhoea and malnutrition. In Bangladesh, diarrhoea alone causes 110,000 deaths among children each year. Because of these reasons, everyone should know from their childhood about the ways of proper health care. It is possible to instil hygiene practices in children and bring about positive changes regarding personal health habits in them through school sanitation and hygiene education.

A good sanitation practice is important to change the hygiene behaviour of children. Besides, it is possible to influence through school sanitation and health education, children themselves, and through the children other children and their families and the local community. It is possible to achieve the desired change in children's behaviour through the school sanitation and hygiene education. The children will learn how to wash hands, safe defecation, ways of keeping latrines clean and maintaining clean environment. It will enable them to live in peace, happiness and in good health. Students can attend school regularly because of improved health and can pay attention to their studies. So, it is necessary to know about sanitation and hygiene from childhood to stay healthy and live a healthy life.

## **Elements of sanitation and hygiene education programme**

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Primary school sanitation and hygiene education elements considered important are discussed as follows:

### **A. Annual school level work plan**

To develop the school overall i.e.; standard of education, material facilities, safe environment etc, and this plan has to be made and realized. School Level Improvement Plan (SLIP) is going to be realized under the Primary Education Development Programme-II (PEDP-II). It is necessary to include SSHE programme in this plan.

- ▶ School students (6 to 10 in number)
- ▶ Elite persons/ philanthropists/ enthusiasts (maximum 5 in number)
- ▶ Ex-student of the school (maximum 5 persons)  
(It is recommended that the participants should be limited to 40-45 persons)

### **Who will facilitate the school planing process**

- ▶ The Upazilla Education Officer
- ▶ The Assistant Upazilla Education Officer

Needs of human beings are unlimited. So it is necessary to know about the methods of determining needs. Every participant will know about the methods of determining school wise need and will be able to determine the needs. The following facts should be kept in mind when determining school-based demands

- ▶ Needs should be determined based upon its importance.
- ▶ Everybody involved with the school must prepare the work plan by realizing the necessity or needs.
- ▶ Geographic location, supply of necessary materials, number of students, future trends etc must be kept in mind to finalize annual plan.

### **A few methods/ ways to determine demand**

At first, the overall situation of the school should be observed and analyzed to determine school wise needs. Safe water and adequate sanitation system in schools should be specially considered when preparing the plan. Necessary improvements should be based on existing infrastructures, and if anything extra is necessary. Considering all the pros and cons, will make the work of determination of needs easy.

Consideration of the following things are essential to determine the school needs

- ▶ Current school situation analysis
- ▶ Expected future of the school/ Determining how the school should look like.

## Some examples of local assets:

### Manpower/Human Resources

- Former students
- Persons attached to learning
- Local representatives/leaders
- Individual patrons of learning
- Enthusiastic young men and women
- Members of clubs
- Different officials/professional
- Religious leaders
- Cultural activists
- Members of cub
- Artisans
- Others

### Materials

- Books/Notepads /Pencils/Pen
- Chalk/Duster/Black Board/  
Colour pencils
- Necessary materials relevant to the lesson
- Sporting tools/ cultural instruments
- Agricultural equipment/materials necessary for gardening
- First-aid Kits
- Fruit Trees/Flower plants/Timber or other trees
- Land/Ponds owned by school etc
- Safe water facilities
- Necessary materials for constructing and maintaining sanitary latrine
- Nail cutters
- De-worming Medicine
- Hand washing soaps
- Waste basket
- Brush, detergent etc to clean toilet
- Glass and pitcher for class rooms with cover for drinking water
- Retail parts for repairing tube-well
- Others

## Steps to realize the plan

1. Copies of the work plan should be given to participants and responsible individuals (The Head master/mistress should take the responsibility)
2. Every responsible individual should be reminded about realization of their particular tasks in writing before hand (The Head master/mistress should take the responsibility)
3. The progress made on the realization of work plan should be discussed in SMC meetings every month. If any problems arise in realizing the work plan, the solution should be found through discussion.
4. Regular, three-monthly reviews should be held with all members of the participants to discuss the progress made in plan realization. The necessary decisions should be taken in this review meeting i.e.; who should do what and how decisions should be taken .If, at the end of the year, it is seen that some tasks have remained unfinished, then they should be included in the next years work plan. The progress report of activities should be sent to the Upazilla Education Office through the involved Assistant Upazilla Education Officer.
6. Prepare a donor list board with description of the donor's name, materials /services provided to realize the school plan. This list should be part of the SLIP list.
7. A separate bank account should be opened with the SMC chairman and the head master's joint signature.

## B. Hygiene Education In Schools:

Students should be aware of the issues of safe water, sanitation, importance of sanitation, and personal and environmental cleanliness to be free from diseases. For this reason, students in primary school (class 1 to 5) should be taught about issues of health education at least once a week in every class by practical application. Thus, the students will be able to learn about hygiene education issues. They will also be able to teach and influence other children in their home and community about these issues.

## C. Student Brigade Activities:

Student brigade activities are "learning through practice". Different student brigades will work under the supervision of the teachers. They will clean the schoolyard, classrooms, and latrines and also take part in gardening.

The objective of forming student brigades is mainly for 'Learning by doing' and also to develop the quality of sanitation system and hygiene education in school and community level. The members of the student brigade will learn through practical experiences and influence the community members to take part in different activities of hygiene education and sanitation activities and help to raise public awareness.

The members of the student brigade will clean the school surroundings, fields, latrines, water tanks, tube-well platforms, classrooms etc. and for gardening.

Since the members of the student brigade live near the school catchments so it will be easy to develop the quality of hygiene education and sanitation system in these catchments through them.

### **Student Brigade Formation:**

**Step one:** A student brigade unit should be formed with 7/8 students who live in the same area or nearby area and of the fourth/fifth grade of the same primary school. It is mandatory for all students of grade 4 & 5.

**Step two:** Student brigades will be guided by and introduced to communities by a teacher and one SMC member.

- ▶ Before receiving the funds, the schools must confirm that they have at least TK 1,000 in its bank account to maintain the WATSAN facilities. Therefore, a bank statement of the school needs to be attached with the application.
- ▶ Immediately after signing the agreement, 80% of the necessary funds for construction of the facilities will be transferred to the school account from EE-DPHE.
- ▶ The school should start necessary construction immediately as soon as funds are available. The work must be completed within two months and a statement of expenditure must also be submitted to the EE.
- ▶ After explaining the costs incurred and submitting a work completion certificate, the rest of the fund(20%) will be handed over to the school authorities.

APPLICATION FORM FOR WATER SUPPLY AND SANITARY LATRINE IN PRIMARY SCHOOLS

14. Does the school require for any water option? **Yes / No**

If yes, please put a tick on the correct option

**Shallow tube-well / Deep tube-well / Tara tube-well / Pond sand filter / Rain water harvesting system / Deep tara tube-well / Ring well**

15. Does the school need for any sanitary units? **Yes / No**

(Please put a tick on the correct option)

If yes then how many units do you wish to receive?

**1 / 2 / 3 / 4 / others** (Please put a tick on the correct option)

Why? (Please describe in brief)

16. If you have applied for any water source, you have to attach a plan for its use and maintenance.

a) Is there any elevated location fit to install water and latrine facilities?

**Yes / No** (Please put a v on the correct option)

b) If no elevated location is available, are the school authorities willing to fill up land at their own expense? **Yes / No**

**Signature of Headmaster**

Name:

Date and Seal:

**Signature of SMC Chairperson**

Name:

Date and Seal:

**Based on the recommendations of the following officials**

**Signature of Assistant  
Upzila Education official**

Name:

Date and Seal:

**Signature of Upzila  
Education Official**

Name:

Date and Seal:

**Signature of  
Sub-Assistant Engineer**

Name:

Date and Seal:

**Signature of UP / Pourashava Chairman**

Name:

Date and Seal:



- d. Who will monitor whether the users are using it regularly as per rules and being cleaned and how?

Everyday one brigade will monitor.

Every class captain will monitor

Everyday one teacher will monitor

Others (specify)

## 5. CLEANLINESS OF SCHOOL-YARD

- a. Will be cleaned regularly by:

Student brigade (male& female)/Cub group [under teacher supervision]

Cleaner (appointed by school authority)

- b. When will it be cleaned?

Before classes commence

After classes end

Other times (specify time)

## 6. FILLING UP THE WATER TANK

- a. Will be filled up everyday by:

Student brigade/cub group (under supervision of teacher)

Others (School authority may appoint someone else)

## 7. MAINTENANCE AND REPAIR OF SAFE WATER SOURCES AND LATRINES:

(It should be mentioned specifically that the school authority should always keep a fund of TK1, 000 handy for maintenance and repair of the facilities. So funds should be collected again as soon as it is spent.)

## **AGREEMENT**

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(This agreement must be signed by the school authorities and government representative after selection of the school to receive safe water and sanitation facilities, and before the receipt of the first instalment from the Department of Public Health Engineering)

### **First Party:**

1. Chairman of SMC
2. School Headmaster

We, the undersigned first party, agree to accept fund from the Department of Public Health Engineering and UNICEF in the sum of TK.....  
(In words .....Takas)  
to construct/repair safe water point and sanitation facilities in two instalment under the following conditions.

### **Conditions:**

1. We will complete the construction of safe water supply and sanitation according to the instructions and guideline.
2. We will accept from the Department of Public Health Engineering the required sum in two instalments (80% +20%), and will apply for the second instalment after being preliminarily approved of satisfactory completion of construction.
3. We will recruit experienced mason and ensure orientation and training on construction with the aid of the Department of Public Health Engineering.
4. We will complete work within sixty days from receipt of the 80% instalment and will claim the rest of the amount within a week of submitting the final statement of expenditures.
5. We will complete construction work using the allocated budget and if extra amount is necessary for extra construction work, then we will collect the extra amount at our own responsibility we will be responsible for returning any.....amount.

## **First Party:**

1. Signature of SMC Chairman:

Name:

Date and Seal:

2. Signature of Headmaster:

Name:

Date and Seal:

## **Second Party:**

We will provide the necessary assistance for School Sanitation & Hygiene Education as per the programme.

1. Signature of Upzila Education Official:

Name:

Date and Seal:

2. Signature of the Department of Public Health Engineering Sub-Assistant Engineer:

Name:

Date and Seal:

Topics discussed in this chapter:

Source of water and safe water, necessity of safe water in sustaining life, arsenic contamination in water, safe water collection and methods of storage and water purification methods.

**Lesson-1: Sources of water and safe water and necessity of safe water in sustaining life.**

**Objectives: The students will be able to define safe water and identify its sources and describe the necessity of safe water in sustaining life.**

**Elements: Charts/ Figures**

## Discussion about the lesson

### Sources of Water

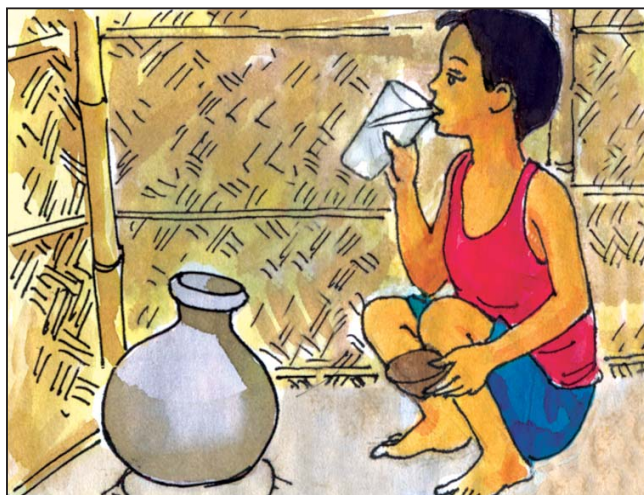
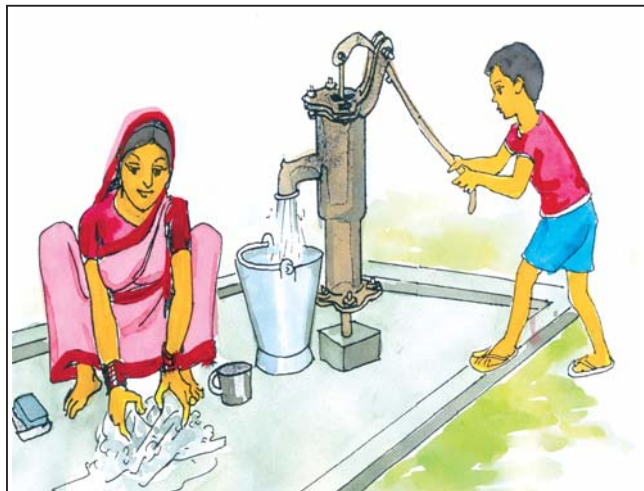
- ▶ Oceans are the main source of water. Besides oceans, underground water, and water in the ponds, lakes, rivers, canals, streams, rain etc are natural sources of water.
- ▶ The main sources of water used by us are underground and surface water sources.
- ▶ We get water from lakes, ponds, rivers, canals etc (above the surface) and deep and shallow water levels (below the surface).
- ▶ All sources of water cannot be used, nor are they safe to use This is because there might be different kinds of germs and harmful materials in above the surface water sources while highly toxic chemicals might be present in under ground water.

### Safe water

Water which does not contain harmful pathogens for human body or germs, and which does not have high level (above the recommended dose) of arsenic, iron etc metal/ chemical elements which are harmful to the human body, is termed as Safe water.

## Planned activities for students

Draw and bring pictures on different uses of water.



*Pictures of water usage*



*Arsenic affected patient's feet*

Primary symptoms of Keratosis and Melanosis occur by drinking arsenic contaminated water. Continuous drinking of arsenic contaminated water may result in cancer.

Usually there is no treatment for diseases from arsenic contamination. So, people must refrain from drinking and cooking with arsenic contaminated water. These diseases are not contagious, so there is no possibility of catching it if you socialize with such a patient.

### **Lesson learning activities**

In the previous lesson the students learnt about safe water, sources of water and necessity of safe water in sustaining life. Ask them following such questions to test their prior knowledge.

- ▶ What do you understand by Safe water?
- ▶ Is water from every source safe?

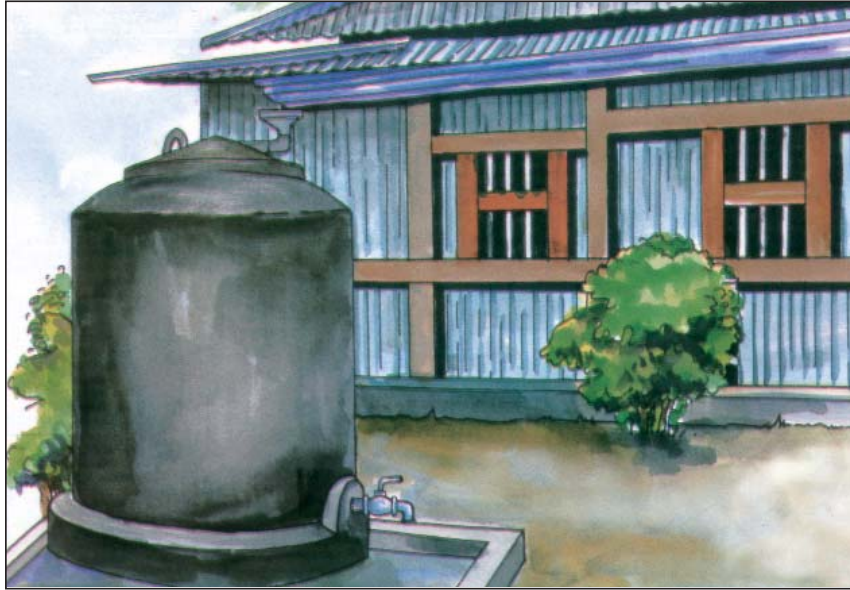
Start the lesson by discussing their answers. Ask them if they have heard about arsenic contamination in water. Try to ascertain their knowledge on arsenic.

Show the charts/pictures of the negative effects of long term drinking of arsenic contaminated water.

- ▶ If pond water is used, then it should be maintained in such a way that water is available throughout the year. Also no outside dirty or polluted water should be mixed with the pond water or garbage from outside should not pollute it. Fish should not be farmed in the same pond.
- ▶ This pond should not be used for cleaning purposes such as washing clothes or dishes. Also cattle must not be bathed there.
- ▶ Water from the ponds or wells should be boiled or purified by other methods to make it safe.
- ▶ To make tube well water safe, a platform should be built around it and it should always be kept clean.
- ▶ A drain should be built to drain the water used from the tube well and that should be kept clean too.
- ▶ Before using tube well water, it should be checked whether it is safe to use. If arsenic is present then check if it is in excessive amount.
- ▶ Arsenic contaminated water is not free from Arsenic after boiling. That is, Arsenic can not be removed by boiling.
- ▶ Pitchers, jugs, glasses or any other pots used to collect water from safe water sources must at first be thoroughly washed and cleaned.
- ▶ The water collected should be covered right after collection.
- ▶ The pots for collecting water such as pitchers or jugs should be kept at an elevated spot at home.
- ▶ The mug/ bowl, etc. used to collect the water should be kept in a safe place so that it remains germ free.
- ▶ Excessive water should not scoop out with hand.

### **Collecting and storing rain water safely:**

- ▶ In some areas, specially in the Arsenic contaminated areas, there is lack of access to safe water. In such areas, for drinking and cooking rain water can be collected and stored using the right methods. Water collected in this way is safe.
- ▶ During the rainy seasons, rain water can be collected by cleaning the tin roofs and regular roofs of homes. This water can be collected by using large pots or



*Methods of collecting & storing rainwater*

### **Evaluation and Review:**

Try to ascertain how much the students have understood about the topic by asking them the following questions or making up questions of your own:

- ▶ Why is safe water important?
- ▶ How can you collect and store safe water?
- ▶ How can you collect rainwater?
- ▶ What should be kept in mind when collecting rainwater?

If there are any problems in comprehending the lesson, discuss it again.

### **Planned activities:**

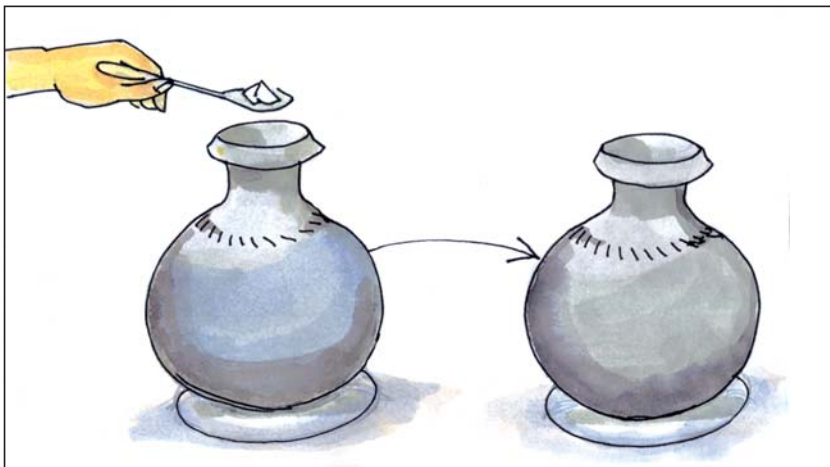
Draw and bring pictures of- collection and storing methods of safe water and demonstrate these methods by role-playing.



## With the help of Alum (FITKIRI)

**AMOUNT OF CRYSTALS:** 1/2 teaspoon (10 mg) of Crystals (FITKIRI),  
in a full water pitcher (about 20 litres)

**METHOD:** Drop the half-tablespoon of crystal in the 20 litres of water inside the pitcher and then stir thoroughly. After the alum has completely dissolved, wait for an hour. After one hour, the water on top (90%) of the pitcher should be transferred to a new pitcher. The water along with the residual left in the old pitcher should be disposed of.



*Purifying water with crystals*

## Boiling Water

After the water has been boiled, it should be boiled for another 20 minutes to ensure that all germs are killed. This boiled water should be kept covered in a pot.



*Purifying water by boiling*

### **Lesson learning activities:**

Try to ascertain, by asking the students questions on whether they have any idea on how to purify water. Ask about the sources of water of the students at home and if it is safe. Discuss how to purify water by linking their answers. Show them pictures and charts of the water purification methods.

### **Evaluation and Review**

Try to find out about their understanding of the water purification methods by asking them questions. If necessary discuss the topic again.

### **Planned activities**

Draw and bring pictures of safe water sources and also bring written report on methods of water purification.

Topics discussed in this chapter:

Different diseases arising from inadequate sanitation system and their prevention methods, ways of spreading diarrhoea through stool and the steps for prevention, what is a sanitary latrine, selecting a place for construction of a sanitary latrine, construction procedures of sanitary latrines, correct rules of sanitary latrine usage and maintenance and the importance of sanitary latrine in health care.

**Lesson-1: Different diseases arising because of inadequate sanitation system and their methods of prevention.**

**Objectives: The students will be able to define what sanitation is and describe different diseases arising because of inadequate sanitation system and their methods of prevention.**

**Elements: Charts/ Figures**

## **Discussion about the lesson**

### **Sanitation**

Sanitation is rules or system for health and hygiene. Sanitation does not only mean safe drainage system of human excrement. It includes safe drainage of excrement, garbage disposal, correct methods of storage of food, personal hygiene and environmental cleanliness. So, we can say that the arrangement, management and maintenance of different facilities and practice and attitudes towards following hygiene rules to live a healthy and normal life, is described as sanitation.

### **Different diseases arising because of inadequate sanitation system and methods of prevention**

The role of sanitation in everyday life in order to live a healthy life is unlimited. To ease oneself (to defecate and urinate) is a natural process, just as safe water is indispensable for sustaining life. Sometimes in our country, the water used to clean after defecation /urination is not drained properly and the removing of wastage is not given the required importance. As a result, it causes bad odour around the surroundings. Besides, different germs breed in such places, which spread diseases among humans.

## Evaluation and Review

To evaluate how much the students have understood the topic, ask them following questions or make up your own questions:

- ▶ What is sanitation?
- ▶ What kinds of diseases can arise due to inadequate sanitation?
- ▶ What are the steps for prevention of these diseases?

## Planned activities

The students will clean their school surroundings and latrines in groups.

**Lesson-2: Process of spreading diarrhoea thorough faeces and the methods of prevention.**

**Objectives: The students will be able to describe how diarrhoea spreads through faeces and the methods of prevention.**

**Elements: Charts/ Figures**

## Discussion about the lesson

### **How Diarrhoea spreads**

- ▶ Diarrhoea spreads thorough germs. Different kinds of germs are found in human faeces.
- ▶ By easing /relieving oneself in any odd place, the faeces spread to different water bodies thorough rainwater, thus polluting them.
- ▶ Besides easing/relieving oneself here and there, can cause flies to carry germs from there and thereby contaminate our uncovered food.
- ▶ These germs spread in food and drinking water thorough different ways from faeces.

## Methods of prevention

- ▶ Sanitary latrines should be used instead of relieving oneself in any place.
- ▶ Both hands should be washed thoroughly using soap or ash after defecation and using soap before meals.
- ▶ Both hands should be washed with soap and adequate water before meals.

## Lesson learning activities

The students were taught about sanitation and about different diseases that arise because of inadequate sanitation system and their prevention methods.

Ask them the following questions to introduce today's topic:

- ▶ What do we mean by sanitation?
- ▶ What kind of diseases can arise because of inadequate sanitation?
- ▶ What steps should we take to protect ourselves from these diseases?

Based on their answers, ask them the following question:

- ▶ What are the negative effects of relieving oneself in any place or in an open place?

After listening their answers try to find out what do they know about causes of diarrhoea. Then show them pictures of the ways by which diarrhoea can spread and teach them about it.

Now show them a picture of how diarrhoea can be prevented and teach them about it.

## Evaluation and Review

To evaluate how much the students have learned from today's lesson, ask them the following questions:

- ▶ What causes Diarrhoea?
- ▶ How does diarrhoea spread?

- ▶ An elevated site (above flood level) must be selected to construct the latrines, as floods occur quite regularly in our country. Besides, special attention must be paid so that rainwater does not create ponding.
- ▶ The construction site for a sanitary latrine should be in such a place that it should be at least 30 foot away from any water source such as well, ponds etc. so that the polluted water cannot contaminate the ground water through the soil. If adequate space is not available, the depth of the tube wells should be increased vertically.
- ▶ Sanitary latrines should be constructed in an adequately ventilated space near the house so that older members can use it both during the day and at night.
- ▶ Surroundings of the latrine and the path to the latrine should be kept clean and free from shrubs.
- ▶ Site should be selected in such a way that it does not cause any problem for the neighbours.
- ▶ Latrine must not be constructed on a sloping or low place.



*Spot for a sanitary latrine*

## Discussion about the lesson

Those students who do not have a sanitary latrine at their home, their parents/guardians should be advised to construct one. The construction method for a sanitary latrine is given below. Sanitary latrines are of two types: sanitary latrines with water-seal facility and those without this facility. The site of construction should be selected for both types of sanitary latrines in the same way. In the sanitary latrine with water-seal facility, because of water-seal, odour cannot spread or flies cannot come in contact with the excrement.

- ▶ A sanitary latrine has three parts: pit, platform and the pit lining. The method of construction for each part is described below.

### **Method of constructing the hole for a pit latrine:**

#### **ELEMENTS:**

To construct this needs bamboo, wood, strong tree branch, wooden pillar, spade, crow bar, basket, cement or earthen ring or bamboo frame.

#### **PROCEDURE TO CONSTRUCT THE PIT/HOLE:**

- ▶ Correct measurement of the hole must be taken. Dig a five to six feet deep hole on elevated ground.
- ▶ For ordinary pit latrines the diameter should be one-and-half yards.
- ▶ Dig the wooden pillar in the middle of the hole, tie a string half in radius, then attach a stick at the end of the string and draw a deep circle with it.
- ▶ In the case of alluvial soil or soft soil, place the cement or earthen soil wheel or the bamboo frame inside the hole. In such cases, a hole slightly bigger in size should be dug than these rings.
- ▶ The platform should be raised up by using the dug up soil. If it is not a flood prone area then the platform could be at least a yard high. If the area is flood prone, then the platform should be raised upto the height of dwelling house.

#### **MAINTENANCE OF THE PIT AND THINGS TO DO IF THE PIT FILLS UP:**

- ▶ If the platform is made strongly and with adequate height then it stays permanent. If there is no platform, then rainwater slides into the pit and the upper portion of the pit might slowly collapse.

*Note: If you wish to know more details then take help from the manuals on how to construct a sanitary latrine, developed by UNICEF and DPHE*

### Steps to construct a latrine



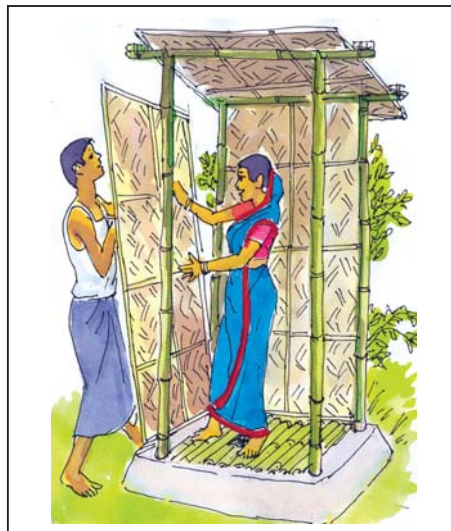
1. A hole is being dug



2. A base is being constructed



3. A platform is being made



4. Walls are being erected



- ▶ If a tap is available in the latrine, use right hand to turn on the tap.
- ▶ If a tap is not available then arrangements should be made to make water available.
- ▶ The pitcher (water pot) should also be held by right hand.
- ▶ Arrangements should also be made to place ash and soap inside the latrine.
- ▶ If it is not a water-seal latrine, then cover the pan or pit.
- ▶ If it is a water-seal latrine, then wash the pan with adequate water after you are finished so that nothing sticks to the pan. Whoever uses the latrine should maintain cleanliness.



*Rules of using sanitary latrines*



*Using a sanitary latrine*

## **Correct rules of latrine use (for urinating)**

- ▶ Always wear a sandal to go the latrine.
- ▶ Always clean the pan with water after you are done.

## **Things to do**

- ▶ Use the latrine for urination too.
- ▶ Influence others to use the latrines.
- ▶ Practice using the latrine for urination both at school and at home.

## **Lesson learning activities**

Hang pictures of hanging latrines and sanitary latrines in the classroom. Ask them which one is sanitary and why. Try to ascertain what students understand by the term sanitary latrine.

After listening their answers, teach them by showing the pictures what we mean by sanitary latrine and what its features are.

Now try to know from them about the negative effects of unsanitary latrines. After that, try to know from them about the rules of using sanitary latrines. Then discuss the topic again and show them pictures. Show them how to clean the toilet with water after defecation by cleaning the school latrine.

The students should be taught about the proper usage of school latrine and influenced to use the sanitary latrine regularly .For maintenance purposes, train students of class four and five specially and make them practice.

## **Evaluation and Review**

Ask the following question to ascertain how much they have understood about today's lesson.

- ▶ What do you understand by the term sanitary latrine?
- ▶ How will you clean the latrine after defecation?

If necessary discuss again.

Try to find out what problems might arise if excretion is carried out anywhere or at an open space.

Show them pictures of the problems of relieving themselves here and there or at an open space. Now tell them the importance of using sanitary latrines and encourage them to use sanitary latrines.

### **Evaluation and Review:**

Try to ascertain what they have understood about the topic. If necessary, review the whole topic again.

### **Planned activities:**

Bring a drawing of how people get sick as a result of relieving themselves anywhere in an open space.

Topics to be discussed in this chapter:

Personal health care and importance of personal health rules, things to do to conserve the environment for good health, methods and importance of washing hands before meals and after defecation.

**Lesson-1: Personal health care and importance of health and hygiene rules**

**Objectives: The students will be able to explain personal health and hygiene care and the importance of health and hygiene rules.**

**Elements: Chart/Pictures**

## Discussion about the lesson

### **Personal health and hygiene care and the importance of health and hygiene rules**

Personal hygiene care is necessary to maintain good health. The ways of keeping healthy personally or together are included in health and hygiene rules. Some of the topics of personal health and hygiene care will be discussed below.

#### **Personal Health and Hygiene care rules**

- ▶ Both hands should be washed thoroughly with soap and water before meals, before feeding baby and before preparing food.
- ▶ Both hands should be washed with soap/ash and water after defecation.
- ▶ After cleaning the child's bottom after defecation, wash both hands thoroughly with soap/ash and water.
- ▶ Adolescents girls and ladies should stay clean during menstruation
- ▶ Always use sanitary latrines so that faeces and urine are kept confined
- ▶ Everybody in the family including the kids should use sanitary latrines

Now ask the students questions such as the following-

- ▶ What should you do to stay neat and clean?

After hearing their answers discuss today's topic with them and show them charts and pictures regarding the topic.

Now ask the students that if they do not follow the rules of personal hygiene what kind of diseases they might suffer from. Discuss the importance of personal health and hygiene care by linking it with their answers.

### **Evaluation and Review:**

To evaluate how much the students have learned from the lesson ask them the following questions:

What is the importance of personal health and hygiene care?

Discuss again if necessary.

### **Planned Activities for students:**

The students will bring a chart about the importance of cleanliness.



*Open food*

- ▶ Hands should be washed before meals to make them germ free. If hands are rubbed thoroughly with soap and water before washing then no germs will enter our body.
- ▶ Hands should be rubbed thoroughly with ash/soap and then washed to make them germ and odour free after defecation.
- ▶ Arrangement should be made for soap or ash to wash hands with for all family members.
- ▶ In schools, arrangements should be made to keep ash/soap for students to wash their hands with.
- ▶ Provisions need to be made for the school students to wash their hands with soap or ash

The following things should be kept in mind when washing hands:

- ▶ The tap should be opened and closed with the right hand
- ▶ If there is no tap, then the *Bodna* (a kind of pitcher with slender spout) should be held with the right hand,
- ▶ First the left hand should be rubbed with ash or soap
- ▶ Then left hand should be washed with adequate amount of water
- ▶ Then both hands should be washed thoroughly
- ▶ Younger siblings should be taught the proper methods for washing their hands.



*Washing hand with soap*

# CHAPTER 5

# THE ENVIRONMENT AND TREE PLANTATION

- ▶ Drainage should be cleaned regularly.
- ▶ A hygienic toilet should be used instead of going here and there to urinate or defecate.
- ▶ Proper drainage for the water used to bathing, cleaning or other deeds should be made.
- ▶ If there are any used tires, broken flower vases or other broken things that are lying around the house and is collecting water, then they should be cleaned.
- ▶ Do not let clean water accumulate anywhere for more than four or five days. If necessary then salt water should be sprayed so that Edis mosquito (a Dengue germ carrier) cannot spread as Edis mosquito lays its eggs in accumulated clean/ translucent water.
- ▶ Homesteads, schools and their surroundings should be kept clean.

### **Tree Plantation in Maintaining the Environment:**

- ▶ Trees keep human beings alive by producing Oxygen and taking in Carbon - dioxide.
- ▶ Not only that, woods from plants is used to build houses, furniture as well as fuel.
- ▶ Trees help prevent soil erosion as the roots take hold of the earth and thus preventing rainwater from eroding the topsoil cover. As a result soil erosion slows down. When trees are cut, the soil becomes bare, thus leading to higher rate of soil erosion.
- ▶ Trees play a huge role in case of natural disasters.
- ▶ Trees keep the natural environment in balance. They play an important role during cyclones, floods, earthquakes and tidal waves. During times of natural disaster, financial losses are a lot less because of trees
- ▶ The animal world is totally dependent upon the plant world. Some life saving medicines is extracted and prepared from trees. For example; Arjun, Tulshi, thankuni, Akand, Shatomuli, Bosak, Kalmeg etc.

### **Roles and Responsibilities:**

- ▶ If one tree is cut, two saplings should be planted. This tree could be your source of capital.



- ▶ Why is it important to keep the environment clean?
- ▶ What are the ways to keep the environment clean?

If any of the students did not understand any part of the lesson, then discuss again and then end the discussion.

### **Planned Job/Activity:**

The students will be divided into groups and will take part in cleaning their classrooms and the school surroundings.



*Students cleaning the school*

## **Lesson learning activities:**

Ask the students,

- ▶ To stay alive, what do we eat?
- ▶ What do chickens, ducks, cows and goats eat?

Start the lesson by linking it with their answers. Show them pictures of vegetables, fruits, and furniture. Ask them where we get them from. After listening their answers, tell them how we are depended upon plants not only for food but also for other things as well. The trees also produce the oxygen we need to breathe.

Ask the students,

- ▶ Which animals make their homes on trees? Show them pictures where animals are making their home on trees. Ask them if they plant trees at home. Discuss with the students the benefits of planting trees to protect the environment and to save our lives and encourage them to plant trees.

## **Evaluation and Review:**

- ▶ What foods do we get from plants?
- ▶ What other benefits do we get from plants?

If there is still any problem in understanding the lesson, then review it.

## **Planned Activities:**

The students, under the guidance of their teacher should plant trees in the schoolyard and surrounding areas and take care of them. Besides that, the students could plant flowers and fruit trees in pots or in yards after taking permission from their parents

The discussion of this chapter:

A female teacher will discuss the issue with the female students of Class IV and V.

**Lesson-1: Reasons of menstruation and things to do during menstruation**

**Objectives: Students will be able to explain why menstruation occurs and describe what to do during this period.**

**Elements: Charts/Figures**

## **Discussion about the lesson**

### **Why Menstruation Occurs**

Menstruation is a natural biological process for a girl of a certain age. Usually menstruation starts naturally between the age of 9 to 12 years and ends around the age of 45-49 years. Normally, menstruation occurs once a month and usually lasts from 3 to 7 days.

As menstruation is a natural phenomenon, girls can do any normal activity during this period. Students should be taught about some steps to be taken during menstruation to stay healthy and fit. The female teachers should teach the female students about these steps so that they are able to maintain a normal life style and not feel uneasy, including going to school.

### **Steps to take during Menstruation:**

- ▶ During menstruation, in order to prevent menstrual blood from soiling clothes or rolling out, a clean piece of cloth, cotton or sanitary napkins or pads found in today's market can be used.
- ▶ These should be changed every three to four hours or depending on your need.

by taking some steps. Tell them about the reason behind the occurrence of menstruation.

Ask the students again-

- ▶ steps do you take during menstruation?

After hearing their answers, present them with a chart showing the steps to be taken during menstruation. Tell them to stay clean during this period.



*Teacher explaining it to the students*

### **Evaluation and Review:**

- ▶ Why it is important to stay clean during menstruation?
- ▶ What should they do while changing pads or napkins during menstruation?

If there are any problems understanding the lesson, review it.

### **Planned Activities:**

The students should form groups and in the next class show what should be done during menstruation.

Topics to be discussed in this chapter:

Disaster management, the problems during the disaster period (Safe drinking water and problems with sanitation), ways to overcome these problems, maintenance of latrines, The importance of personal hygiene and the roles to play for the primary school teachers and members of the student brigade at normal times, during and after the disaster.

### **Disaster Management:**

In a natural disaster scenario loss of lives and financial loss occurs. As a result hardship occurs in the lives of people and their lives become threatened. When it becomes difficult for community or a country to tackle this type of situations then it is termed as a disaster. A disaster may occur due to natural causes or they may be caused by human beings. Example;

1. Cyclones, Tidal waves, Floods, earthquakes etc (Natural disasters)
2. War or civil war (man made disaster)

Problems created because of disasters (Safe drinking water and Sanitation problems):

### **Safe Drinking water and Sanitation problems:**

1. Lack of adequate safe drinking water
2. No proper sanitation facilities remain
3. People cannot focus properly on health awareness.
4. Water borne diseases start to spread.
5. It becomes hard to take proper care of children.
6. Maintaining privacy (Purdah) and safety of women become difficult

4. If the tube well gets submerged, then a pulley should be used to raise it and water inside should be pumped out and disposed for half an hour.
5. If safe drinking water is not available from any sources then water should be boiled, or purified by bleach or FITKIRI (crystal).(This topic was discussed in details in Chapter two, Lesson four).

### **Maintenances of Latrines:**

1. Workers of the refugee centre should keep watch so that no user is making the latrines dirty. Besides they should make sure that people are washing their hands properly.
2. Soap and water should be made available near the latrines so that users are able to wash their hands and the workers should make sure that nobody forgets to do it.
3. Ask the parents of children who perform their toilet outside the latrines to collect their children's excrement and dispose it in the latrines.

### **Importance of Personal Hygiene:**

1. To avoid an epidemic, the rules of personal health and hygiene care should be followed both in refugee centres and at home.
2. Everyone should be advised to wash their hands before meals and after defecation. Parents should help their children.
3. Food should be covered and be eaten when it is still hot.
4. The cooking and distribution place in the refugee centre should be kept clean.
5. If the facility is available then bed sheets, mattresses and pillows should be dried in the sun.

Roles of Primary School teachers and members of Student Brigade during normal times, disaster and afterwards:

1. Raising awareness among people about safe water and sanitation
2. Briefing people about water purification
3. Briefing people about the importance of using latrines

## **Lesson learning activities:**

To evaluate prior knowledge of the students about the discussed topic ask questions like:

What do they know about Disaster management? Do they have any idea about it? Ask them if they were ever in such an emergency situation, which could be described as a disaster.

Try to find out how they solved the problems which arose (safe drinking water and sanitation problems) during the disaster period.

Did they have the opportunity to use safe drinking water and latrines? What do they know about the necessity to maintain latrines and about personal hygiene care?

Try to know if they have any idea about the role of primary school teachers and the student brigade in this time.

Do they know about precautions to be taken to watch over the movement of children during the periods of floods and cyclones?

Write their answers in a chart form on the black board and then divide the students into two groups. Select one student from each group and ask them to read the answers written on the board to the other students. All of them should take part in the discussion about what steps to be taken during periods of disaster and ask the students how much they have learned.

## **Evaluation and Review**

Ask them different questions about safe drinking water and sanitation problems faced during disaster periods, maintenance of latrines, personal hygiene, things to do during a disaster etc to find out how much they have understood the topic. If they still have any trouble understanding, then review the topic again.

## **Planned activities:**

The students will draw pictures of shelters of disaster struck people during a disaster period. They will write down how to raise awareness among the disaster struck people in the shelters in the disaster areas.

To implement the activities of SSHE in schools, the School Management Committee (SMC), school teachers and community members need to assist directly. Their roles are briefly described below:

### **Role of Teachers:**

Teachers are the main contributors in successfully implementing the SSHE activities. The teachers can directly influence the students to practice hygienic habits.

The students will learn about safe water, hygiene care and sanitation directly from the teachers.

The students will keep the surroundings of the school compound neat and clean, plant trees and take care of them, maintain the sanitary latrines under the guidance of their teachers. Through practicing in school, the students will adopt these healthy habits, essential to sustain a hygienic lifestyle.

### **Role of School Management Committee (SMC):**

The role of the School Management Committee, just like the teachers in implementing the SSHE activities, is undeniable. The members of the SMC can help in many ways to implement the activities of SSHE. By the approval of the assembly of the SMC the local fund is raised to implement the activities of SSHE. The progress and realization of planned SSHE activities are discussed in the assembly of the SMC. The members can take necessary decisions in these assemblies. Through active participation of the members of the SMC, the implantation of SSHE activities can be realized easily.

### **Role of Local Community:**

The local community can help the school in their area in many different ways. The students, teachers and the parents are members of the local community. Everybody is a respected citizen of the community and have their own social place and identity in the community. They are respected members of the community. The sanitary latrines and safe water facilities have been constructed for the use of their school going children. Their assistance is needed to assure that these remain suitable for use. The committee can assist







