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KNOWLEDGE, ATTITUDES & PRACTICES

A Report

**PREPARED FOR AMBALA
SCHOOL SANITATION PROGRAMME
HARYANA**

**UNDERTAKEN BY
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PREFACE

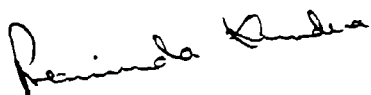
This report is a study carried out in selected schools and villages of Ambala District. The study has two components. One aspect deals with the access to facilities in schools and anganwadis, which profoundly influence the sanitation and health culture of a population. The other aspect is a study of the knowledge, attitudes and practices of the primary school teachers, students and their parents with regard to hygiene and sanitation.

This study had to cover a very wide area and this worked out to be a difficult task not only in terms of the study design, but also in terms of data collection, organisation, analysis, interpretation, integration and conceptualizing of the various issues thrown up by this elaborate process.

The study has provided new insights into many of the components covering the various facets of cultural practices, people's beliefs.

We express our sincere thanks to Ms. Anu Dixit, UNICEF, for providing constant support and guidance. We are extremely grateful to the school teachers for their cooperation and invaluable help.

We hope that this report will be used by the planners and the various implementing agencies involved in the school and rural sanitation programmes in Haryana.



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CHAPTER I

1.0. Introduction

Contaminated drinking water and lack of proper sanitary facilities are a major cause of ill health and thereby play an important role in the complex social ecology of poverty. About 80% of all sickness and diseases are due to the lack of safe drinking water and proper sanitation. They are therefore preventable. Development planners all over the world agree that provision of safe drinking water and safe disposal of wastes are the key issues of promoting health. While concerted efforts should be made to provide clean drinking water and better sanitation, the provision of infrastructure is insufficient, old habits die hard. Education and thereby effecting behavioural changes in the people has been recognised to be equally vital.

Invariably it is the poor especially the rural poor who suffer most from the absence of safe water and sanitation, because they lack not only the means to provide for such facilities but also information on how to minimise the ill effects of the insanitary conditions in which they live. As a result, the debilitating effects of insanitary living conditions lower the productive potential of the very people who can least afford it.

Today's children are tomorrow's 'decision-makers' and 'parents'. Water and environmental sanitation education is a vital instrument for ensuring the health of and the fundamental basis for socioeconomic development of future generations. To imprint on young minds the causal link between insanitary conditions and the diseases that they and their families experience is indeed the first step towards effecting change. If a child is ingrained with these ideas at an early age, the child will not only ensure and act on it but also communicate to those around that proper sanitation and personal hygiene are the roads to better health.

Schools are the meeting point for many children and therefore emerge as an ideal ground for imparting this valuable education. To preach good ideas is simple, but to patiently inculcate good habits is a long and arduous task.

The more is learned about the 'needs', existing beliefs and practices of the people regarding sanitation, the more likelihood there is of finding an appropriate form of Technology and lead to more successful attempts to introduce change.

It is obviously of prime importance to recognise when a sanitation programme will be most appropriate and at what technical level. Equally the planners must be able to identify situations where other kinds of improvements are needed first. It is therefore, essential that a careful assessment be made of the problems faced by an individual community along with an appraisal of all the options of improved sanitation that are open to it.

1.1.0. Need for the Study

At the 1990 World Summit for Children, India committed itself to a set of global goals, for radically improving the lives of children, women and families by the year 2000. One of the water and sanitation goals for India is to provide universal access to safe drinking water and improved access to sanitary means of excreta disposal by the year 2000.

Sanitation includes a package of health related measures and covers all aspects of environmental and household cleanliness as well as personal hygiene. Proper sanitation therefore can be achieved only through a change in attitudes and practices of the people. Health education, for a better understanding about the linkages between health and sanitation is fundamental to attain such a change.

Children are far more receptive to new ideas and are at an impressionable age when they can be influenced and motivated to inculcate hygienic habits and adopt sanitary practices. The huge network of schools offers a ready made infrastructure to be mobilised and used as a resource to influence the parents and the community.

Ambala is one of the five districts in the country where UNICEF is collaborating with the state government in implementing an intensive school sanitation programme. A need therefore, arose to conduct a study which would provide all the relevant information for the successful implementation, management and completion of the project and help achieve the project objectives.

1.2.0. Objectives of the Study

The general objective of the study was to find out about the existing water and sanitation facilities and the knowledge, attitudes and practices of the students and teachers with regard to sanitation.

With this objective in mind the specific objectives of the study were .

- To know the existing infrastructure available in schools and anganwadis regarding water and sanitation facilities in the project area.
- To access the access to drinking water and sanitation facilities in schools, anganwadis and individual households in the project area.
- To know the attitudes knowledge and practices of the students, teachers and parents, related to water and sanitation
- To provide a better basis for planning by making explicit, through data collection the important gaps that exist between peoples perceptions, attitudes knowledge and behaviour etc., and project expectations
- To review the sanitation situation of the populations involved and to understand their views and preferences and gauge the available resources in the schools and community

- To help identify specific problems or gaps between programme expectations and peoples likely response.
- To identify the type and difficulty of problems, which need to be addressed for successful implementation and management of the programme.
- To provide support in the development of a communication and information package which is more likely to effect rapid changes in the behaviours of the target populations
- To identify specific communication needs and channels and provide inputs for the development of training and other educational material.

CHAPTER II

2.0 Study Design

This study was designed as a comprehensive study of the existing beliefs, attitudes and practices of the primary school teachers, students and their parents regarding the various components of sanitation. It was also felt necessary to record some basic beliefs and practices of the Anganwadi worker who is always in close contact with the community and also because the anganwadi worker can influence the preschool child who is at the most impressionable and formative years of his/her childhood. This study would have been incomplete without assessing the sanitation facilities at the schools and anganwadis and the status of these facilities.

The study endeavoured to take an analytical look at the following aspects

- a) Existing water and sanitation facilities in school Anganwadis and access to these facilities by the teachers/students/community.
- b) Level of use and maintenance of these facilities by the beneficiaries/users.
- c) Attitudes and beliefs, knowledge and information, habits and practices of the teachers/students/parents regarding the various components of personal hygiene and sanitation.
- d) Attitudes and perceptions of the teachers and parents towards their role and contribution in promoting the school sanitation programme.

In addition the study also intended to identify correlations and linkages amongst various variables so that measures could be suggested for effective planning management and implementation of the school sanitation programme in the district.

2.1 Data Required

This study required data collection on a very wide range of variables, including the following, access to water and sanitation services / facilities, caste, occupation and literacy levels, beliefs, perceptions knowledge and practices related to water and sanitation and the attitudes of those involved regarding participation in the school sanitation programme.

2.2 Sampling Method

The survey was carried out in each of the three blocks Ambala, Barara and Naraingarh of the Ambala District.

The sample consisted of 80 schools and 117 Anganwadi centres spread over the entire district, which includes 20% of the total schools and anganwadis in the District. A sample of 20% students was drawn from these selected 80 schools. The parents of the selected students were also covered.

The principle of 'statistical regularity' concludes that a random sample is likely to possess the same characteristics as that of the population. A Systematic random sampling method was adopted using a random standing number and a sampling interval in all cases that is schools, anganwadis and student respondents. Care was taken so that the sample drawn was truly representative of the population.

The sample size of 20% was selected and the sample interval was kept as '5'

The sample consisted of the following :

- a) Block — 20% schools and anganwadis from all the three blocks were selected separately by the systematic random sampling method.
- b) Head Teacher — Every school has one head teacher hence 80 head teachers were covered.
- c) Teacher — Each primary school has 2 to 5 teachers anyone teacher from each school was selected.
- d) Students — 20% students from classes 1st to 3rd and 20% students from classes 4th and 5th were selected by the random sampling method keeping the interval at '5'. Separate tables for male and female students were prepared and the same method followed, for equal gender representation.
- e) Parents — Any one of the parents of all the student respondents covered were covered. Care was taken so that there was equal sex wise representation.

2.3 Sample size

20% sample was taken in from schools / anganwadis and students. The details are as follows :

a)	Total Number of Schools in the District	:	80	
	Block wise distribution	:	Ambala	— 31
			Barara	— 26
			Naraingarh	— 23
b)	Total Number of Anganwadis in the District	:	117	
	Block wise distribution	:	Ambala	— 45
			Barara	— 37
			Naraingarh	— 35
c)	Total Number of Students in classes 1-3rd		1229	
	Block wise distribution		Ambala	552
			Barara	— 410
			Naraingarh	— 267

d)	Total Number of students in classes 4-5th in the District	:	871	
	Block wise distribution	:	Ambala	— 361
			Barara	— 284
			Naraingarh	— 226
e)	Total Number of Parents (all classes) in the District	:	2100	
	Block wise distribution	:	Ambala	— 913
			Barara	— 694
			Naraingarh	— 493

The list of villages along with the details is given in annexure 8. The list of Anganwadis is given in annexure 9.

2.4 Instruments of Observation and Data Collection :

A total of seven instruments were designed for this study :

Form I

A school observation form was used by the survey team to collect information through observation on the sanitation status of the school and the students and access to water and sanitation facilities, at these institutions.

Form II

An anganwadi observation and interview form to collect information through observation on the sanitation status of the anganwadi centre and the children and access to sanitation facilities and to collect information through interview regarding some common beliefs and practices related to sanitation.

Form III

An interview schedule for Head teachers with the main objective of collecting detailed information regarding the access to drinking water and sanitation facilities in the schools, status of these facilities and related practices and the sanitation activities taken up the schools.

Form IV

An interview schedule for school teachers to study their beliefs, attitudes and practices related to the various components of sanitation and also their attitude towards their role and involvement in the school, sanitation programme.

Form V

An interview schedule for students of classes 1st to 3rd to mainly record their knowledge, attitudes and practices related to sanitation and gauge the interest taken by their teachers and parents in promoting sanitation in school

Form VI

An interview schedule for students of classes 4th and 5th to study their beliefs, attitudes and practices related to the various components of sanitation as well as to record the interest taken by their teachers in promoting sanitation in the school and the community and the involvement of their parents in school activities .

Form VII

An interview schedule for parents (of the student respondents) to study their beliefs, attitudes and existing practices related to sanitation Also to collect information regarding their attitude towards their role in the promotion of sanitation in schools.

A copy of each of these seven instruments is appended with this report (annexure 1-7).

2.5. Methods of Data Collection

Familiarity with the subject, that is issues related to sanitation, experience in working with rural communities, ability to win confidence of the people and extract information from them, an eye for observation, were the criteria set for selecting the investigators All the investigators were drawn from the RAAHEN team. At least one primary school teacher was selected and oriented to provide support to the investigators in conducting the study because it was extremely difficult in most cases to make the school children belonging to classes 1st to 3rd open-up and talk.

The Project Director provided continuous supervision and training to the investigators this helped in solving problems they encountered in their field work & ensured that they collected all the required data in their villages. The project director made several field visits to cross check these data & whenever needed personally supervised the work of the investigators. The investigators had to exercise considerable persuasive skills with the people & had to make special efforts to overcome communication barriers between them, the school children and their parents.

The field work was carried out over the period April 1996 to August 1996. The survey work had to be discontinued twice, first due to the school examinations and holidays and then due to the elections in the state.

2.6. Analysis and Presentation of Data

The task of the Project Director was to first encompass the entire range of information collected in the course of the study within a single mental canvass, put them all in an orderly form and then interpret them and draw conclusions. The data has been analysed separately for schools, anganwadis, teachers, students and parents The data collected for students of classes 1st to 3rd and 4th and 5th have been analysed separately. The output tables have been expressed in numbers and percentages District & Block level tables have been provided for the KAP surveys for the school teachers, students and their parents Analytical tables, diagrams and charts have been widely used for quick and easy comprehension

In the report the data is presented in the following sequence.

- Access to drinking water and sanitation facilities their use and maintenance.
- Knowledge attitudes and practices related to the seven components of sanitation
- Efforts made by teachers, anganwadi workers and parents in promoting sanitation in schools and the village communities
- Perceptions and attitudes of the teachers, students, parents towards their involvement and role in the promotion of sanitation.

CHAPTER III

The word 'sanitation' is used to define a package of health-related measures. It covers seven distinct components, namely, handling of drinking water, disposal of waste water, disposal of human excreta, disposal of garbage and cattle dung, home sanitation and food hygiene, personal hygiene and village sanitation.

3.1.0. Handling of Drinking Water

Open water sources like rivers, ponds, lakes and open wells get contaminated when people wash clothes and dirty utensils, bathe animals and themselves as well as defecate near these sources, when this contaminated water is used for drinking it can cause diseases like diarrhea, cholera, typhoid, hepatitis and dysentery.

Water from sources such as handpumps, taps and sanitary wells is safe as these sources are protected. However, even the safe water from these protected sources can get contaminated if it is not handled properly. Therefore, from the sanitation point of view it is important to keep water safe right from its collection to consumption. This calls for adoption of proper collection, storage and handling practices.

3.2.0. Disposal of Waste Water

Stagnant pools of waste water around houses, in streets, around the water sources and in choked drains are a health hazard. Besides being an environmental threat, these pools of water give bad smell and make the area slushy and create great inconvenience to passerby. These provide a breeding place for mosquitoes which spread diseases like malaria and filaria. It can also contaminate the close by drinking water sources through seepage.

3.3.0. Disposal of Human Excreta

A very large number of rural population, especially children, defecate outdoors. Infants and children often defecate just outside their homes in the lane or near a drain. Children's excreta is harmful to health. Many diseases spread from human excreta lying exposed due to open defecation. Disease causing germs and worm eggs present in the excreta are transmitted from one person to another through drinking water, vegetables, hands and insects etc. Use of a sanitary latrine stops the spread of diseases such as diarrhea, cholera, typhoid, intestinal worms, hepatitis and polio, caused by excreta. A sanitary latrine also provides the 'user', much convenience and privacy.

3.4.0. Disposal of Garbage and Cattle Dung

A large number of infants die in India due to tetanus. The tetanus germs live in filth, particularly in animal dung. The germs enter the body through an open wound. Piles of garbage and cattle dung lying around in the villages provide a breeding ground for flies. They can also block roads and drains, and attract many vectors such as rats, cockroaches etc. Water logging due to piles of garbage and dung facilitate breeding of mosquitoes which spread malaria and filariasis. Besides, indiscriminate dumping of garbage causes 'a serious environmental hazard'.

3.5.0. Home Sanitation and Food Hygiene

Many village homes are dark, damp and stuffy, most lack light and proper ventilation. Living space is limited and in many poorer households four to five members of the family have to share one room. Most of the households keep cattle. Insanitary surroundings attract disease carriers such as rats, flies and cockroaches into the house. The smoke from the conventional chullah causes eye irritation and respiratory diseases, particularly among women and children.

A large number of people defecate in open fields, thereby contaminating the soil as well as fruits and vegetables growing in these fields. Vegetables and fruits if eaten without washing can lead to the spread of many diseases. Food which is kept uncovered can get contaminated by flies, and germs carried by the wind.

3.6.0. Personal Hygiene

Many diseases due to poor personal hygiene. Healthy and clean habits like hand washing, nail cutting, keeping the body clean, wearing clean clothes etc., have a considerable impact on a person's health status and well-being. Diseases like trachoma, scabies etc., can be considerably controlled through improved personal hygiene practices.

If hands are not washed properly after defecation they can transmit many diseases because human excreta contains many harmful germs. Mothers who do not clean their hands with soap or ash after cleaning the young children, after the latter have defecated unconsciously pass on the germs to the entire family by contaminating the food and drinking water.

Hookworm infestations are very common among people in the rural areas especially children, who do not use footwear. These practices cause severe anemia and weakness in the infected person. Tooth decay and diseases of the gums are common in people who do not clean their teeth regularly.

3.7.0. Environmental Sanitation

Village sanitation or environmental sanitation concerns the entire community and requires the local people's involvement and participation. Sanitation will not become 'a way of life' unless the village environment is kept clean. People may clean their homes and throw garbage in the lanes and may remove cattle dung from their premises and dispose it in the school grounds. Small children may defecate near the drinking water sources or the village drains may be clogged due to the poor maintenance. The platforms near community handpumps may need repairs or the village school may need a set of latrines. All these problems can be solved only by made at the community level.

Thus a clean village environment is equally essential for ensuring good health and improved quality of life can be provided, only with the full and active participation of the entire community.

CHAPTER - IV

A huge network of anganwadi centres exists in the district. The anganwadi is the focal point for the delivery of the entire package of child development services to the children and mothers.

The anganwadi network offers a ready made infrastructure of enormous potential to exert a profound influence, not just on the preschool children within its four walls, but also on the mothers and community at large. The promotion of personal hygiene and sanitation, including the construction and use of latrines, garbage pits, soakage pits in anganwadi centres will help inculcate good habits amongst the children from their early years of childhood.

4.0.0. Anganwadi Observation and KAP

A total of 117 anganwadi centres were covered under the study, comprising 20% of the total in the district. A 20% sample was taken from all the three blocks of Ambala (45 nos.), Barara (37 nos.) and Naraingarh (35 nos.)

Objectives :

- To gauge the sanitation status of the anganwadi centres.
- To gauge the sanitation status of the children coming to the anganwadi center.
- To find out the existing sanitary facilities at the anganwadi centre.
- To get a general idea about the knowledge level, attitudes and practices related to sanitation adopted by the anganwadi worker at the anganwadi centre.

An anganwadi observation format was designed for this purpose which was filled by the survey team. A set of questions were included to study the knowledge level, attitudes and practices of the anganwadi workers. These questions were filled up by interviewing the workers.

4.1.0. Sanitation Status of the Anganwadis

4.1.1. In 70% of the anganwadi centres covered under the study the rooms were kept clean and dusted and things arranged in order. Out of the total centres covered in the three blocks, 83% in Naraingarh and around 64% in both Ambala and Barara blocks were found to be clean.

4.1.2. However in the case of general surroundings, the analysis shows that in 34% of the centres surveyed, garbage was littered in the courtyard and lanes adjacent to the centre. The block-wise tables do not show much variation. This clearly points out the fact that the workers do not place much emphasis on environmental sanitation. Even in the centres where the surroundings were clean it was mainly due to the householder's efforts & not the anganwadi worker's.

4.2.0. Sanitation Status of the Anganwadi Children

A 2 1 Out of the total covered not even in 2% centres the condition was good where over 70% children were found to be looking clean and tidy. In 48% centres the condition was found to be poor where only 10% - 30% children looked as if

they had been given a bath. In the rest the condition was fair. The block-wise data does not show much variation as is evident from the below mentioned table

(Table 4.2.1.)

Children Look Clean	IL	AI	BB	CC
10-30% (Poor)	47.9	53.4	51.3	37.2
40-60% (Fair)	50.4	44.4	46.0	62.8
70% and above (Good)	1.7	2.2	2.7	-

4.2.2. Majority of the children in the anganwadis surveyed by the team were wearing dirty, unwashed clothes. In only 2% centres the condition was found to be good with over 70% children wearing clean washed clothes in 47% centres, the condition was poor where more than 70% children were wearing dirty clothes. The block-wise data does not show much variation. However the situation is marginally better in the case of Naraingarh block where in 63% centres between 40-60% children were wearing clean clothes as observed by the survey team. There were however a few exceptions, 32% in Ambala and 31% of the centres surveyed in Barara block the condition can be termed good, Table given below gives these details.

(Table 4.2.2.)

Wearing Clean Clothes	IL	AI	BB	CC
10-30% (Poor)	47.0	53.4	48.7	37.2
40-60% (Fair)	51.3	44.4	48.6	62.8
70% and above (Good)	1.7	2.2	2.7	-

4.2.3. The situation is not much different when the table 4.2.3. is analysed to study the number of children coming to the anganwadis wearing shoes or slippers. Observations made by the survey team shows that in only 6% anganwadis situation was found to be good, where over 70% children were using footwear, while in 41% centres the situation was found to be extremely poor where not more than 30% of the children were using footwear, in the rest 53% between 40-60% were using footwear. The block-wise tables show that the situation is marginally better in the case of Naraingarh where in 71% of the centres surveyed the situation is fair with 40-60% of the children using footwear.

(Table 4.2.3.)

Using Footwear	IL	AI	BB	CC
10-30% (Poor)	41.0	51.1	40.6	28.6
40-60% (Fair)	53.0	42.2	48.6	71.4
70% and above (Good)	6.0	6.7	10.8	-

4.2.4 Table 4.2.4. given below clearly indicates that in 47% of the total the condition is poor where over 70% of the children were observed to have long, dirty nails. In the next category where the situation appears to be fair comprises of 52% of total, while the situation in not even 1% anganwadis can be called good in this respect. The block-wise data follows a similar trend

(Table 4.2.4.)

Have Clean Nails	IL	AI	BB	CC
10-30% (Poor)	47.1	55.6	37.8	45.7
40-60% (Fair)	52.1	42.2	62.2	54.3
70% and above (Good)	0.9	2.2	-	-

4.2.5. With regard to cleanliness of hair another very important component of personal hygiene the table given below shows that in 44% centres the condition is poor, where over 70% of the children attending the centre were found to have dry, dirty and uncombed hair. In the remaining 56% centres between 40-60% children, as observed by the team had clean hair and this situation can be called fair. Most of the children complained of lice in their hair.

The block-wise data does not show much variation as seen in the table given below. However the situation appears to be slightly better in the case of Naraingarh where majority 57%, fall in the fair category, however, in the Ambala block majority 67% fall in the poor category, while in Barara in 54% of the centres surveyed the condition of the children in this regard is poor. Not even in a single centre can the situation be termed good as per the observations made.

(Table 4.2.5.)

Have Clean Hair	IL	AI	BB	CC
10-30% (Poor)	44.4	66.7	54.1	42.9
40-60% (Fair)	55.6	33.3	45.9	57.1

4.3.0 Sanitation Facilities

4.3.1. Not even 3% of the anganwadi centres covered under the study have latrine facilities. In Naraingarh block not a single anganwadi out of the 35 surveyed have such facilities. In the Barara block 3% reported to have latrines while the figure is marginally higher for Ambala block at 4%. Even where the latrines existed the children do not use it as the householders did not permit their use. Most of the children while at the centres defecate and urinate in the adjacent lanes or in the courtyard.

4.3.2. Observations reveal that of the total anganwadi centres surveyed 75% do not have bathing/washing platforms, the same pattern is observed in all the blocks

4.3.3. 74% of the anganwadi centres covered under the study do not have a garbage pit. The block-wise figures show that in the Naraingarh block the situation is better where 40% of the anganwadis have a garbage pit, followed by 30% in Barara and only 11% of the centres visited in Ambala block have this facility.

4.3.4. The practice of keeping dust bins also does not appear to be popular because only 17% of the total anganwadis surveyed have this facility at the centre. The block-wise data shows that in Ambala 13%, in Barara 11% and in Naraingarh 29% of the centres have this facility. It is clear that the practice of sanitary disposal of garbage is linked to the access to facilities. The sanitation status of the centres in Naraingarh block was found to be best in comparison to the other two blocks and the garbage disposal facilities are also provided in a larger number of centres in the Naraingarh block.

4.3.5. 95% of the total centres surveyed do not have a kitchen garden. The block-wise analysis shows a similar trend.

4.4.0. Knowledge, Attitudes and Practices Related to Water and Sanitation

4.4.1. Drinking water at the anganwadis is collected from two main sources taps and handpumps. At 53% centres, drinking water is collected from handpumps and 46% centres collected it from taps in the rest (1%) the workers stated that they collected it from open dugwells. Taps are the main source in the block of Barara (60%) while handpumps are more popular in Ambala (58%) and Naraingarh 60% for collection of drinking water at the centres. Block wise variations is due to the fact that in many villages of Barara the people complained that the handpump water has a 'peculiar' taste and smell.

(Table 4.4.1.)

Sources of Drinking Water	II	AI	BB	CC
Open Well	0.9	0.8	2.2	-
Tap	46.1	40.0	59.5	40.0
Handpump	53.0	57.8	40.5	60.0

4.4.2. Regarding the practices related to storage of drinking water it was observed that 33% of the anganwadi centres did not keep any vessel for storing drinking water. The block-wise details show that out of the total, 40% in Ambala, 35% in Barara and 20% in Naraingarh block do not store drinking water. Table 4.4.2. also shows that out of the total anganwadi centres which were keeping a vessel majority kept it covered. The block wise data does not show much variation.

(Table 4.4.2.)

Vessel Kept Covered	II	AI	BB	CC
Yes	63.2	55.6	62.2	74.3
No	4.3	4.4	2.7	5.7
No Vessel	32.5	40.0	35.2	20.0

4.4.3 Observations show that out of the total anganwadis where drinking water was being stored in a vessel, in 57% centres water is poured out from the vessel directly to the tumbler or glass, while in 18% centres water is taken out by dipping a glass into the vessel thereby putting the fingers inside the vessel. Only in 22% centres a glass with handle is being used to take out water. In about 4% centres water is either being stored in a jug or a camper. Some variations from the average are seen at the block level. In the Ambala block in 15% centres a glass with handle was being used to take out water, while in Barara this practice was adopted at only 4% centres, in Naraingarh 7% centres are adopting this practice. In 21% of the centres at Naraingarh water is taken out by dipping glass the corresponding figures for Ambala are 19% and Barara 13%. Majority in all blocks follow the practice of pouring water from the vessel in the table given below.

(Table 4.4.3.)

Method of Drawing water from Vessel	IL	LI	BB	CC
Pour it	57.0	63.0	79.2	67.9
Put a glass	17.7	18.5	12.5	21.4
Glass with handle	21.5	14.8	4.2	7.1
With a jug / camper	3.8	3.7	4.1	3.6

4.4.4. Most of the respondents 68%, feel that unsafe contaminated drinking water can be made safe by boiling and 26% find chlorinating the water as the solution to this problem. Only 2% find filtering effective. However 4% of the total respondents were unable to identify any method of treating contaminated drinking water to make it safe. The knowledge regarding the methods of treatment is definitely better in the case of anganwadi workers than compared to the teachers and the villagers as seen in the following chapters. It is significant to note that none of the respondents could identify all the methods of treatment which suggests that the workers need to be given more information in this regard.

The block-wise data stated in the table given below shows some variations. In the Ambala & Naraingarh blocks, filtering of water as a method of treatment to make unsafe water safe is not known at all by the respondent, while in the Barara block 5% identified this method as effective. 2% respondents in the Ambala block suggested adding alum as the only method of treatment of unsafe water.

(Table 4.4.4.)

Method of Treating Unsafe Water	IL	LI	BB	CC
Boiling	68.4	64.5	56.8	85.7
Filtering	1.7	-	5.4	-
Chlorinating	25.6	33.3	29.7	11.4
Don't Know	4.3	2.2	8.1	2.9

- 4.4.5. All the respondents know that pools of stagnant dirty water spread disease. When asked to name the disease, 70% identified malaria as the disease spreading from pools of stagnant dirty water. An analysis of the data clearly indicates that 30% of the anganwadi workers have really no knowledge about the diseases related to unsafe disposal of waste water. The block-wise data shows similar trends.
- 4.4.6. Regarding the methods of waste water disposal the observations show that at 53% centres it is disposed through a drainage channel while 22% centres let it flow in the open courtyard and another 11% allow it to flow in the lanes. Out of the total centres surveyed 7% have dug a simple pit and diverted the waste water in to it. Only 1% are utilizing the wastewater for the kitchen gardens. The remaining 6% divert it to either ponds or fields.
- The block-wise data shows a similar trend, where majority of the centres, 56% in Ambala, 54% in Barara and 49% in Naraingarh have wastewater disposed of through drains. The practice of diverting it to simple pits is highest in Naraingarh at 15%, followed by 11% in Barara and 7% in Ambala block. A large number 14% centres surveyed in Barara allow waste water to flow in the fields and nearby ponds, resulting in cesspools of stagnant dirty water.
- 4.4.7. 93% of the respondents agree that the practice of open defecation leads to the spread of disease.
- However, only 32% have knowledge regarding the diseases which spread due to this unhygienic practice. It is surprising that 27% of the workers interviewed believe that malaria and 9% believe that the disease of plague spreads from excreta, 15% believe that other diseases like T.B., jaundice, measles etc, spread from excreta and the remaining 23% were unable to identify any disease. The block level data analysis gives similar results.
- Efforts are required to impart health education to the workers who are expected to play the role of motivators in the community. It is obvious that even amongst the workers information and knowledge pertaining to the linkages between insanitary practices and related disease is almost absent.
- 4.4.8. A similar situation was found when the workers were asked to identify the disease which spread from unsafe disposal of garbage.
- 98% of the respondents know that disease spreads from garbage dumped in lanes and corners. However, 32% believe that malaria spreads from garbage dumps, and 9% believe that disease like jaundice, measles and throat infections spread from garbage, while 29% of the respondents were unable to identify any disease.
- Only 27% of the respondents know that garbage dumped in an insanitary manner provide breeding places for flies, who transmit Cholera and Diarrhoea, while about 4% of the respondents know that the dreadful disease of 'Plague' spreads from garbage heaps.
- 4.4.9. At the anganwadi workers do educate mothers about issues related to sanitation, this was stated by 97% of the workers

The majority 82% discuss issues related to food sanitation and personal hygiene while 9% educate mothers in maintaining cleanliness in their homes

4.4.10 Food is not cooked at the anganwadi centres. Ready made food is supplied to the centres to be distributed to the mothers and children. However, in majority of the centres the foodstuff was kept covered

The survey team observed that this practice of supplying, ready made foodstuff is not appreciated by the villagers, majority do not have a taste for the items provided besides there is no involvement of the community in the anganwadi centre, it is mostly seen as a distribution centre of food by the local communities. Experience has shown that wherever food is cooked and prepared with the help of the mothers the community is more involved.

4.4.11 The team also observed that in the majority of the anganwadi centres, the children do not spend much time, hardly any mothers were seen at the centres during the visits. It was observed during the visits that most of the anganwadis have not been provided with any teaching and learning aids. As a result of all these factors the anganwadis have lost their true meaning and the workers do not play the desired role of motivators and educators.

CHAPTER V

The primary education system in India is one of the largest in the world, with over 30 lakh teachers and a student strength of over 100 million children. This huge network of schools offers a readymade infrastructure to be mobilized and used as a resource to influence the parents & the community. The promotion of personal hygiene & ~~environmental~~ sanitation within schools, can help children to adopt hygiene habits during the formative years of their childhood. The schools through the students and teachers can also reach out to parents & communities to promote hygiene and sanitation.

Provision of sanitation facilities in schools and their proper use and maintenance can serve as demonstration models for the adoption of the sanitation technologies by the households and by the community at large.

5.0. Access to water and Sanitation Facilities

According to a recent study conducted by the District Administration in schools in the project area, the following data regarding access to drinking water and sanitation facilities was collected.

Sl. No.	No. of Primary Schools (Covered by the project Item)	400 (Nos.)	In %
1.	No. without boundary walls	240	60%
2.	No. with boundary walls needing repairs	130	32.5%
3.	No. of schools without access to safe water	125	31.3%
4.	No. of schools with handpumps not functioning	150	37.5%
5.	No. of water points without platform & a drain	300	75.0%
6.	No. of water points with platforms & drains needing repairs	30	7.5%
7.	No. of schools without storage tanks to hold water for flushing latrines	320	80.0%
8.	No. of schools without any storage tank for drinking water	320	80.0%
9.	No. of schools without proper drainage of waste water from water source	300	75.0%
10.	No. of schools requiring repairs of existing drainage system	100	25.0%
11.	No. of schools without access to sanitary latrines	360	90.0%
12.	No. of schools requiring urinals	240	60.0%
13.	No. of schools without any provision for garbage disposal	240	60.0%

The present chapter analyses information gathered by the survey team during school visits through observation method using form I and the information provided by the head teachers of the selected (80) schools in the three blocks Form III was given to the head teachers to be filled by them. The chapter includes all aspects i.e access to water and sanitation facilities sanitation status of the students and the schools, practices related to water and sanitation, level of utilization and maintenance of the sanitation facilities efforts made by the schools to promote sanitation in schools & the village communities and the perceptions of head teachers regarding their role in promotion of hygiene and sanitation.

5.1.0. Sanitation Status of the Schools

5.1.1. Out of the 80 schools surveyed in the district 63% were found to be clean and tidy while the remaining 37% appeared to be dirty with garbage littered around in the classrooms & school compound.

The block wise tables show that the condition is better in Naraingarh where at least 75% school were found to be clean, in Barara 64% of the total were clean and in Ambala only 52% of the schools surveyed were kept clean. It was observed that the situation was remarkably better in schools having boundary walls. Most of the schools do not have doors and mostly the windows panes are broken. The teachers held outsiders responsible for dirtying the school premises after school hours due to this problem.

5.1.2 60% of the total schools surveyed in the district had playing grounds kept clean, the situation was observed to be similar in the three blocks. Cleanliness of the compounds seems to be related to two factors.

- a) whether the school grounds have a boundary wall.
- b) whether the school is located outside the village.

Observations point out that schools having boundary walls & located inside the village have cleaner compounds. The problem of dung and garbage disposal in the school compounds is a common in schools located at the periphery of the village.

The teachers complained to the survey team that due to the laxity of the panchayats in many villagers used the school grounds to graze & feed their cattle or dump household garbage. A few villages visited soon after the reopening of the schools after holidays the survey team observed that classrooms had been used to store grains by the villagers. The involvement of the people and the role of panchayats is extremely significant in this respect.

5.2.0. Sanitation Status of the students

5.2.1. The below mentioned table gives a clear idea about the general appearance of the students as per the observations made by the survey team, during the school visits

(Table 5.2.1.)

<i>Students Found Neat & Clean</i>	<i>TI</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
10-30% (Poor)	21.3	16.1	24.0	25.0
40-60% (Fair)	75.0	80.7	68.0	75.0
70% and above (Good)	3.7	3.2	8.0	-

In the district as a whole in 75% of the schools the condition can be called fair while in 21% schools the condition was poor where only 10% to 30% children looked clean. Only in 4% schools the situation can be termed good for here over 70% children gave a clean appearance.

The situation in the three blocks shows some differences. The children were found to be cleanest in the schools of Ambala block. The team while making these observations focussed on observing whether the students had taken a bath and whether their hair and bodies looked clean.

5.2.2 Table 5.2.2. gives details regarding the condition of the clothes the children were wearing as observed by the survey team. The general trend is not much different from table 5.2.1. The situation again is marginally better in the Ambala block where in 84% schools the condition is fair with between 40-60% students were observed as wearing clean, washed clothes.

It is clear that wearing of clean clothes is linked to the habit of taking baths. Tables 5.2.1. and 5.2.2. indicate a very close relationship between these two practices.

(Table 5.2.2.)

<i>Students Wearing Clean Clothes</i>	<i>TI</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
10-30% (Poor)	20.0	12.9	24.0	25.0
40-60% (Fair)	77.5	83.9	68.0	75.0
70% and above (Good)	2.5	3.2	8.0	-

5.2.3 A large percentage of students do not use any kind of foot wear while attending the school as can be seen from the table given below, thus exposing themselves to hookworm infestation.

(Table 5.2.3.)

<i>Students Using Footwear</i>	<i>TI</i>	<i>AI</i>	<i>BB</i>	<i>CC</i>
10-30% (Poor)	11.3	12.93	12.0	12.5
40-60% (Fair)	72.5	64.5	68.0	83.3
70% and above (Good)	16.2	22.6	20.0	4.2

In 20% of the schools visited the condition was poor where only 10% to 30% students were using footwear to school. In 75% schools the condition was fair, while only in 5% schools were more than 70% children found to be using footwear. The block wise data shows a similar trend.

- 5.2.4. It appears that very few children adopt the hygienic practice of cutting nails on a regular basis. Only in 5% of the total schools observed by the team, were more than 70% students found to have clean short nails. Observations show that in 75% schools between 40% to 60% students had clean nails, while in the rest 20% schools the situation was poor with nearly 70% children having long dirty nails. The block-wise analysis shows that the situation is similar in the schools of Ambala and Naraingarh blocks. However it is slightly better in the Barara block in this regard as seen in the table given below.

(Table 5.2.4.)

<i>Students with Clean Short Nails</i>	<i>TI</i>	<i>AI</i>	<i>BB</i>	<i>CC</i>
10-30% (Poor)	20.0	22.6	12.0	25.0
40-60% (Fair)	75.0	71.0	88.0	66.7
70% and above (Good)	5.0	6.4	-	8.3

5.3.0. Access to Drinking Water Facilities and Related Practices

- 5 3 1 Drinking-water is mainly collected from handpumps in 53% and from taps in the rest 47% of the total schools covered under the study. However, it was observed during the survey work that most of the handpumps are poor in quality, some are shallow in depth and many without any platform around them. This leads to stagnation of dirty water around the handpumps. A problem which will not only lead to contamination of handpump water but also causes much inconvenience to children while approaching the handpump to drink water.

A similar problem was observed in the schools where water tanks are not provided next to the water points (piped water supply) in the schools. Since most of the waterpoints do not have any taps fixed hence when the supply is on, the entire area gets flooded. Pools of stagnant water around the waterpoints is a common sight in many schools.

(Table 5.3.1.)

Sources of Drinking Water	TL	AA	BB	CC
Handpump	52.5	61.3	46.2	56.5
Tap	47.5	38.7	53.8	43.5

Handpumps appear to be more popular as a source of drinking water in Ambala 61% and Naraingarh 56% blocks while taps are preferred in the Barara block 54%. This practice is related to the fact that ground water in certain areas of Barara has a 'peculiar' taste as related by the teachers and students.

- 5.3.2. Out of the schools which are collecting drinking water from taps at least 64% said that the water supply did not have regular timings which causes them much inconvenience. Another 15% receive supply early in the mornings while 31% receive in the evenings after school hours. The rest 30% receive it twice daily. There is a genuine need for water storage tanks in the schools so that teachers and students have regular access to safe drinking water. In many schools it was observed that students are either sent to nearby houses to drink water or they go to their respective homes when ever they feel thirsty, this definitely affects their studies. The teachers complained that due to this problem, especially in summers many children do not come back to school once they take leave to go home to drink water.
- 5.3.3. Only in 67.5% schools the drinking water sources are located inside the school compound or premises not much difference is found within the blocks. The location of the water sources inside school premises which has a boundary wall with a gate which can be locked after school hours show better maintenance and upkeep of the sources the platforms and drains around it. Maintenance is definitely poor in schools where the source is either outside the school premises or where the school compound does not have a boundary wall.

(Table 5.3.3)

Location of Source	TL	AA	BB	CC
Inside	67.5	70.9	61.5	69.6
Outside	32.5	29.1	38.5	30.4

- 5.3.4. The reports clearly point out that in no school, do the school authorities or panchayats have adopted any method of treating contaminated drinking water. Wherever existing the water tanks have not been reported to be cleaned or chlorinated ever since these were constructed. In many schools the existing water tanks were in poor state of maintenance.
- 5.3.5. In 66% of the schools drinking water is not collected or stored in these schools water containers and is taken either straight from the source or

stored in water tanks or the students, teachers go to nearby homes to quench their thirst. However, it is the school children 75% who mainly collect water in the schools where it is stored.

- 5.3.6 Drinking water storage tanks were not reported to have been cleaned ever since these were constructed in the schools but 89% of the schools which store water in any kind of vessels reported that these are regularly cleaned. In the rest 11% the vessels are regularly cleaned.

(Table 5.3.6.)

Vessel Cleaned Regularly	TL	AA	BB	CC
Yes	88.9	87.5	100	80.01
No	11.1	12.5	-	20.01

As given in the table above this practice differs remarkably in the schools of Barara block where all the respondents stated that the vessels were being cleaned regularly. However, we must also remember that cleaning in most cases washing the vessel only with water before filling it.

- 5.3.7. The job of cleaning the vessels is mainly entrusted to the students 70% wherever peons have been appointed the water is collected and stored by them 22%. In some of the schools the teachers (8%) also take on this job. In Ambala block only students clean the vessels, while in Barara teachers and people share this work with the students. In Naraingarh block students and peons collect water.
- 5.3.8. Arrangement for storing drinking water in classrooms was made in only 13% of the total schools, surveyed in the district. The situation is similar in all the three blocks as stated by the head teachers.
- 5.3.9. In 66% of the schools water is not stored at all. Wherever drinking water is being stored a wide variety of arrangements have been made. Water is stored in pitchers, campers, jugs and buckets in the schools. Cemented water tanks and pitchers are being used by 74% of the schools which store water, while buckets, jugs, campers are used in the remaining 26% schools. The below mentioned table points out block-level differences.

(Table 5.3.9.)

Vessel/Container for storing water	TL	AA	BB	CC
Water tanks	37.0	33.3	50.0	20.0
Pitcher	37.0	33.3	30.0	60.0
Bucket	14.8	16.7	10.0	20.0
Others	11.2	16.7	10.0	-

Water tanks are more common in Barara, this practice is closely linked to the fact that taps are the popular source of drinking water in this block. While in Naraingarh pitchers are more commonly used.

- 5.3.10 The practice of keeping drinking water vessels covered at the school level is being followed in 85% of the school surveyed. The picture changes completely at the classroom level, for only 10% of the vessels kept inside the classrooms were found covered. Drinking water in classrooms is stored in only 13% of the Schools. The commonly used vessels in the classrooms are jugs, campers

and buckets (90%) pitchers were found only in 10% of the classrooms having drinking water storage facilities. The survey team observed that whenever jugs and buckets for storing water in the classrooms were being used these were mostly kept uncovered.

- 5.3.11. Out of the total schools covered under the study the practice of pouring water in a tumbler by tilting the vessel is followed in 33% schools, in 19% water is taken out by dipping a glass inside the vessel and only 11% schools do we find that glasses with long handles are used to take out water. In the remaining 37% the taps attached to the campers and tanks are used to draw out water. Regarding this practice block level differences need to be mentioned. In Ambala in the majority of the schools we found that a glass is dipped to take out water, while in Barara taps attached to the tanks are mostly used. There seems to be a close relationship between these practices and the type of vessel used to take out water.

5.4.0 Disposal of Waste Water

- 5.4.1 Out of the total schools surveyed in the district in 33% the water sources were found to be located outside the school premises. Hence while assessing the waste water disposal facilities we took into account only those schools which had drinking water sources inside the school. Only in 63% of the schools do we find any kind of platform built around the water source. Out of those having platforms, in only 31% schools did we find drains connected to it. Pools of stagnant water around the source hence are a common sight in the schools of Ambala district. However in some schools the teachers and students have made "kaccha" drainage channels to drain out the waste water. The condition was found to be better in Naraingarh block where 46% of the constructed platforms had attached drains.

(Table 5.4.1.)

Waste Water Disposal facilities	TI	AI	BB	CC
1. Schools with platform around water source	63.0	62.5	58.2	63.5
a) Platforms with drain	31.4	28.6	20.0	45.5
b) Platform without drain	68.6	71.4	80.0	54.5

59% of the platforms and drains are in urgent need of repairs as observed by the team.

- 5.4.2. In 44% schools the drains are cleaned on a regular basis. Observations made by the team point out that in 73% of the schools visited the drains wherever provided were found clean. The situation in this regard was found to be better in the schools of Naraingarh where drains were found clean in 82% of the schools having this facility.
- 5.4.3. School children are involved with maintaining this facility in 71% of the schools. Out of which in 23% schools this work is also shared by the school teachers. In 29% schools the job of cleaning the drains is entrusted to the peons and sweepers. A similar trend is observed in the blocks of Ambala and Barara, however in Naraingarh in 75% schools the students clean the drains and in the rest the peons are entrusted with this job, teachers did not

report of participating in this activity. The table below gives details at the block level:

(Table 5.4.3.)

Maintenance of Drains/Platforms	TL	II	BB	CC
Students	47.6	31.3	50.0	75.0
Students & Teachers	23.0	37.3	20.0	-
Peons/ Sweepers	29.4	31.3	30.0	25.0

It was also observed by the survey team that in the school where teachers are involved in this activity, they are instrumental in planting trees and maintaining gardens, besides the involvement and awareness of the students in the improvement of the school surroundings is higher.

5.4.4. Table 5.4.4. given below shows that not much emphasis has been laid on the sanitary disposal of waste water in the schools, a problem closely linked to the non-availability of drainage facilities in the schools. Waste water from schools is disposed of through various methods as shown in the table given below:

The latrines constructed is nearby households in the village. The condition is similar in all the three blocks as seen from the table given below:

(Table 5.4.4.)

Methods of Disposal of Waste Water	TL	II	BB	CC
Pit	12.7	16.4	16.7	15.0
Garden	15.0	9.0	26.5	19.2
Compound / School Ground	33.8	36.9	32.1	31.0
Drain	27.2	25.1	12.2	21.3
Others	11.2	12.6	12.5	13.5

In over 34% schools waste water is just allowed to flow in the compounds creating ideal breeding place for mosquitoes, as well as causing inconvenience to teachers and children. A properly constructed drainage system was found only in 27% of the schools, in another 13% schools we found that a pit had been dug in the ground and waste water disposed into it. Most of the schools do not have gardens or gardens were found in only 31% of the schools surveyed plantations. However, in 15% schools waste water is diverted to these patches of greenery i.e., only 50% of the schools use waste water for the gardens and plantations. In the rest 11% waste water is either drained into a nearby pond, field or fallow land. The practice of disposal through drains is more common in schools located inside the village and in congested areas and disposal into ponds, fields or gardens is common in schools situated on the outer fringes of the village

5.5.0. Disposal of Human Excreta

5.5.1 Out of the total schools (90 nos.) surveyed in the district only 34% have at least one latrine. It needs to be emphasized here that in many schools these latrines can and are in fact only being used as urinals. In most cases the pans are not fitted properly, door are missing, or there is no water source available nearby. Many teachers confessed of going out of the open even though a latrine is existing in their school due to such problems. Sometimes the teachers especially female teachers use the latrines constructed in nearby households in the village. The condition is similar in all the three blocks as seen from the table given below.

(Table 5.5.1.)

School has latrine	TL	AA	BB	CC
YES	33.8	35.5	38.5	26.1
NO	66.3	64.5	61.5	73.9

5.5.2. Even where the latrines are existing and are functional the numbers is not sufficient. It has been the experience in many programmes that in schools where only one latrine has been constructed and is functional it has been set aside for the exclusive use of teachers, the students are not allowed to use it. Observations reveal that similar conditions prevail here.

Out of the total schools which have any latrine facility 63% have only one single unit, while 26% schools have two units constructed. Some of the larger schools, especially those attached to middle schools have separate units for students and teachers where nearly 4% have three units and in a few exceptions separate units have been constructed for teachers, male and female students only 7% have four units. The practice of open defecation is clearly linked to the access to this facility.

Majority of the schools 73% in Ambala, 50% in Barara and 67% in Naraingarh have single units.

The Schools of Barara have better access to this facility as shown in the table below. Though 10% schools in Barara have three units and 20% have four units none of the schools of the other two blocks have more than two units

(Table 5.5.2.)

No. of Latrine Units	TL	AA	BB	CC
1	63.0	72.7	50.0	66.7
2	26.0	27.3	20.0	33.3
3	3.7	-	10.0	-
4	7.3	-	20.0	-

5.5.3. The pattern of usage of latrines is closely linked to the number of units provided in each school. The team observed that in schools where only a single unit is provided the facility is exclusively used by teachers. 33% of the existing latrines are exclusively used by the teachers, 19% are used by the students, 11% are used by teachers and female students and the rest 37% are not being used at all.

5.5.4. The table given below throws significant light on the level of maintenance of the existing latrine facilities. Out of the total constructed units only 48% were found to be properly maintained, the rest 52% latrines are found to be dirty and in need of immediate repairs. Such latrines are more of a health hazard and set a bad impression on the minds of the students and the local communities. The block-wise analysis shows that nearly 73% of the constructed units in Ambala block are well maintained, however the situation in the other two blocks is very unsatisfactory. In Barara only 40% of the latrines are usable and in Naraingarh only 17% of the constructed latrines are in usable condition. Hence in these schools students and teachers are forced to practice open defecation. Absence of doors and locking facilities, poor quality of construction, lack of water for cleaning the toilets, non availability of cleaning material (soap etc.) and apathy of the Panchayats and Block authorities are all contributing factors for poor maintenance.

Lack of doors and locking facilities is the single most problem for the poor maintenance of latrines and urinals. The teachers in many schools stressed during the survey, that villagers misuse these facilities after school hours. Hence all urinals and latrines must have locking facilities especially in schools with no boundary walls.

(Table 5.5.4.)

Maintenance of Latrines	II	IA	BB	CC
Good	48.2	72.7	40.0	16.8
Poor	51.8	27.3	60.0	83.2

5.5.5. The head teachers informed that the maintenance of 59% of the existing latrines is entrusted to sweepers and peons appointed by the school authorities or panchayats. In 22% schools these facilities are maintained by students while in the rest 9 no one maintains the facility. It is significant to remember that cleaning of latrines is not considered a clean job in the majority of the villages and is taboo for many caste groups. The noninvolvement of students in this activity is mainly due to this cultural factor. Hence a specific strategy needs to be developed to tackle this problem as the idea of promoting maintenance of latrines through students might not be acceptable to many parents. Good quality of construction, adequate number of units, locking facilities on doors and education of students regarding proper use of latrines will help in overcoming the problem of optimum utilization and good maintenance.

Data analysed at the block level follows similar trends as at the district as a whole, as shown in the table below:

(Table 5.5.5.)

Who maintain the Latrines	II	IA	BB	CC
Students	22.2	17.3	12.0	16.7
Sweeper/Peon	59.3	62.6	48.5	55.5
No one	13.5	20.1	39.5	27.8

5.5.6. Proper maintenance of the latrines can be ensured only if the cleaning materials required, ex. broom, soap powder, disinfectant etc. are available in the schools. Only in 22% schools these provisions have been made. None of

the schools in Naraingarh have made such provision. The extremely poor state of maintenance of latrine facilities in Naraingarh is related to this factor

- 5.5.7. Availability of water outside the latrines serves the dual purpose of maintenance and inculcating the hygienic practice of hand washing after defecation. Access to facilities is the first step towards promotion of a practice. Out of the total 34% schools having latrine facilities, only 44% have water available outside the latrines. However storage facilities are available in only 67% out of these schools, in the rest 33% the water is taken directly from the source, mostly hand pumps.

It was observed that water is mostly stored in pitchers and buckets, water tanks outside latrines have been provided in only 13% of the total schools covered under this study. The fact that only 15% of the schools have access to water facilities outside latrines clearly indicate that the practice of washing hands during school time after defecation and of washing the latrine after use is not a popular habit amongst primary school children in the district

- 5.5.8. The team observed that only 43% of the students wash hands after defecation during school hours. This information was collected by both observing these habits of the children as well as interviewing some students, soon after they had used a latrine. The practice of using soap for cleaning hands after defecation was found in only 34% students. The rest clean hands either with mud or only water. This practice is closely linked to the availability of soap in the schools.

In 35% schools the head teachers reported that the regular supply of soap is maintained to inculcate this hygienic practice. Out of these 35% schools the facility is being used in 96% schools. Hence provision of soap or ash in the school will definitely have a positive impact on the children and inculcate this hygienic practice in them.

- 5.5.9. 66% of the schools do not have any latrine facilities. Even where the facility is provided only 48% are properly maintained, the rest are either not being used at all or used only during emergencies by the teachers or female students or have been converted into urinals. Students and teachers in such situations are forced to practice open defecation if the need arises during school hours. Added to this problem is the fact that in majority of the schools only one single unit has been provided which are in most cases as expected used only by teachers that too female teachers.

Students use only 30% of the existing latrine facilities, 37% of existing latrines are not being used by anyone as stated before and 33% are being used by teachers alone. Hence it is obvious that the majority of the students defecate in the open. In the schools are taken together, only 10% of the students have access to latrine facilities a rather alarming situation. It is obvious that out of this 10% not all prefer to use the facility. It is therefore, not surprising that not more than 5% to 10% students in all classes reported to be using latrines for defecation during school hours. The most common practice of the primary school children is to go to nearby fields to ease themselves. It was observed that the students of classes 1st and 2nd prefer to use the school grounds or the lanes and drains, open spaces and fields adjacent to the school for this purpose while nearby ponds and fields are preferred by older children. Not only do the children waste time but also expose themselves to many diseases due to this practice. The non-use of footwear by many students adds to the problem. Besides it has also been observed by the team that these small children going for open defecation mostly do not practice anal cleaning and nor do they clean their hands properly.

5.6.0 Disposal of Garbage and Dung

5.6.1. Most of the schools are two room buildings. Only in 49% of the schools individual classrooms have been provided with a dustbin. Absence of this facility in the classrooms indirectly encourages the students to dispose of garbage on the floor, in the classroom corners, or in the school compound.

It was observed that wherever this facility is available it is being utilized. Nearly 90% of the children use this facility where provided. However the practice of disposing garbage collected from these dustbins, in the classes, differs considerably at the district and block level. Garbage pits were found in only 44% of the total schools surveyed. Only 40% of the existing pits are being utilized to dispose garbage collected from the classrooms. Here we find that though dustbins are being used optimally in 90% of the schools, only 40% of the garbage pits are being used optimally. The practice is clearly linked to the attitude of most of the teachers, who place great emphasis on classroom sanitation but little on environmental sanitation.

In the schools where dustbins have been provided, 41% are emptied outside the school compound either in a field, pond or in the lane; 36% dustbins are emptied into garbage pits and 23% are emptied on a nearby garbage dump. Within the blocks it was observed that garbage pits are used by nearly 59% of the schools in Barara, 50% of the schools in Naraingarh and only 16% of the schools in Ambala block. In the schools of Ambala garbage from classrooms and school compound is mostly disposed of on the garbage dumps or outside school compounds.

Wherever provided, emptying of dustbins is done on a regular basis. Out of the total schools having this facility, in 87% cases dustbins are cleaned on a daily basis, in the rest 13% cases it is emptied on a weekly basis. The practice is similar in Ambala and Barara blocks, though in Naraingarh all the dustbins are cleaned on daily basis.

5.6.2. Classrooms are cleaned on a daily basis in 90% of the total schools surveyed, in about 3% schools classrooms are cleaned on a weekly basis and in the rest 7% schools the respondents stated that this job is taken up only when the need arises. Similar patterns of classroom cleaning are observed in all the three blocks.

5.6.3. The job of cleaning the classrooms is mainly entrusted to the students. During the school visits it was observed that in most of the schools the students mainly of classes 4th and 5th even in the absence of the teachers, took up the job of cleaning and dusting the classrooms and mats on which they sit, as soon as they reached school in the mornings.

Classrooms in 78% schools are cleaned by the students. In 21% schools sweepers and peons have been appointed to do this job. Block-wise trends are similar. The only exception was one school in Ambala where the teachers themselves cleaned up the classrooms.

5.6.4. The problem of stray cattle entering the school compounds for grazing or the villagers using the school grounds to tie their cattle especially after school hours is a common problem in schools where there is no boundary wall or fencing. This problem was also found in schools where there are no gates which can be locked. The role of the panchayats in tackling this problem is significant. According to the respondents the problem of stray cattle entering school compounds is found only in 40% schools. The block wise tables do not show much variations.

Stray cattle leave behind the problem of dung disposal. However since cattle dung is a valuable resource in the rural economy hence the schools do not face much problem on this account for the village women and children willingly collect it from the school grounds, out of the 40% schools facing this problem in 53% cases the dung is taken away by them. However in those schools where dung is left behind and not collected by villagers, the majority 67% dispose it in the nearby garbage dumps, only 33% dispose it in compost pits.

- 5.6.5. Gardens are maintained in only 31% of the total schools covered under the study. This garden in most cases is just a patch of greenery in a corner or in the front of the school building. Proper gardens are rarely found in the schools, though there are a few exceptions. The existence and maintenance of a garden is also linked with the facility of boundary walls and water in the schools. Eucalyptus trees have been planted in a number of schools mainly because they require little water and caring besides the Panchayats can sell these trees once they are fully grown.

However, manure from compost pits within the school premises is mostly (83%) utilized for these gardens.

5.7.0. Food Sanitation

- 5.7.1. Vendors selling foodstuff and fruits are rarely found outside village schools except in those which are attached to middle/high schools, hence large in size, or outside those which are located very close to the towns.

Vendors were found outside only 7.5% schools surveyed. However majority of the vendors had not kept the foodstuff covered to protect from dust flies and contamination. The school children did not seem to be bothered about it. Children were seen buying stuff from the vendors outside all schools, though not in very large numbers. The team observed that the decision not to buy things from the vendors is not due to the fact that food stuff is not kept covered but mainly due to economic reasons.

When the head teachers were asked whether any measures had been adopted by the school to ensure that the vendors keep their food covered only 17% accepted that efforts in this direction had been made by them.

5.8.0. Personal Hygiene

- 5.8.1. 69% head teachers claim that children in their schools are in a habit of using footwear to school. However observations made by the team during school visits indicate that in only 16% schools more than 70% students use footwear

- 5.8.2. Head teachers in 45% schools claimed that nail cutters have been provided to individual classrooms, however the team observed that in only 5% of the total schools surveyed did more than 70% children have clean, short nails. Hence we find that in this case the access to the facility and the related practice are not correlated. It also indicates that the teachers are not monitoring this practice closely and nor is the facility being used optimally.

- 5.8.3. Only 6% of the students have the habit of using a handkerchief. The practice is similar in all the schools.

- 4.8.4. The practice of hand-washing is encouraged in all the schools, according to the head teachers. However, in only 35% schools soap is provided to the students for washing hands, ash is not provided at all.

- 5.8.4. None of the teachers have appointed class monitors to help them monitor the hygiene habits of the children. Poor sanitation status of the students in

the schools, may be also due to this arrangement. Many schools are understaffed, besides in many schools the teachers have to spend a lot of time commuting due to inaccessibility and poor transport services, hence the focus of the teachers is mainly on academic matters and very less time is devoted to other essential activities. There is definitely a need to encourage teachers to appoint monitors to help them perform these activities. The teachers may be provided support in drawing up a plan of action for their schools to promote sanitation and hygienic practices amongst the students.

5.9.0. Community participation and Role of Teachers in Promoting Sanitation.

5.9.1. Parent Teacher Associations have been established in 68% of the total schools surveyed. However not all of these PTA's have fixed schedules for meetings. Only 30% of PTA's meet on a monthly basis and 18% on a yearly basis while 52% meet only whenever the need arises. However when the head teachers were asked whether the PTAs maintained regularity in observing this schedule, (monthly/yearly meetings) it was pointed out that only 35% PTAs (of these 48%) were particular about holding meetings as per the adopted pattern. However all the head teachers claimed that efforts were made by them to stream line these meetings and call them on a regular basis. All also claimed that sanitation related issues are discussed in these meetings.

5.9.2. All the head teachers claimed that talks are regularly given by the school teachers both during assembly as well as in the classrooms on sanitation related issues.

However, only 4% schools have organized any exhibition or melas to promote sanitation in the schools. 16% of the schools have been involved in organizing camps, of which the majority have been organized at the block headquarters, sanitation issues/themes were highlighted in such camps. However, only 15% of the schools have organized various activities in the villages to promote sanitation amongst the local communities. 10% of the schools have called Panchayat meetings to discuss these issues, 4% have organized sanitation walks and cultural programmes on 'special days' to promote sanitation messages. Only 1% out of the total respondents claimed that 'Safai Abhiyans' or 'Cleanliness Drives' have been organized by them.

5.9.3. All the respondents agree that children should be provided education and information on sanitation related issues in schools.

When asked to list the facilities which they believe are essential in the schools in order to ensure that the students practice what they learn, the majority 59% felt that soap, nail cutters, towels etc. are most essential items. 19% feel that latrine facilities are essential. 10% gave priority to drinking water facilities, 7% gave priority to provision of charts and posters, while 5% felt that dustbins and sitting mats should be provided in schools to include hygienic practices amongst the students.

5.9.4. All the respondents agreed that school teachers have an important role to play in ensuring proper maintenance and use of sanitation facilities in the schools. When the head teachers were asked to list the ways in which the teachers can make a contribution, 49% observed that this could be done by providing knowledge and information to the students, 41% stated that they could contribute by seeking an active involvement of Panchayats and local leaders. The rest of the 10% respondents observed that they could contribute, by monitoring the habits and practices of the children and by organizing exhibitions and camps and competitions in the school to ensure proper use and maintenance of sanitation facilities.

5.9.5. Various roles are perceived by the teachers in the promotion of sanitation in the villages. Majority, 50% see themselves as motivators, reaching out to the parents of the students studying in their schools. 10% feel that they can be instrumental in organizing 'cleanliness drives' in the village to promote 'environmental sanitation'. 3% stated that they can help by organizing campaigns for awareness creation while another 5% see their role in organizing and motivating PTA's and Panchayats to improve the sanitation situation in their villages. While the remaining 32% agree that they have a significant role to play in the promotion of sanitation in the villages and they can achieve through all these ways. The enthusiasm and the positive approach of the teachers is evident from these responses and if given the required training support, the teachers can play a very significant role in the programme.

CHAPTER VI

A total of 1229 students belonging to classes 1st, 2nd and 3rd were covered under this study. It was extremely difficult to extract information out from the children studying in these classes, especially those belonging to classes 1st and 2nd. The assignment could not have been completed but for the invaluable support of the school teachers. The survey team had to many a times rely on their own observations to fill up the schedules than on the actual responses given.

Students from Classes 1st to 3rd	No. of Students	No. of Schools
Total	1229	80
AA	552	31
BB	410	26
CC	267	23

Knowledge, attitudes and practices of these students related to all the seven components of sanitation have been covered. While identifying the respondents separate lists were prepared for both male and female students and then selected randomly.

6.1.0. Drinking Water

- 6.1.1. 91% of the total respondents agreed that drinking contaminated water leads to spread of disease. 95% students of Ambala block could identify this relationship.
- 6.1.2. Water in the homes of these respondents is collected mainly from three sources handpumps, taps and open dugwells, though a small percentage 2% also collect it from other sources such as tubewells and streams. 47% households collect drinking water from handpumps, 42% from taps and 9% from open dugwells. Within the blocks there is preference for handpumps in Naraingarh 64% and taps in Barara 53%.
- 6.1.3. 75% of the respondents identified handpumps (42%) and taps (33%) as safe sources of water. However, 16% believe that open dugwells and 5% stated that water from streams and rivers is safe for drinking. Only 5% students were unable to distinguish between a safe and an unsafe source. Taps are considered safer in Barara and handpumps in Ambala and Naraingarh blocks.

A comparison between the beliefs and practices regarding drinking water as shown in the table below, gives some interesting insights.

(Table 6.1.3.)

Drinking water Sources	% of households collect water	% of respondents find it safe
Handpump	47.4	41.5
Tap	41.7	33.0
Open Dugwell	9.4	15.5
Pond	-	4.9
Others	1.5	5.1

It is obvious that the beliefs of the respondents do not always match the practices. It is significant that only in about 9% homes drinking water is collected from open dugwells however nearly 16% of the respondents find it safe. 1.5% households collect water from other sources such as streams and tubewells however 5% respondents consider these safe, while none of the households collect water from ponds but 5% respondents consider it safe.

6.1.4. In the majority of the households women 62% are the main collectors of drinking water. In 30% families all members of the household share this work, while only in 8% households this job is entrusted to children alone. Wherever children collect water it is mainly the female children who are given this job. There is not much variation in this trend at the block-level.

6.1.5. 26% respondents know that unsafe water can be made safe by boiling it, while 31% find filtering the best method to make it safe. However, 32% out of the total respondents were unable to identify any method by which unsafe water can be made safe. Chlorinating was considered as the best method by only 6% of the total respondents while the remaining 5% identified both the methods of boiling and filtering water. The block-wise data shows similar trends. We find that sweetness of the water is considered as an important attribute of drinking water by the people and since chlorination adds a medicinal taste to the water, hence chlorination as a method of treatment is not popular in the village households.

However, when asked whether any of these methods is adopted in their homes to treat unsafe water, only 25% accepted that these methods were adopted in their homes.

6.1.6. Out of the total only 21% respondents believe that water safe at source can get contaminated by unhygienic, storing and handling practices.

Out of these 39% agree that water gets contaminated by putting dirty hands and fingers inside the vessel, while 21% stated that it get contaminated due to storing of water in a vessel which has not been cleaned properly before filling, for 19% the main problem is the wrong practice of keeping the vessel uncovered. A similar pattern emerges when the block-level data is analysed.

6.1.7. Nearly 60% of the respondents pour out water from the container to the tumbler for drinking. The remaining either dip a glass (20%) or use a long ladle (20%) to take out water. There is not much difference in this practice of handling water at the block level.

6.2.0. Disposal of Waste Water

(Table 6.2.1.)

Problems related to Stagnant water	II	AA	BB	CC
Smells Bad	20.3	18.7	20.7	23.2
Inconvenience to passerby	9.4	10.9	9.0	6.7
Mosquitoes Breed	24.6	25.4	23.2	25.1
Looks Bad	5.2	5.8	5.4	3.7
Disease Spreads	25.9	27.4	26.3	22.1
Don't know	14.6	12.0	15.4	19.1

Out of the total about 51% respondents stated that the spread of disease and breeding of mosquitoes is the main problem arising from stagnant pools of water. For another 34% respondents bad smell, inconvenience and the bad sight offered are the main problems, while the rest 15% were unable to state any problems. Maybe for them this situation is accepted as a part of their everyday lives. Not much variation to this trend is evident at the block level as shown in table 6.2.1. given above.

6.2.2. Regarding the best method of waste water disposal, the majority 64% feel that it should be disposed of through drains. Ponds and fields are considered as the next best alternative by 20%, while kitchen gardens and soakage pits find preference with only 7% of the respondents.

(Table 5.2.2.)

Best method of waste water disposal	II	AA	BB	CC
Drains	63.5	66.8	60.0	61.8
Fields and ponds	20.0	19.5	21.7	18.3
Kitchen garden and soakage pit	7.3	6.4	8.5	7.1
Backyard	4.2	3.3	3.2	7.9
Don't know	5.0	4.0	6.6	4.9

The table given above shows that the block-level differences in responses are not significant. Availability of large open backyards in majority of households in Naraingarh have influenced the attitudes of about 9% respondents who find disposal of waste water in the backyard as the best method.

6.3.0. Disposal of Human Excreta

6.3.1 We have already seen that a very small percentage of primary school children in the district have access to latrine facilities in the school as well as at their homes.

Out of the total respondents only 29% have access to latrine facilities in school and only 15% of the total respondents have latrines at their homes. The table given below gives these details

(Table 6.3.1.)

Access to Latrines	TI	AA	BB	CC
In school	32.1	34.0	32.8	17.6
At home	15.0	22.5	17.3	7.5

6.3.2. Even where latrines are available, it may not be optimally utilised. Only 28% of the respondents having school latrines use latrines in school, the reasons for non-use are given in the table below :-

(Table 6.3.2.)

Reasons for not using latrine	TI	AA	BB	CC
Teachers do not allow	29.4	35.2	26.8	16.7
Like open spaces	22.8	19.7	21.1	36.7
Latrine is not functional	28.4	26.9	31.7	25.0
Smells bad	19.4	18.2	20.4	21.6

Only 23% of the total respondents accepted that they did not use latrines in school because they preferred open spaces. The majority are not using it either because the teachers do not allow them to use, or due to poor maintenance and water problem. It is obvious that some education, access to a well-maintained latrine with water facilities will definitely motivate these children to adopt the hygienic practice of defecating in a latrine.

6.3.3 The main reason for not using the latrine at home emerges as the preference for open spaces (47%). 24% do not use latrines because they are either incomplete or damaged due to misuse or poor construction. While 17% do not use because only the elders in their families use them, hence children are not allowed to use. This attitude is related to two problems, many families fear that the pits will fill-up fast hence discourage children from using it, while some discourage children because they do not use the facility properly.

In the majority of the families the respondents observed, that only women are using this facility. Only in 23% families are all members using the facility. It is also significant to note that 22% of the latrines are not used at all. The block-level data shows similar trends.

6.3.4. Only 54% of the total respondents think that the practice of open defecation leads to the spread of diseases. However, 65% in Ambala, 52% in Barara and only 36% in Naraingarh blocks think that this practice leads to the spread of disease.

When asked to identify the ways in which pathogens from excreta are carried to the body only 62% were able to correctly identify various routes of disease transmission. The block-wise trends are similar as given in the table below

(Table 6.3.4.)

Routes of Disease Transmission	II	AA	BB	CC
Flies	33.0	32.5	32.8	33.7
Feet / soil & vegetables / Bathing in dirty pond	28.7	29.4	28.3	28.9
Smells / looks bad	38.3	38.1	38.9	37.8

- 6.3.5. The fact that open defecation near drinking water sources can lead to the contamination of the sources and thereby spread disease, is only known to 23% of the total respondents 33% do not see any such relationship while the rest 44% do not understand 'how' this practice can spread disease. In the Naraingarh block only 15% of the respondents agree that defecation near water and source is related to spread of disease. The respondents in the other two blocks follow the overall trend at the district level.
- 6.3.6. For the majority of the respondents, fields (57%) are the best way to dispose of human excreta. Only 16% believe that latrines should be used for excreta disposal. Garbage dumps are considered the best method of disposal by 10% and the rest believe that defecation near ponds and rivers or along the lanes and drains are the best of disposal. However 10% of the children mainly from classes 1st and 2nd were unable to give any answer. The block level data analysis shows similar trends as stated in the table below :-

(Table 6.3.6.)

Best method of excreta disposal	II	AA	BB	CC
Fields	57.4	59.6	55.6	55.8
Latrines	15.9	15.2	17.6	15.0
Pond / River bank	3.9	2.9	4.9	4.5
Garbage dumps & lanes / drain / courtyard	12.5	10.5	13.9	14.2
Don't know	10.3	11.8	8.0	10.5

Related to the practice of open defecation is the practice of hand washing and anal cleaning after defecation. It was observed by the team that majority of the children who go to fields for defecation, do not have the habit of anal cleaning nor do they wash hands hygienically.

- 6.4.0. Garbage & Dung Disposal
- 6.4.1. Only 26% of the total students surveyed have access to garbage disposal facilities in the classrooms. Hence in the absence of facilities many children pick up the habit of disposing garbage in the classrooms on the floor and corners. Dust bins are used by only 24% of the students, 48% dispose it on the floor or classroom corners, while the rest 28% collect it to dispose it in the garbage pits, garbage dumps or in the school grounds.
- 6.4.2. Methods of garbage disposal at the school level is clearly related to the access to these facilities. Garbage collected from class rooms and school grounds is disposed of in garbage pits and dust bins by 37% of the respondents. 36% stated that it is disposed on the garbage dumps located near the schools, while the rest throw garbage in the adjacent lanes, drains nearby ponds or on a site within the school grounds. The table given below emphasis block-level differences

(Table 6.4.2)

Methods of garbage disposal in school	II	AI	BB	CC
Dust bin & garbage pit	37.0	31.7	45.9	38.9
Garbage dump	35.6	39.5	36.8	25.8
Lane / drain / pond / inside school compound	27.4	28.8	17.3	35.3

The practice of disposing garbage in dust bins and garbage pits is highest amongst the students of Barara while the practice of throwing garbage on dumps located near schools is highest in Ambala. In Naraingarh 35% respondents stated that they threw garbage collected from their schools in ponds, lanes or in some corner in the school grounds. This practice seems to be related to the fact that most of the schools surveyed in Naraingarh have very large compounds without any fencing or boundary walls, hence the school grounds have turned into garbage disposal sites not only for schools but also for villagers. Many villagers have thus gradually encroached on school lands.

- 6.4.3. Majority of the students, 64% have participated in cleaning of the classrooms and schools and disposing garbage.

(Table 6.4.4)

Problems related to unsafe garbage disposal	II	AI	BB	CC
Flies, mosquitoes and disease	57.2	65.6	56.1	51.9
Bad smell / inconvenience / looks bad	28.2	23.9	29.5	24.9
Don't know	14.6	10.5	14.4	23.2

- 6.4.4. The table given above shows that for 28% of the respondents garbage disposed is a problem related to bad smell and sight and inconvenience. Only 57% agreed that unsafe disposal of garbage leads to the breeding of flies and spread of disease. The remaining 15% are not sure how it can be seen as a problem.

- 6.4.5. Unsafe disposal of dung is seen as a problem by 72% of the respondents. However, when these respondents were asked to identify these problems only 25% agreed that it is a health hazard, as seen in the table below -

(Table 6.4.5)

Problems related to unsafe dung disposal	II	AI	BB	CC
Flies & disease	24.9	34.6	25.4	15.7
Inconvenience, smells & looks bad	56.0	60.3	61.8	67.4
Don't know	19.1	5.1	12.8	16.9

For the majority 56% dung heaps cause inconvenience and smells and look bad. For the rest 19% it is not a problem at all. However, a larger number of respondents from Ambala (36%) were able to identify dung heaps as a health hazard, while only 16% in Naraingarh find it a problem related to spread of disease.

Analysis of the data clearly points out that cattle dung is not considered a health related problem by the majority of the students of classes 1st and 3rd

6.4.6 Regarding the methods of dung disposal only 12% stated that it should be disposed of in bio gas plants and compost pits. The majority 62% feel that making dung cakes and disposing it in the fields is the best method. However, 21% think that disposal on garbage and dung dumps is the best method of disposal. The block level analysis shows similar responses

6.5.0 Food Sanitation

6.5.1 Vendors selling food stuff outside schools is a rare sight in the remote villages. Only 18% of the respondents, stated that vendors came to their schools. However, wherever they are found 77% of the children buy food stuff from them. Only 25% of the vendors keep the food covered. It is extremely difficult to stop children from purchasing food stuff from the vendors hence the strategy should be to reach out to the vendors and educate and motivate them to keep the food stuff covered.

6.5.2. According to 62% respondents by covering food we protect it from dirt, dust and insects. Only 33% find that food kept uncovered gets contaminated by flies, rats and other animals. The rest 5% were unable to give any reason.

Only 60% of the total respondents wash fruits and vegetables before eating. Out of these 66% wash to remove dirt and mud, while only 22% wash it to remove germs. The rest 12% follow this practice because it has become a habit and not because it is seen as a health related problem.

6.6.0. Personal Hygiene

6.6.1. The practice of cleaning the teeth daily in the morning is observed by only 32% of the total respondents. 7% clean their teeth twice daily, in the mornings and before going to bed. However, a very large number 58% either clean their teeth occasionally or have not ever cleaned them. A very large number of children in the rural areas suffer from dental problems. The cause of this problem is different from the urban areas where bad eating habits are the problem, here it is mainly due to poor dental hygiene, as is evident from these responses. However, the situation appears to be slightly better in Ambala and extremely poor in Naraingarh blocks as per the respondents.

6.6.2. However, out of those who clean their teeth, 25% do so only with water, which is as good as not cleaning them. Only 69% clean their teeth either with toothpaste and powder or with a chewing stick. The rest 6% use other agents such as charcoal, salt and oil.

(Table 6.6.3.a)

Frequency of taking baths in summer	TL	AA	BB	CC
Once Daily	58.7	56.9	58.5	62.9
Twice Daily	29.7	32.2	30.7	22.8
Occasionally	11.6	10.9	11.8	14.3

(Table 6.6.3.b)

Frequency of taking baths in winter	II	AA	BB	CC
Once Daily	30.3	28.3	31.2	33.0
Twice Daily	11.3	10.9	13.4	9.0
Occasionally	58.4	60.8	55.4	58.0

6.6.3. The tables given above show that nearly 88% of the total respondents bathe in summers, while the corresponding figures for winters are only 42%. 58% of the children do not bathe regularly in winters. The blocks show similar trends.

6.6.4. 41% of the total respondents use soap to clean their bodies while the rest 56% do so only with water. Usage of soap is also related to the affordability of the respondent. We found during the home visits that majority of the students come from very poor households hence many cannot always afford soaps. For majority of the students bathing with good quality soap is a luxury which is to be enjoyed sometimes.

6.6.5. Very few households have bathrooms inside the premises. Majority of the people bathe in the open, at the village wells or at the community water points and handpumps.

Out of the total respondents 50% bathe at the community water points and wells, 26% bathe in their courtyards in the open. Only 3% bathe in ponds, while 21% take bathe in the bathrooms constructed inside their homes. The problem of bathing in the open by the majority may be also indirectly related to the problem of not using of soap for cleaning the body. The block wise tables when analysed give similar trends.

Only 3% of the total respondents bathe in ponds and about 4% feel that bathing in ponds containing dirty water does not lead to the spread of disease. This indicates that most of those who bathe in the ponds are either totally unaware about the problems or do not believe that disease can spread through this practice. Out of the total respondents 88% agree that bathing in dirty ponds leads to spread of disease. However, the remaining 8% were not sure how this practice can spread diseases.

6.6.6. Using footwear is not a common practice in the rural areas, especially amongst the smaller children. The practice is mainly related to the attitudes and beliefs of the people as is evident from the table given below

(Table 6.6.6.)

Why Footwear is used	TL	AA	BB	CC
Keep feet clean	41.7	40.9	41.0	42.2
Save from injury	38.2	38.8	39.3	35.6
Prestige	9.8	9.6	8.5	12.0
Prevents disease	9.4	9.2	10.2	8.2
Don't know	1.0	1.4	1.0	-

Only 31% of the respondents are in the habit of using footwear always. Majority 60% wear shoes occasionally when they have to go out, either to schools, fields or to some social gathering. Nearly 10% of the respondents admitted that they do not wear shoes at all, for them it is more of an economic problem and less of an attitudinal one.

Only 9% of the total respondents use footwear because it spreads disease. For the majority the practice is associated with prestige and convenience.

Out of the total respondents who use footwear were enquired and we learnt that only 33% use it always, 58% wear shoes only when they have to go out while 9% use footwear when they go to fields for defecation.

6.6.7. 95% know that nails must be kept clean & short. However, only 17% cut nails on a weekly or monthly basis, 42% do so when the nails grow long, while 41% cut them occasionally.

When asked the reasons for cutting nails, the majority 73% admitted that they do so to keep their hands clean. Only 27% practice this habit because long dirty nails spread disease.

6.6.8. Only 42% of the respondents admitted of washing hands frequently or every time the hands get dirty.

The majority 40% wash hands only before eating, while 35% wash hands after defecation and only 8% wash hands after every activity which makes their hands dirty. These habits added to the fact that only 42% wash hands frequently point out the gravity of the problem. Just by teaching the students the advantages of hand washing and monitoring this practice the teachers and parents can make a valuable contribution towards the health of these children.

47% of the respondents wash hands with soap and ash, 32% wash hands only with water, while the remaining use either mud or ash.

6.6.9. 61% of the respondents stated that they wash hair either on a daily or on a weekly basis. The rest wash their hair either once a month or occasionally. Of these only 37% use soap to clean their hair. Out of the remaining 50%, wash hair with just water or use 'curds' 13% to clean their hair.

6.7.0. Community participation and Role of teachers in promotion of sanitation.

6.7.1. 70% of the respondents agree that adoption of hygienic practices leads to improvement in health.

6.7.2. Only 46% of the respondents admitted that their parents visit their schools and meet their teachers. The non-involvement of the parents in their children at school and school activities is a major hindrance in launching any school programme. Involvement of parents and the community in the schools is a great motivating factor both for the teachers as well as children as seen in many successful programmes.

6.7.3. 73% of the students agreed that their teachers talk about sanitation related issues to them in school. However, the teachers mostly discuss issues related to personal hygiene and cleanliness as classrooms as given in the table below.

(Table 6.7.3.)

Sanitation issues discussed in S.A.S.	II	AA	BB	CC
Personal hygiene & cleanliness of classrooms	87.5	84.8	88.1	59.5
Village sanitation	4.5	6.8	3.4	38.0
Food sanitation	8.1	8.4	8.5	3.5

The analysis of the block level data points out that though the responses in Ambala and Barara blocks follow in similar trends however 38% respondents in Naraingarh stated that their teachers stressed on the need for improved village sanitation. We have seen in the previous chapter that though in many schools surveyed by the team classrooms are clean and have dust bins, very few schools have kept the school compounds clean. Garbage pits and garbage bins in the school for garbage disposal are also not found in all the schools. There appears to be a direct correlation between the information provided by the teachers in the schools and the related attitudes and practices of the children.

- 6.7.4. 52% of the respondents admitted to have participated in a sanitation programme. However, all these activities were related to cleaning the classrooms and sometimes to school compounds.

CHAPTER - VII

A total of 871 students belonging to classes 4th and 5th were interviewed. However, the team had to depend also on their own experience and observations while interviewing the respondents. Support was taken from the class teachers, who had all been briefed about the objectives and needs of the study.

The interview schedule covered knowledge, attitudes and practices related to the seven components of sanitation. Separate lists of male and female students were made and the respondents selected randomly.

<i>Students from Classes</i>	<i>No. of Students</i>	<i>No. of Schools</i>
Total	871	80
AA	361	31
BB	284	26
CC	226	23

7.0.0. General

7.1.1. 58% of the respondents were able to identify the diseases which spread from drinking contaminated water, while 24% were incorrect and 18% do not know whether drinking contaminated water spreads disease. The table given below highlights the block level variations.

(Table 7.1.1.)

<i>Disease Related to Drinking Contaminated Water</i>	<i>TI</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Cholera / Diarrhoea / Jaundice / Typhoid / Polio	58.1	72.3	64.1	39.0
Others	23.8	15.0	16.1	36.7
Don't know	18.1	12.7	19.8	24.3

72% of the respondents from Ambala, 64% from Barara and only 39% from Naraingarh blocks were able to correctly identify the names of the diseases which spread from drinking contaminated water. It is surprising that nearly 17% of the respondents believe that the disease of Cancer, Plague and Malaria are water borne.

7.1.2. Out of the total respondents interviewed 83% could identify at least the one route by which diseases are transmitted. 8% believe that contaminated food spreads disease, while 9% do not have any knowledge regarding these routes. The below mentioned tables give the details block-wise.

(Table 7.1.2)

Routes by which the Water Source gets Contaminated	II	III	BB	CC
By Air	16.5	18.0	11.6	20.4
By Flies & insects	34.6	35.5	46.1	18.6
By hands	15.3	14.1	11.6	21.7
By with dirty water	17.3	18.0	17.6	15.9
By Food	7.7	10.0	7.0	4.9
Don't know	8.6	4.4	6.0	18.6

The majority of the respondents 35% believe that flies and insects are the routes by which diseases are transmitted, while 17% regard air or wind as the only route. 15% are aware that disease can be transmitted by our own hands if not kept clean, while about 8% believe that only contaminated food can transmit disease. It is significant to note that none of the respondents identified more than one route and nor did any respondent identify human excreta as a major route for disease transmission. The block level analysis of data shows similar pattern.

7.1.0. Drinking Water

7.1.1 Handpumps and taps are considered safe sources by 95% of the respondents, while 5% consider open dugwells safe.

7.1.2 There are various methods of treating unsafe water to make it safe, however 10% of the respondents were unable to identify any method. Boiling as a method is considered by 48%, chlorinating by 12% and filtering by 29%. Only 3% of the total respondents were able to identify the two methods of boiling and filtering, while none of the respondents were able to identify all the methods of treatment. The block level data analysis gives similar trends.

However, when the respondents were asked whether water is treated in their homes by any of the identified methods, 82% stated that no such practice was adopted. In only 18% households this practice was carried on. The team observed that boiling of water for many signifies simply heating the water. Also that chlorination as a method is least popular due to the change in the taste of the water, while filtering is the most commonly used method especially during the rainy season.

7.1.3. Drinking water safe at source can get contaminated after collection is accepted by 51% of the total respondents. A very large number, 49% still believe that water safe at source cannot get contaminated.

7.1.4. Those respondents who know that water can get contaminated after collection were asked to identify the channels, the table given below gives these details.

(Table 7.1.4.)

Ways by which Water gets Contaminated after Collection	TL	AA	BB	CC
By dirty hands / children	40.2	33.2	43.3	49.1
By putting dirty glass / vessel not clean	21.4	20.9	20.7	23.5
If vessel not covered	28.8	35.2	24.0	23.5
By birds & animals	2.9	3.6	3.3	1.0
Don't know	6.7	7.1	8.7	2.9

Majority of the respondents, 40% know that safe water can get contaminated if dirty hands are put inside or if children dip fingers inside the vessel / containers. 29% know that if the water vessel is not kept covered then germs in the air and dust can contaminate the water, while 21% know that this problem can arise if the vessel is not clean or if a dirty tumbler is used to take out water from the vessel. About 3% stated that if birds and animals drink from the vessel it can get contaminated. A small percentage, about 7% failed to give any answer, the block level trends are similar.

7.1.5. In the majority of the schools attended by the respondents no vessels are kept to store drinking water.

In those schools where water is stored in vessels, 37% of the respondents just pour out water into the tumbler by tilting the vessel, 21% dip a glass to take out water while 29% of the respondents use a glass with a long handle. The practice of taking out water is related to the type of vessel and the available facilities. As already pointed out in the previous chapters, wherever pitchers are used water is mostly poured out either by tilting the vessel or using a glass with long handle, wherever water is stored in buckets water is taken out by dipping a tumbler and hence the chances of contamination by hands

7.2.0. Disposal of Waste Water

(Table 7.2.1.)

Problems Related to Stagnant Pools of Water	TL	AA	BB	CC
Mosquitoes breed & spreads disease	82.2	81.7	82.1	83.1
Cause inconvenience / looks & smells bad	14.8	16.9	17.9	7.6
Don't know	3.0	1.4	-	9.3

7.2.1 Majority of the respondents seem to be well aware of the problems related to insanitary disposal of waste water 82% of the total respondents know that stagnant pools of dirty water are ideal places for breeding of mosquitoes and also cause the spread of diseases. However, about 15% of the respondents perceive it as a problem related to inconvenience, bad odour and displeasing to the eyes. The block level data analysis gives similar responses

7.2.2. 97% of the respondents said that stagnant pools of waste water cause the spread of disease. Only 67% of the respondents could identify a relationship between the spread of 'malaria' and stagnant water. 26% believe that diseases such as cholera, diarrhoea and throat infections spread from cesspools of stagnant water while about 7% were unable to identify the name of the disease.

At the block level we find that 78% of the respondents in Naraingarh were able to identify 'malaria' while in both the blocks of Ambala and Barara blocks 64% of the respondents were correct in their identification of the disease.

(Table 7.2.3.)

<i>Best Method of Waste Water Disposal</i>	<i>TL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Drain	64.2	64.5	64.8	62.8
Soakage pit and kitchen garden	8.4	11.4	6.7	5.7
Ponds and fields	18.6	14.1	18.0	26.6
Backyard / lanes	8.8	10.0	10.5	4.9

7.2.3. Attitudes related to the methods of disposal of waste water correspond to the prevalent practices in the villages. 64% of the respondents stated that waste water should be disposed of into the drainage channels, 19% observed that it should be disposed of into ponds and fields and over 8% think that disposal should be into soakage pits and kitchen gardens. Only 9% believe that the best method to dispose of waste water from their homes is into the backyards and lanes.

At the block level we find that the majority of the respondents in all the three blocks consider disposal into drainage channels the best method of waste water. Ponds and fields are regarded as the next best alternative by 27% in Naraingarh, 18% in Barara and 14% in Ambala.

7.3.0. Disposal of Human Excreta

(Table 7.3.1.)

<i>Disposal of Excreta while at School</i>	<i>TL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Fields	82.2	76.2	85.9	87.2
Latrine	10.7	15.8	7.7	6.2
Near Pond	1.8	2.5	2.5	-
Nearby Lanes	2.0	1.9	1.4	2.7
Garbage Dump	0.1	-	0.4	-
School Grounds	3.2	3.6	2.1	4.0

7.3.1. The table given above tells us about the practices related to excreta disposal by the respondents during school hours has been pointed out in the previous chapter that smaller children if not using latrine in the school defecate closer to the school premises or inside the school compound while the senior students prefer to defecate farther away from the school premises.

Not even 11% of the respondents use latrines, the remaining 89% practice open defecation. Out of those defecating in the open about 95% use the fields, not much variation in these practices is seen at the block level.

7.3.2 Only 21% of the total respondents have latrines in their homes. There are block level differences regarding access to latrine facilities as is evident from the table given below. In Ambala 31% of the respondents, in Barara 15% and in Naraingarh 14% of the total respondents claimed to have latrines constructed in their homes.

However, out of those having latrines only 35% of the respondents admitted to using these facilities. The usage of latrines is highest in Ambala, where 50% of the respondents use it, while it is lowest in Naraingarh where only about 13% of those having latrines in their homes use it. In Barara block 33% of the respondents use these facilities. The analysis once again emphasises that access to latrines does not ensure its utilisation. The table given below gives the details.

(Table 7.3.2.)

<i>Latrines Access & Use</i>	<i>TL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Have latrines at home	21.4	31.0	14.8	14.2
Use the latrine	34.9	50.0	33.3	12.5

7.3.3. The main reason given for the non-utilisation of the facilities by the respondents is their preference for open spaces for excreta disposal as seen in the table given below. Out of those practicing open defecation about 95% prefer fields. Drains and lanes etc., are used by not even 1% of the total respondents.

(Table 7.3.3.)

<i>Reasons for not Using Latrines at Homes</i>	<i>TL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Only elders use	8.3	3.0	14.3	14.3
Smells foul	21.5	30.8	14.3	7.1
Like open spaces	39.6	38.5	28.5	53.6
Not functional	30.6	27.7	42.9	25.0

40% do not use latrines because they like open spaces, 21.5% do not use because the latrines smell foul, while 31% respondents stated that the units in their homes had become nonfunctional, 8% do not use the latrines for it is only used by the elders in the family and children are either discouraged or not allowed to use the facility. At the block level we find that in Ambala 39% do not use the facility because they like open spaces, while 31% complained that the reason smells given by latrines hence do not use it. In 28% households the latrine is not functioning. Barara in 14% households only elders use the facility, while 43% of the facilities are not functioning, the percentage of children who do not use the latrine because of their preference for open spaces is much smaller, only 28% enjoy open spaces. In the Naraingarh block the majority 54% admitted that they do not use the latrines constructed in their homes because they like open spaces, while in 14% households only elders use it, 25% of the respondents claimed that the main reason for non-utilisation is the non-functionality of the latrine in their homes.

It is therefore clear that out of the total respondents only 17% have access to latrines. Nearly 20% of the constructed units have become unfit for use either due to constructional defects or due to poor maintenance. A strategy must be immediately developed to make these units functional, for these units lying unutilised demotivate even those who desire to construct or use latrine facilities at home.

(Table 7.3.4)

Who Uses the Latrines	II	AJ	BB	CC
Only children	3.2	4.4	-	3.1
Only women	25.8	26.9	10.0	31.3
Only elders	9.7	10.7	14.3	-
All members	23.6	20.5	26.2	31.3
No one / Not Latrine	37.7	37.5	40.5	34.3

7.3.4 Out of the total constructed units nearly 38% are not being used at all, only 24% are being used by all members of the family. A very large number of constructed latrines nearly 26% are being used only by women. We learned that even the units which are being used by various members of the family are mostly not used by them 'always'. The utilisation of latrines goes up during rainy season when the fields are flooded and in winters when it is dark and cold in the mornings.

About 3% of the latrines are used only by children and about 10% only by elders in the family. The block level data analysis shows that in Naraingarh 13% of the functional units are not being used, in Barara 12% units are not being used, while in Ambala 16% of the functional units are not being used at all. However, the number of latrines being used by only women members of the household is as high as 31% in Naraingarh, 27% in Ambala and 19% in Barara.

7.3.5 Out of the total only about 37% of the respondents have latrines in their school. In Ambala 36%, in Barara 44% and in Naraingarh 33% of the respondents agreed that they have latrines in their schools.

However, here again we find that the usage is only 26% by the respondents of the existing latrines. The block level data shows that only 17% in Barara, 32% in Naraingarh and 29% in Ambala use the latrine facilities at school.

7.3.6 The reasons given for not using the latrines at school are various. 39% are not allowed to use as the latrines are exclusively meant for school teachers, 27% prefer to go out in the open while 34% of the respondents do not use because the units are not functioning.

In Barara 38% in Naraingarh 31% and in Ambala 30% of the respondents do not use latrines because the units are nonfunctional. However, a large number of respondents 59% in Ambala 29% in Naraingarh and 26% in Barara are not allowed to use latrines in school by their teachers, the rest do not use because they prefer to go in the open. Hence it is once again obvious as with classes 1st

to 3rd respondents that while in school the practice of open defecation is mainly due to problems of accessibility. A change can be brought about in these habits of the children with educational and motivational inputs.

7.3.7. 92% of the students think that there is a linkage between the practice of open defecation and disease, 81% know that excreta of small children also spreads disease. However, only 33% of the total respondents could identify any one may be which excreta transmits of disease. The block level analysis of data gives similar results.

(Table 7.3.7.)

Best Method of Excreta Disposal	TI	AA	BB	CC
Latrine	33.9	36.0	32.0	32.7
Fields	52.1	49.0	46.8	63.7
Pond / River bank	2.6	2.2	4.2	1.3
Lane / Drain covered pit	2.1	2.8	2.8	-
Garbage Dump	7.5	9.1	11.3	-

The majority of the respondents 52%, believe that using the fields for excreta disposal is the best method, while only 36% believe that the best method to dispose of excreta is either in a latrine or a covered pit. The practice of using garbage dumps as excreta disposal sites especially by women has influenced the thinking of nearly 8% of the respondents, who think that garbage dump sites are the best way to dispose of excreta. The respondents of Ambala and Barara blocks gave similar responses, however, the percentage of students who think fields are best for excreta disposal is extremely large 64%, in Naraingarh block.

7.3.8. 87% of the total respondents agree that defecating near drinking water sources leads to spread of disease. The majority of the respondents 79% could also identify ways in which the drinking water sources can get contaminated due to this insanitary practice.

(Table 7.3.8.)

Ways in which Drinking Water Sources get Contaminated	TI	AA	BB	CC
Seepage by water	22.9	23.4	19.1	26.8
By Air	55.6	53.8	57.4	55.9
Don't know	21.5	22.8	23.9	17.3

7.3.9. Nearly 57% of the total respondents stated that drinking water sources get contaminated by air, mainly because the wells are not covered, while 23% stated that water of handpumps gets contaminated if platforms are not built around it or due to seepage by any other way, while the rest 21% do not know the ways in which the sources get contaminated. The above mentioned table shows that there is not much variation in the answers given by the respondents of different blocks.

7.3.10 Over 95% wash hands after defecation. Only 54% use ash or soap to clean their hands while 21% use mud and the rest wash hands only with water. Similar practices are found at the block level.

Since only 54% of the respondents claim to be washing hands hygienically, we can understand the gravity of the situation. A very large number of children thus expose themselves to various diseases unknowingly. Added to this problem is the practice of open defecation both at home and while at school by the children. It has been observed that children many a times when go to far off fields do not immediately come back home after defecating and mostly start playing.

Hence we can conclude that even those who wash hands with soap and ash do not practice 'always' or every time after they defecate.

7.4.0. Garbage and Dung Disposal

(Table 7.4.1.)

Methods of Garbage Disposal in Classrooms	IL	AA	MB	CU
Floor	25.5	18.3	20.8	42.9
Classroom corner	10.2	9.7	13.0	7.5
Dust bin	37.9	47.4	31.7	30.5
Garbage pit	20.7	17.7	26.4	18.1
School compound	5.7	6.9	8.1	0.9

7.4.1 Nearly 59% of the respondents use dust bins and garbage pits to dispose of garbage in the classrooms. However, 36% either throw it on the floor or in the classroom corner, while about 6% in the school grounds. The usage of dust bins and garbage pits is highest in Ambala 65%, and lowest in Naraingarh 49%. The majority in Naraingarh 50% use the floor and classroom corners to throw garbage. However, surprisingly the practice of throwing garbage in the school compound is reported by not more than 1% of the respondents in Naraingarh. This practice seems to be related to the emphasis on environmental sanitation by the school teachers.

7.4.2 Nearly 92% of the respondents claimed that they have participated in activities related to cleaning of classrooms and school compounds. Garbage collected by the respondents 51% is mostly disposed of in garbage pits and garbage bins. Disposal of garbage on garbage and dung dumps located near the school is reported by 32% of the total respondents. The rest admitted of disposing it of in the lanes, drains, nearby fields and ponds. Dust bins and garbage pits are most frequently used in the schools of Ambala block and least in Naraingarh. The practice of garbage disposal in schools is closely linked to the availability of the facility. The team observed that wherever dust bins and garbage pits were provided they are being utilised by the students. In many schools we observed that students under the supervision of their teachers burn the collected garbage in some corner or inside the garbage pit.

(Table 7.4.3)

Problems Related to Insanitary Garbage Disposal	TL	AA	BB	CC
Spread flies, insects & disease	51.3	49.9	54.2	50.0
Bad smell, looks bad causes inconvenience	42.4	44.8	42.3	38.5
Don't know	6.3	5.3	3.5	11.5

7.4.3 Mounds of garbage dumped in the lanes or outside homes is found to be a problem by the majority of the respondents, though not all of them see it as a health hazard. Only 51% of the respondents see a linkage between insanitary disposal of garbage and spread of disease. 42% perceive it as a problem, which for them is related to bad smell and inconvenience. A small percentage 6% however, do not know how garbage can cause problems. May be they have just got used to living in and seeing filth around them. The data analysed at the block level gives similar responses.

7.4.4 Dung disposed of along the lanes or in the open is considered a problem by nearly 92% of the respondents.

The table given below tells us about their perceptions regarding the problems related to disposal of dung in an insanitary manner.

(Table 7.4.4)

Problems Created by Unsats Disposal of Cattle Dung	TL	AA	BB	CC
Breeds flies, mosquitoes	37.9	37.0	29.2	49.5
Spreads disease	35.5	39.9	35.4	29.8
Causes inconvenience and bad smell	26.6	23.1	35.4	20.7

38% see dung disposal sites as breeding grounds for flies and mosquitoes, while for 36% the main problem is the spread of disease. Nearly 27% respondents relate it to the problem of bad smell and inconvenience to traffic. The respondents of the three blocks have similar perceptions.

(Table 7.4.5)

Name of the Disease Spreading from Dung	TL	AA	BB	CC
Tetanus	1.4	0.6	-	4.5
Malaria	8.2	8.6	5.6	10.7
Cholera	18.0	18.6	18.7	16.5
T.B.	8.4	6.4	7.4	12.9
Jaundice, Eye and Throat Infections	44.6	52.5	50.3	25.0
Don't know	19.4	13.3	18.0	30.4

7.4.5 The table given above throws light on the knowledge level of the respondents regarding the diseases which spread from cattle dung

Many respondents, 45% believe that, jaundice and eyes and throat infections spread from dung. Many women claim that many a times they get sick with these diseases while making dung cakes due to the gasses related from dung heaps especially during summer months.

18% stated that the disease of cholera spreads from these dung heaps through the flies which breed here, while 8% see a linkage between dung and the spread of malaria. Another 8% stated that tuberculosis spreads from dung heaps. Not even 2% of the respondents were able to identify a link between the disease of tetanus and cattle dung. However, 19% of the total respondents were unable to name any disease. May be for them as for many rural peoples cattle dung is believed to be absolutely safe and free from disease. The practice of applying dung on wounds and cuts is still advocated by some, besides dung is plastered on the walls and floors to make them clean and strong.

7.4.6.

Disposing cattle dung collected from homes in the fields is considered the best method of disposal by 50% of the respondents. Over 22% think that the dung should be disposed of on garbage dumps, while about 16% agree that dung should be disposed of in compost pits, for conversion into good quality manure. Another 8% consider using the dung to make cakes for fuel the best method of disposal. Bio gas as the best alternative is accepted by only 4% of the total respondents.

Some variations in responses are seen at the block level. While the majority of respondents in Barara and Ambala find disposal in fields the best method, the majority in Naraingarh block think that the best method of disposal is on the garbage dumps. The table given below gives the details.

(Table 7.4.6.)

Best Method of Dung Disposal	II	AI	III	CC
Fields	50.1	54.0	59.9	31.4
Garbage dumps	22.3	14.1	18.3	40.3
Compost pit & Bio gas plant	18.0	19.6	18.3	15.1
Dung cakes	7.9	9.7	3.5	10.6
Compose pit & Dung cakes	1.7	2.5	-	2.7

In majority of the households dung is used for making cakes to be used for cooking the balance is used in the fields. The general practice is to collect the dung and pile it on some private or panchayat land, these sites are also used to dispose of household garbage. Almost every household in the village has a site marked for this purpose. Compost pits in the villages are a rare sight, the people know that dung converts into manure and should be added to the fields, but the proper method is not known to most. The respondents while giving answers to these questions appear to be influenced by the related practices in their villages.

7.5.0. Food Sanitation

7.5.1 72% of the respondents agreed that food left uncovered gets contaminated by flies, insects, mice and animals. Only 3% stated that uncovered food if eaten leads to the spread of disease, while 25% think that the food should be covered to stop dust and dirt from falling in it. Not much variation is seen in the trend in answers at the block level.

7.5.2 Nearly 18% of the total respondents admitted that they do not always wash fruits and vegetables before eating. It has been observed by the team that many children just dust or wipe the fruits and vegetables before eating to make it clean, obviously this practice is related to their perceptions and attitudes given in the table below

(Table 7.5.2)

<i>Reasons for Washing Fruits / Vegetables</i>	<i>IL</i>	<i>II</i>	<i>BB</i>	<i>CC</i>
Remove dust and dirt	55.9	56.6	55.1	56.0
Remove germs	39.7	42.2	39.4	34.3
Remove dust and germs	3.9	1.2	5.5	7.5
Don't know	0.4	-	-	2.2

It is obvious that the majority of the respondents do not know that by eating fruits and vegetables which are not properly washed we expose ourselves to many diseases.

7.5.3 It has been pointed out in the previous chapters that vendors selling food stuff outside rural schools is not a very common feature. However, wherever vendors come only 36% respondents accepted that they purchase food stuffs from them. The main reason for not buying food stuff by 56% respondents from vendors is that they do not cover the food stuff hence dust and dirt falls in it and not the knowledge about the spread of disease. Only 44% of the total respondents find that food left uncovered gets contaminated by flies and hence leads to the spread of disease.

7.6.0. Personnel Hygiene

7.6.1. About 62% of the respondents clean their teeth at the least once daily. The remaining 38% either clean their teeth 'sometimes'; or do not clean at all.

Related to this practice is the choice of method for cleaning teeth as given in the table below.

(Table 7.6.1)

<i>Frequency of Cleaning Teeth / Agent used for Cleaning</i>	<i>IL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Once daily	61.7	69.9	61.3	49.6
Occasionally / Never	38.3	30.1	38.7	50.4
Paste Powder & Chewing Sticks	82.1	80.8	83.0	82.7
Only water	10.6	8.3	10.3	15.0
Others	7.3	10.9	6.7	2.3

Only 50% of the respondents in Naraingarh, 61% in Barara and 70% in Ambala clean their teeth at least once daily. It is definitely a matter of concern that large number of children are not in the habit of cleaning their teeth on a daily basis and only about 3% follow this practice twice daily in mornings and before going to bed in the evenings.

Chewing stick and tooth paste to clean teeth are used by an equal number of respondents. However, 7% of the respondents use salt, oil or charcoal to clean teeth while 11% wash their teeth only with water.

In Naraingarh a large percentage do not clean their teeth daily 50% besides a significant number, 15% of the total respondents clean their teeth only with water.

(Table 7.6.2)

	II	LI	III	IV
Summer				
Once daily	47.0	44.0	42.3	57.5
Twice daily	41.0	47.1	46.1	24.8
Sometimes	12.0	28.9	11.6	17.7
Winter				
Once daily	37.0	41.0	44.4	21.2
Twice daily	3.9	6.4	3.2	0.9
Sometimes	59.1	52.6	52.4	78.9

7.6.2. The above mentioned table throws light on the practices of the respondents relating to taking baths during summers and winters.

88% of the total respondents bathe at least once daily during summer months however, in winters only 41% are in the habit of taking baths at least once during the day. 12% of the total respondents admitted to not taking baths on a daily basis in summer, while 59% do not bathe daily in winters. The data analysed at the block level gives similar responses, except in the case of Naraingarh where nearly 79% of the respondents admitted that they bathe 'sometimes' in winters.

Only 39% of the total respondents use soap to clean their bodies while bathing. The remaining 61% bathe only with water. We have already seen in the previous chapter that since majority of the children attending government run primary schools come from families with very low incomes, regular use of soap for bathing is a luxury which they cannot afford. The practice is clearly related to the economic condition of the family.

Not taking baths on a regular and daily basis and use of only water to clean the body are one of the main causes for widespread skin diseases amongst the children in the rural areas.

7.6.3 Out of the total respondents covered under the study, 98% agree that it is essential to use footwear. The following table reveals the attitudes of the respondents regarding the use of footwear.

(Table 7.6.3.)

<i>Reasons for Using Footwear</i>	<i>II</i>	<i>II</i>	<i>BB</i>	<i>CC</i>
Prevents Hookworms	5.3	7.1	4.6	3.2
Protects from injury	45.8	44.3	45.2	49.1
Keep feet clean & adds to prestige	46.7	44.6	48.4	47.7
Don't know	2.2	4.0	1.8	-

Only 5% of the total respondents use footwear to prevent hookworm infestation. 46% use footwear to save their feet from injury while 47% wear shoes to keep their feet clean and also because it adds to their prestige among their peers. The trend in responses is similar at the block level.

However, when we asked the respondents to give details regarding this practice, over 37% claimed that they wore footwear always, while 34% use footwear only for going to school, and 11% do not use footwear at all. The rest use it while going for social outings (10%) or while going to fields for defecation (9%). Here too we find that the attitudes and practices are positively correlated. The pattern of responses is similar at the block level.

7.6.4. Almost 98% of the respondents agree that nails should be clipped regularly and kept clean.

(Table 7.6.4.)

<i>Reasons for Cutting Nails</i>	<i>II</i>	<i>II</i>	<i>BB</i>	<i>CC</i>
To keep hands clean & look nice	28.1	30.2	24.3	29.7
Prevents dirt from collecting under long nails & disease	71.9	69.8	75.7	70.3

The table given above shows that 72% of the respondents are aware of the fact that dirt collects under long nails and hence cutting them prevents the spread of disease. The remaining 28% cut their nails so that their hands look nice and are also kept clean. The block level data analysis gives similar trends.

The knowledge and the attitudes related to cutting of nails are also reflected in the actual practice. Majority of the respondents, 48% stated that they cut their nails whenever they grow long, while 30% practice it regularly on a weekly or monthly basis. However 22% of the total respondents do not follow this practice regularly.

7.6.5. Many diseases spread if hands are not cleaned properly, every time food and drinking water is handled and after defecation. However, we find that only 68% of the respondents wash their hands frequently during the day. The remaining 32% wash hands 'sometimes' or rarely.

(Table 7.6.5.)

Activities Related to Hand Washing	II	III	BB	CC
Every time hands get dirty	3.2	1.7	6.7	1.3
Before & after eating,	33.8	79.1	44.0	28.2
Before & after eating & after defecation	39.1	38.2	28.5	53.7
After defecation	20.9	26.0	19.0	15.0
After playing / Working	3.0	5.0	1.8	1.8

Hand washing is a habit, which if picked up in childhood becomes a way of life. Only 3% of the respondents clean their hands every time their hands get dirty. 34% clean before and after taking food and only 40% wash hands before and after taking food and after defecation. Nearly 21% wash hands only after defecation.

In the Barara block only 29% wash hands before and after taking food and after defecation, while only 19% wash hands only after defecation. The situation as given in the table above appears to be slightly better in Naraingarh where 54% wash hands before and after taking food and after defecation.

7.6.6. When the respondents were asked as to what is used to clean hands only 58% admitted to using soap or ash, 18% use mud while 24% use only water. The block-level data shows similar trends.

When the entire data related to these practices is analysed carefully the true picture emerges. Firstly 32% respondents wash hands 'sometimes or rarely, then only 40% admitted that they wash hands before taking food and after defecation then about 42% of the total respondents said that they use mud or only water to clean their hands.

Teachers need to demonstrate and monitor these activities of their students regularly, besides a strategy needs to be developed for promotion of this hygienic practice in the local communities. The use of 'mud' to clean hands and utensils should be discouraged by providing information and knowledge to the children at school.

7.7.0. Community participation and involvements of students and teachers in the promotion of sanitation in school.

7.7.1. 95% of the total respondents 'know' that the adoption of hygienic practices leads to improved health.

Parents of only 62% respondents regularly visit school and meet their teachers. The responses for Ambala and Barara blocks are similar, but in Naraingarh parents of only 45% of the respondents regularly visit school.

Most of the teachers complained about this attitude of noninvolvement by the parents in their child's and school's affairs. One of the reasons could be that many schools have not set up PTAs and even where PTAs are existing they do not meet regularly. The other reason could be related to the economic problems of many parents. The team learnt that most of the children come from families of small farmers or landless labourers where mostly both the parents leave early in the mornings to work in the fields and come back late thus missing out

on the school activities consequently illiteracy of the parents mostly 'mothers' is another contributing problem. 60% of the respondents from Ambala and Barara and only 45% from Naraingarh stated that their parents regularly visit their schools

77.2 75% of the total respondents have participated in sanitation related activities in school. The majority of these activities, 98% were related to cleaning of classrooms and school compounds. Only 2% of the respondents have participated in awareness camps.

77.3 Teachers do make efforts to discuss sanitation issues with the school children though most of these issues are related to improved personal hygiene and maintaining cleanliness in the schools.

95% of the respondents recalled that their teachers provide information regarding various components of sanitation from time to time in schools.

However, out of the total, 64% respondents stated that issues related only to personal hygiene are discussed, while 24% agreed that issues pertaining to school sanitation and personal hygiene are discussed by their teachers. A very small percentage 12% stated that their teachers discussed with them matters concerned with village, food and home sanitation. It is important to note that none of the respondents informed that their teachers discuss the entire 'sanitation package' or all the seven components of sanitation with them.

Only 2% of the respondents informed that their teachers discuss with them the problems related to maintaining a clean environment in the village. These responses once again emphasise that environmental sanitation is an issue which the teachers feel is not their concern. For majority of the teachers the focus is on the child and hence the concern with and promotion of personal hygiene. It is obvious that they do not understand the linkage between a clean environment and a good health.

CHAPTER VIII

Children pick up the attitudes and practices related to sanitation from their homes. The influence of the mother's knowledge and practices has a significant impact on the young children. A total of 2100 persons were interviewed, all these were either 'mothers' or 'fathers' of the students covered under the study of classes 1st to 5th.

Parents	Total No. of Respondents	No. of Villages
Total	2100	80
AA	913	31
BB	694	26
CC	493	23

8.1.0. Drinking Water

8.1.1. Out of the total households surveyed 39% collect drinking water from handpumps and 53% from taps. A small number also collects water from open dug wells 6.7% and other sources such as tube wells and streams 1.4%. The table given below indicates blocks level differences.

Sources of Drinking Water	AA	BB	CC
Hand pump	39.3	34.4	35.7
Open dug well	6.7	5.4	9.2
Tap	52.6	57.7	54.4
Others	1.4	2.5	0.7

The majority of the households covered in Ambala (58%) and Barara (54%) collect tap water, while hand pumps as a source appear to be more popular in Naraingarh (54%). Tap water is considered to be safe by a majority of the respondents. Many women in Barara complained that they are forced to collect water from other sources due to the uncertainty of water supply. 85% of the total respondents find their sources safe and only 13% believe that the sources from where they collect water for drinking purposes are unsafe or contaminated.

8.1.2 When asked to give reasons for collecting water from the preferred source the respondents gave a wide range of answers as shown in the table below

(Table 8.1.2.)

Reasons for collecting water from the sources	II	II	EE	EE
Looks clean and sweet in taste	50.0	48.8	50.1	52.2
Available throughout the day	14.5	14.5	21.2	5.1
Looks food well	27.0	25.1	23.5	35.8
Free from germs	2.6	3.2	1.0	3.7
Free from germs and sweet	5.9	8.5	4.3	3.3

It is evident from the above mentioned table that majority of the respondents 50% go for clearness (visual) and sweetness when making a choice of drinking water source. Sources which give water that cooks food well is also preferred by a large number. Only 15% of the people collect water from any of the stated sources because it is germ free or pathogen free. Availability of water throughout the day was given as the main reason by nearly 15% of the respondents. Most of the respondents in Barara who use hand pump water stated that they do so only because of its availability otherwise they prefer tap water. Well water is mainly collected for drinking due to its sweet taste.

8.1.3. We have earlier seen, as stated by the student respondents that not many households adopt any of known methods for treating water to make it safe. This is linked to the fact that nearly 88% of the respondents believe that the water which is collected for drinking in their houses is safe and about 46% of the respondents are unaware of any method of treatment.

When the respondents were asked to identify the various methods of treating water at the house level to make it safe only 6% could identify chlorinating as a method, while 24% identified 'boiling' and 16% identified the 'filtering' method. Over 8% identified both the methods of boiling and filtering. It is also significant to note that 46% of the total respondents were not aware of any of these methods. It was observed that mothers were more knowledgeable than fathers in this regard.

At the block-level 21% respondents in Ambala and Barara blocks while 32% in Naraingarh were able to identify the 'boiling' method. It was also observed by the team that boiling of water for most mothers simply means heating the water, which hardly serves the purpose. Filtering as a method was identified by 24% Naraingarh. Chlorinating water to make it safe, as a method could be identified by 24% in Naraingarh and by about 13% in the blocks of Ambala and Barara. However chlorinating water to make it safe as method could be identified by only 1% in the Naraingarh block.

(Table 8.1.4.)

Safe Sources of water	II	A.1	BB	CC
Hand pump	47.6	39.9	43.5	67.9
Open dug well	4.2	3.1	4.7	5.3
Tap	45.8	54.0	48.9	26.4
Tap and Hand pump	1.7	2.7	1.7	0.4
Others	0.7	0.3	1.2	-

8.1.4. Out of the total respondents 95% were correct in the identification of safe sources. We have seen earlier that nearly 7% collect water from open dug wells while only 4% find it safe, while only 39% collect water from hand pumps but nearly 48% find hand pump water safe. Surprisingly only 45% of the total respondents agree that taps are a safe source of drinking water. This attitude can be attributed to the fact that due to leakages tap water in many areas gets contaminated especially during the rainy season. At the block level we find that taps are considered safer in Ambala and Barara blocks, while 68% of the respondents find hand pump water safe in Naraingarh. 41% household collect water from taps in Naraingarh but only 26% considered it safe.

8.1.5. It was felt necessary to find out from the people regarding their attitude towards safe water; The following table gives these details:

(Table 8.1.5.)

Attributes of safe water	II	A.1	BB	CC
Looks clean/sweet in taste/ cook food well/ flowing water	67.8	64.0	66.8	76.2
Free from germs	16.7	22.1	14.5	9.8
Free from germs/sweet/ cook food well	15.5	13.9	18.7	14.0

According to 68% respondents water which visually looks clean, tastes sweet, cooks food well and is flowing is considered safe. Only 17% believe that safe water is "germs free". For the remaining all these attributes make water safe for drinking. The reason for not chlorinating well water or storage tanks appears to be linked to such attitudes. Strategy needs to be developed to educate people regarding the distinction between safe and unsafe water and that water which looks clean and taste sweet can be detrimental to health, if it is contaminated.

8.1.6. 70% of the respondents claimed that the drinking water vessels are cleaned every time these are filled up 27% clean the vessels daily while the rest 3% 'sometimes'. The block level data on analysis gives similar results

However, when we compare these responses to the fact that not many households use ash or soap to clean the vessels the problem appears alarming as seen in the table given below

(Table 8.1.6.)

Respondents	Vessels Cleaned at least Once Daily	Vessels Cleaned with Minc & Only Water
Total	96.7	79.5
Ambala	96.7	79.3
Barara	98.0	83.0
Naraingarh	94.6	75.0

8.1.7. The practice of covering the vessel while after filling it at the source is adopted by only 35% of the households. In Ambala 46% in Barara 38% and only 10% of the respondents admitting of following this practice.

However, when asked to give the reasons for following this practice, 52% out of the total respondents stated that it was done to prevent dust and dirt falling into the vessel, while 38% cover it to prevent, flies and insects from falling into it, and 6% know that by covering the vessels we can prevent contamination of drinking water by germs in the air. A small percentage 4% follow this practice as a habit without knowing the reason 'why'. The block level data analysis gives similar trends.

8.1.8. In the majority of the households drinking water vessels are kept on the floor or on a slightly raised platform as seen from the table given below.

(Table 8.1.8.)

Placement of Vessel	II	AI	BB	CC
Floor / raised Platform	71.2	65.3	68.8	85.8
Stand / Shelf / Table	27.1	32.6	28.9	14.0
Do not Store	1.7	2.1	2.3	0.2

71% of the households keep the drinking water vessels on the floor or slightly raised platforms, hence within the easy reach of children and domestic animals. Only 27% keep the vessels on a stand, shelf or table while about 2% do not store water but take it directly from the source that is handpumps. Most of the households have installed their oven handpumps though the majority are shallow in depth. Not much variation in these practices is observed at the block level.

8.1.9. Drinking water vessels are not kept covered in only about 2% of the households. The respondents gave many reasons for following this practice, though the majority 57% observed that this practice is followed to prevent dust in insects from falling into the drinking water, 33% cover the vessels to prevent contamination by germs in the air and flies, while the rest cover the vessels to protect the water from contamination by animals, birds and small children. Smaller children enjoy playing with water and dip their hands and fingers inside the vessel if it is not covered. Not much variations in this trend of responses is seen at the block level.

8.1.10. 63% of the respondents pour out water from the vessel by tilting it, 24% put a glass inside the vessel, thereby contaminating it by also dipping fingers and only 13% use a glass with a long handle to take out water. Similar practices are found at the block level.

8.1.11. Only 77% of the respondents know that water safe at the source can get contaminated during collection and transfer to home 21% do not believe that safe water at source can get contaminated in any way while about 2% of the total respondents do not know how the water can get contaminated

The table given below provides information about the present knowledge of the respondents regarding the ways in which the water can get contaminated

(Table 8.1.11.)

How Water can get Contaminated-After Collection	II	III	BB	CC
By storing in dirty vessel	28.2	27.2	31.7	23.3
By putting dirty hands inside	25.8	25.6	23.0	32.8
By germs in the air	4.9	6.0	3.8	4.0
By flies & insects	4.9	2.3	2.7	13.0
By dust & dirt	32.0	33.0	37.4	16.2
Don't know	5.2	5.9	1.4	10.7

The majority 32% think that water gets contaminated if dust falls into it 28% know that if the vessel in which the water is being stored is not clean then too contamination takes place while 26% know that contamination takes place if dirty hands are put inside the vessel. Contamination of water by germs, insects and flies can take place if the vessel is not covered soon after collection of water this fact is known to 10% of the total respondents. The block level data gives similar observations.

8.1.12. Drinking contaminated water can make us sick, 97% of the total respondents agree. But when these respondents were asked to identify the names of these diseases only 75% could do so, the remaining 25% were unable to establish the linkage between drinking contaminated water and related diseases.

The majority 45% could identify the two common water borne diseases of diarrhoea and cholera. 30% identified diseases such as jaundice, polio and tuberculosis.

It is significant to note that 25% of the respondents believe that plague, malaria and tetanus spread from drinking contaminated water .

8.2.0. Disposal of Waste Water

8.2.1. Waste water is disposed of by various methods, however, the majority 62% stated that in their homes waste water is diverted to the drains.

In 19% of the respondents homes waste water is just allowed to flow in the lanes while 13% stated that waste water from their homes is diverted to the nearby ponds and fields. Only 2% of the households use the waste water for their kitchen gardens.

Proper soakage pits were not found anywhere during our survey work. Whenever the respondents identified the 'soakage pit' as a method of waste water disposal in their homes on inspection it was observed that it was actually a simple pit dug in the ground over flowing with water similar practices are observed at the block level

8.2.2. The table given below throw light on the attitudes of the respondents regarding the best method of waste water disposal.

(Table 8.2.2.)

Best Method of Waste Water Disposal	II	III	BB	CC
Drain	67.0	65.9	74.7	58.3
Kitchen Garden & Soakage Pit	6.3	8.4	4.4	4.9
Fields	7.8	8.2	9.4	4.9
Pond	17.9	15.7	11.5	31.1
Drain and Pond	1.0	1.8	-	0.8

About 68% of the total respondents regard disposal of waste water into the drains and only 6% regard disposal into kitchen gardens and soakage pits as the best methods of disposal. The remaining regard ponds 18%, and fields 8%, as the best alternatives for waste water disposal.

While not much variation to the total is observed in the Ambala and Barara blocks, a significant number 31%, of the respondents in Naraingarh regard disposal into the ponds as the best method.

These attitudes appear to be related to the existing conditions. It was observed that the respondents living close to the fields or having kitchen gardens regard disposal of waste water in them as the best method. In Naraingarh the density of drainage channels was found to be the lowest and the villages less congested besides most of the villages have large ponds, hence the waste water into ponds is considered the best method by a larger number.

(Table 8.2.3.)

Problems Related to Stagnant Ponds of Water	II	III	BB	CC
Disease and Mosquitoes	84.7	80.8	91.1	77.4
Inconvenience, looks & smells bad	12.7	17.3	7.6	16.9
Bad smell and Discase	2.6	1.9	1.3	5.7

As seen in the table given above the majority of the respondents 85%, can identify a linkage between disease and insanitary disposal of waste water. However, for about 13% bad smell and sight and inconvenience caused due to stagnant pools of water is the main problem.

At the block level 17% in Ambala and Naraingarh and about 8% in Barara find bad smell and sight and inconvenience as the problems related to insanitary

disposal of waste water. However, in Barara 91%, in Ambala 81% and in Naraingarh 77%, of the respondents interviewed were able to identify the linkage between disease and insanitary disposal of waste water.

- 8.2.4 Only 56% of the total respondents covered under the study were able to identify the disease of 'malaria' to be related to the problem of stagnant pools of water in their villages. 36% believes that water borne diseases such as cholera, dysentery, diarrhoea, jaundice and polio spread due to insanitary disposal of waste water. While about 8% believe that diseases such as tetanus, measles, T.B. and plague are linked to this problem as shown in the table given below.

(Table 8.2.4.)

Disease Spreading from Stagnant Pools of Water	TL	AA	BB	CC
Malaria	56.4	59.3	69.0	33.7
Cholera, dysentery, diarrhoea, jaundice & polio	36.0	34.3	26.4	52.8
Tetanus, plague, T.B. & measles	7.6	6.4	4.6	13.5

Not much variation is evident in the two blocks of Ambala and Barara but in Naraingarh block we find that only 34% of the respondents could correctly identify the disease of 'malaria' and 53% other water borne diseases, while 14% believe that tetanus, plague, T.B. and measles spread due to the problem of stagnant water.

- 8.2.5. Regarding the practice of cleaning the drains within and around the households 68% of the total respondents admitted that they clean the drains on a daily or weekly basis. Nearly 16% clean drains whenever it gets choked while the remaining 16% do so either once a month or 'sometimes'. The block level data analysis gives similar trends in responses.

8.3.0. Disposal of Human Excreta

- 8.3.1 Only 14% of the respondents have latrines in their homes. However, not all the constructed units are being used, about 41% units are not being used at all.

(Table 8.3.1.)

Whether have Latrine at Home	TL	AA	BB	CC
Yes	13.7	21.4	9.1	6.7
No	86.3	78.6	90.9	93.3
Whether Latrine is Used at Home				
Yes	59.0	56.8	61.9	66.7
No	41.1	43.2	38.1	33.3

In Ambala the access to latrine facilities is higher, 21% in Ambala and only 7% in Naraingarh have latrines constructed in their homes.

However the utilization pattern for all the three blocks appears to be similar. In 37% households the constructed latrine units are being maintained by the women, while in another 36% all the family members share this responsibility. 21% units are not being maintained at all, most of which are nonfunctional.

At the block level we find that in Naraingarh only women 100%, are responsible for maintaining latrines, the corresponding figures for Barara and Ambala are 44% and 22% respectively. Maintenance of water and sanitation facilities at home is seen mainly as a 'women's job' in the rural areas, hence women need to be educated and trained in matters related to use and maintenance of these technologies.

8.3.2. Only 10% of the total respondents interviewed stated that they use the latrines for defecation, the remaining 90% practice open defecation. 86% use the open fields for excreta disposal. The utilization of latrines by the respondent is highest in Ambala block 13% followed by 10% Barara and lowest in Naraingarh block 4%.

2% use the village lanes for defecating it is obvious that having a latrine at home does not ensure its utilization. Village women lined up along the outer village lanes 'phirnee', in groups is a common sight in early mornings and late evenings. This practice is common for households which do not have their own fields or during rainy season when the fields are full of water.

(Table 8.3.3.)

<i>Disease Spreading from Stagnant Pools of Water</i>	II	AA	BB	CC
Convenient and Safe	73.7	79.6	64.2	63.7
Gives Privacy	9.8	3.9	17.9	22.7
Clean	15.5	16.5	17.9	13.6

8.3.3. The above mentioned table clearly states that convenience and safety are the two major priorities for the respondents and the reason given for the use of latrines. About 17% use latrines because it is neat and clean and 10% of the respondents stated that it gives them privacy. It was observed that, female respondents mainly use latrines because it is convenient and safe. Due to shortage of open space and forest cover women have no choice but to go out to ease themselves in the dark, thereby exposing themselves to snake and insect bites. The attitude towards this problem of the respondents in all the three blocks appears to be similar.

(Table 8.3.4.)

<i>Reasons for not Using Latrine</i>	II	AA	BB	CC
Small in Size & Fear of Filling	16.9	10.5	12.5	64.3
Bad Smell	16.1	11.6	33.3	14.3
Like Open Spaces	26.6	34.9	12.5	-
Others	22.7	24.4	29.2	-
Not functional	17.7	18.6	12.5	21.4

8.3.4 As can be seen in the table given above, out of the total latrines constructed in the respondents homes, 18% are not being used at all because either these are incomplete or damaged due to poor construction quality 27% do not use because they like defecating in the open while 16% do not use due to the bad smell given by these latrines.

The baseless fear that the pits will get filled up fast and the small size of the latrines is the other reason given for non-utilization by 17% of the respondents. The rest 23%, do not use latrines due to various other reasons. It has been observed that many elders in the village believe that latrines are meant for the young, especially women. Cultural, practices, for example, the men folk feel shy in sharing the latrine with the women, or the daughter-in-law who observes 'purdah' should not be seen entering a latrine by her father-in-law, also influence these practices considerably.

At the block level we find that the majority of the respondents, 35% in Ambala, do not use latrines due to their preference for open fields. In Barara the majority 33% do not use latrines due to the problem of bad smell. In Narangarh a very significant majority 64% do not use the constructed, latrines in their homes due to the fear of filling and the small size of the unit.

8.3.5 58% believe that excreta should be disposed of in the open fields. Only 38% agree that latrines are the best method of excreta disposal.

86% of the respondents agree that the practice of open defecation creates various problems, however, not all of, see it related to poor health and disease.

(Table 8.3.5.)

Problems Related to Open Defecation	TL	AA	BB	CC
Disease, Flies & Insects	60.8	63.2	56.5	56.5
Bad Smell & Inconvenience	28.3	28.6	30.3	30.6
Looks Bad	10.9	8.2	13.2	12.9

The above mentioned table clearly indicates that the majority of the respondents in all the three blocks understand the linkage between the insanitary practice of open defecation and the spread of disease mainly through vectors such as flies and insects. 39% of the total respondents relate this practice to the problem of bad smell, inconvenience and lack of privacy.

8.3.6. 47% of the respondents said that their children below 5 years in their homes. About 88% know that children's excreta is harmful.

(Table 8.3.6.)

Method of Disposing Children's Excreta	TL	AA	BB	CC
Latrine	5.5	7.1	4.0	4.3
Fields	22.1	29.4	11.0	24.4
Garbage Dumps & Near Ponds	53.0	42.1	67.7	53.6
Lane, Drain & Courtyard	19.4	21.4	17.3	17.7

8.3.7. About 53% of the respondents (those who reported to have children below five in their homes) dispose of the child's excreta on the garbage dumps. It has been earlier observed that majority of the garbage 'dumps' are located in the low lying areas, which get, easily flooded during rains. 22% collect and throw the child's excreta in the fields, while 19% dispose it of in the adjacent lanes, drains or in the courtyards. Only about 6% use latrines for this purpose. None of the respondents dispose it in covered pits. Not much variation in this trend of responses is evident at the block level.

Regarding their attitude towards the best method of disposal, 25% believe that children's excreta should be disposed of in the latrines, while only 16% believe that 'garbage dumps' are the best method of disposal. We have seen that 19% dispose of their children's excreta in lanes, drains and courtyards and about 17% respondents believe that this is the best method of disposal.

8.3.8. 89% of the total interviewed stated that they wash hands after disposing of their child's excreta, but only 14% use soap to clean their hands following this activity. The majority 52%, wash hands only with water, while the remaining use mud and sometimes ash to clean their hands.

It is obvious that the majority in the rural areas do not believe that children's excreta is harmful to health. It is mostly seen as a problem related to bad smell or a bad sight.

8.4.0. Disposal of Garbage and Dung

8.4.1. Only 83% of the total respondents interviewed agreed that cattle dung can spread disease if not disposed of safely. However, 13% believe that dung is absolutely safe and can spread no disease, while 4% were not sure.

Cattle dung is regarded as an antiseptic and many villagers apply a paste of dung on cuts and animal bites, this practice was observed by the team members.

About 80% of the respondents in Ambala and Naraingarh but nearly 90% in Barara believe that dung can spread disease.

However, when those respondents who had agreed that insanitary disposal of cattle dung leads to the spread of disease were asked to identify the name of the disease, only 11% could identify that the germs of 'tetanus' are found in dung. The majority 47% were unable to identify any disease and the remaining believe that disease such as malaria, cholera, measles and asthma spread from dung. About 15% of the respondents in Naraingarh and only 7% of those interviewed in Ambala were correct in identifying that tetanus, germs are found in cattle dung.

The belief that 'malaria' is related to dung stems from the fact that, in most of the villages the dung disposal grounds are located in low lying areas, which results in stagnation of water around it and hence provides breeding grounds for mosquitoes. Most of the women believe that they get afflicted by such diseases as 'jaundice' and 'asthma' due to the gases released from dung heaps, while they prepare dung cakes used in the traditional 'chullah' (stove).

8.4.2 The majority of the parents interviewed 81%, know that cattle dung is left undisturbed in covered pits, converts into quality manure over a period of time. However, there appears to be a considerable gap between their existing knowledge and their attitude towards the use or disposal of cattle dung. The below mentioned table gives such details.

(Table 8.4.2.)

Best Method of Dung Disposal	TL	AA	BB	CC
Compost pit & Garbage Pit	16.7	15.9	24.2	7.6
Garbage Dumps	38.4	41.6	43.3	25.6
Fields	11.1	13.5	10.6	7.3
Biogas Plant	2.2	3.6	1.6	0.6
Dung Cakes	30.0	24.3	19.9	54.9
Don't Know	1.6	1.1	0.4	4.1

50% believe that the traditional way of disposal of dung in the fields or dumping it along with the household garbage and ash on the vacant patch of land i.e., the 'garbage dumps' is the best method. Dung from these garbage dumps is mainly used for making dung cakes, only the left over is transferred to the fields before tilling the lands for cultivation. 30% use cattle dung to make 'dung cakes' as it is the main source of energy in the poorer households. Only 17% believe that dung should be disposed of in compost or garbage pits. Disposal into bio-gas plants is considered by only 2% of the total respondents. Systematic efforts to promote the bio-gas technology along with the popularization of compost pits will help solve this problem. In the absence of other sources of energy ex-wood gas, coal the poor people are forced to depend on cattle dung for cooking purposes.

At the block level we find that use of dung to make 'cakes' for cooking purposes is preferred by about 55% in Naraingarh and only 20% in the Barara block. While 24% of the respondents in Barara believe that dung should be disposed of in compost / garbage pits, only 8% in Naraingarh regard this as the best method. The majority in Ambala 42%, and Barara 43% regard 'garbage dumps' as the best place for dung disposal.

It was observed that the male respondents generally regard fields as the best method of dung disposal. The female respondents on the other hand regard garbage dumps as the best method of dung disposal, this attitude appears to be linked to the use of dung for making cakes to be used as fuel in the kitchens by the women.

8.4.3 Cattle play an extremely important and often indispensable role in the lives of the rural populations. 88% of the total respondents covered under the survey own cattle. 79% in Ambala, 94% in Barara and 95% in Naraingarh own cattle.

A large majority collect dung twice daily and dispose it of through various methods. In those households where dung is used in the fields it is generally removed from the 'dumps' before the agricultural season begins while the households where dung is used for fuel, it is removed from the dumps either once in 10-15 days or whenever the 'stocks' get depleted.

(Table 8.4.3.)

Usage of Cattle Dung	II	III	BB	CC
Garbage Pit & Compost Pit	4.7	2.4	8.2	3.2
Fields	12.1	15.9	14.5	3.2
Garbage Dumps	13.5	12.4	18.1	9.0
Dung Cakes & Garbage Dumps	69.7	69.3	59.2	84.6

A comparison between the tables 8.4.2. and 8.4.3 given above shows a positive correlation between the attitudes and practices of these respondents. 68% of the respondents regard disposal of dung on garbage dumps to be used for making 'cakes' as the best method of disposal and in actual practice about 70% households dung is used as fuel. Dung is directly disposed of in the fields in only 12% of the households and this method is regarded best, by only 11% of the total respondents. Similar patterns emerge at the block level.

'Garbage dumps' which are also used to dispose of cattle dung is the major problem which needs to be tackled at the community level. Encroachment of school compounds by the villagers is mainly done for this purpose.

8.4.4. The practices related to garbage disposal in the majority of the households covered under the study throw considerable light on the existing sanitation situation in the villages.

Only 11% of the households surveyed use dustbins, while another 17% have dug pits for garbage disposal. About 50% of the respondents dispose of garbage collected from their homes on garbage dumps, while 14% throw it in the fields, 6% just throw the garbage outside in the lanes adjacent to their homes.

The practice of making compost out of biodegradable garbage needs to be promoted by judicious I E C strategies. Not even 3% of the total households use compost pits for disposing garbage.

(Table 8.4.4.)

Problems Related to Insanitary Disposal of Garbage	II	III	BB	CC
Flies, disease & bad smell	37.9	32.3	38.0	48.0
Rats & insects	1.7	2.0	2.2	0.6
Inconvenience & bad smell	22.4	26.2	20.1	18.5
Mosquitoes	38.0	39.5	39.7	32.9

Spread of disease and breeding of flies is considered a problem related to insanitary disposal of garbage by only 38% of the households. It has been pointed out earlier that garbage from homes is mostly thrown on 'garbage' dumps found everywhere in the villages. The land used for this purpose is mostly low lying and unfit for construction or agriculture, hence stagnation of water near these 'garbage dumps' is a common sight. The fact that 38% of the respondents see a linkage between the breeding of mosquitoes and insanitary disposal of garbage, is related to this practice. The villagers do not know that disposal of garbage and dung in this manner leads to the spread of many diseases and these grounds are the main 'health hazards' in the villages.

For 22% of the respondents the main problem is 'bad smell' and inconvenience caused to their movements in the village. The block level data analysis gives similar trends.

- 8.4.5 When the respondents were specifically asked whether garbage dumps or heaps spread disease, 93% replied in the affirmative, 4% said no and 3% were not sure of this linkage.

(Table 8.4.5.)

<i>Diseases Spreading from Insanitary Disposal of Garbage</i>	TL	AA	BB	CC
Cholera, Diarrhoea	43.7	37.0	57.9	9.8
Jaundice	0.3	0.2	0.3	0.4
Plague	4.1	5.2	1.7	5.5
Tetanus	2.1	4.1	0.9	0.2
Malaria	17.2	23.5	18.4	12.4
Don't know	32.6	21.0	20.8	71.7

The above mentioned table gives details regarding the knowledge of the respondents about the diseases which spread from insanitary disposal of garbage. Breeding of flies at the garbage dumps is seen as a major problem by 35% of the total respondents. 44% of the total interviewed know that the spread of diseases of cholera and diarrhoea are linked to the disposal of garbage. 40% of the respondents said that the mosquitoes breed near garbage heaps and 17% stated that malaria spreads due to insanitary disposal of garbage. Only 4% know that garbage if not disposed of safely can lead to the spread of 'plague'. A very large number about 33% however, were unable to identify any disease related to this problem. It is clear therefore that though most of the villagers are aware that the insanitary practices related to garbage disposal spread diseases, but not all see it as a health related problem. This attitude seems to have been formed due to the people's poor knowledge regarding the various routes of disease transmission.

Household garbage is mostly disposed of on dung heaps which are located generally in low lying areas hence, stagnant pools of water are a common sight around such garbage dumps in the villages, leading to the belief of many villagers that 'malaria' spreads from garbage.

Block level tables show that 58% in Barara, 37% in Ambala and only 10% in Naraingarh understand the linkage between breeding of flies at the garbage disposal sites and the spread of diseases like cholera and diarrhoea. A very significant majority 72% in Naraingarh were unable to identify the name of any disease related to this problem.

- 8.4.6 For the majority 55% of the respondents disposal of garbage in either dustbins or garbage and compost pits is the best method of disposal. 43% believe that garbage should be disposed of by the traditional method, that is throwing it on 'garbage dumps' along with the cattle dung collected from their homes.

(Table 8.4.6.)

Best Method of Garbage Disposal	II	III	BB	CC
Dust bin, Garbage pit & Compost pit	54.6	55.4	66.8	36.7
Garbage dump	42.6	41.0	32.4	60.0
Fields & Lane	1.2	2.1	0.2	-
Don't know	1.6	1.5	0.6	3.3

43% in Ambala and 41% in Barara and 60% in Naraingarh said that garbage should be disposed of on these 'garbage dumps'.

8.5.0. Home Sanitation & Food Hygiene

8.5.1 Over 97% of the respondents interviewed said that their homes are cleaned either once or twice daily. Similar trends are observed at the block level.

(Table 8.5.2.)

Reasons for Keeping the House Clean	II	III	BB	CC
Remove dust & dirt	39.4	30.7	42.4	51.4
Looks good	31.0	31.9	33.5	25.6
Flies, insects, germs & good health	25.8	32.7	22.8	37.3
Don't know	3.8	4.7	1.3	5.7

8.5.2. About 71% of the total respondents clean their homes to remove dust and dirt and also because this practice makes their house look good. Only 26% clean their homes, so that it is kept in order to keep it free from flies and insects, as well as to maintain their own good health. Analysis done at the block level gives similar trends.

8.5.3. Almost all the respondents stated that cooked food is always kept covered in their homes. However, their reasons for keeping the food covered vary. About 25% cover food to prevent dust and dirt falling onto it. The rest 75% cover it to either protect it from flies and insects or rats and lizards or germs. At the block level similar trends can be seen.

8.5.4 97% wash fruits and vegetables before eating. Of these 65% wash, to remove dust and dirt gathered on it, while the rest 35% wash the fruits and vegetables before eating to remove germs and insecticides.

8.5.5. 83% of the total respondents do not have smokeless chullahs in their homes, very few households in the rural areas have other facilities for cooking food such as kerosene stoves or 'cooking gas'. The majority of the women thus expose themselves to all kinds of smoke related diseases by cooking food on the 'traditional chullah'.

The table given below describes the respondents perceptions regarding the problems related to smoke let out from the traditional chullah.

(Table 8.5.5.)

<i>Problems Related to Smoke from Smoke from Traditional Chullah</i>	<i>TL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Hurts eyes	37.0	40.6	37.8	28.9
Cough & throat infections	52.0	48.8	55.4	53.3
Eye Infections & Breeding Problems	6.0	7.5	4.5	5.4
Don't Know	5.0	3.1	2.3	12.4

37% of the total respondents said that smoke hurts and irritates their eyes, 'redness' and 'watery eyes' is the common complaint. 52% complained of throat infections and persistent cough, and 6% recognised that smoke let out from such chullahs contributes to many infections of the eyes and 'asthma' problem. Not much variations in the answers emerges at the block level. However, in Naraingarh about 12% were unable to give any 'smoke related' problem.

Women respondents were found to be more accurate in the answers for we know that it is the women who are the 'users' and hence most affected by the use of traditional chullahs. Most of the male respondents either could not identify any problem, or observed that smoke 'hurts the eyes'.

8.5.6. The 'smokeless chullah' programme was launched in the district many years back, yet it does not appear to be very popular, for only 17% of the respondents have these chullahs installed in their kitchens.

The table given below gives us the reasons which have led to the non-installment of smokeless chullahs in the homes of those covered under the study.

(Table 8.5.6.)

<i>Reasons for not Installing Smokeless Chullah</i>	<i>TL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Lack of Information	57.1	51.7	59.9	62.4
Use more fuel wood & takes longer time to cook	23.8	25.1	18.1	30.2
Had Constructed but did not function well	13.7	14.5	17.9	6.0
Use other sources for cooking	5.4	8.7	4.1	1.4

Many well meaning programmes turn out to be unsuccessful in the rural areas because it does not reach the target populations systematically. The implementors are more concerned with achieving project targets and less with the people. Lack of information regarding the construction, maintenance and use of the smokeless chullah has been given as the main reason for non-installation by 57% of the respondents. 24% do not install one because they believe that it consumes more fuel and takes longer time to cook. However, 14% had installed one in their kitchens but destroyed it because it did not function well. Lack of knowledge regarding the maintenance and use creates many misconceptions in the minds of the people as is evident from these observations made by the respondents.

8.6.0. Personal Hygiene

8.6.1. Almost 98% of the respondents agree that non-use of footwear causes problems. The table given below tells us about their perception of this problem.

(Table 8.6.1.)

Problems Related to non-use of Footwear	II	VI	BB	CC
Injury & Dirt	89.4	82.7	94.1	94.0
Looks Bad	4.0	5.8	1.9	4.1
Disease & Hookworm Infestation	6.6	11.5	4.0	1.9

Over 89% believe that footwear should be used for this practice protects feet from injuries, as well as prevents feet from getting dirty. Only about 7% understand the linkage between non-use of footwear and spread of disease, and infestation by hookworms. The widespread practice of open defecation along with the practice of not using footwear is the main factor contributing to the high incidence of hookworm infestation in the rural areas leading to widespread anaemia problem, especially in young children.

8.6.2. Only about 61% of the respondents 'always' use footwear. 11% use it when going out of the village or for some social gathering, while only 10% use them when going to the fields, to work or for the purpose of defecation. About 19% said that they use footwear 'sometimes'. Analysis of data at the block level gives similar results.

8.6.3. 89% of the respondents said that they wash their hands frequently, while 11% wash hands 'rarely'. The table given below tells us about the activities after which they wash hands.

(Table 8.6.3.)

Activities Related to Hand Washing	II	VI	BB	CC
Before & after eating	30.9	29.6	34.1	28.7
Before & after eating & after defecation	44.4	47.4	44.1	39.2
After defecation	9.1	8.9	9.9	8.6
After returning from fields	3.6	3.9	1.9	5.3
After all activities	12.0	10.2	10.0	18.2

It is obvious that most of the people are not aware that our own hands if not kept clean transmit many diseases. 31% wash hands before and after taking food and 4% after returning from their work in the fields. 9% wash hands only after defecation. Only 44% wash hands before eating and after defecation while 12% clean hands after all activities which make them unclean. The block level analysis of data gives similar results.

8.6.4. Only 57% of the respondents use ash or soap to clean their hands. 10% use ash, soap or mud depending on the availability, while the remaining 33% use either mud or only water to clean their hands.

About 90% of the respondents follow this practice to remove dirt from the hands so that they look clean. Only 10% wash to prevent contamination of food and water, because unclean hands carry germs. A strategy to promote hand washing with soap and ash, not only for students but for the entire community needs to be developed urgently. The people must be made aware about the oral facial routes of disease transmission.

8.7.0. Community Participation and Involvement of Parents in School Activities

8.7.1 Only 36% of the total respondents are members of the School Parent Teachers Associations. We have earlier seen that not all schools have established PTA's.

Out of those who are PTA members only 53% discuss sanitation issues in these meetings.

(Table 8.7.1.)

Whether Members of PTAs	TI	AI	BB	CC
Yes	25.6	35.4	23.2	11.0
No	74.4	64.6	76.8	89.0
Whether Discuss Sanitation Issues in Meetings				
Yes	53.0	53.3	54.7	46.3
No	47.0	46.7	45.3	53.7

The table given above shows that a larger percentage of respondents in Ambala 35% are PTA members, while only 11% of the respondents from Naraingarh are members of school PTAs.

8.7.2. Out of those (53%) who said that they discuss sanitation issues in school PTAs, the majority 73%, discuss matters related to their children's personal hygiene and food sanitation. Only 27% discuss issues related to cleanliness of schools in the PTAs. It is significant to note that issues such as sanitary excreta disposal in school or waste water and garbage disposal are not discussed at all. A similar trend in responses is seen at the block level. This indicates that the majority in the rural areas regard environmental sanitation as the problem of the panchayats' or the government agencies.

8.7.3 About 57% of the parents covered under the study discuss school activities with their children. This shows that the majority of the parents do take interest in the activities of their children in school. This indicates the potential role of the school teachers and students as 'agents of change' if planned efforts are made in this direction, such as organising 'sanitation melas' in school or strengthening the PTAs

8.7.4 However, only 16% of the respondents said that they have participated in any activity related to village sanitation. The schools were involved by only 33% of these respondents. The block wise analysis shows that 17% of the respondents in Ambala, 19% in Barara and only 12% in Naraingarh have participated in sanitation related activities in school. However, 51% in Barara, 30% in Ambala involved the schools in the activities related to village sanitation. None of the respondents from Naraingarh involved the schools in carrying out such activities

CHAPTER IX

One teacher from each of the eighty schools covered under the study was randomly selected and hence a total of 80 school teachers were interviewed. All the seven components of sanitation have been covered. Hence teachers from Ambala, Barara and from Naraingarh blocks were interviewed.

90 The table given below throws considerable light on the knowledge level of the teacher respondents regarding the various routes of disease transmission.

(Table 9.0.)

Routes of Disease Transmission	TL	AA	BB	CC
Air	5.0	6.4	7.7	-
Hands	3.7	-	7.7	4.4
Water	16.3	19.4	11.5	17.4
Flies & Insects	15.0	16.1	11.5	17.4
Food	7.5	-	15.4	8.7
All these	26.3	32.3	19.2	26.1
Air and Water	10.0	12.9	3.6	13.0
Air, flies & Insects	3.7	3.2	3.6	4.4
Water, flies & insects, food	10.0	6.5	19.2	4.4
Hands & Water	2.5	3.2	-	4.4

It is obvious that only 26% of the total respondents were able to identify all the main routes of disease transmission. 5% of the total believe that diseases are transmitted only by air, while 15% believe that flies and insects are the only routes of disease transmission. 16% of the total respondents stated that all the diseases are transmitted to us through water. While about 8% believe that 'food' is the main transmitter of disease. The block level analysis shows variations in responses. 19% in Ambala and 17% in Naraingarh identified water as the main route of transmission, while only 12% in Barara identified this route. 15% of the teachers interviewed in Barara believe that 'food' is the main route for transmission of diseases. It is significant to note that very few only 4% said that disease transmission can also take place by our hands.

9.1.0. Drinking Water

9.1.1. The table given below gives details regarding the knowledge of the respondents regarding the diseases spreading from drinking contaminated water. The majority 90%, identified the four diseases of diarrhea, cholera, jaundice & typhoid, 6% of the respondents were totally incorrect & believe that T B and plague spread due to drinking contaminated water, while the rest 4% are not sure or partially correct. The block wise tables show some minor variations. In Ambala a very large proportion of respondents 97%, could identify the diseases of diarrhea, cholera, jaundice and typhoid followed by Barara 88%, and Naraingarh 78%. However 8% in Barara and 18% in Naraingarh were totally incorrect and identified the

disease of plague and TB, while another 4% in Barara and Naraingarh gave partially correct answers. The respondents of Ambala block seem to be better informed in the respect and here 97% were able to identify the four common water borne diseases

(Table 9.1.1.)

<i>Name of Disease</i>	<i>TL</i>	<i>AA</i>	<i>BB</i>	<i>CC</i>
Diarrhea, Cholera	89.9	96.8	88.3	78.1
Jaundice, Typhoid, T.B.,				
Cholera & Plague	6.3	-	7.8	17.5
Others	3.8	3.2	3.9	4.4

9.1.2. Hand pumps and taps are considered to be safe sources of water by majority of the respondents. However 4% consider covered wells as the only safe source of drinking water. All the respondents could identify at least one source of safe water. About 27% of the total respondents consider covered wells a safe source along with either hand pump or taps. Some variations observed at the block level. In Naraingarh hand pumps are considered a safe source by a larger number, while taps are considered a safer source by the majority in Barara and Ambala blocks.

9.1.3. About 31% do not believe that water safe at source can get contaminated only 69% of the respondents agree that safe water at source can become unsafe for drinking due to wrong storage and handling practices. Block wise figures show that about 78% respondents in Naraingarh & Ambala blocks and only 50% in Barara block agree that safe water at source can become unsafe for drinking due to insanitary practices related to storage & handling of drinking water. When the respondents were asked to give reasons or factors contributing to contamination of water after collection, the majority 42% believe that this happens because the vessel in which drinking water is stored is left uncovered while another 15% stated that water can get contaminated by dipping dirty fingers inside the vessel. Only 18% were able to identify all the insanitary practice contributing to contamination of water after collection at source. 7% were unable to identify any contributing factor to this problem.

The block wise data shows some variations. In Barara a very large number of respondents 23% were unable to identify any factor contributing to this problem. In Naraingarh 28% could identify all the related practice leading to contamination of water found safe at source. However leaving drinking water vessel uncovered is considered to be the only problem by the majority in all blocks as evident from the below mentioned table. Contamination of water by children animals & birds was not recognised by any respondent in Barara & Naraingarh blocks

(Table 9.1.3.)

Ways in which safe water at source gets contaminated	TI	II	BB	CC
Dirty Hands	14.6	8.3	15.4	22.2
Dirty Glass	5.5	4.2	-	11.1
Vessel not covered	41.8	58.3	30.8	27.8
Children put fingers	1.8	4.2	-	-
All of these	18.2	12.5	15.4	27.8
Dirty hands & glass	3.6	4.2	-	5.6
Dirty hands & vessel not covered	5.4	-	15.4	5.6
By children, animals & birds	1.8	4.2	-	-
Don't know	7.3	4.2	23.1	-

9.1.4. Some of the households which collect drinking water especially from handpumps do not store it in any vessel but take it directly from the source. The respondents who admitted of storing drinking water in containers, when asked to identify the method of by which the water is taken out the majority of the respondents 58% claimed that a glass with a long handle is used, while 40% stated that water from the container is just poured into the glass by tilting the vessel. Only 2% dip their fingers inside the vessel to take out water.

The blockwise analysis shows some significant variations. In Barara and Naraingarh all the respondents claimed that the practice of dipping a glass in the vessel to take out water had been discarded in favour of either using glasses with long handles or by tilting the vessel and pouring out the water. In Ambala 6% admitted of using a glass to take water out, from the vessel and thus unconsciously contaminating the stored drinking water by dipping fingers inside the vessel.

9.1.5. Boiling of water is considered to be the best method for treating unsafe water to make it safe for drinking by majority of the respondents. Chlorinating as a method. Very few consider filtering as a method of treating contaminated water to make it germfree. However only 20% of the total respondents were able to identify all the three methods, while 29% could identify at least two of these methods. Block wise data analysis gives similar responses as shown in table below is considered best by a large number of respondents.

(Table 9.1.5.)

Method of treating unsafe water at home	TI	II	BB	CC
Boiling	40.0	35.5	42.3	43.5
Chlorinating	8.8	12.9	7.7	4.4
Filtering	2.5	3.2	-	4.4
All these	20.0	22.6	19.2	17.4
Boiling & Filtering	13.7	9.7	15.4	17.4
Boiling & Chlorinating	15.0	16.1	15.4	13.0

9.1.6 However when the teachers covered under the study were asked whether any of the three known methods 'boiling', chlorinating or filtering were being adopted in their homes for treating contaminated water, only 56% admitted that at least one of these practices was being adopted in their homes. A larger number of respondents in the Ambala block 74% claimed that water is being treated in their homes by at least one of these methods to make it safe for drinking, while in Narangarh and Barara blocks the majority admitted that none of these methods were adopted to treat water at the home level.

9.2.0. Disposal of waste water

9.2.1. About 95% of the total respondents agree that the main problem arising from stagnant pools of dirty water is the spread of disease and breeding of mosquitoes. However, 4% see it as a problem which causes much inconvenience to passers by and spreads foul smell. The table given below gives the details.

(Table 9.2.1.)

Problems related to stagnant water	TI	AA	BB	CC
Mosquitoes breed & Disease spreads	56.1	64.5	51.0	52.1
Causes inconvenience	1.3	3.2	-	-
Looks & smells bad	2.5	3.2	-	4.4
Mosquitoes breed & causes inconvenience	11.3	6.5	23.1	4.4
All these	28.8	22.6	26.9	39.1

9.2.2. 99% of the respondents were able to identify the disease of malaria, while only 1% identified both the diseases of malaria & filaria which spreads from mosquitoes which breed in the stagnant pools of water.

(Table 9.2.3.)

Best method of waste water disposal	TI	AA	BB	CC
Kitchen garden	8.8	3.2	15.4	8.7
Soakage pit	35.0	25.8	46.2	34.8
Pond	2.5	6.5	-	-
Drain	53.7	64.5	38.4	56.5

54% of the total respondents agreed that the best method of disposal of waste water is through drains, 35% consider disposal into soakage pits, while about 9% identified disposal into kitchen gardens as the best method of waste water disposal. Only 2.5% feel that disposal into ponds is the best method.

Responses vary at the block level. In Barara the majority of the respondents 46%, consider soakage pits as the best alternative while in Ambala & Narangarh blocks drains are considered to be the best method of waste water disposal. Disposal into kitchen gardens is considered by 15% in Barara, 9% in Narangarh and only 3% in Ambala as the best alternative. Disposal into ponds is identified as the best alternative only by the respondents (7%) of the Ambala block.

- 9.3.5 In the schools, covered under the study, out of the total latrines constructed 25% are not being used. The main reason given for non-utilization by the respondents is that these units are not functional. Latrines have been rendered nonfunctional mainly because they are incomplete and also due to lack of water facility in the school as pointed out on the previous chapter.
- 9.3.6. About 98% of the total respondents know that the practice of open defecation leads to the spread of various diseases. All the respondents interviewed from the Ambala blocks know that this insanitary practice leads to spread of disease.

(Table 9.3.7.)

<i>Problems related to open defecation</i>	TL	AA	BB	CC
Flies breed & spreads disease	43.7	58.1	36.0	31.8
Smells bad	19.2	12.9	20.0	27.3
Spreads Disease and Smells bad	11.5	-	12.0	27.3
All these	25.6	29.0	32.0	13.6

- 9.3.7. As seen from the table given above 44% of the respondents agree that breeding of flies and spread of disease is the main problem arising from the practice of open defecation. 19% stated that bad smell and for 12% bad smell and disease both create problems. However, 26% stated that breeding of flies and spread of disease as well as the foul smell spread from the defecation grounds create problems.

Block level analysis shows, that 'bad smell' is regarded as the main problem resulting from the practice of open defecation by 27% of the respondents in Naraingarh and 20% in Barara, while only 13% in Ambala consider this as the main problem. The majority in all the blocks however know that the main problem resulting from the insanitary practice of open defecation is that these sites breed flies and are a health hazard.

- 9.3.8. Only 85% know that excreta of children if not disposed of safely can lead to the spread of disease. 4% believe that children's excreta is harmless, while the remaining 11% are not sure. 97% of the respondents in Ambala, 85% in Barara and only 70% in Naraingarh believe that children's excreta is harmful.

(Table 9.3.9.)

<i>Best method of excreta disposal</i>	TL	AA	BB	CC
Latrine	57.5	61.3	73.1	34.8
Fields	10.0	6.4	3.8	21.8
Covered pit	23.8	32.3	7.7	30.4
Latrine & Covered Pit	8.7	-	15.4	13.0

- 9.3.9. Disposal of excreta in the fields is considered the best method by only 10% of the teachers interviewed. Disposal into covered pits is considered the best by a considerable majority over 32% respondents. Nearly 66% prefer latrines best for excreta of disposal.

As the block level we find that only 4% in Barara, 6% in Ambala and while about 22% in Naraingarh believe that excreta should be disposed of in the fields. Covered pits are considered best by 43% of the total respondents in and Naraingarh and 32% in Ambala. While latrines are considered best by about 88% in Barara, 61% in Ambala and only 48% in Naraingarh. It was learnt during the survey that one of the reasons for nonpreference of latrines is that not all households have sanitary latrines. Many have a single pit latrine without a water-seal, while a few have dry latrines and some just connect the pans to nearby drains.

- 9.3.10. All the respondents know that defecating near the drinking water sources, leads to spread of disease.

(Table 9.3.10.)

Ways by which excreta contaminates water	TL	AA	BB	CC
By Seepage	20.0	12.9	23.1	26.1
By flies	8.8	12.9	7.7	4.3
By germs in the air	10.0	6.5	15.4	8.7
All the above	2.5	3.2	3.8	-
Don't know	58.7	64.5	50.0	60.9

Pathogens from the excreta reach water sources and contaminate drinking water through various ways. However, a very large number 59% of the total respondents who stated that defecation near drinking water sources leads to contamination of sources, 'do not know' how the pathogens reach the water source. 20% stated that sources get contaminated by seepage, of surface water which containing pathogens from excreta. 9% believe that flies and 10% believe that wind carries the germs to the sources. Only about 3% are aware of all the routes of disease transmission.

At the block level we find that 13% in Ambala, 23% in Barara and 26% in Naraingarh agree that drinking water sources get contaminated by seepage. While 13% in Ambala, 8% in Barara and only 4% in Naraingarh stated that flies carry such pathogens. In Barara 15% stated that the germs are carried by the winds to the water sources.

(Table 9.3.11.)

Material used to clean hands after defecation	TL	AA	BB	CC
Ash	5.0	-	-	17.4
Soap	83.7	96.8	92.3	56.5
Ash & Soap	8.8	3.2	7.7	17.4
Soap & Mud	2.5	-	-	8.7

Only 2.5% of the total respondents sometimes use mud to clean hands after defecation, the remaining 97.5% use either soap or ash. Only soap is used by 84% of the total respondents. There is not much difference in this practice amongst

the respondents of Barara and Ambala. However, about 9% of the respondents in Naraingarh admitted of using mud sometimes to clean their hands, and the usage of ash to clean hands is highest in this block.

9.4.0. Disposal of garbage and Dung

9.4.1 The practice of using dustbins in the classrooms for disposal of garbage was reported by 65% of the respondents. 23% dispose garbage outside the classroom into the garbage pits, while about 13% just throw it on the floor while in the classrooms.

9.4.2 84% of the total respondents claimed that they had participated in the collection and disposal of garbage in their schools. 96% in Naraingarh and only 77% in Ambala admitted their participation in such activities.

The garbage collected from the schools by the teachers is mainly disposed of in the garbage pit, while only 19% disposed it in garbage bins being kept inside the school. The remaining 14% either threw it outside the school compound or disposed it of on the nearby garbage dumps. It has been observed during the survey that many of the school compounds which do not have boundary walls are being used to dump garbage and dung by the villagers. This practice is noted especially in schools located on the outskirts of the main village.

9.4.3. All the respondents agreed that cattle dung if not disposed of safely creates problems.

(Table 9.4.3.)

Problems related to insanitary disposal of dung	II	AA	BB	CC
Flies breed and spreads disease	41.2	41.9	38.5	43.5
Smells Bad	15.0	22.6	11.5	8.7
Flies breed, smells bad & spreads disease	32.5	19.4	42.3	39.1
Causes inconvenience smells bad breeds flies & spreads disease	11.3	16.1	7.7	8.7

The above mentioned table throws light on the attitudes of the respondents with regard to the problem of garbage disposal. 15% of the total respondents find bad smell given by garbage heaps as the only problem. Bad smell is regarded as one of the problems besides others by nearly 60% of the total problems. The majority of the respondents know that garbage dumps provide breeding places for flies as well as spread many diseases. The block level analysis does not show much variation in the responses except, in the case of Ambala where nearly 23% believe that bad smell is the only problem related to garbage disposed of in an insanitary manner.

9.4.4. Knowledge regarding the diseases which spread from cattle dung is very poor amongst the respondents as seen in the table given below

The block level data analysis points out that 31% in Barara, 39% in Ambala and 57% in Naraingarh do not see any association between the practice of cutting nails and prevention of disease

9 6 6 However, in practice 54% of the total respondents cut their nails on a weekly basis, while 44% cut them whenever they grow long. About 3% of the total respondents cut their nails either once a month or sometimes. The block level tables indicate similarities in responses

9 6 7 Hands are washed 'frequently' by all the respondents and almost all the respondents use soap to clean their hands

The table given below shows that not all the respondents associate the practice of cleaning hands before eating or handling food & after defecation which is a must to break the 'disease transmission cycle'.

(Table 9.6.7.)

Activity related to washing of hands	FL	AA	BB	CC
Before eating and after eating food	13.8	9.7	19.2	13.4
After defecating	1.3	3.2	-	-
After eating & after defecating	38.6	54.8	46.2	8.3
After all such activities by which hands become dirty	46.3	32.3	34.6	78.3

Nearly 14% of the total respondents wash hands before & after taking food. About 39% wash hands before & after taking food & after defecation. Only 46% wash hands every time their hands get dirty. There are significant variations at the block level. In Ambala about 10%, in Naraingarh 13% and in Barara 19% wash hands before & after eating food.

A large majority in Naraingarh 78% claimed that they wash hands after all the activities which make their hands unclean, while only 32% in Ambala and 35% in Barara follow this practice. 55% in Ambala, 46% in Barara and 8% in Naraingarh wash hands before & after eating food and after defecation. 3% of the respondents interviewed in Ambala admitted that they wash hands only after defecation.

It is possible that the respondents who have not mentioned washing of hands after defecation, most probably wash hands either only with water or with mud or ash.

9.7.0. All the respondents agree that clean habits and good hygiene leads to improvement in health. All the teachers appear to be aware of the relationship between good health and sanitary habits

CHAPTER X

CONCLUSIONS AND RECOMMENDATIONS

- A planned, participatory and promotional hygiene education strategy should be adopted, with specific messages and inventory for specific target groups, i.e., the teachers, the children, their parents and the community, so that sanitation and hygienic practices becomes an integral part of the daily life, resulting in an improved environment and quality of life
- The primary school teachers need to be oriented and sensitized to play a pivotal role in interpersonal communication with the children and through them, reach out to their families and the community, in motivating them for change in both their attitudes and practices.
- For the people to change their age old habits it is most important that the programme involves their full and active participation. Technology is not enough. It is powerless to change the quality of life. It is the user and the delivery systems which are important. For the purpose of motivation and education of all concerned we must evolve effective channels of communication. Effective communication makes impact and impact creates change, therefore a multimedia and multichannel approach will have to be adopted.
- Schools are the most appropriate place where introduction of sanitation and adoption of sanitary habits by children. This will lead to a future generation having knowledge of sanitation and its health linkages and a proper attitude towards them and practicing them in their life.

The students should be instructed not to buy food stuff from vendors who keep their stuff uncovered. However, we must not forget that the primary school children are very young and might find it difficult to resist temptation, hence a better strategy would be to educate vendors outside school regarding the problems related to this unhygienic practice of keeping food stuff uncovered and develop in them a sense of social responsibility. The teachers can play an important role along with the Panchayats in this regard.

Good sanitation most of all depends on people and on their organisation and habits. If people are to be reached and their habits modified, health education is essential. Health education that is based on a dialogue with the people and not just on instructing them, provides an important channel for learning about local situations and for making appropriate strategies.

Health education should be a part of a child's education. The teachers can adopt various methods and techniques to impart such instructions to the primary school children. Issues related to sanitation and health must be discussed with the parents and during the PTA meetings. The students with the help of their teachers should also organise 'camps' and 'talks' in the villages to promote sanitation. What is desired is a change in habits that people will incorporate in their own culture and accept it as a part of their life style.

- Improved sanitation can be achieved in phases. It is not necessarily best to impose a technology on people that is difficult to maintain or more costly than they can afford. In fact there are many examples, where such an approach has failed. Children and the local community should be given various choices in technologies and practices so that they can choose, the one which appeals to them. For example, the programme should advocate using both 'ash' and 'soap' for washing hands, or offer a range of sanitary latrines rather than promoting a specific design. The choice of the superstructure could be left to the 'user' for we have seen that many object to the latrines because of its small size.
- Villagers often object to a latrine strongly because they still have the impression that a latrine is filthy and smelly or that the pits are too small (in the case of pit latrines). In order to get over this initial objection, demonstration of a well constructed and well maintained latrine is important. The school and anganwadi centres can act as ideal demonstration centres.
- The study emphasises that if the students have access to urinal and latrine facilities in school, they prefer using it rather than going out in the open to ease themselves. Majority of the constructed units in schools are single units and hence these are being used only by the teachers. Most of the students especially in classes 4th and 5th expressed that they do not use the latrines because their teachers do not allow them, this indicates that the habit of using latrines can be very easily picked up by the students in their schools.
- Effective utilization of sanitation facilities implies optimal, hygienic and consistent use of facilities to maximise health and social benefits. As is evident from the survey majority of the constructed facilities, especially latrines and garbage pits are not being utilized effectively both in schools as well as in individual households. For example, we have seen that few latrines are being used by all members of the family or all students in the school or that even those who possess footwear do not 'always' use them. Hence consistent efforts have to be made to educate the teachers, students and villagers in these matters.
- Every Anganwadi centre should have a latrine and a urinal, while every school should have a set of latrines and urinals, depending on the size of the school. However, at least two latrine units must be constructed in each school, so that all teachers and students get the opportunity to use this facility. In bigger schools separate latrines and urinals must be constructed for male and female students.
- Every anganwadi and school must be provided with garbage and waste water disposal facilities. The parents and the community must be asked to contribute for providing this facility to ensure their involvement.
- To inculcate good habits is a long and arduous task. Ideas regarding personal hygiene and sanitation have to be reinforced repeatedly till it permeates the child's consciousness and becomes second nature, a habit. The teachers must be provided special training in order to give them the required skills to handle this difficult work.

- The study shows the peoples willingness to contribute both physically and financially in the programme. Sanitation is one field where community - government partnership can yield dramatic results, if the community is helped progressively to take the lead with some government support. Total dependence for any activity on the government should be strongly discouraged. An attitude of self-help and partnership should be encouraged.
- Students and communities must express the need for improving their environments. The people need to be sensitized, for instance to bring home the relationship between insanitary conditions and what its impact can be on their health and well-being. For example we have seen that all the respondents teachers, students as well as their parents, have very poor knowledge regarding the spread of disease and insanitary disposal of dung, or excreta disposal in the open and related diseases, also very few of those surveyed are aware about the linkages between 'use of footwear' or 'washing of hands' and prevention of disease.
- What is needed is an effective educational programme using communications strategies that do not merely 'tell' the community and children what to do what not to do, but build in them the ability to recognise their problems and the confidence to assume greater control over their health.
- In order to participate meaningfully in the programme, there is a need to develop a sound information dissemination system. Peoples involvement is influenced by their level of information and knowledge therefore provision of education both formal and informal is required. This would also enhance the capacity of the people to initiate, plan and adopt the programme.
- It is significant that village high schools get more grants and are better off than the primary schools in terms of cost per pupil. The infrastructure situation in many schools is extremely poor. Many buildings need repairs, many schools need additional classrooms. Most of the primary schools do not have boundary walls, latrines and drinking water facilities. Access to facilities is the first step towards bringing change.
- Most of the students attending the government schools even in the villages come from poorer sections. Most students belong to socially backward castes and majority have illiterate mothers. Any sanitation programme developed for them must take into account all these factors.
- The study points out that decisions about drinking water sources are often based on colour, taste or smell rather than on technical purity. Besides unsafe water is rarely treated by any of the known methods at the home level in most of the rural households, added to this are the problems of insanitary water storage and handling practices. A systematic health education programme incorporating all these issues is the need of the hour.
- Children seldom become the target group of any sanitation programme. Technologies are not designed for them and health and hygiene messages do not take their attitudes and beliefs into consideration. We are aware that in many households and schools drinking water is collected and stored by children while many female children are also responsible for taking care of their siblings, cooking for the family etc.

- The school teacher who provides education to the children can also play an important role in improving the sanitation situation in the villages by reaching out to the community. But first, the teachers themselves need to be informed and involved.
- No theoretical education on health and sanitation will carry credibility unless it is backed by concrete examples. Teachers and anganwadi workers have to first bring about the required changes in their own habits and practices and only then can they play the desired role in the programme.
- Good health is founded in the family, if women are illiterate, ignorant, deprived and suppressed then the health of their family will continue to suffer. Mothers must be involved and consulted in all the school activities, it has been observed that most of the PTAs, do not have female members.
- Concerted community action is needed for the maintenance of environmental sanitation in schools, anganwadis and the villages. We have seen that many school compounds have been turned into garbage and dung disposal grounds by the people and many school latrines are being misused by the villagers after school hours. The panchayat members and local leaders have to be educated and involved. The support of local authorities should be taken to solve specific problems. The community, specific groups and their problems need to be addressed. People, especially the panchayat members and the 'parents' should be encouraged to think about what can and should be done. Communication therefore should achieve group action, which that includes identifying the problems and possible solutions and the actions which need to be carried out.

Area specific and school specific plans have to be worked out in consultation with the panchayats, PTAs and school teachers to solve specific problems.

At the village level, the project must direct all efforts to communicate the following repeatedly, consistently and effectively :

- a) messages on the project objectives. The full scope of the project, the technologies proposed and roles and responsibilities of the teachers, panchayat members, anganwadi workers and the Parent Teacher Associations.
 - c) messages on the need for community participation : making villagers conscious about their unhygienic practices and the need to change them, giving information and insights on how the project treasures in the long run improve their environment and health situation and the need for group action in providing and maintaining sanitation facilities in the schools and anganwadis and the villages.
- Village camps and the campaigns, mother's meetings and PTA meetings need to be organised so that the villagers are engaged in a consistent dialogue, besides such a process will throw up specific information and messages that need to be focussed on

- Anganwadi workers, teachers and the panchayat members can play a very effective role in the promotion of school sanitation and the health of the children in the project villages. Specific training and orientations organised for them will not only give them the required information about the project objectives and their roles but also equip them with the necessary skills to become better communicators and planners
- The block level implementors and supervisors have to be oriented so that they understand that targets are important, but not at the cost of the quality of the programmes. It has been observed during field visits and on analysis of the collected data that many latrines both in the schools as well as at homes are not being used due to poor quality of construction, this has made them unfit for use. It might be a good idea to allow the teachers and PTAs to select and construct the various facilities with the technical guidance provided by experts, from the blocks as well as local NGOs.
- Since the main target group are primary school children and pre-school children from the anganwadis, the project needs to initiate several I.E.C activities. These have to be systematised and an overall communication plan needs to be developed. The plan should be flexible so that it can adapt to the specific needs of the schools, villages, anganwadi centres

Educational and motivational material, especially games, models etc, and children's literature must be developed, keeping in mind the aptitude and interest of the target groups. Teachers should be encouraged and provided support and incentives to develop their own aids and tools. However, basic material needs to be developed at the district level and distributed to the schools and anganwadis. The teachers can be given a sanitation diary with a general plan of action, month-wise. The school teachers can use it to fill the activities they would like to take up on a daily basis both in the schools and the community. This strategy will help the planners and supervisors in monitoring school sanitation activities.

School Observations

Annexure I A

1. Does the school look clean?
Yes / No
2. Do the children look neat and clean? (In percentage)
3. Are their clothes clean? (In percentage)
4. Are the children wearing shoes / slippers? (In percentage)
5. Are their nails cut short? (In percentage)
6. Is the school latrine clean?
Yes / No.
7. Who is using the latrine?
Teachers / Only girls / All / No one / Girls and Teachers
8. Do the children wash hands after defecating?
Yes / No.
9. Is the drinking water container / vessel covered?
Yes / No / NA.
10. How do the children take out water from the container?
Pour it / By a ladle / By a glass.
11. Does the school have a garden?
Yes / No.
12. Does the school have a garbage pit?
Yes / No.
13. Do the classrooms have dustbins?
Yes / No.
14. Is the playing ground clean?
Yes / No.
15. Do the children have the habit of using the dustbins?
Yes / No.
16. Do the children have the habit of using a handkerchief?
Yes / No.
17. Is there a drain to dispose off waste water near the water source?
Yes / No.
18. Are the drains clean?
Yes / No.
19. How is the waste water disposed in the school?
(a) Garden (b) Soakage pit (c) To the drainage system (d) In a pond (e) In the school compound.
20. Is the platform near the water source in good condition?
Yes / No.
21. Is there a vendor selling food stuff / eatables outside the school?
Yes / No
22. If yes, then has he kept the food covered?
Yes / No
23. Are the children buying eatables from the vendor?
Yes / No.

Annexure I B School Observations

1 Does the school look clean?

	Total
Yes	62 50%
No	37 50%

2 Do the children look neat and clean? (In percentage)

	Total
10-30%	17
40-60%	63
70% and above	0

3 Are their clothes clean? (In percentage)

	Total
10-30%	16
40-60%	62
70% and above	2

4 Are the children wearing shoes / slippers? (In percentage)

	Total
10-30%	9
40-60%	58
70% and above	13

5 Are their nails cut short? (In percentage)

	Total
10-30%	16
40-60%	60
70% and above	4

6 Is the school latrine clean?

	Total
Yes	48 15%
No	51 85%

No.7 Who is using the latrine?

	Total
Teachers	33 33%
Students	18 52%
Teachers and girls	11 11%

8 Do the children wash hands after defecating?

	Total
Yes	42 50%
No	57 50%

9 Is the school drinking water container / vessel covered?

	Total
Yes	85 00%
No	25 00%

10 How do the children take out water from the container?

	Total
Pour it	33 33%
By a ladle	18 52%
By a glass	11.11%
	37 04%

11 Does the school have a garden?

	Total
Yes	31.25%
No	68.75%

12 Does the school have a garbage pit?

	Total
Yes	43 75%
No	56 25%

13 Do the classrooms have dustbins?

	Total
Yes	48 75%
No	51 25%

14 Is the playing ground clean?

	Total
Yes	60 00%
No	40 00%

15 Do the children have the habit of using the dustbins?

	Total
Yes	89 74%
No	10 26%

16 Do the children have the habit of using a handkerchief?

	Total
Yes	6 25%
No	93 75%

17 Is there a drain to dispose off waste water near the water source?

	Total
Yes	31 10%
No	68 60%

18 Are the drains clean?

	Total
Yes	73 53%
No	26 47%

19 How is the waste water disposed in the school?

	Total
(a) Garden	12.50%
(b) Soakage pit	15.00%
(c) To the drainage system	27.50%
(d) In a pond	11.25%
In the school compound	33.75%

20 Is the platform near the water source in good condition?

	Total
Yes	41.18%
No	58.82%

21 Is there a vendor selling food stuff / eatables outside the school?

	Total
Yes	7.50%
No	92.50%

22 If yes, then has he kept the food covered?

	Total
Yes	33.33%
No	66.67%

23 Are the children buying eatables from the vendor?

	Total
Yes	100.00%
No	0.00%

Annexure II A

Questionnaire for Head Teachers
(Knowledge, Attitudes & Practices with regard to Components of Sanitation)

Name of School Age

Village Block District

Name of Principal

No. of boys in school

No. of girls in school

1. Handling of drinking water .

1. Where does the school collect the water from?
1) Handpump 2) Tap
2. If tap water is being collected what are the timings of supply?
1) Morning 2) Evening 3) Irregular / Uncertain 4) Twice Daily 5) Use Handpumps
3. Is the water source within the school compound or outside it?
1) Inside 2) Outside
4. (If water is collected from an unsafe source) Does the school take any measures to make the water safe?
Yes / No
5. Who collects the water for the school?
1) Students 2) Teachers 3) Peons / Students
6. Is the vessel used for storing water cleaned regularly?
Yes / No
7. Where is the water stored in the school for children to drink?
1) Water Tank 2) Pitcher 3) Bucket 4) Others
8. Is this storage vessel kept covered?
Yes / No
9. Who cleans the vessel it?
1) Students 2) Teachers 3) Peons
10. How is the water taken out for children to drink?
1) Pour it 2) Use Glass 3) Use Glass with Ladle
11. Do individual classrooms have provision for storing drinking water?
Yes / No
12. If yes, in what?
1) Pitcher 2) Jugs & Bucket

2. Disposal of waste water :

13. Does the water source have a platform around it with a drain?
Yes / No
14. Is it cleaned regularly?
Yes / No
15. Who cleans the drains?
1) Peons & Sweepers 2) Students 3) Teachers & Students
16. How is the waste water from the source disposed of?
1) Pit 2) Garden 3) Drain 4) Others , Lane & Pond Fields 5) Compound

3. Disposal of Human Excreta .

- 17 Does the school have a latrine?
Yes / No
- 18 If yes, how many units does it have?
1) One 2) Two 3) Three 4) Four
- 19 Where do the children go for defecation, while at school?
1) Fields 2) Latrine 3) Outside 4) School Compound
- 20 Is the latrine in a good condition?
Yes / No
- 21 Are there arrangements for water outside the latrine to flush it and to wash the hands?
Yes / No
- 22 If yes, where is this water stored?
1) Pitcher / Bucket 2) Tank 3) Direct from source
- 23 Is there a regular supply of soap for children to wash hands with?
Yes / No
- 24 If yes, are children in the habit of washing hands after defecation?
Yes / No
- 25 Who maintains the latrine?
1) Students 2) Sweeper & Peon 3) No one
- 26 Is there a regular supply of soap powder & other items for cleaning the latrine?
Yes / No

4. Disposal of garbage & animal dung :

27. Do individual classrooms have dustbins?
Yes / No
28. How frequently are classrooms cleaned?
1) Daily 2) Weekly 3) Sometimes
29. If a dustbin is used, where is it emptied outside the school?
1) Outside School Compound 2) Garbage Pit 3) Garbage Dump
30. How frequently is it emptied outside the school?
1) Daily 2) Weekly 3) Sometimes
- 31 Does the school have a garden?
Yes / No
- 32 (if there is a garbage pit) Is the compost formed in the pit used as fertilizer in the garden?
Yes / No
- 33 Who cleans the classrooms and the school?
1) Students 2) Peons 3) Teachers
34. Does cattle stray into the school?
Yes / No
- 35 If yes, where is the cattle dung disposed?
1) Garbage Dump 2) Compost Pit 3) Fields

5. Food Hygiene :

- 36 Does the school provide meals to children?
Yes / No
- 37 If yes, have arrangements been made to ensure that there is no smoke in the classrooms while cooking?
Yes / No
- 38 If yes, what are the measures taken?
- 39 (If there is a vendor outside the school) Have any measures been taken to ensure that the vendor keeps his food covered?
Yes / No

6. Personal Hygiene :

- 40 Do children wear shoes to school?
Yes / No
- 41 Does each class have a nail cutter?
Yes / No
- 42 Who monitors hygiene habits of children in different classes?
1) Teachers 2) Monitors
- 43 Is hand washing encouraged in children?
Yes / No

7. General :

- 44 Has the school established Parent Teacher Association?
Yes / No
- 45 How often are PTA meetings held?
1) Monthly 2) Once a Year 3) When Required
- 46 Has the school arranged for sanitation talks during assembly or at any other time by teachers?
Yes / No
- 47 Has the school organised exhibitions, melas in the school to promote sanitation?
Yes / No
- 48 Has the school organised any sanitation camp?
Yes / No
- 49 If yes, where were they held?
1) Block 2) Village 3) School
- 50 Do the teachers encourage the students to use the sanitation facilities in the school to motivate parents to construct / use these facilities in their homes?
Yes / No

8. General :

- 51 Do the PTAs meet regularly? Yes / No.
- 52 If no, then are efforts made to make the PTA meetings regular and ensure maximum participation?
Yes / No
- 53 Do you think sanitation issues should be discussed in PTA meetings? Yes / No.
- 54 If there is a latrine in the school have you ever demonstrated a clean latrine to the parents and encouraged them to construct latrines in their homes? Yes / No
- 55 Have you organised a programme in the village through your school to promote sanitation?
Yes / No

- 56 If yes then, how?
57. Do you think that children should be educated in sanitation matters in school? Yes / No.
- 58 If yes, then what facilities are essential in the school to ensure that the students practise what they learn?
1) Latrine 2) Soap / Nail cutters / Comb 3) Sitting Mats 4) Drinking Water 5) Books / Literature Posters
- 59 Do you think that the teachers have a role to play in the maintenance and use of these facilities in the school? Yes / No
- 60 If yes, then how can the teachers contribute . 1) By giving knowledge and information to the student 2) By observing the sanitation habits of the students and motivating them 3) By organising cleanliness drives 4) Organising competitions in classes / school 5) Other / specify - Involve Panchayats / Village Leaders.
- 61 What role can the teachers play in the promotion of sanitation in the village?
1) By motivating the parents 2) By organising a special awareness drive 3) By organising cleanliness drives in the village on special days 4) Addressing PTA meetings & Motivating Panchayats 5) All these activities

Annexure II B Responses of Head Teachers

1. .Where does the school collect the water from?

	Total
Handpump	52 50%
Tap	47 50%

2. .If tap water is being collected what are the timings of supply?

	Total
Morning	5.00%
Evening	1 25%
Irregular/ Uncertain	30 00%
Twice daily	11 25%
Use handpump	52 50%

3. .Is the water source within the school compound or outside it?

	Total
Inside	67 50%
Outside	32 50%

4. .(If water is collected from an unsafe source) Does the school take any measures to make the water safe?

	Total
Yes	0 00%
No	100 00%

1

5. Who collects the water for the school?

	Total
Students	66.67%
Teachers	7.41%
Peons/ students	25.93%

6. Is the vessel used for storing water cleaned regularly?

	Total
Yes	88.89%
No	11.11%

7. Where is the water stored in the school for children to drink?

	Total
Water tank	37.04%
Pitcher	37.04%
Bucket	14.81%
Others	11.11%

8. Is this storage vessel kept covered?

	Total
Yes	85.19%
No	14.81%

9. .Who cleans the vessel it?

	Total
Pour it	70 37%
Use glass	7 41%
Use glass with ladle	22 22%

10. .How is the water taken out for children to drink?

	Total
Pour it	33 33%
Use glass	18 52%
Use glass with ladle	11 11%
Other	37 04%

11. .Do individual classrooms have provision for storing drinking water?

	Total
Yes	12.50%
No	87.50%

12. .If yes, in what?

	Total
Pitcher	10 00%
Jugs and bucket	90 00%

13. .Does the water source have a platform around it with a drain?

	Total
Yes	62 96%
No	37 04%

14. .Is it cleaned regulatly?

	Total
Yes	44.12%
No	55.88%

15. .Who cleans the drains?

	Total
Peons and sweepers	29.41%
Students	47.06%
Teachers and students	23.53%

16. .How is the waste water from the source disposed of?

	Total
Pit	12.50%
Garden	15.00%
Drain	27.50%
Lane, pond and fields	11.25%
Compound	33.75%

17. .Does the school have a latrine?

	Total
Yes	33.75%
No	66.25%

18. .If yes, how many units does it have?

	Total
One	62 96%
Two	25 93%
Three	3 70%
Four	7 41%

19. .Where do the children go for defecation, while at school?

	Total
Fields	45 83%
Latrine	29 17%
Outside school compounds	25 00%

20. .Is the latrine in a good condition?

	Total
Yes	48 15%
No	51 85%

21. .Are there arrangements for water outside the latrine to flush it and to wash the hands?

	Total
Yes	44 44%
No	55 56%

22. .If yes, where is this water stored?

	Total
Pitcher/ bucket	50.00%
Tank	16.67%
Direct from source	33.33%

23. .Is there a regular supply of soap for children to wash hands with?

	Total
Yes	35.00%
No	65.00%

24. .If yes, are children in the habit of washing hands after defecation?

	Total
Yes	96.43%
No	3.57%

25. .Who maintains the latrine?

	Total
Students	22.22%
Sweeper/ peon	59.26%
No one	18.52%

26. Is there a regular supply of soap powder & other items for cleaning the latrine?

	Total
Yes	22 22%
No	77 78%

27. Do individual classrooms have dustbins?

	Total
Yes	48 75%
No	51 25%

28. How frequently are classrooms cleaned?

	Total
Daily	90 00%
Weekly	2 50%
Sometimes	7 50%

29. If a dustbin is used, where is it emptied outside the school?

	Total
Outside school compound	41 03%
Garbage pit	35 90%
Garbage dump	23 08%

30. .How frequently is it emptied outside the school?

	Total
Daily	87 18%
Weekly	12 82%
Sometimes	0.00%

31. .Does the school have a garden?

	Total
Yes	31 25%
No	68 75%

32. .(If there is a garbage pit) Is the compost formed in the pit used as fertilizer in the garden?

	Total
Yes	83 33%
No	16 67%

33. .Who cleans the classrooms and the school?

	Total
Students	77 50%
Peons	21 25%
Teachers	1 25%

34. Does cattle stray into the school?

	Total
Yes	40.00%
No	60.00%

35. If yes, where is the cattle dung disposed?

	Total
Garbage dump	31.25%
Compost pit	15.63%
Fields	53.13%

36. Does the school provide meals to children?

	Total
Yes	0.00%
No	100.00%

37. If yes, have arrangements been made to ensure that there is no smoke in the classrooms while cooking?

	Total
Yes	NA
No	NA

38. If yes, what are the measures taken?

Total

39. (If there is a vendor outside the school) Have any measures been taken to ensure that the vendor keeps his food covered?

	Total
Yes	16.67%
No	83.33%

40. Do children wear chappals to school?

	Total
Yes	68.75%
No	31.25%

41. Does each class have a nail cutter?

	Total
Yes	45.00%
No	55.00%

42. Who monitors hygiene habits of children in different classes?

	Total
Yes	100.00%
No	0.00%

43. Is hand washing encouraged in children?

	Total
Yes	100.00%
No	0.00%

44. Has the school established Parent Teacher Association?

	Total
Yes	67 50%
No	32 50%

45. How often are PTA meetings held?

	Total
Monthly	29 63%
Yearly	18 52%
When required	51 85%

46. Has the school arranged for sanitation talks during assembly or at any other time by children or teachers?

	Total
Yes	100 00%
No	0.00%

47. Has the school organised exhibitions, melas in the school to promote sanitation??

	Total
Yes	3 75%
No	96 25%

48. Has the school organised any sanitation camp?

	Total
Yes	16 25%
No	83 75%

49. .If yes, where were they held?

	Total
Blocks	58.33%
Village	0.00%
School	41.67%

50. .Do the teachers encourage the students to use sanitation facilities in the school to motivate parents to construct / use these facilities in their homes?

	Total
Yes	51.25%
No	48.75%

51. .Do the PTAs meet regularly?

	Total
Yes / No.	35.19%
No.	64.81%

52. .If no, then are efforts made to make the PTA meetings regular and ensure maximum participation?

	Total
Yes	100.00%
No	0.00%

53. Do you think sanitation issues should be discussed in PTA meetings?

	Total
Yes	100 00%
No	0 00%

54. If there is a latrine in the school have you ever demonstrated a clean latrine to the parents and encouraged them to construct latrines in their homes?

	Total
Yes	12.50%
No	30 00%
	57 50%

55. Have you organised a programme in the village through your school to promote sanitation?

	Total
Yes	15.00%
No	85 00%

56. If yes then, how?

Total
66 67%
25 00%
8 33%

57. Do you think that children should be educated in sanitation matters in school?

	Total
Yes	100.00%
No	0.00%

58. If yes, then what facilities are essential in the school to ensure that the students practise what they learn?

	Total
Latrine	18.75%
Soap Nailcutters/ comb	58.75%
Sitting mats	5.00%
Drinking water	10.00%
Books/ literature/ posters	7.50%

59. Do you think that the teachers have a role to play in the maintenance and use of these facilities in the school?

	Total
Yes	100.00%
No	0.00%

60. If yes, then how can the teachers contribute :

	Total
- By giving knowledge and information to the students	48.75%
By observing the sanitation habits of the students and motivating them	2.50%
By organising cleanliness drives	3.75%
By organising competitions in classes	3.75%
By involving Panchayats and Village leaders	41.25%

61. What role can the teachers play in the promotion of sanitation in the village?

	Total
By motivating the parents	50.00%
By organising a awareness drive	2.50%
Organising cleanliness drives	10.00%
Addressing PTA meetings and pancnayat	5.00%
All the above	32.50%

Anganwadi Observation

Annexure IV A

1. Is the Anganwadi neat and clean?
Yes
No
2. What per cent of children look clean? (In percentage)
3. What per cent of children are wearing clean clothes?
4. Percentage of children wearing shoes / slippers?
5. Percentage of children with short and clean nails?
6. Percentage of children with clean hair?
7. (For the worker) where is the drinking water collected from?
8. Is the drinking water vessel covered?
Yes
No
No Vessel
9. How is water taken out from the vessel?
Pour
Dip glass
Use glass with handle
Others, specify
10. (For the worker) How can we make contaminated water safe for drinking?
Boiling
Filtering
Chlorinating
All these
Don't know
11. Does the Anganwadi have a kitchen garden?
Yes
No
12. Does the Anganwadi have a bathing / washing platform?
Yes
No
13. How is the waste water disposed of?
Courtyard
Lane
Kitchen Garden
Drain
Pit
Pond / Field
14. (For the worker) if waste water is allowed to stagnate will it lead and spread of disease?
Yes
No
15. (For the worker) if yes, name the disease?
Malaria
Cholera
Eye disease
Don't know
16. Does the Anganwadi have a latrine?
Yes
No

- 17 if yes, who uses the latrine?
 All
 No one
 Only workers
- 18 (For the worker) if there is a latrine and no one uses it, then why?
 Like open spaces
 Owners do not allow
- 19 (For the worker) do you think that open defecation leads to the spread of disease?
 Yes
 No
- 20 (For the worker) if yes, name the disease?
 Diarrhoea
 Cholera
 Malaria
 Plague
 Others
 Don't know
- 21 Is garbage littered around in the centre?
 Yes
 No
22. Does the Anganwadi have a dust bin?
 Yes
 No
- 23 Does the Anganwadi have a garbage pit?
 Yes
 No
- 24 If garbage is dumped and not disposed of safely will it lead to the spread of disease?
 Yes
 No
- 25 (For the worker) if yes, name the disease?
 Malaria
 Cholera
 Diarrhoea
 Plague
 Others
 Don't know
- 26 Is the food kept covered?
 Yes
 No
 Not applicable
- 27 (For the worker) do you educate mothers about issues related to sanitation and personal hygiene?
 Yes
 No
- 28 If yes, then what, specify?

Annexure IV B

Responses of Anganwadi workers

1. Is the Anganwadi neat and clean?

	Total
Yes	70 09%
No	29 91%

2. What per cent of children look clean? (In percentage)

	Total
10-30%	56
40-60%	59
70% and above	2

3. What per cent of children are wearing clean clothes?

	Total
10-30%	55
40-60%	60
70% and above	2

4. Percentage of children wearing shoes / slippers?

	Total
10-30%	48
40-60%	62
70% and above	7

5. Percentage of children with short and clean nails?

	Total
10-30%	55
40-60%	61
70% and above	1

6. Percentage of children with clean hair?

	Total
10-30%	52
40-60%	65

7. (For the worker) where is the drinking water collected from?

	Total
Covered well	0.0%
Well	0.85%
Tap	46.15%
Handpump	52.99%

8. Is the drinking water vessel covered?

	Total
Yes	63.25%
No	4.27%
No Vessel	32.48%

9. How is water taken out from the vessel?

	Total
Pour	58.21%
Dip glass	18.42%
Use glass with handle	22.37%
Others, specify	0.00%

10. (For the worker) How can we make contaminated water safe for drinking?

	Total
Boiling	44.78%
Filtering	2.99%
Chlorinating	44.78%
All these	0.00%
Don't know	7.46%

11. Does the Anganwadi have a kitchen garden?

	Total
Yes	5.13%
No	94.87%

12. Does the Anganwadi have a bathing / washing platform?

	Total
Yes	24.79%
No	75.21%

13. How is the waste water disposed of?

	Total
Courtyard	22.22%
Lane	11.11%
Kitchen Garden	0.85%
Drain	52.99%
Pit	6.84%
Pond / Field	5.98%

14. (For the worker) if waste water is allowed to stagnate will it lead and spread of disease?

	Total
Yes	100.00%
No	0.00%

15. (For the worker) if yes, name the disease?

	Total
Malaria	68.91%
Cholera	11.76%
Eye disease	2.52%
Don't know	15.13%
	1.68%

16. Does the Anganwadi have a latrine?

	Total
Yes	2.56%
No	97.44%

17. If yes, who uses the latrine?

	Total
All	0.00%
No one	100.00%
Only workers	0.00%

18. (For the worker) if there is a latrine and no one uses it, then why?

	Total
Like open spaces	0.00%
Owners do not allow	100.00%

19. (For the worker) do you think that open defecation leads to the spread of disease?

	Total
Yes	93.16%
No	6.84%

20. (For the worker) if yes, name the disease?

	Total
Diarrhoea	4.76%
Cholera	29.76%
Malaria	34.52%
Plague	11.90%
Others	19.05%
Don't know	0.00%

21. Is garbage littered around in the centre?

	Total
Yes	34 19%
No	65 81%

22. Does the Anganwadi have a dust bin?

	Total
Yes	25 64%
No	74 36%

23. Does the Anganwadi have a garbage pit?

	Total
Yes	25 64%
No	74 36%

24. If garbage is dumped and not disposed of safely will it lead to the spread of disease?

	Total
Yes	98 29%
No	1 71%

25. (For the worker) If yes, name the disease?

	Total
Malaria	32 17%
Cholera	20 87%
Diarrhoea	6 09%
Plague	3 48%
Others	8 70%
Don't know	28 70%

26. Is the food kept covered?

	Total
Yes	55.56%
No	2.56%
Not applicable	41.88%

27. (For the worker) do you educate mothers about issues related to sanitation and personal hygiene?

	Total
Yes	96.58%
No	3.42%

28. If yes, then what, specify?

	Total
Personal health	45.13%
Home sanitation	8.85%
Home sanitation and personal hygiene	3.54%
Food sanitation	8.85%
Personal hygiene and food sanitation	33.63%

Annexure V

Questionnaire for Students of Class Ist, IInd & IIInd
(Knowledge, Attitudes & Practices with regard to Components of Sanitation)

Name of Student Age

Class Father's Name

Drinking Water

1. Do you think that drinking contaminated water leads to spread of disease?
Yes / No / Don't know
2. Where do you collect your drinking water from?
• Handpump • Tap • Open dugwell • Others specify.
3. Which according to you is a safe source of water?
• Handpump • Tap • Open dugwell • Pond / River • Others specify
4. Who collects water in your house?
Children / Women / All / Don't know
5. If drinking water is not safe how can we make it safe?
Boiling / Chlorinating / Filtering & boiling / Filtering / Don't know
6. Do you boil / filter / chlorinate drinking water at home for making it safe?
Yes / No / Don't know.
7. Can safe drinking water at the source of collection get contaminated during collection?
Yes / No / Don't Know.
8. If Yes, then how?
• By dirty hands • By dirty vessel • If poured in dirty glass • If vessel is not covered • By animals / birds
• Any other, specify.
9. Do you have a vessel for keeping drinking water in your school?
Yes / No.
10. If yes then how do you take water from the vessel?
• Pour it • By dipping a glass in the vessel • By using a ladle.

Disposal of Waste Water

11. Plenty of waste water from our houses accumulates in lanes and around the houses. If waste water is not disposed of safely what will happen?
• Smells bad • Inconvenience to passersby • Mosquitoes Breed • Looks bad • Spreads disease • Don't know • Any other / specify.
12. What is the best way to dispose off waste water?
• Into the backyard • In a kitchen garden / orchard • In a soakage pit • In the pond • In the drain
• In the fields • Don't know.

Disposal of Human Excreta

13. Where do you defecate in the school?
• Outside school premises • In the fields • In the latrine • School grounds • Pond / River bank • Garbage dump • Others / specify.
14. Where do you go for defecation at home?
• Backyard • In the fields • In a latrine • Garbage dump • Near pond / river • Lane • Others / specify
15. If there is a latrine in your school then why don't you use it?
• Teachers don't allow • I like open spaces • Is not functional • Smells foul • Any other, specify.
16. If there is a latrine in your home then why don't you use it?
• Only elders use • I like open spaces • Not functional • Smells bad

17. Who uses the latrine at home?
 • Only children • Only women • Only elders • All • No one
18. Do you think open defecation can lead to spread of disease?
 Yes / No / Don't know.
19. If yes, then how?
 • By flies • Bad smell / odour • Looks bad • By our feet • Through soil & vegetables • Any other / specify
20. What is the best way to dispose human excreta safely?
 • In the fields • In the latrine • Pond / river bank • Garbage dump • Any other, specify • Don't know
21. After defecation with what do you wash your hands?
 • Ash • Mud • Soap • Only water • Mud & ash • Do not wash.
22. Do you think defecation near a drinking water source can spread disease?
 Yes / No / Don't know.

Garbage & Dung Disposal

23. Where do you throw garbage in your classroom?
 • On the floor • In the corner • Dustbin • In the garbage pit • Garbage dump • Any other, specify
24. Where do you throw the garbage collected in the school?
 • In the lane outside school • Outside school compound • Dustbin • On the garbage dump / heap
 • Garbage pit • Others specify
25. Have you assisted in throwing garbage collected in the classroom / school?
 Yes / No
26. What happens if garbage is thrown in the lanes?
 • Spreads flies • Spreads disease • Smells foul • Is inconvenient to passerby • Any other, specify • Don't know
27. Does dung if not disposed of properly cause problems?
 Yes / No / Don't know
28. If yes, then how?
 • Spreads flies • Spreads disease • Smell is bad • Spreads mosquitoes • Any other specify • Don't know.
29. How should the dung be disposed of according to you?
 • Dung cakes • Garbage / Dung dumps • In the fields • In a bio-gas plant • Dung cakes / fields • Compost pit • Don't know
30. Do you purchase food stuffs from the vendors outside your school?
 Yes / No / NA
31. Does the vendor keep the food stuff covered?
 Yes / No.
32. What happens to food left uncovered?
 • Flies sit on it • Dust falls • Rats & animals eat • Others specify • Don't know
33. Do you wash fruits / vegetables before eating?
 Yes / No
34. If yes, then why?
 • Removes dirt / mud • Removes germs • Don't know • Any other, specify

Personal Hygiene

35. How often do you clean your teeth?
 • Daily in the morning • Before going to bed • In the morning & before going to sleep • Sometimes
 • Do not clean.

36. **With what do you clean your teeth?**
 • Chewing stick • Charcoal • Salt & Oil • Paste / Powder • Only water • Any other, specify.
37. **How often do you bathe?**
 A) In Summers
 - Once daily
 - Twice daily
 - Once a week
 - Sometimes
 B) In Winters
 - Once daily
 - Twice daily
 - Once a week
 - Sometimes
38. **Where do you bathe?**
 • In the courtyard • Bathroom • Near the handpump / tap in the lane • Near well • Pond
39. **With what do you clean your body?**
 • Soap • Only water • Any other / specify
40. **Can bathing in a dirty pond / stream water lead to spread of disease?**
 Yes / No / Don't know.
41. **Do you wear shoes?**
 • Always / mostly • Never / rarely • Sometimes.
42. **If yes, then why?**
 • Feet become dirty • To stop spread of disease • Feet are safe from injuring • Any other, specify • Don't know
43. **When do you wear shoes?**
 • Always • While going for outing • While going to school • While going to fields for defecation • Going to school & outings.
44. **Do you think that we should cut our nails short?**
 Yes / No
45. **Why should we cut the nails short?**
 • To keep hands clean • Dirt accumulates under long nails • Spreads disease.
46. **When do you cut nails?**
 • Weekly • Once a month • Sometimes • Whenever they grow long.
47. **How often do you wash hands?**
 • Very often • Sometimes • Rarely.
48. **When do you wash hands?**
 • Before eating food • After eating food • After defecation • Before eating & after defecation • After coming from fields / play • Before & after eating food • After all these activities
49. **With what do you wash your hands?**
 • Soap • Ash • Mud • Only water • Ash & Mud • Any other / specify.
50. **When do you wash your hands?**
 • Daily • Weekly • Once a month • Sometimes.
51. **With what do you wash your hands?**
 • Soap • Only water • Any other / specify.
52. **Do we keep good health if we adopt hygienic habits?**
 Yes / No / Don't know.
53. **Do your parents visit your school?**
 Yes / No.
54. **Do the teachers talk about / discuss sanitation issues in the school?**
 Yes / No.

55. If yes, then what issues are discussed?
• Personal hygiene • Village sanitation • Cleaning of classrooms • Food sanitation • School Sanitation •
School Sanitation & Personal hygiene ; Any other / specify
56. Have you ever taken part in any sanitation programme?
Yes / No
57. If yes, then in which programme?
• Cleaning of classrooms • Cleaning of school compound • Cleaning of classroom & school compound
• Other / specify

Annexure V B

Responses of Children studying in classes I to III

1. Do you think that drinking contaminated water leads to spread of disease?

	Block 1	Block 2	Block 3	Total
Yes	94.75%	88.29%	86.89%	90.89%
No	1.63%	3.66%	8.99%	3.91%
Don't Know	3.62%	8.05%	4.12%	5.21%

2. Where do you collect your drinking water from?

	Block 1	Block 2	Block 3	Total
Handpump	49.82%	33.17%	64.42%	47.44%
Tap	42.57%	52.68%	23.22%	41.74%
Open dugwell	7.61%	10.73%	10.49%	9.28%
Stream/ river	0.00%	3.41%	1.87%	1.55%

3. Which according to you is a safe source of water?

	Block 1	Block 2	Block 3	Total
Handpump	47.28%	28.54%	49.44%	41.50%
Tap	25.91%	50.73%	20.22%	32.95%
Open dugwell	17.03%	13.41%	15.36%	15.46%
Others	3.62%	4.88%	7.49%	4.88%
Don't know	6.16%	2.44%	7.49%	5.21%

4. Who collects water in your house?

	Block 1	Block 2	Block 3	Total
Children	7.97%	6.34%	9.36%	7.73%
Women	66.49%	60.98%	55.06%	62.16%
All	25.54%	32.68%	35.58%	30.11%

5.If drinking water is not safe how can we make it safe?

	Block 1	Block 2	Block 3	Total
Boiling	27 36%	27 32%	23 22%	26 44%
Chlorinating	6 16%	5.85%	4 49%	5 70%
Filtering & boiling	5 80%	4 88%	1 87%	4 64%
Filtering	34 96%	31.22%	23 22%	31 16%
Don't know	25 72%	30 73%	47 19%	32 06%

6.Do you boil filter chlorinate drinking water at home for making it safe?

	Block 1	Block 2	Block 3	Total
Yes	24 09%	24 39%	26 22%	24 65%
No	51 09%	59 76%	57 30%	55 33%
Don't know	24 82%	15 85%	16 48%	20 02%

7.Can safe drinking water at the source of collection get contaminated after collection?

	Block 1	Block 2	Block 3	Total
Yes	18 12%	23 17%	23 22%	20 91%
No	50 91%	53 66%	44 57%	50 45%
Don't Know.	30 98%	23 17%	32.21%	28 64%

8.If Yes then later?

	Block 1	Block 2	Block 3	Total
By dirty hands	45 00%	34 74%	35.48%	38 91%
By dirty vessel	12 00%	21 05%	35 48%	21 01%
If poured in dirty glass	20 00%	15 79%	0 00%	13 62%
If vessel is not covered	16 00%	23 16%	16 13%	18 68%
By animals / birds	7 00%	5 26%	12 90%	7 78%

9. Do you have a vessel for keeping drinking water in your school?

	Block 1	Block 2	Block 3	Total
Yes	64.21%	60.53%	59.13%	118.68%
No	35.79%	39.47%	40.87%	73.93%

10. If yes then how do you take water from the vessel?

	Block 1	Block 2	Block 3	Total
Pour it	61.23%	60.00%	56.18%	59.72%
By dipping a glass in the vessel	18.12%	21.46%	22.47%	20.18%
By using a ladle.	20.65%	18.54%	21.35%	20.10%

11. Plenty of waste water from our houses accumulates in lanes and around the houses. If waste water is not disposed of safely what will happen?

	Block 1	Block 2	Block 3	Total
Smells bad	18.66%	20.73%	23.22%	20.34%
Inconvenience to passersby	10.87%	9.02%	6.74%	9.36%
Mosquitoes Breed	25.36%	23.17%	25.09%	24.57%
Looks bad	5.80%	5.37%	3.75%	5.21%
Spreads disease	27.36%	26.34%	22.10%	25.87%
Don't know.	11.96%	15.37%	19.10%	14.65%

12. What is the best way to dispose off waste water?

	Block 1	Block 2	Block 3	Total
Into the backyard	3.26%	3.17%	7.87%	4.22%
In a kitchen garden	3.99%	4.63%	7.12%	4.87%
In a soakage pit	2.36%	3.90%	0.00%	2.36%
In the pond	13.22%	7.80%	7.49%	10.15%
In the drain	66.85%	60.00%	61.80%	63.53%
In the fields	6.34%	13.90%	10.86%	9.93%
Don't know	3.99%	6.59%	4.87%	5.04%

13. Where do you defecate at school?

	Block 1	Block 2	Block 3	Total
Outside school premises	17.06%	13.41%	10.49%	14.32%
In the fields	64.59%	69.27%	79.40%	69.00%
In the latrine	6.24%	6.34%	4.49%	5.86%
School grounds.	1.28%	0.98%	3.75%	1.71%
Pond / River bank	5.50%	6.34%	0.00%	4.56%
Garbage dump	4.22%	2.93%	1.87%	3.25%
Others / specify.	1.10%	0.73%	0.00%	1.30%

14. Where do you go for defecation at home?

	Block 1	Block 2	Block 3	Total
Backyard	2.54%	4.88%	6.74%	4.23%
In the fields	71.56%	69.51%	71.16%	70.79%
In a latrine	6.16%	5.37%	2.62%	5.13%
Garbage dump	6.70%	8.54%	10.49%	8.14%
Near pond / river bank	2.72%	4.15%	3.75%	3.42%
Lane	6.70%	3.17%	5.24%	5.21%
Others	3.62%	4.39%	0.00%	3.09%

15. If there is a latrine in your school then why don't you use it?

	Block 1	Block 2	Block 3	Total
Teachers don't allow	29.44%	26.76%	16.67%	9.44%
I like open spaces	16.45%	21.13%	36.67%	7.32%
Is not functional	16.45%	31.69%	25.00%	9.11%
Smells foul	22.51%	20.42%	21.67%	6.27%
Any other	15.15%	0.00%	0.00%	0.00%

16. If there is a latrine in your home then why don't you use it?

	Block 1	Block 2	Block 3	Total
Only elders use	18.49%	20.00%	0.00%	2.60%
I like open spaces	55.46%	30.00%	40.00%	7.40%
Not functional	15.97%	40.00%	28.00%	3.74%
Smells bad	10.08%	10.00%	32.00%	2.03%

17. Who uses the latrine at home?

	Block 1	Block 2	Block 3	Total
Only children	3.23%	18.18%	0.00%	0.98%
Only women	33.06%	50.00%	25.00%	5.53%
Only elders	11.29%	18.18%	0.00%	1.79%
All	29.03%	6.82%	25.00%	3.58%
No one	23.39%	6.82%	50.00%	3.42%

18. Do you think open defecation can lead to spread of disease?

	Block 1	Block 2	Block 3	Total
Yes	65.40%	51.71%	35.58%	54.35%
No	23.73%	21.46%	34.46%	25.31%
Don't know.	10.87%	26.83%	29.96%	20.34%

19. If yes, then how?

	Block 1	Block 2	Block 3	Total
By flies	32.46%	32.83%	33.72%	32.98%
Bad smell	16.23%	22.22%	19.19%	19.25%
Looks bad	21.99%	16.67%	18.60%	19.07%
By our feet	6.28%	10.10%	5.81%	7.49%
Soil and vegetables	10.47%	9.60%	6.98%	9.89%
Bathing in dirty pond water	12.57%	8.59%	15.70%	12.12%



20. What is the best way to dispose human excreta safely?

	Block 1	Block 2	Block 3	Total
In the fields	59.60%	55.61%	55.81%	57.45%
In the latrine	15.22%	17.56%	14.98%	15.95%
Pond/ river bank	2.90%	4.88%	4.49%	3.91%
Garbage dump	10.51%	8.54%	10.49%	9.85%
Any other	0.00%	5.37%	3.75%	2.60%
Don't know	11.78%	8.05%	10.49%	10.25%

21. After defecation with what do you wash your hands?

	Block 1	Block 2	Block 3	Total
Ash	3.62%	5.12%	6.37%	4.72%
Mud	11.96%	19.02%	16.85%	15.38%
Soap	47.83%	32.93%	30.34%	39.06%
Only water	25.72%	31.22%	35.96%	29.78%
Mud & ash	8.70%	9.76%	10.49%	9.44%
Do not wash	2.17%	1.95%	0.00%	1.63%

22. Do you think defecation near a drinking water source can spread disease?

	Block 1	Block 2	Block 3	Total
Yes	26.27%	23.90%	14.61%	22.95%
No	32.07%	31.71%	36.70%	32.95%
Don't know.	41.67%	44.39%	48.69%	44.10%

23. Where do you throw garbage in your classroom?

	Block 1	Block 2	Block 3	Total
On the floor	39.86%	39.51%	32.21%	38.08%
In the corner	4.35%	14.88%	12.73%	9.68%
Dustbin	25.72%	22.93%	23.97%	24.41%
In the garbage pit	9.98%	11.71%	8.24%	10.17%
Garbage dump	8.33%	8.54%	15.73%	10.01%
Any other	11.78%	2.44%	7.12%	7.65%

24. Where do you throw the garbage collected in the school?

	Block 1	Block 2	Block 3	Total
In the lane outside school	5.98%	2.68%	3.37%	4.31%
Outside school compound	19.20%	2.44%	19.48%	13.67%
Dustbin	7.25%	5.85%	8.24%	7.00%
On the garbage dump / heap	39.49%	36.83%	25.84%	35.64%
Garbage pit	24.46%	40.00%	30.71%	31.00%
Others specify	3.62%	12.20%	12.36%	8.38%

25. Have you assisted in throwing garbage collected in the classroom / school?

	Block 1	Block 2	Block 3	Total
Yes	68.84%	62.93%	57.68%	64.44%
No	31.16%	37.07%	42.32%	35.56%

26. What happens if garbage is thrown in the lanes?

	Block 1	Block 2	Block 3	Total
Spreads flies and mosquitoes	44.93%	29.51%	18.73%	34.09%
Spreads disease	20.65%	26.59%	23.22%	23.19%
Smells foul	14.86%	20.00%	25.47%	18.88%
Is inconvenient to passerby	7.43%	5.85%	6.74%	6.75%
Looks bad	1.63%	3.66%	2.62%	2.52%
Don't know	10.51%	14.39%	23.22%	14.56%

27. Does dung if not disposed of properly cause problems?

	Block 1	Block 2	Block 3	Total
Yes	74.82%	72.20%	66.67%	72.17%
No	5.43%	6.34%	11.99%	7.16%
Don't know	19.75%	21.46%	21.35%	20.67%

Distribution of Respondents - Block Naraingarh

Annexure 2C

SL. NO.	VILLAGE	STUDENTS		PARENTS
		1-3	4-5	
1	Ahmedpur	6	4	10
2.	Akbarpur	6	5	11
3.	Bari Rasour	14	9	23
4.	Buraj Shabid	7	8	15
5.	Brahman Majra	6	7	13
6.	Dudhli	12	11	23
7.	Fathehpur	8	4	12
8.	Firozpur	10	7	17
9.	Gaudi	15	17	32
10.	Gadholi	30	35	65
11.	Hassanpur	13	9	22
12.	Jhiriwala	7	5	12
13.	Khanpur Lebana	40	26	66
14.	Kullarpur	6	4	10
15.	Kalyana	8	8	16
16.	Nagla Jattan	9	5	14
17.	Nanduwali	10	8	18
18.	Naya Gaon	8	12	20
19.	Panjori	6	5	11
20.	Panjeton	16	10	26
21.	Racheri	11	13	24
22.	Shadikpur	10	5	15
23.	Sherpur	9	9	18
	Total	267	226	493

Distribution of Respondents - Block Barara

Annexure 8B

SL. NO.	VILLAGE	STUDENTS		PARENTS
		1-3	4-5	
1.	Adhoyee	13	9	22
2.	Aliaspur	30	17	47
3.	Bikanpur	7	7	14
4.	Chapra	8	11	19
5.	Dinarpur	33	22	55
6.	Dhanora	28	23	51
7.	Foxa	8	5	13
8.	Ghasitpur	12	5	17
9.	Harda	20	13	33
10.	Jawargarh	7	4	11
11.	Kambass	10	9	19
12.	Kesopur	7	6	13
13.	Khan Ahmedpur	9	3	12
14.	Khanpur	30	7	34
15.	Manu Majra	13	9	21
16.	Milk Shekon	11	8	19
17.	Nurd	9	8	17
18.	Rampur	23	19	42
19.	Sabapur	11	7	18
20.	Sohata	16	11	27
21.	Sulakhani	19	16	35
22.	Subhri	19	19	38
23.	Tangail	11	7	18
24.	Tandwali	16	10	26
25.	Ugali (G)	15	16	31
26.	Ugala (B)	25	13	38
	Total	410	284	694

Distribution of Respondents - Block Ambala

Annexure B A

SL. NO.	VILLAGE	STUDENTS		PARENTS
		1-3	4-5	
1.	Barnala	11	10	21
2.	Bhanokheri	24	20	44
3.	Devi Nagar	15	9	24
4.	Dhankaur	12	10	22
5.	Dhielo Majra	8	5	13
6.	Dhurali	17	10	27
7.	Dukheri	54	29	83
8.	Dangdheri	12	9	21
9.	Fharoli	10	11	21
10.	Ghagru	8	4	12
11.	Garnala	13	9	22
12.	Jaipura	10	6	16
13.	Jansui	16	12	28
14.	Kaleheri	36	16	52
15.	Khera	12	10	22
16.	Kaunli	38	13	51
17.	Kaunla	32	14	46
18.	Kurbanpur	9	6	15
19.	Lakhnor Sahib	15	6	21
20.	Lautan	8	6	14
21.	Matheri Shekon	19	21	31
22.	Mehlan	12	8	20
23.	Miya Majra	15	11	26
24.	Nadiali	13	10	23
25.	Nasirpur	10	12	22
26.	Niharsa	11	7	18
27.	Panjola	11	8	19
28.	Rampur Sirsaheri	24	28	62
29.	Sonda	19	15	34
30.	Saunta	18	12	30
31.	Sultanpur	30	23	53
	Total	552	361	913

10. If yes, what are the different ways in which parents can help the school in this regard?

	Block 1	Block 2	Block 3	Total
Contributing labour	23 60%	31 40%	33 26%	28 46%
Contributing money	24 87%	18 02%	37 61%	25 62%
Supervise	8 04%	8 60%	4 13%	7 28%
Advice	43 49%	41 98%	25 00%	38 64%

1. Are you a member of the Parent-Teacher Association in the school?

	Block 1	Block 2	Block 3	Total
Yes	35.38%	23.17%	10.98%	25.62%
No	64.62%	76.83%	89.02%	74.38%

2. If yes, has the association ever discussed how to promote sanitation in the school?

	Block 1	Block 2	Block 3	Total
Yes	53.25%	54.66%	46.30%	52.97%
No	46.75%	45.34%	53.70%	47.03%

3. If yes, in what sanitation activities were you involved?

	Block 1	Block 2	Block 3	Total
Personal hygiene	19.19%	44.32%	0.00%	24.16%
Food sanitation	26.16%	21.59%	0.00%	21.48%
Cleaning school compound	30.81%	14.77%	40.00%	25.50%
Personal hygiene and food sanitation	23.84%	19.32%	60.00%	28.86%

4. Do you ever talk to your child about the activities in the school?

	Block 1	Block 2	Block 3	Total
Yes	58.60%	69.21%	34.76%	56.52%
No	41.40%	30.79%	65.24%	43.48%

5. Did you ever participate in any activity for cleaning up the village?

	Block 1	Block 2	Block 3	Total
Yes	16.76%	18.56%	11.99%	16.24%
No	83.24%	81.44%	88.01%	83.76%

6. If yes, was the school involved in this activity?

	Block 1	Block 2	Block 3	Total
Yes	30.07%	51.16%	0.00%	32.84%
No	69.93%	48.84%	100.00%	67.16%

7. Do you think children should be taught hygiene practices in school?

	Block 1	Block 2	Block 3	Total
Yes	100.00%	100.00%	97.97%	99.52%
No	0.00%	0.00%	2.03%	0.48%

8. If yes, what facilities should the school have to ensure that the children practice what they are taught?

	Block 1	Block 2	Block 3	Total
Water	19.82%	16.86%	4.15%	15.99%
Latrine	2.30%	3.17%	2.07%	2.66%
Books	12.05%	12.39%	9.34%	12.12%
Soap, oil, comb	29.57%	27.81%	39.83%	32.93%
Dust bin	0.00%	0.00%	0.00%	0.00%
Mats	11.17%	10.81%	8.09%	10.86%
Latrine and water	8.98%	8.65%	14.32%	10.61%
Sports equipment	5.37%	2.31%	0.00%	3.27%
Don't know	7.34%	18.01%	22.20%	11.56%

9. Do you think parents have a role in establishing and maintaining this infrastructure?

	Block 1	Block 2	Block 3	Total
Yes	85.87%	87.05%	90.87%	87.00%
No	14.13%	12.95%	9.13%	13.00%
Don't know	0.00%	0.00%	0.00%	0.00%

61. If yes, why?

	Block 1	Block 2	Block 3	Total
Feet get dirty	55.51%	60.42%	54.98%	55.57%
Look bad	5.78%	1.95%	4.15%	4.05%
Hookworm	6.56%	2.55%	1.87%	4.05%
Injury to feet	24.69%	29.54%	39.00%	28.90%
Diseases	4.89%	1.50%	0.00%	2.57%
Injury and dirt	2.56%	4.05%	0.00%	4.86%

62. How often do you use footwear?

	Block 1	Block 2	Block 3	Total
All the time	57.17%	66.91%	57.52%	60.48%
When going out for social events	12.16%	7.77%	12.40%	10.76%
When going to fields	4.38%	4.17%	3.25%	4.05%
When going for defecation	7.45%	4.89%	5.89%	6.24%
Sometimes	18.84%	16.26%	20.93%	18.48%

63. How often do you wash your hands?

	Block 1	Block 2	Block 3	Total
Very often	84.99%	95.68%	87.60%	89.14%
Rarely	15.01%	4.32%	12.40%	10.86%

64. What are the activities with which you relate your hand washing?

	Block 1	Block 2	Block 3	Total
Before eating	18.29%	15.40%	7.54%	14.81%
After eating	1.75%	3.31%	5.70%	3.19%
After defecation	8.87%	9.93%	8.55%	9.14%
Before eating & after defecation	32.53%	19.14%	24.64%	26.24%
After returning from fields	3.94%	1.87%	5.30%	3.57%
Before & after eating & defecation	14.90%	25.04%	14.66%	18.19%
Before and after eating	9.53%	15.40%	15.48%	12.86%
Whenever hands get dirty	7.67%	7.77%	14.26%	9.24%
After all activities	2.52%	2.16%	3.87%	2.76%

65. With what do you wash your hands?

	Block 1	Block 2	Block 3	Total
With soap	59.26%	56.98%	32.11%	52.14%
With Ash	3.72%	2.16%	10.16%	4.71%
With Mud	1.97%	8.63%	7.11%	5.38%
With Mud / Ash / Soap	10.95%	7.77%	11.99%	10.14%
Only water	10.62%	8.78%	11.79%	10.29%
Mud / Only water	13.47%	15.68%	26.83%	17.33%

66. Why is it important to wash hands regularly?

	Block 1	Block 2	Block 3	Total
Removes dirt	71.41%	69.35%	65.65%	69.38%
Looks clean	18.18%	21.15%	16.67%	18.81%
Keeps food clean	7.12%	7.34%	14.63%	8.95%
Prevent contamination of food and water	1.97%	1.44%	0.41%	1.43%
Cleans and removes dirt	0.55%	0.29%	0.00%	0.33%
Don't know	0.77%	0.43%	2.64%	1.10%

53 Do you have infants and children at home, less than 5 years old? .

	Block 1	Block 2	Block 3	Total
Yes	52.57%	49.93%	33.33%	47.19%
No	47.43%	50.07%	66.67%	52.81%

54. Many parents allow their children, (below five years), to defecate in the courtyard or immediately outside the house or on the streets. Also, many times infants' excreta is left unattended in this house for a long time. Where do you dispose of your ch

	Block 1	Block 2	Block 3	Total
In a latrine	7.08%	4.03%	4.27%	5.55%
In the fields	29.38%	10.95%	24.39%	22.10%
Near pond / river bank	0.63%	0.29%	3.05%	0.91%
In a garbage dump	41.46%	67.44%	50.61%	52.07%
In the streets	4.79%	4.90%	6.71%	5.15%
Drain	8.75%	8.93%	4.88%	8.17%
Courtyard	7.92%	3.46%	6.10%	6.05%

55. Do you wash your hands after disposing of excreta of your child?

	Block 1	Block 2	Block 3	Total
Yes	85.42%	95.10%	87.80%	89.20%
No	14.58%	4.90%	12.20%	10.80%

56. If yes, with what?

	Block 1	Block 2	Block 3	Total
Soap	16.10%	10.00%	13.89%	13.46%
Mud	16.10%	14.24%	18.06%	15.72%
Only water	46.59%	51.82%	36.11%	51.92%
Mud and ash	21.22%	15.45%	31.94%	18.89%

57. What is the best way of disposing of excreta of infants and children?

	Block 1	Block 2	Block 3	Total
In a latrine	36.69%	20.29%	10.98%	25.24%
In the fields	28.26%	35.11%	57.11%	37.29%
Near pond / river bank	0.11%	0.29%	0.00%	0.14%
In a garbage dump	15.88%	27.34%	0.00%	15.95%
In the streets	3.29%	5.18%	7.11%	4.81%
Drain	3.18%	1.01%	6.91%	3.33%
Courtyard	10.08%	10.07%	16.06%	11.48%
Pit	2.52%	0.72%	1.83%	1.76%

58. Do you think the exposed excreta of these infants / children is harmful to health?

	Block 1	Block 2	Block 3	Total
Yes	84.88%	88.49%	92.48%	87.86%
No	5.70%	3.60%	1.02%	3.90%
Don't know	9.42%	7.91%	6.50%	8.24%

59. Who maintains the latrine in your home?

	Block 1	Block 2	Block 3	Total
Women	22.02%	43.59%	100.00%	37.20%
Sweeper	3.67%	12.82%	0.00%	5.49%
All	45.87%	23.08%	0.00%	35.98%
No one	28.44%	10.26%	0.00%	21.34%

60. We often find adults and children in the villages walking around without footwear, even in areas where people defecate. Does walking around without footwear cause any problems?

	Block 1	Block 2	Block 3	Total
Yes	98.47%	95.97%	97.97%	97.52%
No	1.53%	4.03%	2.03%	2.48%

46. Do you have latrine in your home?

	Block 1	Block 2	Block 3	Total
Yes	20.70%	9.00%	7.30%	13.70%
No	79.30%	91.00%	92.70%	86.30%

47. Do you use the latrine?

	Block 1	Block 2	Block 3	Total
Yes	54.50%	61.90%	61.10%	56.90%
No	45.00%	38.10%	38.90%	43.10%

48. (For those who have a latrine but do not use it) Why don't you use the latrine in your home?

	Block 1	Block 2	Block 3	Total
Because of its smaller size	9.30%	4.00%	35.70%	11.30%
Because of foul smell	11.60%	33.00%	14.30%	16.10%
Fear of falling	1.20%	8.00%	28.60%	5.60%
Shy of using it	8.10%	4.00%	0.00%	6.40%
No water	2.30%	4.00%	0.00%	2.40%
Like open spaces	34.90%	13.00%	0.00%	26.60%
Only women use it	14.00%	21.00%	0.00%	13.70%
Not functional.	18.60%	13.00%	21.40%	17.70%

49. (For those who have a latrine and are using it) Why do you like using the latrine and not defecate in the open like some of your neighbours?

	Block 1	Block 2	Block 3	Total
Convenient in all seasons	62.10%	44.00%	27.00%	53.00%
Privacy	3.90%	18.00%	23.00%	9.80%
Hygienic	16.50%	18.00%	14.00%	16.50%
Protects from snake and insects bite	3.90%	8.00%	9.00%	5.50%
Convenient and safe	13.60%	13.00%	18.00%	14.00%

50. What according to you is the best way of disposal of human excreta?

	Block 1	Block 2	Block 3	Total
In a latrine	47.21%	33.24%	27.44%	37.95%
In the fields	47.54%	62.01%	70.33%	57.67%
Near pond / river bank	1.97%	1.29%	0.00%	1.29%
In a garbage dump	1.75%	0.72%	0.00%	1.00%
In the streets	0.11%	0.72%	0.20%	0.33%
Pit	0.99%	0.14%	0.00%	0.48%
Fields and pit	0.44%	1.87%	2.03%	1.29%

51. Many people as also children defecate indiscriminately in and around the village. Do you think the exposed excreta is harmful to health?

	Block 1	Block 2	Block 3	Total
Yes	86.75%	86.19%	84.96%	86.14%
No	3.94%	5.32%	11.99%	6.29%
Don't know	9.31%	8.49%	3.05%	7.57%

52. If yes, why?

	Block 1	Block 2	Block 3	Total
Spreads diseases	55.56%	44.74%	39.00%	48.15%
Smells foul	27.15%	27.55%	25.84%	26.98%
Looks dirty	8.21%	13.19%	12.92%	10.95%
Attracts flies and other insects	5.68%	10.35%	16.99%	11.28%
Disease and bad smell	1.89%	1.34%	0.48%	1.38%
Inconvenient	1.52%	2.84%	4.78%	1.27%

38. Do you keep cooked food always covered?

	Block 1	Block 2	Block 3	Total
Yes	99.78%	99.42%	95.33%	98.62%
No	0.22%	0.58%	4.67%	1.38%

39. If yes, why?

	Block 1	Block 2	Block 3	Total
Flies sit on it	69.15%	63.53%	54.67%	64.61%
dirt / dust falls on it	19.10%	25.90%	32.72%	24.82%
Animals / pets / rodents can eat it and contaminate it	3.51%	4.05%	4.07%	3.86%
Germs	2.31%	4.34%	1.02%	2.70%
Flies and rats	5.82%	1.16%	0.81%	3.14%
Don't know.	0.11%	1.01%	6.71%	0.87%

40. Do you wash fruits and raw vegetables before cooking / eating them?

	Block 1	Block 2	Block 3	Total
Yes	97.48%	97.70%	96.34%	97.29%
No	2.52%	2.30%	3.66%	2.71%

41. If yes, why?

	Block 1	Block 2	Block 3	Total
To remove dirt	55.32%	64.51%	75.74%	62.79%
To remove germs	30.80%	33.43%	14.56%	27.77%
Insecticides	6.27%	1.18%	4.22%	4.09%
Dirt and germs	5.04%	0.88%	3.59%	3.31%
Looks clean	2.58%	0.00%	1.90%	2.04%

42. Is there a smokeless chulah in your home?

	Block 1	Block 2	Block 3	Total
Yes	20.81%	12.37%	15.04%	16.67%
No	79.19%	87.63%	84.96%	83.33%

43. What happens when smoke from a traditional chulha fills the house?

	Block 1	Block 2	Block 3	Total
It irritates the eyes	40.64%	37.84%	28.86%	36.95%
It creates coughing	34.28%	34.68%	33.54%	34.24%
It helps in contracting respiratory diseases	14.46%	20.72%	19.72%	17.76%
Eye diseases	4.49%	1.15%	2.85%	3.00%
Breathing problem	0.22%	1.29%	0.00%	0.52%
Eye diseases and breathing problems	2.85%	2.01%	2.64%	2.52%
Don't know	3.07%	0.00%	12.40%	5.00%

44. Why don't you install a smokeless chulha in your house?

	Block 1	Block 2	Block 3	Total
No information	51.73%	59.93%	62.44%	57.14%
Requires more fuel wood for cooking	10.93%	8.21%	12.92%	10.46%
Have gas stove	8.71%	4.11%	1.44%	5.37%
Had installed one but did not function well	14.52%	17.90%	5.98%	13.66%
Takes longer time	13.83%	9.85%	17.22%	13.37%

45. Where do you go for defecation?

	Block 1	Block 2	Block 3	Total
In a latrine	13.25%	10.22%	3.66%	10.00%
In the fields	84.56%	85.90%	89.23%	86.10%
Near a pond / river bank	1.42%	0.29%	0.00%	0.71%
In the street	0.11%	3.02%	4.27%	2.05%
On the railway tracks	0.66%	0.58%	0.00%	0.48%
Garbage dump	0.00%	0.00%	2.85%	0.67%

32. What are the problems which are caused if garbage is not disposed of properly?

	Block 1	Block 2	Block 3	Total
It breeds flies	26.51%	34.68%	41.46%	32.71%
Mosquitoes	39.54%	39.71%	32.93%	38.05%
It smells foul	22.23%	15.68%	14.23%	18.19%
Inconvenience	2.30%	1.29%	2.44%	2.00%
It attracts rats and other insects	1.97%	2.16%	0.61%	1.71%
Bad smell and inconvenience	1.53%	3.17%	1.83%	2.14%
Disease	2.85%	1.29%	1.22%	1.95%
Disease and bad smell	3.07%	2.01%	5.28%	3.24%

33. Do you think that garbage heaps can spread disease?

	Block 1	Block 2	Block 3	Total
Yes	93.32%	94.82%	91.87%	93.48%
No	4.05%	2.73%	3.46%	3.48%
Don't know.	2.63%	2.45%	4.67%	3.05%

34. (For parents who think that garbage can spread diseases) Name the diseases that spread due to garbage?

	Block 1	Block 2	Block 3	Total
Cholera	28.40%	20.18%	6.19%	20.53%
Jaundice	0.23%	0.30%	0.44%	0.31%
Plague	5.16%	1.67%	5.53%	4.08%
Tetanus	4.11%	0.91%	0.22%	2.14%
Malaria	23.47%	18.36%	3.54%	17.17%
Diarrhoea	17.61%	37.78%	12.39%	23.18%
Don't know	21.01%	20.79%	71.68%	32.60%

35. What is the best way of disposing garbage?

	Block 1	Block 2	Block 3	Total
In the dustbin	15.44%	15.11%	5.08%	12.90%
In a garbage pit	23.77%	24.60%	4.47%	19.52%
In the streets	0.66%	0.14%	0.61%	0.48%
In a garbage dump	40.96%	32.37%	59.96%	42.57%
In a compost pit	16.21%	27.05%	26.63%	22.24%
Fields	1.42%	0.14%	0.00%	0.67%
Don't know	1.53%	0.58%	3.25%	1.62%

36. How often do you clean your house?

	Block 1	Block 2	Block 3	Total
Daily	71.30%	80.86%	75.41%	75.43%
Twice daily	25.85%	17.70%	20.53%	21.90%
Weekly	1.75%	0.72%	0.00%	1.00%
Monthly	0.00%	0.00%	0.00%	0.00%
Sometimes	0.22%	0.00%	1.22%	0.38%
Whenever gets dirty.	0.88%	0.72%	2.85%	1.29%

37. Why is it important to clean the house regularly?

	Block 1	Block 2	Block 3	Total
To keep it clean and free from dirt / dust	30.67%	42.45%	51.42%	39.43%
To keep it free from insects / pests / rodents	10.08%	4.32%	10.37%	8.24%
Clean surroundings improve health	21.91%	17.70%	6.91%	17.00%
Looks nice	31.87%	33.53%	25.61%	30.95%
Germ	0.77%	0.72%	0.00%	0.57%
Don't know	4.71%	1.29%	5.69%	3.81%

25. For those who think dung leads to spread of diseases :Name the disease which spreads from dung? Name of disease

	Block 1	Block 2	Block 3	Total
Malaria	17.52%	25.12%	11.93%	19.00%
Jaundice	0.28%	0.16%	0.00%	0.17%
Cholera	8.76%	5.76%	14.97%	9.10%
Diarrhoea	0.83%	2.08%	1.02%	1.32%
Polio	0.00%	0.00%	0.00%	0.00%
Measles	4.87%	2.08%	10.66%	5.18%
Plague	0.42%	0.32%	4.31%	1.27%
Tetanus	6.54%	12.48%	14.72%	10.54%
Dysentery	0.14%	0.32%	0.00%	0.17%
Don't know	50.21%	48.64%	36.04%	46.46%
Asthma	8.62%	2.72%	6.35%	6.04%
Others	1.81%	0.32%	0.00%	0.75%

26. What is the best way to dispose of dung?

	Block 1	Block 2	Block 3	Total
Garbage dump	41.62%	43.31%	25.61%	38.43%
Field	13.47%	10.65%	7.32%	11.10%
Garbage pit	2.41%	2.45%	3.86%	2.76%
Compost pit	13.47%	21.73%	3.66%	13.90%
Bio gas plant	3.61%	1.58%	0.61%	2.24%
Dung cakes	24.32%	19.86%	54.88%	30.00%
Don't know.	1.10%	0.43%	4.07%	1.57%

27. What happens if garbage and cattle dung are covered with soil and left untouched for a long time?

	Block 1	Block 2	Block 3	Total
Turns into compost / manure	82.58%	85.47%	70.33%	80.67%
Nothing happens	3.83%	4.46%	12.40%	6.05%
Don't know.	13.58%	9.64%	17.28%	13.29%

28. Every day when you clean your house plenty of garbage is accumulated. Where do you throw this garbage?

	Block 1	Block 2	Block 3	Total
In a dustbin	15.66%	10.36%	2.24%	10.76%
In a garbage pit	15.66%	22.59%	11.38%	16.95%
Lane	4.27%	3.60%	11.99%	5.86%
In a garbage dump	44.36%	48.49%	61.59%	49.76%
Fields	17.31%	13.24%	9.35%	14.10%
In a Compost pit.	2.74%	1.73%	3.46%	2.57%

29. Do you own cattle?

	Block 1	Block 2	Block 3	Total
Yes	79.08%	94.53%	95.12%	88.05%
No	20.92%	5.47%	4.88%	11.95%

30. If yes, what do you do with the cattle dung?

	Block 1	Block 2	Block 3	Total
By disposing in the fields for use as a manure	15.88%	14.46%	3.21%	12.11%
By disposing in the garbage pit	0.97%	7.00%	1.71%	3.30%
Compost pit	1.39%	1.22%	1.50%	1.35%
Garbage dump	12.40%	18.11%	8.97%	13.52%
Dung cakes	67.13%	50.68%	74.15%	62.84%
Dung cakes and garbage dump	2.23%	8.52%	10.47%	6.87%

31. When do you remove dung?

	Block 1	Block 2	Block 3	Total
Whenever needed	24.10%	14.00%	17.52%	18.82%
Twice daily	52.08%	70.62%	69.02%	62.90%
After 10-15 days	1.39%	1.07%	0.00%	0.92%
After 6 months	2.49%	3.04%	0.00%	2.06%
Once daily	15.79%	7.31%	13.46%	12.11%
Weekly	4.16%	3.96%	0.00%	3.19%

19. As you are aware plenty of waste water is generated in every house from the bathing cubicle and the kitchen. What measures do you take to dispose of the waste water in your house? Let it flow :

	Block 1	Block 2	Block 3	Total
Onto the lane	20.48%	16.26%	21.75%	19.38%
Fields	8.43%	6.47%	10.57%	8.29%
In the kitchen garden	2.41%	1.87%	1.02%	1.90%
In a soakage pit	4.16%	5.04%	1.22%	3.76%
In a drain	59.04%	66.91%	59.76%	61.81%
Pond	5.48%	3.45%	5.69%	4.86%

20. What is the safest way to dispose of waste water generated at home?

	Block 1	Block 2	Block 3	Total
Into a kitchen garden	6.13%	4.17%	1.83%	4.48%
Into a fields	8.21%	9.35%	4.88%	7.81%
Into a pond	15.66%	11.51%	31.10%	17.90%
Into a drain	65.94%	74.68%	58.33%	67.05%
Soakage pit	2.30%	0.29%	3.05%	1.81%
Drain and pond	1.75%	0.00%	0.81%	0.95%

21. We find pools of water around houses and in the courtyard. What happens if this water is allowed to stagnate?

	Block 1	Block 2	Block 3	Total
Spreads diseases	44.03%	44.60%	37.20%	42.62%
Allows breeding of mosquitoes	36.80%	46.47%	45.93%	42.14%
Causes inconvenience	8.11%	3.02%	4.88%	5.67%
Smells	4.49%	4.32%	4.27%	4.38%
looks bad	4.71%	0.29%	2.03%	2.62%
Smell and disease	1.86%	1.29%	5.69%	2.57%

22. Name a disease which spreads due to stagnant water?

	Block 1	Block 2	Block 3	Total
Cholera	10.43%	9.51%	15.85%	11.38%
Dysentery	0.99%	0.86%	0.61%	0.86%
Measles	4.61%	4.18%	8.13%	5.29%
Malaria	55.21%	68.44%	32.11%	54.10%
TB	0.88%	0.43%	2.24%	1.05%
Plague	0.66%	0.14%	1.42%	0.81%
Polio	0.00%	0.29%	0.61%	0.24%
Cholera and dysentery	0.11%	0.00%	2.64%	0.67%
Jaundice	0.22%	0.72%	0.20%	0.38%
Diarrhoea	22.61%	14.84%	32.72%	22.38%
Tetanus	0.22%	0.00%	1.83%	0.52%
Malaria and Chloera	4.06%	0.58%	1.63%	2.33%

23. As you are aware, water from the drains overflows if garbage accumulates in the drains. How often do you clean the drains diverting the waste water from your house?

	Block 1	Block 2	Block 3	Total
Daily	53.23%	60.58%	57.32%	56.62%
Once in a week	12.27%	15.40%	4.07%	11.38%
Once in a month	2.63%	2.01%	0.00%	1.81%
When it clogs	14.57%	16.83%	16.26%	15.71%
Sometimes	17.31%	5.18%	22.36%	14.48%

24. Does cattle dung spread diseases?

	Block 1	Block 2	Block 3	Total
Yes	78.86%	89.64%	80.08%	82.71%
No.	15.99%	9.06%	14.63%	13.38%
NA	5.15%	1.29%	5.28%	3.90%

12. If yes, why?

	Block 1	Block 2	Block 3	Total
To prevent from dust	50.78%	52.79%	67.56%	55.37%
From children	6.10%	7.48%	4.34%	6.14%
Animals / birds	5.99%	4.40%	1.45%	4.40%
Germs	20.73%	11.14%	9.09%	14.85%
Flies and insects	15.52%	23.61%	14.05%	17.84%
Dust and insects	0.89%	0.59%	3.51%	1.40%

13. How do you take the water out from the vessel to drink?

	Block 1	Block 2	Block 3	Total
Pour it out	52.46%	66.91%	77.24%	63.05%
Dip a glass	27.93%	20.58%	20.93%	23.86%
Glass with handle	19.61%	12.52%	1.83%	13.10%

14. Do you think that due to our carelessness the safe water collected gets contaminated while carrying it home?

	Block 1	Block 2	Block 3	Total
Yes	85.87%	84.32%	51.42%	77.29%
No	13.36%	15.11%	44.51%	21.24%
Do not know.	0.77%	0.58%	4.07%	1.48%

15. If yes, then how?

	Block 1	Block 2	Block 3	Total
If the vessel is not clean	27.17%	31.74%	23.32%	28.22%
Through dirty hands	25.64%	23.04%	32.81%	25.82%
Dust falls in it	33.04%	37.37%	16.21%	31.98%
By germs in the air	5.99%	3.75%	3.95%	4.87%
Flies and insects	2.30%	2.73%	13.04%	4.13%
Don't know.	5.87%	1.37%	10.67%	4.93%

16. Do you think that by drinking unsafe / impure water we can get diseased?

	Block 1	Block 2	Block 3	Total
Yes	98.47%	98.27%	91.26%	96.71%
No	1.53%	1.73%	8.74%	3.29%

17. If yes then name the disease?

	Block 1	Block 2	Block 3	Total
TB	2.25%	6.00%	15.14%	6.35%
Jaundice	6.09%	4.54%	4.45%	5.17%
Cholera	37.66%	37.48%	16.26%	32.64%
Diarrhoea	8.68%	7.47%	4.01%	7.19%
Polio	2.14%	1.02%	1.56%	1.62%
Plague	0.56%	1.32%	6.90%	2.22%
Measles	1.47%	0.88%	9.35%	3.00%
Tetanus	0.90%	0.29%	2.90%	1.13%
Diarrhoea and Jaundice	8.12%	4.98%	2.45%	5.76%
Cholera and Diarrhoea	6.76%	7.61%	5.35%	6.70%
Malaria	13.08%	10.10%	8.24%	10.93%
Don't know	12.29%	18.30%	23.39%	17.28%

18. Do you think that if waste water is not disposed of safely it leads to spread of diseases?

	Block 1	Block 2	Block 3	Total
Yes	97.70%	98.71%	97.76%	98.05%
No	2.30%	1.29%	2.24%	1.95%

6. How often do you clean the vessel used for collecting drinking water?

	Block 1	Block 2	Block 3	Total
Before filling it	64.73%	70.50%	78.86%	69.95%
Once daily	31.98%	27.48%	15.65%	26.67%
Weekly	0.77%	0.43%	0.41%	0.57%
Monthly	1.20%	0.00%	2.44%	1.10%
Sometimes	1.31%	1.58%	2.64%	1.71%

7. What do you use to clean your vessel?

	Block 1	Block 2	Block 3	Total
Mud	12.16%	15.68%	25.41%	16.43%
Ash	4.60%	6.62%	9.76%	6.48%
Soap	15.01%	9.35%	13.01%	12.67%
Only water	67.14%	67.34%	49.59%	63.10%
Others	0.77%	0.00%	0.00%	0.33%

8. Do you always keep the vessel covered while carrying the water from the source to your house?

	Block 1	Block 2	Block 3	Total
Yes	45.78%	38.27%	9.55%	34.81%
No.	54.22%	61.73%	90.45%	65.19%

9. If yes, why?

	Block 1	Block 2	Block 3	Total
Dust falls in it	49.76%	57.14%	38.30%	51.71%
Flies / insects fall in it	37.32%	34.96%	53.19%	37.48%
Germs	6.46%	5.26%	0.00%	5.61%
Dust/ dirt/ flies/ insects	1.91%	0.75%	0.00%	1.37%
Don't know	4.55%	1.88%	8.51%	3.83%

10. Where do you keep the water at home?

	Block 1	Block 2	Block 3	Total
Above the ground level	22.56%	20.00%	18.70%	20.81%
On a tripod	21.47%	19.86%	7.32%	17.62%
On a Shelf	6.90%	6.76%	3.25%	6.00%
On a table	4.27%	2.16%	3.46%	3.38%
On the ground	42.72%	48.78%	67.07%	50.43%
Water tank	1.86%	0.72%	0.00%	1.05%
Don't store.	0.22%	1.73%	0.20%	0.71%

11. Do you keep it covered?

	Block 1	Block 2	Block 3	Total
Yes	98.80%	98.13%	98.37%	98.48%
No.	1.20%	1.87%	1.63%	1.52%

Annexure VII B

Responses of parents

1. There are many sources of water in your village. Where do you collect your drinking water from?

	Block 1	Block 2	Block 3	Total
Handpump	34.39%	35.68%	53.46%	39.29%
Open dugwell	5.37%	9.21%	5.69%	6.71%
Stream	0.00%	0.00%	0.00%	0.00%
River	0.00%	0.00%	0.00%	0.00%
Pond	0.00%	0.00%	0.00%	0.00%
Tap	57.72%	54.39%	40.85%	52.62%
Covered well	0.00%	0.00%	0.00%	0.00%
Others	2.52%	0.72%	0.00%	1.38%

2. As you are aware not all the sources provide water which is safe for cooking and drinking. Do you think the source which you are using provides you with safe water?

	Block 1	Block 2	Block 3	Total
Yes	87.62%	85.61%	89.43%	87.38%
No.	12.38%	14.39%	10.57%	12.62%

3. Why do you take water from this source?

	Block 1	Block 2	Block 3	Total
Looks clean	26.07%	34.39%	31.10%	30.00%
Available throughout the day	14.46%	21.15%	5.08%	14.48%
Sweet	20.48%	14.53%	19.72%	18.33%
Cooks food well	25.08%	23.45%	35.77%	27.05%
Free from germs	3.18%	1.01%	3.66%	2.57%
Free from germs and sweet	8.54%	4.32%	3.25%	5.90%
Looks clean and sweet	2.19%	1.15%	1.42%	1.67%

4. If the source is not safe, what measures do you take at home to make it safe?

	Block 1	Block 2	Block 3	Total
Boiling	20.92%	20.99%	32.32%	23.71%
Chlorinating	7.89%	7.38%	1.02%	6.14%
Boiling and Filtering	8.43%	5.55%	9.35%	8.19%
Filtering	13.69%	13.05%	23.78%	15.90%
Don't know	49.07%	51.63%	33.54%	46.05%

4a) In your opinion what are safe sources of water?

	Block 1	Block 2	Block 3	Total
Handpump	39.87%	43.45%	67.89%	47.62%
Open Dugwell	3.07%	4.75%	5.28%	4.14%
Pond	0.00%	0.00%	0.00%	0.00%
Stream	0.00%	0.00%	0.00%	0.00%
Tap	54.00%	48.92%	28.42%	45.88%
Covered well / tube well	0.33%	1.73%	0.00%	0.71%
Tap and handpump	2.74%	0.00%	0.41%	1.67%

5. What do you think should be the attributes of safe water?

	Block 1	Block 2	Block 3	Total
Looks clean	35.27%	33.38%	43.90%	36.67%
Tastes sweet	23.11%	26.04%	28.05%	25.24%
Is free from germs	22.12%	14.53%	9.76%	16.71%
Free from germs and tastes sweet	12.38%	13.67%	14.02%	13.19%
Cooks food well	2.19%	4.60%	0.41%	2.57%
Cooks well + sweet	0.77%	2.45%	3.86%	2.05%
Cooks well and looks clean	1.31%	0.00%	0.00%	0.57%
Flowing water	1.31%	0.43%	0.00%	0.71%
Free from germs and cooks well	1.53%	4.89%	0.00%	2.29%

7 General

- 1 Are you a member of the Parent-Teacher Association in the school?
Yes / No
- 2 If yes, has the association ever discussed how to promote sanitation in the school?
Yes / No
- 3 If yes, in what sanitation activities were you involved?
Specify
- 4 Do you ever talk to your child about the activities in the school?
Yes / No
- 5 Did you ever participate in any activity for cleaning up the village?
Yes / No
- 6 If yes, was the school involved in this activity?
Yes / No
- 7 Do you think children should be taught hygiene practices in school?
Yes / No
- 8 If yes, what facilities should the school have to ensure that the children practice what they are taught?
Specify
- 9 Do you think parents have a role in establishing and maintaining this infrastructure?
Yes / No
- 10 If yes, what are the different ways in which parents can help the school in this regard?
• Contributing labour • Contributing money • Supervise • Advice

28.If yes then how?

	Block 1	Block 2	Block 3	Total
Spreads flies	22.28%	12.16%	8.99%	14.59%
Spreads disease	12.35%	13.18%	6.74%	10.33%
Smells bad	26.15%	38.18%	38.20%	29.28%
Spreads mosquitoes	29.30%	19.93%	25.28%	22.80%
Looks bad	4.84%	3.72%	3.93%	3.85%
Don't know	5.08%	12.84%	16.85%	19.15%

29.How should the dung be disposed of according to you?

	Block 1	Block 2	Block 3	Total
Dung cakes	23.62%	11.43%	10.86%	16.68%
Garbage / Dung dumps	18.45%	19.52%	26.22%	20.50%
In the fields	23.80%	27.62%	26.97%	25.79%
In a bio-gas plant	3.87%	2.14%	0.00%	2.44%
Dung cakes / fields	17.34%	19.52%	22.10%	19.93%
Compose pit	9.59%	10.71%	5.62%	9.11%
Don't know.	3.32%	9.05%	8.24%	5.53%

30.Do you purchase food stuffs from the vendors outside your school?

	Block 1	Block 2	Block 3	Total
Yes	75.82%	78.49%	75.68%	13.83%
No	24.18%	21.51%	24.32%	4.15%

31.Does the vendor keep the food stuffs covered?

	Block 1	Block 2	Block 3	Total
Yes	32.97%	24.73%	18.92%	4.48%
No	67.03%	75.27%	81.08%	13.51%

32.What happens to food left uncovered?

	Block 1	Block 2	Block 3	Total
Flies sit on it	30.25%	23.66%	25.09%	26.93%
Dust falls	59.42%	62.44%	49.06%	58.18%
Rats & animals eat	5.43%	4.39%	8.99%	5.86%
Others	2.72%	4.88%	4.87%	3.91%
Don't know.	2.17%	4.63%	11.99%	5.13%

33.Do you wash fruits / vegetables before eating?

	Block 1	Block 2	Block 3	Total
Yes	63.04%	57.56%	58.43%	60.21%
No.	36.96%	42.44%	41.57%	39.79%

34.If yes, then only

	Block 1	Block 2	Block 3	Total
Removes dirt / mud	66.95%	61.86%	69.87%	65.95%
Removes germs	22.99%	24.58%	17.31%	22.30%
Don't know	10.06%	13.56%	12.82%	11.76%
Any other	0.00%	0.00%	0.00%	0.00%

35.How often do you clean your teeth?

	Block 1	Block 2	Block 3	Total
Daily in the morning	40.04%	29.27%	19.10%	31.90%
Before going to bed	3.62%	3.17%	3.37%	3.42%
In the morning & before going to sleep	5.43%	9.02%	7.87%	7.16%
Sometimes	38.59%	33.66%	39.33%	37.10%
Do not clean	12.32%	24.88%	30.34%	20.42%

36. With what do you clean your teeth?

	Block 1	Block 2	Block 3	Total
Chewing stick	37.14%	36.10%	37.08%	36.78%
Charcoal	0.00%	4.88%	3.75%	2.44%
Salt & Oil	3.44%	3.41%	3.37%	3.42%
Paste/ Powder	32.97%	33.17%	29.96%	32.38%
Only water	26.45%	22.44%	25.84%	24.98%
Any other	0.00%	0.00%	0.00%	0.00%

37A. How often do you bathe? In Summers

	Block 1	Block 2	Block 3	Total
- Once daily-	56.88%	58.54%	62.92%	58.75%
Twice daily	32.25%	30.73%	22.85%	29.70%
Weekly	2.90%	2.93%	5.24%	3.42%
- Sometimes-	7.97%	7.80%	8.99%	8.14%

37B. How often do you bathe? In Winters

	Block 1	Block 2	Block 3	Total
Once daily	28.26%	31.22%	32.96%	30.27%
Twice daily	10.87%	13.41%	8.99%	11.31%
Weekly	38.77%	25.61%	22.85%	30.92%
Sometimes	22.10%	29.76%	35.21%	27.50%

38. Where do you bathe?

	Block 1	Block 2	Block 3	Total
In the courtyard	26.81%	29.76%	19.48%	26.20%
Bathroom	19.02%	21.46%	21.72%	20.42%
Near community handpump / tap	44.38%	37.32%	43.82%	41.90%
Near well	7.25%	8.54%	10.49%	8.38%
Pond	2.54%	2.93%	4.49%	3.09%

39. With what do you clean your body?

	Block 1	Block 2	Block 3	Total
Soap	36.78%	45.85%	54.68%	43.69%
Only water	63.22%	54.15%	45.32%	56.31%

40. Can bathing in a dirty pond / stream water lead to spread of disease?

	Block 1	Block 2	Block 3	Total
Yes	88.77%	85.61%	84.27%	88.17%
No	3.99%	6.34%	5.24%	3.47%
Don't know.	7.25%	8.05%	10.49%	8.35%

41. Do you wear shoes?

	Block 1	Block 2	Block 3	Total
Always/ mostly	32.25%	33.17%	23.97%	30.76%
Never/ rarely	5.98%	12.68%	13.11%	9.76%
Sometimes	61.78%	54.15%	62.92%	59.48%

42. If yes, then why?

	Block 1	Block 2	Block 3	Total
Feet become dirty	40.94%	40.98%	44.19%	41.66%
To stop spread of disease	9.24%	10.24%	8.24%	9.36%
Feet are safe from injury	38.77%	39.27%	35.58%	38.24%
Prestige	9.60%	8.54%	11.99%	9.76%
specify	1.45%	0.98%	0.00%	0.98%
Don't know	0.00%	0.00%	0.00%	0.00%

43. When do you wear shoes?

	Block 1	Block 2	Block 3	Total
Always	34.42%	32.93%	30.34%	33.03%
While going for outing	11.59%	11.71%	9.74%	11.23%
While going to school	37.86%	37.07%	30.71%	36.05%
While going to fields for defecation	11.78%	7.07%	5.24%	8.79%
Going to school & outings	4.35%	11.22%	23.97%	10.90%

44. Do you think that we should cut our nails short?

	Block 1	Block 2	Block 3	Total
Yes	96.38%	93.90%	94.38%	95.12%
No	3.62%	6.10%	5.62%	4.88%

45. Why should we cut the nails short?

	Block 1	Block 2	Block 3	Total
To keep hands clean	19.55%	15.58%	36.90%	22.16%
Dirt accumulates under long nails	51.88%	57.14%	40.08%	50.69%
Spreads disease.	28.57%	27.27%	23.02%	27.16%

46. When do you cut nails?

	Block 1	Block 2	Block 3	Total
Weekly	13.77%	10.73%	9.74%	11.88%
Once a month	5.25%	5.12%	6.37%	5.45%
Sometimes	39.86%	39.27%	46.07%	41.01%
Whenever they grow long.	41.12%	44.88%	37.83%	41.66%

47. How often do you wash hands?

	Block 1	Block 2	Block 3	Total
Very often / always	46.20%	38.29%	40.45%	42.31%
Sometimes	41.67%	48.29%	49.06%	45.48%
Rarely	12.14%	13.41%	10.49%	12.21%

48. When do you wash hands? Before eating food

	Block 1	Block 2	Block 3	Total
After eating food	40.94%	39.51%	40.82%	40.44%
After defecation	5.80%	6.83%	6.37%	6.27%
Before eating & after defecation	15.40%	14.63%	15.36%	15.13%
After coming from fields play	20.47%	20.00%	18.73%	19.93%
Before & after eating food	4.71%	5.37%	3.75%	4.72%
	5.07%	6.10%	5.62%	5.53%
After all these activities	7.61%	7.56%	9.36%	7.97%

49. With what do you wash your hands?

	Block 1	Block 2	Block 3	Total
Soap	40.94%	39.51%	38.95%	40.03%
Ash	5.25%	4.88%	5.24%	5.13%
Mud	15.94%	19.27%	19.48%	17.82%
Only water	34.78%	29.51%	28.09%	31.57%
Ash & Mud	3.08%	6.83%	8.24%	5.45%

50. When do you wash your hair?

	Block 1	Block 2	Block 3	Total
Daily	35.87%	34.15%	33.71%	34.83%
Weekly	27.36%	27.32%	25.47%	26.93%
Once a month	9.60%	8.54%	8.24%	8.95%
Sometimes	27.17%	30.00%	32.58%	29.29%

51. With what do you wash your hair?

	Block 1	Block 2	Block 3	Total
Soap	39.49%	37.32%	31.84%	37.10%
Only water	50.72%	47.80%	50.56%	49.72%
Any other / specify	9.78%	14.88%	17.60%	13.18%

52. Do we keep good health if we adopt hygienic habits?

	Block 1	Block 2	Block 3	Total
Yes	74.64%	65.37%	67.04%	69.89%
No	0.00%	0.00%	0.00%	0.00%
Don't know	25.36%	34.63%	32.96%	30.11%

53. Do your parents visit your school to meet teachers?

	Block 1	Block 2	Block 3	Total
Yes	48.37%	48.78%	38.20%	46.30%
No.	51.63%	51.22%	61.80%	53.70%

54. Do the teachers talk about / discuss sanitation issues in the school?

	Block 1	Block 2	Block 3	Total
Yes	79.35%	71.71%	60.67%	72.74%
No.	20.65%	28.29%	39.33%	27.26%

55. If yes then what issues are discussed?

	Block 1	Block 2	Block 3	Total
Personal hygiene	31.51%	26.19%	0.00%	28.19%
Village sanitation	6.85%	3.40%	26.96%	4.47%
Cleaning of classrooms	21.69%	22.11%	4.35%	24.83%
Food sanitation	8.45%	8.50%	3.48%	8.05%
School Sanitation	7.31%	5.10%	19.57%	6.15%
School Sanitation and personal hygiene	24.20%	34.69%	0.00%	28.30%

56. Have you ever taken part in any sanitation programme?

	Block 1	Block 2	Block 3	Total
Yes	51.81%	44.39%	46.07%	48.09%
No	48.19%	55.61%	53.93%	51.91%

57. If yes then in which programme?

	Block 1	Block 2	Block 3	Total
Cleaning of classrooms	36.01%	51.10%	17.23%	40.95%
Cleaning of school compound	11.54%	9.89%	9.36%	12.86%
Cleaning of classroom & school compound	52.45%	39.01%	19.48%	46.19%

Annexure VI B

Responses of children studying in classes IV - V

1.If the drinking water get contaminated, it leads to spread of disease? Can you name them?

	Block 1	Block 2	Block 3	Total
Cholera	43.21%	35.56%	20.35%	34.79%
Diarrohea	8.03%	8.10%	3.54%	6.89%
Jaundice	7.76%	10.21%	6.19%	8.15%
Typhoid	0.83%	2.82%	2.65%	1.95%
Worms	2.22%	0.35%	0.44%	1.15%
Polio	5.26%	7.39%	6.19%	6.20%
Cancer	5.82%	2.11%	9.73%	5.63%
Plague	1.94%	1.41%	3.54%	2.18%
Measles	4.16%	4.23%	9.29%	5.51%
Other	8.03%	7.75%	13.72%	9.41%
Don't know	12.74%	20.07%	24.34%	18.14%

2.How do these diseases spread?

	Block 1	Block 2	Block 3	Total
By Air	18.01%	11.62%	20.35%	16.53%
By Hands	14.13%	11.62%	21.68%	15.27%
By Water	18.01%	17.61%	15.93%	17.34%
By Flies & Insects	35.46%	46.13%	18.58%	34.56%
Food does not get contaminated	9.97%	7.04%	4.87%	7.69%
Don't know.	4.43%	5.99%	18.58%	8.61%

3.What according to you is a safe source of drinking water?

	Block 1	Block 2	Block 3	Total
Handpump	39.06%	41.20%	61.95%	45.69%
Tap	51.52%	51.76%	36.73%	47.76%
Open dugwell	8.86%	4.23%	1.33%	5.40%
Stream/river	0.00%	0.00%	0.00%	0.00%
Tube-well	0.00%	0.00%	0.00%	0.00%
Covered well	0.55%	2.82%	0.00%	1.15%

4.If the water is not safe for drinking, them how can we make it safe?

	Block 1	Block 2	Block 3	Total
Boiling	49.58%	46.48%	45.58%	47.53%
Chlorinating	11.36%	13.73%	8.85%	11.48%
Boiling & Filtering	3.05%	3.52%	0.44%	2.53%
Filtering	26.59%	28.17%	32.74%	28.70%
Don't know.	9.42%	8.10%	12.39%	9.76%

5.Is water filtered / chlorinated / bolled in your homes?

	Block 1	Block 2	Block 3	Total
Yes	20.50%	22.18%	9.29%	18.14%
No.	79.50%	77.82%	90.71%	81.86%

6.Can the water get contaminated after collecting it from a safe source?

	Block 1	Block 2	Block 3	Total
Yes	54.29%	52.82%	45.13%	51.44%
No	45.71%	47.18%	54.87%	48.56%

7.If yes, then how?

	Block 1	Block 2	Block 3	Total
By dirty hands	28.57%	41.33%	48.04%	37.28%
By dirty glass	20.92%	20.67%	23.53%	21.43%
By not keeping the vessel covered	35.20%	24.00%	23.53%	28.79%
By children	4.59%	2.00%	0.98%	2.90%
Birds/animals	3.57%	3.33%	0.98%	2.90%
Don't know.	7.14%	8.67%	2.94%	6.70%

8.Do you have a vessel to keep drinking water in your school?

	Block 1	Block 2	Block 3	Total
Yes	37.12%	30.99%	14.16%	29.16%
No	62.88%	69.01%	85.84%	70.84%

9.If yes, then how do you take water from it?

	Block 1	Block 2	Block 3	Total
Pour it	28.36%	44.32%	53.13%	37.01%
Dip glass in vessel	23.88%	36.36%	18.75%	27.56%
Use glass with handle	47.76%	19.32%	28.13%	35.43%

10.If water collects and stagnates in the lanes then what will happen?

	Block 1	Block 2	Block 3	Total
Spread disease	39.61%	36.27%	44.25%	39.72%
Spread mosquitoes	42.11%	45.77%	38.94%	42.48%
Cause inconvenience	9.70%	3.87%	3.54%	6.20%
Smells bad	3.32%	5.28%	2.21%	3.67%
Looks bad	3.88%	8.80%	1.77%	4.94%
Don't know.	1.39%	0.00%	9.29%	2.99%

11.Does dirty stagnant water spread disease?

	Block 1	Block 2	Block 3	Total
Yes	98.34%	98.94%	92.48%	97.01%
No	1.66%	1.06%	7.52%	2.99%

12.Name any disease which spreads due to stagnant water?

	Block 1	Block 2	Block 3	Total
Malaria	63.94%	63.70%	77.99%	67.34%
Cholera and diarrhoea	3.10%	2.85%	0.00%	2.25%
Don't know	25.35%	26.69%	16.75%	23.67%
Any other.	7.61%	6.76%	5.26%	6.75%

13.Which is the best way to dispose off waste water?

	Block 1	Block 2	Block 3	Total
Soakage pit	3.60%	1.41%	4.42%	3.10%
Kitchen garden	7.76%	5.28%	1.33%	5.28%
Back yard	9.42%	9.86%	4.87%	8.38%
Pond	13.85%	17.96%	20.80%	16.99%
Drain	64.54%	64.79%	62.83%	64.18%
Filed	0.28%	0.00%	5.75%	1.61%
Others	0.55%	0.70%	0.00%	0.46%

14. Where do you defecate in school -?

	Block 1	Block 2	Block 3	Total
Fields	76.18%	85.92%	87.17%	82.20%
Latrine	15.79%	7.75%	6.19%	10.68%
Near pond	2.49%	2.46%	0.00%	1.84%
Lane	1.94%	1.41%	2.65%	1.95%
Railway track	0.00%	0.00%	0.00%	0.00%
Near garbage dump	0.00%	0.35%	0.00%	0.11%
School grounds	3.60%	2.11%	3.98%	3.21%

15. Where do you defecate At home -?

	Block 1	Block 2	Block 3	Total
Fields	75.62%	83.45%	87.61%	81.29%
Latrine	22.16%	12.68%	6.64%	15.04%
Pond / river bank	1.39%	0.70%	0.00%	0.80%
Garbage dumps	0.28%	3.17%	3.54%	2.07%
Lance	0.55%	0.00%	0.00%	0.23%
Any other	0.00%	0.00%	2.21%	0.57%

16. Do you have a latrine at home?

	Block 1	Block 2	Block 3	Total
Yes	31.02%	14.79%	14.16%	21.35%
No	68.98%	85.21%	85.84%	78.65%

17. Do you use it?

	Block 1	Block 2	Block 3	Total
Yes	41.96%	33.33%	12.50%	34.95%
No	58.04%	66.67%	87.50%	65.05%

18. Those who have latrine but do not use, then why?

	Block 1	Block 2	Block 3	Total
Only elders use it	3.08%	14.29%	14.29%	8.26%
Don't know how to use it	0.00%	0.00%	0.00%	0.00%
Does not function	27.69%	42.86%	25.00%	30.58%
Smells bad	30.77%	14.29%	7.14%	21.49%
Like open spaces	38.46%	28.57%	53.57%	39.67%

19. Who uses the latrine at your home?

	Block 1	Block 2	Block 3	Total
Only children	4.46%	3.70%	3.13%	3.23%
Only women	26.79%	33.33%	31.25%	25.81%
Only elders	10.71%	11.11%	0.00%	9.68%
All members	20.54%	20.37%	31.25%	23.66%
No one	21.43%	9.26%	12.50%	17.74%
Not functional	16.07%	22.22%	21.88%	19.89%

20. Do you have a latrine in your school?

	Block 1	Block 2	Block 3	Total
Yes	36.01%	40.85%	30.36%	36.85%
No.	63.99%	59.15%	61.13%	63.15%

21. Do you use the latrine in your school?

	Block 1	Block 2	Block 3	Total
Yes	29.23%	17.24%	32.00%	25.55%
No.	70.77%	82.76%	68.00%	74.45%

22. If there is a latrine and do not use, then why?

	Block 1	Block 2	Block 3	Total
Only teachers use	58.70%	26.04%	29.41%	39.33%
Is not functional	30.43%	38.54%	31.37%	33.89%
I like open spaces	10.87%	35.42%	39.22%	26.78%

23. Do you think that open defecation leads to spread of disease?

	Block 1	Block 2	Block 3	Total
Yes	91.41%	89.44%	94.69%	91.62%
No	8.59%	3.17%	3.98%	5.63%
Don't know	0.00%	7.39%	1.33%	2.76%

24. If yes, then how?

	Block 1	Block 2	Block 3	Total
Flies breed	32.19%	29.13%	39.72%	32.83%
Smells foul	23.75%	28.74%	28.04%	26.19%
Looks bad	21.25%	12.99%	9.35%	15.16%
Feet get dirty	21.56%	25.59%	17.76%	21.55%
Don't know	1.25%	3.54%	5.14%	4.26%

25. Do you think that even excreta of small children can spread disease by open defecation?

	Block 1	Block 2	Block 3	Total
Yes	72.85%	86.27%	86.73%	80.83%
No	6.09%	5.28%	7.96%	6.31%
Don't know	21.05%	8.45%	5.31%	12.86%

26. Which according to you is the best method for excreta disposal?

	Block 1	Block 2	Block 3	Total
Latrine	36.01%	32.04%	32.74%	33.87%
Fields	49.03%	46.83%	63.72%	52.12%
Pond / River bank	2.22%	4.23%	1.33%	2.64%
Lane/ drain	0.83%	2.82%	2.21%	1.84%
Covered pit	2.77%	2.82%	0.00%	2.07%
Garbage dump	9.14%	11.27%	0.00%	7.46%

27. Do you think that defecation near water sources spreads disease?

	Block 1	Block 2	Block 3	Total
Yes	80.33%	88.38%	94.25%	86.57%
No	12.74%	10.92%	3.10%	9.64%
Don't know	6.93%	0.70%	2.65%	3.79%

28.If yes, then how?

	Block 1	Block 2	Block 3	Total
If there is no platform near handpump	3.45%	6.77%	6.10%	5.31%
By air germs are carried	16.55%	18.73%	30.99%	21.35%
Dust & dirt falls	11.03%	29.08%	14.55%	18.04%
If the well is not covered	26.21%	9.56%	10.33%	16.18%
Through soil and vegetable	20.69%	23.51%	10.33%	18.70%
By seepage	20.00%	12.35%	20.66%	17.64%
Don't know	2.07%	0.00%	7.04%	2.79%

29.Do you wash hands after defecation?

	Block 1	Block 2	Block 3	Total
Yes	96.40%	98.24%	90.71%	95.52%
No	3.60%	1.76%	9.29%	4.48%

30.If yes, then how?

	Block 1	Block 2	Block 3	Total
Ash	8.31%	15.49%	17.70%	13.70%
Mud	19.94%	19.37%	22.57%	21.39%
Soap	46.81%	39.79%	25.22%	40.75%
Only Water	24.93%	25.35%	34.51%	24.16%

31.Where do you throw garbage in the class room?

	Block 1	Block 2	Block 3	Total
On the floor	18.28%	20.77%	42.92%	25.49%
In the corner	9.70%	13.03%	7.52%	10.22%
In the dustbin	47.37%	31.69%	30.53%	37.89%
In garbage pit	17.73%	26.41%	18.14%	20.67%
Outside classroom / school compound	6.93%	8.10%	0.88%	5.74%

32. Have you participated in garbage disposal at school?

	Block 1	Block 2	Block 3	Total
Yes	91.41%	94.01%	88.94%	91.62%
No	8.59%	5.99%	11.06%	8.38%

33. Where do you throw garbage collected from the classroom / compound?

	Block 1	Block 2	Block 3	Total
Dustbin	29.91%	10.11%	11.44%	18.67%
Garbage pit	41.09%	29.96%	21.89%	32.58%
Garbage dumps	18.13%	40.82%	41.29%	31.58%
Outside school compound	10.88%	14.61%	22.39%	15.04%
In the lane / fields	0.00%	4.49%	2.99%	2.13%

34. What happens if garbage is thrown in the lanes?

	Block 1	Block 2	Block 3	Total
Spreads flies	36.29%	33.80%	30.53%	33.98%
Smells bad	35.18%	33.10%	31.42%	33.52%
Spreads disease	13.57%	20.42%	19.47%	17.34%
Causes inconvenience to passerby	9.14%	7.75%	6.64%	8.04%
Looks bad	0.55%	1.41%	0.44%	0.80%
Don't know	5.26%	3.52%	11.50%	6.31%

35. Do you think that dung thrown in lanes / lying in courtyard creates problems?

	Block 1	Block 2	Block 3	Total
Yes	83.93%	96.48%	97.35%	91.50%
No	16.07%	3.52%	2.65%	8.50%

36. If yes, then how?

	Block 1	Block 2	Block 3	Total
Spreads flies	36.30%	26.64%	47.25%	35.88%
Spreads disease	39.93%	35.40%	29.82%	35.51%
Smells foul	17.49%	32.48%	16.97%	22.46%
Inconvenience	5.61%	2.92%	3.67%	4.14%
Breeds mosquitoes	0.66%	2.55%	2.29%	2.01%

37.Name any disease which spreads from dung?

	Block 1	Block 2	Block 3	Total
Malaria	8.59%	5.63%	10.71%	8.15%
Cholera	18.56%	18.66%	16.52%	18.03%
Jaundice	0.00%	1.06%	2.23%	0.92%
Tetanus	0.55%	0.00%	4.46%	1.38%
TB	6.37%	7.39%	12.95%	8.38%
Eye/ throat infections	52.63%	49.30%	22.77%	43.74%
Don't know	13.30%	17.96%	30.36%	19.40%

38.How should dung be disposed off safely?

	Block 1	Block 2	Block 3	Total
Fields	54.02%	59.86%	31.42%	50.06%
Garbage dump	14.13%	18.31%	40.27%	22.27%
In the compost pit	16.62%	15.49%	7.96%	14.01%
Bio-gas plant	3.05%	2.82%	7.08%	4.02%
Make dung cakes	9.70%	3.52%	10.62%	7.92%
Dung cakes and compost pit	2.49%	0.00%	2.65%	1.72%

39.If food is not covered then what happens?

	Block 1	Block 2	Block 3	Total
Flies sit on it	65.37%	65.49%	62.39%	64.64%
Dust falls on it	24.10%	22.54%	28.32%	24.68%
Rats / animals/ insects eat it	6.09%	10.21%	8.41%	8.04%
Disease	4.43%	1.76%	0.88%	2.64%

40.Do you wash raw vegetables / fruits before eating?

	Block 1	Block 2	Block 3	Total
Yes	90.58%	89.44%	59.29%	82.09%
No.	9.42%	10.56%	40.71%	17.91%

41.If yes, then why?

	Block 1	Block 2	Block 3	Total
Dust & dirt	56.57%	55.12%	55.97%	55.94%
Remove germs	42.20%	39.37%	34.33%	39.72%
Remove dust, dirt & germs	1.22%	5.51%	7.46%	3.92%
Don't know	0.00%	0.00%	2.24%	0.42%

42.Do you buy food stuffs from vendors outside school?

	Block 1	Block 2	Block 3	Total
Yes	27.98%	29.23%	0.44%	21.24%
No	40.72%	41.20%	26.11%	37.08%
There are no vendors	31.30%	29.58%	73.45%	41.68%

43.If no, then why?

	Block 1	Block 2	Block 3	Total
Flies sit on it	32.65%	31.62%	33.90%	32.51%
Dust falls on it	57.82%	52.99%	55.93%	55.73%
Spreads disease	5.44%	3.42%	0.00%	3.72%
Insects and flies	4.08%	11.97%	10.17%	8.05%

44.How often do you clean your teeth?

	Block 1	Block 2	Block 3	Total
Daily in the morning	58.17%	54.23%	41.59%	52.58%
Morning & Night	7.76%	3.52%	6.19%	5.97%
Before going to sleep	3.88%	3.52%	1.77%	3.21%
Sometimes	27.15%	38.03%	45.13%	35.36%
Don't clean.	3.05%	0.70%	5.31%	2.87%

45.With what do you clean your teeth?

	Block 1	Block 2	Block 3	Total
Paste / Powder	44.57%	36.88%	41.59%	41.25%
Chewing stick	36.29%	46.10%	41.12%	40.78%
Salt & oil/ charcoal	10.86%	6.74%	2.34%	7.33%
Only water	8.29%	10.28%	14.95%	10.64%

46.How often do you bathe? a) In Summers

	Block 1	Block 2	Block 3	Total
Once daily	44.04%	42.25%	57.52%	46.96%
Twice daily	47.09%	46.13%	24.78%	40.99%
Once a week	1.94%	1.76%	9.29%	3.79%
Sometimes-	6.93%	9.86%	8.41%	8.27%

46.How often do you bathe?b) In Winters

	Block 1	Block 2	Block 3	Total
Once daily	41.00%	44.37%	21.24%	36.97%
Twice daily	6.37%	3.17%	0.88%	3.90%
Once a week	28.25%	19.01%	40.27%	28.36%
Sometimes-	24.38%	33.45%	37.61%	30.77%

47.What do you use for cleaning while bathing?

	Block 1	Block 2	Block 3	Total
Soap	32.96%	40.49%	41.59%	38.92%
Mud	0.55%	1.41%	2.21%	0.00%
Oil	66.48%	58.10%	56.19%	61.08%

48.Do you think it is necessary to wear shoes?

	Block 1	Block 2	Block 3	Total
Yes	97.51%	98.94%	95.58%	97.47%
No.	2.49%	1.06%	4.42%	2.53%

49.If yes, then why?

	Block 1	Block 2	Block 3	Total
To keep feet clean	32.95%	32.03%	36.57%	26.66%
Protect from injury	44.32%	45.20%	49.07%	36.39%
Prestige	11.65%	16.37%	11.11%	10.38%
Prevents hookworms	7.10%	4.63%	3.24%	4.21%
Don't know	3.98%	1.78%	0.00%	1.78%

50.When do you wear shoes?

	Block 1	Block 2	Block 3	Total
Always	39.61%	32.75%	39.38%	39.59%
While going out	9.42%	12.32%	7.96%	10.60%
While going to school	34.90%	35.92%	28.32%	35.57%
While going to fields to defecate	6.37%	10.56%	9.73%	9.14%
Don't wear	7.76%	8.45%	12.39%	5.12%
Any other	1.94%	0.00%	2.21%	0.00%

51.Do you think we should cut our nails short?

	Block 1	Block 2	Block 3	Total
Yes	99.17%	97.18%	96.46%	97.82%
No.	0.83%	2.82%	3.54%	2.18%

52.If yes, then why?

	Block 1	Block 2	Block 3	Total
To keep hands clean	26.59%	20.77%	24.78%	24.23%
Germs / dirt collects in long nails	45.43%	42.61%	47.35%	45.01%
Prevents disease	24.38%	33.10%	23.01%	26.87%
Looks good	3.60%	3.52%	4.87%	3.90%

53.When do you cut nails?

	Block 1	Block 2	Block 3	Total
Weekly	24.65%	31.34%	21.24%	25.95%
Monthly	4.71%	3.87%	2.65%	3.90%
Whenever they grow long	46.81%	45.77%	51.77%	47.76%
Sometimes	23.82%	19.01%	24.34%	22.39%

54.How often do you wash your hands?

	Block 1	Block 2	Block 3	Total
Very often / always	66.76%	74.30%	62.83%	68.20%
Sometimes	30.47%	21.83%	35.40%	28.93%
Rarely	2.77%	3.87%	1.77%	2.87%

55.When do you wash your hands?

	Block 1	Block 2	Block 3	Total
Before eating food	18.28%	33.45%	11.95%	21.58%
After eating food	4.99%	4.93%	3.54%	4.59%
After defecation	26.04%	19.01%	15.04%	20.90%
Before & after eating	5.82%	5.63%	12.83%	7.58%
Before and after defecation	33.24%	25.00%	37.17%	31.57%
After coming from fields/ play	4.99%	1.76%	1.77%	3.10%
Before and after eating, after defecation:	4.99%	3.52%	16.37%	7.46%
Whenever hands look dirty	1.66%	6.69%	1.33%	3.21%

56.With what do you wash your hands?

	Block 1	Block 2	Block 3	Total
Ash	11.91%	8.80%	19.47%	12.86%
Mud	15.79%	19.01%	19.47%	17.80%
Soap	53.19%	41.55%	34.07%	44.43%
Only water	17.73%	30.63%	26.99%	24.11%
Soap & Ash	1.39%	0.00%	0.00%	0.80%

57.Do you think that hygienic habits lead to better health?

	Block 1	Block 2	Block 3	Total
Yes	91.97%	96.13%	100.00%	95.41%
No	6.65%	1.41%	0.00%	3.21%
Don't know	1.39%	2.46%	0.00%	1.38%

58.Do your parents often visit & meet your teachers?

	Block 1	Block 2	Block 3	Total
Yes	73.13%	62.32%	44.69%	62.23%
No	26.87%	37.68%	55.31%	37.77%

59. Do you participate in activities related to sanitation?

	Block 1	Block 2	Block 3	Total
Yes	72.85%	77.82%	74.34%	74.86%
No.	27.15%	22.18%	25.66%	25.14%

60. If yes, then what activities?

	Block 1	Block 2	Block 3	Total
Cleaning classrooms	39.54%	28.96%	38.69%	35.74%
Cleaning school compound	43.35%	61.99%	51.79%	51.84%
Cleaning classrooms & school compound	13.69%	6.33%	9.52%	10.12%
Village sanitation awareness & sanitation camps	3.42%	2.71%	0.00%	2.30%

61. Do your teachers tell you about sanitation issues in the school?

	Block 1	Block 2	Block 3	Total
Yes	93.91%	93.66%	96.46%	94.49%
No	6.09%	6.34%	3.54%	5.51%

62. If yes, then what?

	Block 1	Block 2	Block 3	Total
Personal hygiene	64.31%	55.64%	75.23%	64.40%
School sanitation	17.11%	9.02%	9.63%	12.52%
Village sanitation	0.88%	6.02%	0.00%	2.31%
Food sanitation	5.01%	7.89%	6.88%	6.44%
School sanitation & personal hygiene	10.62%	17.29%	6.88%	11.79%
Home sanitation	2.06%	4.14%	1.38%	2.55%

Questionnaire for Parents
(Knowledge, Attitudes & Practices with regard to Seven Components of Sanitation)

Annexure VII A

Name of School Class

Name of father Name of mother Education level

Occupation of father Occupation of mother

Caste - SC/ST/OBC/others specify Size of the family

Highest education of any of the member of the family Total No. of family members
Male Female Children

Handling of drinking water :

1. There are many sources of water in your village. Where do you collect your drinking water from?
• Handpump • Dugwell • Stream • River • Pond • Tap • Sanitary well • Others / specify.
2. As you are aware not all the sources provide water which is safe for cooking and drinking
Do you think the source which you are using provides you with safe water? Yes / No.
3. Why do you take water from this source? 1) Looks clean 2) Available throughout the day 3) Sweet
4) Cooks food well 5) Free from germs 6) Others
4. How can we make unsafe water safe at the home level?
• Boiling • Chlorinating • Filtering • Others • Don't know.
- 4a) In your opinion what are the safe sources of water?
• Handpump • Tap • Pond • Stream • Open Dugwell • Covered well • Others / Specify
5. What do you think should be the attributes of safe water?
• Looks clear • Tastes sweet • Is free from germs • Cooks food well • Running water
• Others / Specify.
6. How often do you clean the vessel used for collecting drinking water?
• Before filling it • Once daily • Weekly • Monthly • Sometimes.
7. What do you use to clean your vessel?
• Mud • Ash • Soap • Only water • Others.
8. Do you always keep the vessel covered while carrying the water from the source to your house?
Yes / No.
9. If yes, why?
• Dust falls in it • Flies / insects fall in it • Germs • Others • Don't know.
10. Where do you keep the water at home?
• Above the ground level • On a tripod • On a Shelf • On a table • On the ground
• Others / specify • Don't store.
11. Do you keep it covered?
Yes / No.
12. If yes, why?
• To prevent from dust • From children • Animals / birds • Germs • Flies and insects • Others
13. How do you take the water out from the vessel to drink?
• Pour it out • Dip a glass • Use a long ladle.
14. Do you think that due to our carelessness the safe water collected gets contaminated while carrying
it home?
Yes / No / Do not know
15. If yes, then how?
• If the vessel is not clean • Through dirty hands • Dust falls in it • By germs in the air • Others •
Don't know
16. Do you think that by drinking unsafe / impure water we can get diseased?
Yes / No

17. If yes then name the disease?

2. Disposal of waste water :

18. Do you think that if waste water is not disposed off safely it leads to spread of diseases?
Yes / No.

19. As you are aware plenty of waste water is generated in every house from the bathing cubicle & the kitchen. What measures do you take to dispose of the waste water in your house?

Let it flow

• On the streets • Fields • In the kitchen/garden • In a soakage pit • In a drain • Others / spec

20. What is the safest way to dispose of waste water generated at home?

• Into a kitchen garden / orchard • Into a fields • Into a pond • Into a drain • Sokage pit • Other specify.

21. We find pools of water around houses and in the courtyard What happens if this water is allow to stagnate?

• Spreads diseases • Allows breeding of mosquitoes • Causes inconvenience • Smells • loc bad • Others / specify.

22. Name the disease which spreads due to stagnant water?

Name of disease / Do not know.

23. As you are aware, water from the drains overflows if garbage accumulates in the drains. How oft do you clean the drains?

• Daily • Once in a week • Once in a month • When it clogs • Sometimes • Others / specify.

3. Disposal of Garbage & Cattle dung :

24. Does cattle dung spread diseases?

Yes / No

25. For those who think dung leads to spread of diseases .

Name the disease which spreads from dung? Name of disease / Do not know.

26. What is the best way to dispose of dung?

• Garbage dump • Field • Garbage pit • Compost pit • Bio gas plant • Dung cakes • Don't know

27. What happens if garbage and cattle dung are covered with soil and left untouched for a long time?

• Turns into compost / manure • Nothing happens • Don't know.

28. Every day when you clean your house plenty of garbage is accumulated. Where do you thr this garbage?

• In a dustbin • In a garbage pit • Fields • In the streets • In a garbage dump • In a Compost p

29. Do you own cattle?

Yes / No.

30. If yes, what do you do with the cattle dung?

• By disposing in the fields for use as a manure • By disposing in the garbage pit • Compost :
• Garbage dump • Dung cakes • Any other / specify.

31. When do you remove dung?

• Whenever needed • Twice daily • After 10-15 days • After 6 months • Others.

32. What are the problems which are caused if garbage is not disposed properly?

• It breeds flies • Mosquitoes • It smells foul • It creates traffic nuisance • It attracts rats and oth insects • Others / specify.

33. Do you think that garbage heaps can spread disease?

Yes / No / Don't know

- 34 (For parents who think that garbage can spread diseases) Name the diseases that spread due to garbage?
 • Name of the diseases
- 35 What is the best way of disposing garbage?
 • In the dustbin • In a garbage pit • In the streets • In a garbage dump • In a compost pit
 • Others / specify • Don't know

4. Home Sanitation and Food Hygiene

- 36 How often do you clean your house?
 • Daily • Twice daily • Weekly • Monthly • Sometimes • Whenever gets dirty
- 37 Why is it important to clean the house regularly?
 • To keep it clean and free from dirt / dust • To keep it free from insects / pests / rodents
 • Clean surroundings improve health • Looks nice • Germs • Don't know.
- 38 Do you keep cooked food always covered?
 Yes / No
39. If yes, why?
 • Flies sit on it • dirt / dust falls on it • Animals / pets / rodents can eat it and contaminate it
 • Germs • Others • Don't know
- 40 Do you wash fruits and raw vegetables before cooking / eating them?
 Yes / No
- 41 If yes, why?
 • To remove dirt • To remove microorganisms • Insecticides • Other / specify
- 42 Is there a smokeless chulha in your home?
 Yes / No
43. What happens when smoke from a traditional chulha fills the house?
 • It irritates the eyes • It creates coughing • It helps in contracting respiratory diseases
 • I diseases • Breathing problem • Others / specify • Don't know.
44. Why don't you install a smokeless chulha in your house?
 • No information • Requires more fuel wood for cooking • Have gas stove • Had installed one but did not function well • Any other reason specify.

5. Disposal of human excreta :

45. Where do you go for defecation?
 • In a latrine • In the fields • Near a pond / river bank • In the street • On the railway tracks
 • Garbage dump.
- 46 Do you have latrine in your home?
 Yes / No
- 47 Do you use the latrine?
 Yes / No.
48. (For those who have a latrine but do not use it)
 Why don't you use the latrine in your home?
 • Because of its smaller size • Because of foul smell • Fear of felling • Shy of using it • No water
 • Like open spaces • Other specify • Not functional.
- 49 (For those who have a latrine and are using it)
 Why do you like using the latrine and not defecate in the open like some of your neighbours?
 • Convenient in all seasons • Privacy • Hygienic • Protects from snake and insects bite
 • Any other / specify.
- 50 What according to you is the best way of disposal of human excreta?
 • In a latrine • In the fields • Near pond / river bank • In a garbage dump • In the streets
 • Others / specify • Don't know

51. Many people as also children defecate indiscriminately in and around the village. Do you think that exposed excreta is harmful to health?
Yes / No / Don't know
52. If yes, why?
• Spreads diseases • Smells foul • Looks dirty • Attracts flies and other insects • Other / specify
53. Do you have infants and children at home?
Yes / No
54. Many parents allow their children, (below five years), to defecate in the courtyard or immediate outside the house or on the streets. Also, many times infants' excreta is left unattended in the house for a long time. Where do you dispose of your child's excreta?
• In a latrine • In the fields • Near pond / river bank • In a garbage dump • In the streets • Drain
• Others / specify • Don't know.
55. Do you wash your hands after disposing of excreta of your child?
Yes / No
56. If yes, with what?
• Soap • Mud • Only water • Other / specify.
57. What is the best way of disposing of excreta of infants and children?
• In a latrine • In the fields • Near pond / river bank • In a garbage dump • In the streets • Drain
• Others / specify • Don't know.
58. Do you think the exposed excreta of these infants / children's is harmful to health?
Yes / No / Don't know
59. Who maintains the latrine in your home?
• Women • Sweeper • All • No one

6. Personal Hygiene :

60. We often find adults and children in the villages walking around without footwear, even in areas where people defecate. Does walking around without footwear cause any problems?
Yes / No.
61. If yes, why?
• Feet get dirty • Look bad • Avoid hookworm • To protect the feet from injury • Diseases protection
• Other / specify
62. How often do you use footwear?
• All the time • When going out for social events • When going to fields • When going for defecation
• Any other / specify
63. How often do you wash your hands?
• Very often • Rarely.
64. What are the activities with which you relate your hand washing?
• Before eating • After eating • After defecation • Before eating & after defecation • After returning from fields • Before & after eating & defecation • Other / specify.
65. With what do you wash your hands?
• With soap • With Ash • With Mud • With Mud / Ash / Soap • Only water • Mud / Only water • Any other / specify
66. Why is it important to wash hands regularly?
• Removes dirt • Looks clean • Keeps food clean • Prevent contamination of food / water • Any other / specify.

