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# NEEDS ASSESSMENT FOR THE SANITATION PROGRAMME

DPHE - UNICEF  
WATER AND SANITATION PROGRAMME



ASSOCIATES FOR COMMUNITY AND POPULATION RESEARCH  
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We would be thankful to the readers if they find this report useful for the purpose it was prepared for.

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Management of ACPR



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## GLOSSARY

ACPR	=	Associates For Community And Population Research
AV	=	Audio-Visual
Co-PI	=	Co-principal Investigator
DC	=	Deputy Commissioner
DPHE	=	Department of Public Health Engineering
EPI	=	Expanded Programme on Immunization
FGDs	=	Focus Group Discussions
FWA	=	Family Welfare Assistant
GOB	=	Government of Bangladesh
HA	=	Health Assistant
H & FP	=	Health and Family Planning
HHs	=	Households
IA	=	Integrated Approach
IEC	=	Information, Education and Communication
MOHFW	=	Ministry of Health and Family Welfare
NGO	=	Non-government Organization
PI	=	Principal Investigator
PSKS	=	Palashipara Samaj Kallyan Samity
PUP	=	Palli Unnayan Prayash
SAE	=	Sub-Assistant Engineer
SANPLAT	=	Sanitary Platform
TNO	=	Thana Nirbahi Officer
UP	=	Union Parishad
UNICEF	=	United Nations Children's Fund
VDP	=	Village Defence Party
WFP	=	World Food Programme
WHO	=	World Health Organization



## EXECUTIVE SUMMARY

Despite a remarkable success in the provision of safe drinking water in Bangladesh, faecal pollution of the environment and poor hygienic practices continue to transmit diseases. With the growing realization of this, the sanitation programme has adopted an integrated approach that includes promotion of an expanded use of tubewell water, hygienic defecation practices, and improved personal hygiene. Although the use of hygienic latrines has substantially increased in the recent years, the GOB recognizes that the current strategy alone will never achieve the target of full sanitation coverage. A new approach is called for.

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### Purpose

The purpose of the study was to assess the strengths and weaknesses of the different types of programmes undertaken so far and to make contributions to strategy development for the sanitation programme.

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### Methodology

Qualitative methods like indepth interviews, focus group discussions (FGDs), and informational discussions were used in conducting the study. Data were collected from 502 indepth interview respondents and 398 participants in 50 FGDs. An observational check-list was also used for tapping local technological options. In addition, informational discussions were held with DPHE officials and NGO management.

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### Knowledge about Sanitation

While knowledge about safe drinking water was universal, knowledge about hygienic latrines was not so wide-spread, except in a few special programme areas. Messages related to personal hygiene appeared to have been much less frequently disseminated.

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### Sources of Knowledge

Two-thirds of the indepth interview respondents were ever told by any one about a hygienic latrine. DPHE workers were the sources of information for nearly half of the respondents, followed by NGO workers and H&FP workers.

---

2

Those who have received any information from the mass media sources, two-thirds mentioned about 'posters/leaflets/books' and a quarter 'radio/TV'.

---

### **Acceptability of One-ring One-slab Latrines**

One-ring one-slab latrines are not acceptable to most of the respondents because of its many disadvantages including that the pit fills-up quickly and frequent shifting of the pit/superstructure is hazardous.

Multiple-ring-slab latrines are preferred by the beneficiaries, but cost of cleaning the pit is very high and in many areas sweepers are not readily available. Due to cost and hazards of cleaning some people are reverting to unhygienic practices, while some others are resorting to harmful practices like connecting the pit to the water sources.

#### **Recommendation:**

- a. **Information and education should be provided on price, place, and process of procurement of ring-slab latrines.**
  - b. **Appropriate information and education should be provided to all on advantages of one-ring one-slab latrines.**
  - c. **Information and education on correct use of latrine should be widely disseminated.**
- 

### **Shifting of Latrines**

People are mentally prepared for shifting of latrines when the pit is filled. Shifting is easier for homemade latrines and only slab latrines than one-ring one-slab latrines. However, these three types of latrines are more suitable because cleaning of the pit is not necessary. Cleaning of the pit for multiple ring slab latrines are generally more expensive than even installing a new latrine.

#### **Recommendation:**

**Appropriate information and education should be provided to all on proper desludging of multiple ring-slab latrines.**

---

### **Coverage and Voluntarism**

Major hurdles to increase coverage are lack of knowledge, poverty, negligence, and landlessness. The Banaripara experience provides ample

opportunity to develop strategy to increase coverage. Issues related to replicability of the Banaripara experience including the strategies for social mobilization campaign has been discussed in the report.

Voluntary participation of the people must be ensured for coverage and sustainability. Experiences in Banaripara and some NGO areas show that if people are properly informed and educated, most of them are easily motivated to install hygienic latrines. But the distressed and the landless have problems that cannot be readily addressed. A general consensus was that when the vast majority will install hygienic latrines, social pressure will be effective for the unyieldings.

**Recommendations:**

- a. **Sale centers should be organised in every union with demonstration of pit and superstructure.**
  - b. **Mobile sale centers should be made more effective.**
  - c. **Information on installation should be provided along with sale of latrines.**
- 

**Removal of Faeces**

Shifting of latrine is directly related to removal of faeces. The customary practice is not to shift the open/hanging latrine, because the faeces and the latrine area is perceived as filthy, dirty, and nasty. Since the old latrine area is not used for any other purpose even after many years of abandonment, need for frequent shifting may eventually pose a serious problem. Shortage of land among distressed and landless does already exist. Therefore, use of two alternate pits appears to be highly efficient, provided removal of faeces can be made an usual practice. Promotion of use of faeces for productive purposes is likely to remove barriers for removal of faeces. As such, sustainability may depend on productive use of faeces. Productive use of faeces is not unknown to rural people though not usually undertaken by even a microscopic proportion. If the procedure for shifting of latrine and use of faeces as manure are properly demonstrated, people might be prepared to spend small amount of money for the latrine.

**Recommendations:**

- a. **Appropriate information and education should be provided to all on possible use of human faeces as manure.**
- b. **Appropriate demonstration should be provided for all on:**
  - **installation of one-ring one-slab latrine;**

- installation of only a slab latrine;
  - do it yourself type of latrines;
  - use of two side-by-side pits alternately; and
  - removal and use of faeces as manure.
- 

### **Innovative Ideas**

A few of the innovative ideas have been discussed in the report which are suitable for poor, lower middle class, and middle class population. From the cost and durability considerations, a slab only latrine is most suitable, because the home made latrines also cost money and does not last for more than one rainy season. Multiple options need to be provided to suit the users from different social strata. Unless people are convinced of the benefits of one-ring one-slab latrine, demand for multiple ring slab latrine is likely to continue. Innovative technologies should be devised by DPHE/UNICEF for which scientific research studies need to be undertaken.

#### **Recommendation:**

**Options for multiple ring latrines at a reasonable price may be given as per individual liking of the beneficiaries.**

---

### **Research Needs**

Several areas for research have been identified. Research should be conducted on identification of suitable type(s) of latrines and on possibility for productive use of faeces. Appropriate procedure for disposal of excreta may influence developing suitable type(s) of latrines. And finally, developing programme strategy will largely depend on the type(s) of latrines to be promoted.

#### **Recommendations:**

- a. **The national level social mobilization campaign for promotion of the sanitation programme should be intensified; appropriate type(s) of latrine to be promoted should be rapidly ascertained basing on scientific research.**
- b. **Behavioral and operations research should be undertaken on the following:**
  - **suitability of one-ring one-slab latrine and only a slab latrine with innovative pits under seasonal and regional variations;**

- appropriateness of use of twin pits for multiple ring slab latrines;
- appropriateness of different options of hygienic latrines in different regions of Bangladesh;
- possibilities of productive use of faeces;
- appropriateness of selected interventions for social mobilization; and
- identification of means of behavioral changes for defecation practices and disposal of children's faeces.

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### Sustainability

Cleaning of pit for multiple ring slab latrine and shifting of one-ring one-slab, only a slab, SANPLAT, or homemade latrines are very important issues to be considered to ensure sustainability. Shifting of latrines and removal of excreta are issues related to productive use of faeces. Experiences from countries like India, China, and Vietnam on productive use of faeces may be utilized in taking decision on whether or not to promote productive use of faeces in Bangladesh. If productive use of faeces is considered feasible, programme strategy and type(s) of latrines to be promoted will be different from if it is not feasible.

#### **Recommendation:**

**A visit to India or China of a Bangladeshi expert team may be organised to gather experiences on productive use of faeces.**

---

### Role of Workers and Allies

Workers and allies are, in general, happy with their participation in the sanitation programme. However, dearth of DPHE field workers was cited as a major obstacle for educating beneficiaries. Job responsibilities need to be expanded from the existing narrow perspective of mere tubewell mechanics to a wider perspective of public health assistants. There exists a lack of linkage between the DPHE workers and the allies at different levels. A number of programmatic barriers and obstacles have been identified. There exists an universal demand from workers and volunteers for rewards and incentives.

### **Recommendations:**

- a. DPHE field staff should be increased at least at the rate of one per union.
  - b. Job responsibilities of the DPHE workers should be reviewed and refined to suit the need to develop their motivational skills.
  - c. Designation of the DPHE field workers should be changed to demonstrate that they are not mere tubewell mechanics rather public health assistants.
  - d. Awards for best performances may be given to individuals and institutions on local, regional, and national basis as part of the social mobilization drive.
  - e. More linkages between workers and allies at all levels should be established.
- 

### **Training Needs**

Information on training needs of the workers and allies are detailed in the report. It appears that prior to review and refinement of the training curricula the type(s) of latrines to be promoted should be ascertained without which procedure for removal of excreta and shifting of latrine can not be appropriately detailed in the curricula.

---

### **NGO Participation**

Despite the fact that NGOs have been making significant contributions in promoting the sanitation programme, their strategies are varied and sometimes frustrating for the DPHE.

### **Recommendation:**

A guideline should be prepared for the NGO participation ensuring that their activities are in line with the sanitation programme policies. A national level collaboration between GOB and NGO at all levels is needed and mechanisms for sub-national collaboration should be activated.



## Section-1

# BACKGROUND AND OBJECTIVES

### 1.1. Introduction:

Sanitation programme has been given due importance in the recent years. Bangladesh has made remarkable achievements in the supply of safe drinking water. Coverage of sanitary latrines has risen substantially in the last few years. The government of Bangladesh (GOB) with assistance from the United Nations Children's Fund (UNICEF) and other donors has undertaken different programs to promote water supply, environmental sanitation, and personal hygiene. In order to further strengthen the program, more effective strategies need to be developed. Keeping this in view the current study was sponsored by UNICEF.

### 1.2. Background:

Every year, approximately 300,000 children under five years of age, accounting for one-third of all child deaths, die of diarrhoeal diseases. The causes of this are predominantly: limited use of tubewell water and poor environmental sanitation and standards of personal hygiene.

The GOB has made substantial progress during recent decades in the provision of tubewell water. The Fourth Five Year Plan document indicated accelerated implementation of rural water supply and sanitation programme. The Integrated Approach (IA) to implementation of water supply, sanitation and hygiene will be expanded to cover all Thanas. The entire country will be brought under IA by 1995 (GOB-UNICEF, 1992).

It is recognized that the minimum conditions necessary to achieve health impact are:

- a. expanded use of tubewell water by all beneficiaries for all domestic needs;
- b. practice of hygienic excreta disposal with due attention to hygienic disposal of the faeces of young children; and
- c. practice of improved personal and domestic hygiene like thorough hand washing by everyone.

A recent national survey revealed that the use of sanitary latrines has increased to 26 percent in 1991 from 10 percent in 1989 (Mitra and Associates, 1992). A recent WHO sample survey was conducted on the one-ring and one-slab latrine which represent about 25 percent of all waterseal latrines (WHO, 1992). The data showed that of the users whose waterseal latrine pits were filled up, about 17 percent went back to open defecation and 30 percent use them unhygienically. The main reasons are lack of proper knowledge of shifting when filled up.

Though problems with and clogging of the waterseal is observed, the water-seal latrine is considered an appropriate low-cost technology for which there is a potential market. However, even at the current subsidized rate, many rural families cannot afford this technology.

Faecal contamination of the environment and, thus, the transmission of disease will continue until the vast majority of the people practice sanitary excreta disposal. Therefore, it is essential that poorer people also build and use latrines. Experiences to-date have demonstrated that it is possible to build a homemade hygienic, simple pit latrine entirely with locally available materials. There is a need, therefore, to continue the promotion of such latrines as an alternative for families who cannot, as yet, afford a water-seal latrine.

Studies have shown that the most significant practices relating to diarrhoeal diseases in children are indiscriminate defecation by young children around the bari (house) in which they play and the handwashing practices of the mother, particularly before food preparation and serving.

Although the sanitation programme has expanded in the number of latrines produced and sold, the GOB recognizes that this strategy alone will never achieve the target of full sanitation coverage. A new approach is called for. A favourable situation has recently been created for an accelerated sanitation programme. Moreover, evidence from other programme areas indicates that the "software" side of the programme involving communication (i.e. advocacy, social mobilization, and programme communication) for sanitation needs to be significantly strengthened in order for this acceleration to take place.

In the past, communication efforts have focused mainly on the training of tubewell mechanics in health promotion, especially in connection with IA activities, but such efforts have proved limited in their impact in terms of geographic coverage. In addition, the Directorate of Public Health Engineering (DPHE) has a small core group of health educators, whose number is inadequate and skills limited to have a significant impact. A major constraint is that issues concerning household sanitation and personal hygiene are largely women-centered and the above groups of potential change agents are entirely male.

In order to make a major impact in this area, through sustained behavioral change, new strategies are urgently required. High level commitment and the assistance of multi-sectoral allies are essential. Well-planned programme communication/training interventions will support the above.

Attempts have been made in the recent past to accelerate the ongoing sanitation programme through involvement of primary and high school teachers and students. In few Thanas of Barisal, the civil administration took special drive and involved the teachers and students of schools and madrassas for promoting personal hygiene and the construction and use of sanitary latrines in their own homes first, and then to neighbours. The initiatives taken by some primary schools in Bogra district, with the support of DPHE and local-level school administration have resulted in families of students building latrines. Although evaluation

findings evidenced apparent success of this initiatives, how far these strategies will be effective for sustained behavioural change is yet to be ascertained.

Whilst other programmes such as EPI and Family Planning achieved tremendous success in creating awareness through media campaign, social mobilization, and interpersonal communication, effective programme communication strategy is yet to be developed to strengthen the sanitation programme. This needs assessment study was considered essential to develop effective strategies and strengthen the "software" side of the programme.

### **1.3. Purpose and objectives:**

The purpose of the study was to assess the strengths and weaknesses of the different types of programmes undertaken so far and to make contributions to strategy development for the sanitation programme.

The specific objectives of the study were to:

- a. assess the current knowledge, attitude, and practices regarding environmental sanitation and personal hygiene of the beneficiaries, DPHE and NGO workers, and allies working in collaboration with the sanitation programme;
- b. examine perceptions and attitudes regarding latrine use, personal hygiene and use of tubewell water by the beneficiaries at the household level;
- c. ascertain level of voluntarism and motivation and the conditions under which latrines were received or adopted and the sustainability of latrine usages and personal hygiene practices;
- d. assess the strengths and weaknesses of the different programmes including special programme in Banaripara Thana, primary school programme in Rajshahi Division, NGO programmes, DPHE IA programme; and non-IA programme; and
- e. identify possibilities for greater coverage, maintenance, and sustainability of the programme.

## Section-2

# METHODOLOGY AND IMPLEMENTATION

### 2.1. Research methods:

The study was conducted applying qualitative research methods following a rapid assessment approach. The following qualitative methods were applied for conducting the study:

- a. Focus Group Discussions (FGDs), and
- b. Indepth Interviews.

An observational check-list was also used for tapping local technological options.

In addition, informational discussions were made with DPHE and NGO officials at the national and field level.

### 2.2. Sample selection:

Information was collected from a wide range of target population and the allies working in collaboration with the sanitation programme, such as, male and female beneficiaries, school students and teachers, DPHE and NGO workers, MOHFW workers, community leaders, and religious leaders (Imams/Pirs). Separate samples were selected for each of the following different programme areas:

- a. Non-IA programme;
- b. IA programme with <3 years of intervention;
- c. IA programme with >3 years of intervention;
- d. Primary school programme in Rajshahi Division;
- e. Special programme in Banaripara Thana; and
- f. NGO programmes.

From each of the different types of programmes, samples were selected separately for each method.

#### 2.2.1. Samples for FGDs:

FGDs were conducted with the beneficiaries, (i.e., males and females), school students, and school teachers. Greater emphasis was given to females, since they play the most vital role not only in maintaining hygienic conditions for themselves and their children, but also for other members of the family. School students and teachers were considered in areas having school programmes. A total of 50 FGDs were conducted in different programme areas as follows (Table 2.1):

**Table 2.1: Number of FGDs with beneficiaries, students, and teachers.**

Programme types	Males	Females	Students	Teachers	Total
a. Non-IA areas	3	4	-	-	7
b. IA with <3 years of interventions	3	4	-	-	7
c. IA areas with >3 years of interventions	3	4	-	-	7
d. Primary school programme in Rajshahi Division	3	4	2	2	11
e. Special programme in Banaripara Thana	3	4	2	2	11
f. NGO programmes	3	4	-	-	7
<b>Total</b>	<b>18</b>	<b>24</b>	<b>4</b>	<b>4</b>	<b>50</b>

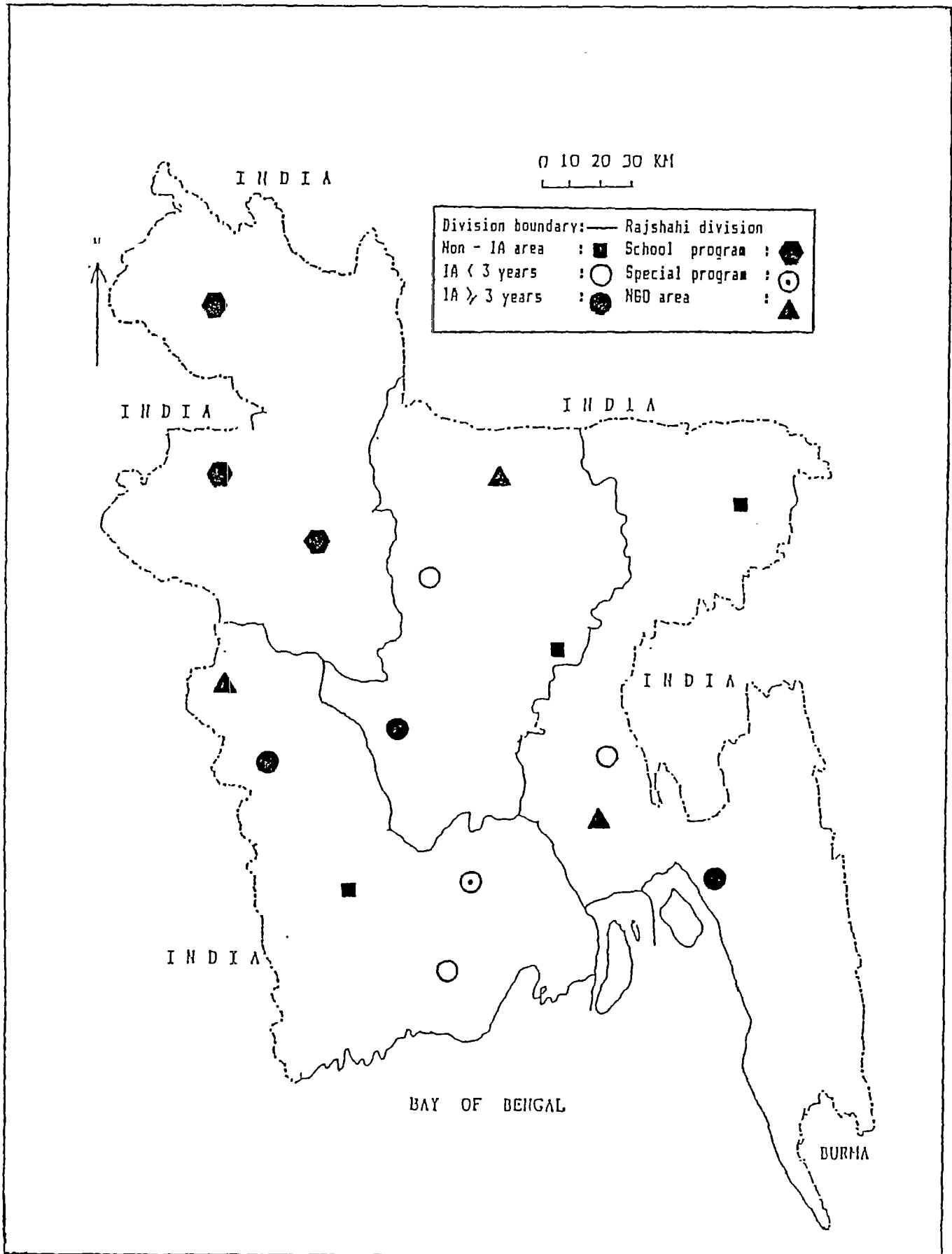
### 2.2.2. Samples for indepth interviews:

In-depth interviews were conducted with all the different categories of respondents, e.g., beneficiaries, DPHE and NGO workers, MOHFW workers, teachers, students, community leaders, and religious leaders (Imams/Pirs). Samples were drawn from NGOs actively working for promotion of the sanitation programme and their field workers and participants were selected for in-depth interviews.

A total of 502 samples were selected for in-depth interviews from the different programme types. Out of the total of 502 samples, there were 259 females and 243 males. The distribution of samples for the in-depth interviews are presented in table 2.2.

A map of Bangladesh showing the sample spots is presented at the next page.

MAP OF BANGLADESH SHOWING THE SAMPLE SPOTS



**Table-2.2: Sample size for Indepth Interviews.**

	Male	Female	School student	Teacher	DPHE worker	NGO FW	MOHFW FW	Imans/Pirs	Community leader	Total
a. Non-IA areas	10	20	5	8	6	-	10	6	9	74
b. IA-areas with <3 years of interventions	10	20	5	8	6	-	10	6	9	74
c. IA-areas with >3 years of interventions	10	20	5	8	6	-	10	6	9	74
d. Primary school programme in Rajshahi Division	15	30	10	21	4	-	-	6	9	95
e. Special programme in Banaripara Thana	15	30	10	20	4	-	-	6	9	94
f. NGO programmes	10	20	5	8	3	30	-	6	9	91
<b>Total</b>	<b>70</b>	<b>140</b>	<b>40</b>	<b>73</b>	<b>29</b>	<b>30</b>	<b>30</b>	<b>36</b>	<b>54</b>	<b>502</b>

### 2.3. Implementation of the study:

The study was implemented by ACPR. Executive Director, ACPR worked as the Principal Investigator (PI) and was responsible for implementation of the study. Research Associate, ACPR worked as the Co-Principal Investigator (CoPI). The CoPI was responsible for recruitment of survey field staff and conducting training and field operation for data collection.

In addition, one social scientist and another public health expert worked as consultants. The consultants were responsible for preparation of data collection instruments, providing technical assistance, conducting FGDs, and preparation of write-up for relevant activities. The PI, CoPI, and the consultants were responsible for data analysis and report writing.

#### 2.3.1. Implementation of FGDs:

The FGDs were conducted by four FGD teams, each consisting of a Moderator, a Rapporteur, and an Organiser. One of the members of each FGD team was a female. Moderation of the FGDs with female participants was done by the female member of the FGD team.

A set of guidelines was prepared for FGDs with each types of beneficiaries and was pretested and modified. However, the process of refinement continued till the end of conducting the FGDs. A copy of the FGD guidelines is at Appendix-A.

The FGD Organiser was responsible for selecting participants, arranging accommodation, and maintaining liaison and coordination. Notes taken down by the Rapporteur were verified with the tape-recording at the end of each FGD and the completed FGD guidelines were modified/ corrected. Standard principles and procedures in conducting FGDs were strictly followed.

### **2.3.2. Implementation of indepth interviews:**

The in-depth interviews were conducted by six teams, each consisting of a male and a female interviewer. For the indepth interviews the respondents were selected ensuring appropriate scatter of the sample throughout the selected Thana/NGO programme. Respondents selected for the indepth interviews were not selected as participants for the FGDs. Selection of participants for FGDs and in-depth interviews was done from far off places to avoid any possible contamination. Usually samples from different categories of respondents were selected from different unions within the selected Thana.

A semi-structured questionnaire was developed for the in-depth interviews. The questionnaire was pretested and finalized prior to conducting the actual interviews. A copy of the Questionnaire used for the indepth interviews is at Appendix-B.

A list of personpower worked for the study is at Appendix-C.



## Section-3

# RESEARCH RESULTS

### 3.1. Knowledge and its sources:

#### 3.1.1. Knowledge about hygienic latrine:

A wide range of information was collected about awareness and use of different types of latrines, understanding of hygienic latrines, and its advantages and disadvantages. A detailed set of tables has been prepared with the data obtained from the indepth interviews. Relevant tables are presented in the text, while the additional tables may be seen at Appendix-D. The study being qualitative in nature with a small purposive sample, the estimates shown in the tables in no way represent the general population and must be cautiously interpreted.

Ninety percent of the indepth interview respondents spontaneously mentioned that they were aware of the ring-slab latrine and 53 percent were aware of the homemade pit latrine (Table-3.1).

It is important to note that 50 percent of the respondents had ever-used ring-slab latrine, while 23 percent homemade pit latrine (Table-3.2).

At the time of the interview 45 percent of the respondents were currently using ring-slab latrines, 12 percent home-made pit latrines, and another 12 percent septic tank latrines, while the remaining 28 percent were using unhygienic latrines (Table-3.3).

The proportion using unhygienic latrines was only 2 percent in Banaripara, while in other program areas the corresponding figure ranged from 27 percent to 40 percent.

The FGD findings revealed that the understanding about hygienic latrines was primarily as follows:

- concrete latrine with septic tank is usually considered as sanitary latrine;
- pucca construction, but open excreta disposal type latrines are also considered by some as sanitary latrine;
- most respondents in Banaripara fully well understand a hygienic latrine and usefulness of covered pit;

**Table 3.1: Awareness about different types of latrine.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
<b>Ring/Slab latrine</b>							
Unprompted	96	87	97	82	95	88	90
Prompted	4	12	3	15	5	12	9
<b>Septic tank latrine</b>							
Unprompted	65	61	68	72	51	60	63
Prompted	30	34	26	20	31	31	29
<b>Pit latrine</b>							
Unprompted	51	51	43	46	76	50	53
Prompted	34	40	46	33	23	37	35
<b>Open/hanging latrine</b>							
Unprompted	96	95	92	73	92	91	89
Prompted	3	5	8	24	9	8	10
N	74	74	74	95	94	91	502

**Table 3.2: Type of latrine ever used at the respondent's household.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Ring-slab latrine	45	51	53	39	72	40	50
Septic tank latrine	19	19	15	28	12	20	19
Homemade pit latrine	18	15	14	28	35	25	23
Open/hanging latrine	66	68	72	53	57	70	64
N	74	74	74	95	94	91	502

**Table 3.3: Types of latrine currently being used at the respondent's household.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Ring-slab latrine	41	45	47	43	69	36	45
Septic tank latrine	10	13	14	17	5	18	13
Homemade pit latrine	9	12	5	6	24	15	12
Open/hanging latrine	31	26	27	31	2	29	24
other	9	4	7	3	-	2	6
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502

Vast majority of the indepth interview respondents mentioned their understanding of a hygienic latrine as 'flies/mosquitoes/poultry cannot spread bacteria; environment is not polluted' (76 percent), 'bad smell cannot spread out' (63 percent), and 'excreta remains sealed in the pit' (24 percent) (Table-3.4).

When asked about the advantages of hygienic latrine, the most frequently mentioned answers were 'bad smell cannot spread out' (90 percent), 'does not become sick' (78 percent), 'bacteria cannot spread out' (67 percent), and 'environment is not polluted' (55 percent) (Table-3.5).

When asked about whether males and females use the same latrine, 69 percent answered in the affirmative, and 24 percent mentioned that they used different latrines (Table-3.6).

### **3.1.2. Knowledge about safe water:**

FGD results revealed the following findings about the sources of safe water, practices, hindrances, and misconceptions:

#### **A. Sources of safe water:**

- tubewell water
- boiled water
- use of 'Fitkiri'/'Corpur'/water purifying tablets
- use of home-made filters

#### **B. Practices:**

- vast majority use tubewell water for drinking
- some use tubewell water for cleaning and washing too
- most of them know that it should be used for all purposes, but do not do so
- families not having tubewell within their own premises find it difficult to use tubewell water for all purposes

#### **C. Hindrances:**

- tubewell is not available within a reasonable distance
- tubewell water is distasteful
- tubewell water turns rice/curry black
- boiling of rice/curry is delayed with tubewell water

#### **D. Misconceptions:**

- Tubewell water causes rheumatism.

Table 3.4: Respondent's understanding of a hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Flies/mosquitoes/poultry cannot spread bacteria, environment is not polluted	72	72	76	71	75	91	76
Bad smell cannot spread out	62	54	73	56	52	85	63
Excreta cannot spread, sealed in the pit	34	27	22	10	38	14	24
Pucca latrine with walls on all sides/none can see from outside	22	18	22	27	17	11	19
Excreta cannot be seen	16	18	22	11	30	11	18
Ring-slab latrine	4	7	10	3	14	7	7
Septic tank latrine	1	4	5	1	7	1	3
Pit with a cover	4	1	-	1	3	-	2
Tough/strong/clean protected from rain	7	1	5	4	1	11	5
Other	-	1	-	1	-	-	0
Don't know	1	2	1	1	-	-	1
N	74	74	74	95	94	91	502

Table 3.5: Advantages of hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Bad smell cannot spread out	91	87	97	79	94	92	90
Does not become sick	78	80	81	46	95	90	78
Bacteria cannot spread out	66	66	60	72	68	71	67
Environment is not polluted	39	61	49	60	67	48	55
Nobody can see from outside	24	27	19	23	25	21	23
Other	12	14	18	21	18	20	17
N	74	74	74	95	94	91	502

Table 3.6: Whether males and females use the same latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Same latrine	87	66	62	77	62	64	69
Different latrine	13	26	33	3	38	31	24
Other	-	8	6	20	-	5	7
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502

Indepth interview results revealed that tubewell water is universally considered as safe drinking water (98 percent). One-fifth of the respondents mentioned that boiled water is safe for drinking. Seven percent of the respondents mentioned that water can be purified with 'fitkiri' 'karpur' and water purifying tablets, another 7 percent mentioned that the water which has no dirt, pollution, or bacteria is safe for drinking. It is important to note that 2 percent of the respondents considered that 'pond/well/rain water is good' for drinking (Table-3.7).

Tubewell was mentioned as the current source of drinking water for all the respondents, except for only one percent (Table-3.8).

**Table 3.7: Understanding about safe drinking water.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
Tubewell water	99	96	97	97	99	100	98
Boiled water	23	14	14	11	33	24	20
Purified with 'fitkiri', 'karpur' and water purification tablet	8	4	7	-	11	10	7
The water which has no dirt, pollution, or bacteria	3	10	4	11	6	8	7
Pond/well/rain water is good	5	-	3	2	-	-	2
Home-made filter	-	-	-	-	-	2	0
Tap water	-	1	-	-	1	-	0
N	74	74	74	95	94	91	502

**Table 3.8: Current source of drinking water.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
Tubewell water	96	100	97	100	100	99	99
Ring well	-	-	2	-	-	-	0
Pond/River/Canal	3	-	1	-	-	1	1
Other	1	-	-	-	-	-	0
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502

When asked whether people use tubewell water for purposes other than drinking, three-fourths (77 percent) of the respondents replied in the negative (Table-3.9). Most frequently mentioned reasons for not using tubewell water for purposes other than drinking was 'tubewell is far away (68 percent), followed by 'tubewell water turns cooked items black and distasteful/boiling requires more time/spots utensils' (32 percent) and 'washing utensils in the pond is more convenient than in tubewell water' (22 percent). Seventeen percent of the respondents mentioned that it might be 'due to lack of knowledge' among the people (Table-3.10).

**Table 3.9: Respondent's perception about whether people use tubewell water for purposes other than drinking.**

Whether use tubewell water for purposes other than drinking	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
	(Percent)						
Yes	14	29	10	45	6	29	23
No	86	71	90	55	94	71	77
Total	100	100	100	100	100	100	100
N	51	65	49	63	92	63	383

**Table 3.10: Reasons for not using tubewell water for purposes other than drinking.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
	(Percent)						
Tubewell is far away	67	67	57	71	89	51	68
Tubewell water turns cooked items black and distasteful/boiling requires more time/spot utensils	39	39	55	-	10	49	32
Washing utensils in the pond is more convenient than in tubewell water	20	16	18	49	11	26	22
Due to lack of knowledge	14	10	21	18	13	31	17
Tubewell owners do not allow others to use their tubewell	6	-	5	-	-	2	2
Water other than tubewell is purified in the cooking process	2	3	-	-	1	-	1
Fear that tubewell may go out of order soon if its water is used for all purposes	-	-	2	4	-	3	1
No one to fetch water	2	-	-	-	1	-	1
N	64	67	67	51	88	65	402

### 3.1.3. Knowledge about personal hygiene:

FGD respondents were asked about the measures other than safe water and sanitary latrine that will reduce the incidence of diseases. The findings were as follows:

- remain neat and clean;
- keep food covered so that flies cannot sit on it;
- do not eat cold/rotten food;
- wash hands and mouth before eating;
- wash hands and dishes before serving food;
- keep garbage in a fixed ditch;

- clean the hand with soap/ash/mud after defecation;
- regularly cut the nails;
- keep the household/courtyard clean;
- take good/nutritious food;
- do some exercise;
- keep the body clean/take regular shower; and
- do not smoke/do not take betel-nut/betel-leaves.

In the indepth interviews a similar question was asked. Most frequently mentioned answers were 'maintenance of cleanliness' (65 percent), followed by 'not to eat stale/rotten food' (33 percent), 'food should be kept covered' (30 percent), and 'disposal of garbage in a definite place/keep the environment clean' (29 percent) (Table D-2 in Appendix-D).

#### **3.1.4. Knowledge about diarrhoeal diseases**

In the Indepth interviews respondents were asked about the perception why lot of people suffer from and die of diarrhoeal diseases every year. About three-fourths of the respondents made mentions that 'by taking rotten/adulterated/contaminated food' (77 percent). About one-half mentioned that 'by drinking polluted water/using contaminated water for washing/cooking' (54 percent). About two-fifths mentioned that 'for keeping the food open/flies and insects sit on food' (44 percent) and a similar proportion opined that for 'indiscriminate defecation/using open or hanging latrine/spread of diseases in rainy season or during floods'. About another two-fifths (39 percent) mentioned that 'people don't maintain cleanliness/don't wash the hands before taking food/don't properly clean the hands after defecation'. Details may be seen at table D-24 in Appendix-D.

When asked about the measures that are needed to prevent diarrhoeal diseases, most frequently mentioned answers were, 'foods have to be covered to protect from flies/dust' (53 percent) and 'maintain cleanliness' (52 percent). One half of the respondents emphasised on 'drinking safe water/tubewell water/boiled water', followed by 'not to eat rotten foods' (42 percent), 'use of hygienic latrine/defecate at a fixed place'(42 percent). Details may be seen at table D-25 in Appendix-D.

#### **3.1.5. Sources of information:**

Indepth interview results revealed that two-thirds of the respondents were ever told by any one about a hygienic latrine. Dissemination of this information was highest in Banaripara (90 percent), followed by the NGO areas (69 percent), and IA areas with 3 or more years of intervention (61 percent). In the remaining areas the percentages ranged from 55-58 percent (Table D-3 in Appendix-D).

The source of information were primarily the DPHE worker (40 percent), NGO worker (18 percent) H&FP worker (16 percent) teacher/student (10 percent) and friend/relative/neighbour (9 percent) (Table-3.11).

**Table 3.11: Sources of first information about a hygienic latrine.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripa	NGO	All
	(Percent)						
DPHE worker	54	36	47	36	57	11	40
H & FP Worker	20	32	22	13	11	5	16
NGO worker	2	6	9	17	2	65	18
Teacher/student	2	4	4	20	17	5	10
Friend/relative/neighbour	17	14	2	6	7	10	9
Chairman/member	-	4	7	-	2	-	2
VDP	5	-	-	5	-	-	1
Other	-	4	9	3	4	4	4
Total	100	100	100	100	100	100	100
N	42	52	45	55	85	63	342

### 3.1.6. Mass media sources:

In order to ascertain the mass media sources of information, the respondents were asked in the indepth interviews about the media in which they heard about safe water, sanitary latrine, and personal hygiene. Over two-thirds (69 percent) said that their source of media was 'poster/leaflet/book' and a quarter (26 percent) mentioned 'radio/television'. 'Theatre and Jarigan' was also mentioned by about one-fifth of the respondents (Table-3.12).

**Table 3.12: Mass media through which heard about safe water, sanitary latrine, and personal hygiene.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripa	NGO	All
	(Percent)						
Poster/leaflet/book	67	69	72	56	72	93	69
Home visit by worker	34	49	46	29	80	38	45
Group meeting	27	34	32	17	70	26	34
Radio/Television	32	31	27	13	28	34	26
Hospital/Doctor	32	31	18	18	40	9	24
Theater/Jari	18	14	15	15	22	29	19
Meeting/Workshop	12	14	11	11	20	24	15
Newspaper	4	5	12	4	7	11	7
Home visit by relative/ friend	-	5	3	2	2	10	4
Mobile cinema	-	-	-	-	2	-	0
Other	1	-	-	3	-	-	0
N	74	74	74	95	94	91	502

### 3.2. Sanitation and religion:

Almost every respondent mention that religion says everyone to remain neat and clean. If some one is not neat and clean, God will not accept his/her prayer. Male and female beneficiaries and the teachers and students who participated in the FGDs mentioned about the following religious mentions:

- 'Parishkar Parichannata Imaner Aungo' - Islam  
(To remain neat and clean is part of faith in Islam)



- If some one defecates/urinates in the water which is used for drinking/cooking/bathing/'oju', it is a 'Kabira Gunah' - Islam ('Kabira Guna' is an unforgivable sin)
- "Parishkar Parichanna Rohe Je Jon Ishawr Bashen Bhaloo Taree Sharbakkan" - Hinduism (God always likes the one, who remains neat and clean) (No Christian and Buddhist was an FGD participant).

The following responses were obtained from the respondents in the indepth interviews:

- Hadith says "Cleanliness is a part of faith"
- Allah said to the prophet, "Send message to every household so that they remain clean"
- without cleanliness no prayer or fast will be accepted, no worship is acceptable in impure state
- it is 'Haram' (forbidden) to defecate and urinate in the water and under a fruit bearing tree
- it is the saying of prophet Khijir Alaihe Ossalam, "One who defecates in the water will suffer from tuberculosis"
- it is in the religion, 'he who defecates under the open sky, a fruit bearing tree, on the road, or in the field is called 'Daus'. A 'daus' will never enter paradise
- he who remains clean is loved by God and by mankind
- angels do not enter the house where there is indiscriminate defecation
- if cleanliness is maintained, devil does not come near
- religion mentioned not to go to latrine barefooted
- if 'kulup' is not used after defecation and urination it will be violation of religious instruction. Without 'Kulup' even if soap is used prayers will not be accepted
- religion instructed to defecate in purdah
- those who have no latrine in their households have no faith
- if a muslim household does not possess six 'Khanas' such as 'baitak khana' (sitting room for visitors), 'dastar khana' (spread sheet for dinning), 'Gusalkhana' (bathroom), 'paikhana' (latrine), 'pesrabkhana' (place to urinate), and 'Khodakhana' (place of worship), it cannot be called a muslim household.
- if the excreta touches any one or disease is spread from the excreta, the person who defecated will be the sinner
- religion seriously emphasizes to brush teeth, cut nails, keep the body clean, do ablution, etc.
- it is mentioned in Hinduism that if one does not bath and change one's dresses after defecation, touching the utensils will be sinful. Evil may befall on husband and prosperity of the family will be hindered
- cleanliness brings prosperity to the family
- children are blessed with longer life if cleanliness is maintained
- Jesus always liked a person with clean mind, clean body, clean clothes, and without pride.

### 3.3. Perception about excreta:

Excreta is perceived as:

- Very nasty/filthy/too bad/bad-smelling, etc.;
- Harmful for health/spreads germs/diseases;
- Feel like vomiting;
- Cannot eat food, if it comes in their mind;
- Close their nose with saree's end;
- Spit through the windows;
- Behave in a way, as if it is touching their body.

It is very interesting to notice the kinds of things the FGD participants did when they were asked about their perception of the excreta. Covering their noses with the saree's end, as if actually smelling the stench of excreta, majority of the women said, "Oh dear, don't utter that filthy word, we feel nauseated at the very sound of its utterance. We can not take our food, we feel like vomiting, when the word appears in our mind".

### 3.4. Defecation practices of children:

Defecation practices of children are presented classifying them into infants (<1 year) and children (1-4 years).

FGD participants were asked, "Where do the infants/children defecate?" A subsequent question was asked, "How do the faeces are disposed off?" Usually infants defecate in the bed, napkin, cradle, or in the lap of their mother. In most cases napkins and clothes are cleaned in the ponds, canals, and rivers. People having little or no access to rivers or canals wash their clothes with tubewell water, mostly on the platform. As mentioned only in Banaripara, some people dig a ditch to clean clothes with faeces.

Children of approximately 1-4 years of age defecate on the courtyard, verandah, or in open space near the house. Sometimes small pits are specially prepared for them. Faeces are cleaned with straw and disposed in the bush, canal, river, or latrine. Faeces are also cleaned with spade and disposed into ditches. In many cases faeces remain at the defecation site. Hens and ducks tread upon those. During the rainy season faeces are washed away.

In reply to the question about how the faeces can be disposed in a hygienic way so that environment is not polluted, the following suggestions were obtained from different FGD groups:

- mothers should take their children to the latrine and help them develop a habit;
- faeces of children should be disposed in covered pits so that it can not spread diseases;
- a ditch/pond should be specifically kept for cleaning of childrens' faeces;
- small pits covered with a pitcher can be installed in the courtyard;

- small plastic or aluminum pots can be used;
- subsidized plastic pots for poor families will help hygienic disposal;
- faeces cleaned by straw blocks the pan, if disposed in ring-slab latrines; and
- faeces of children are not abhorred by mothers due to love and affection.

Females usually remain busy with different types of household work. Children can not express when they feel the urge for easing themselves, and defecate indiscriminately. Therefore, the mothers have to be cautious and children's faeces must be hygienically disposed as quickly as possible. Parents should be careful enough so that faeces can not spread during rainy season and contaminate the soil. They also opined that many parents do not know the importance of teaching these things to the children, so the parents will have to be educated on these issues.

Data obtained from the indepth interviews are not presented in this report, since the question used in the interview lumped the results together for all children, instead of classifying them by 1-4 years age group and by older age group.

### **3.5. Acceptability, practices, and sustainability:**

#### **3.5.1. Acceptability of one-ring one-slab:**

Opinion was sought from FGD participants and indepth interview respondents on advantages and disadvantages of one-ring one-slab latrine in order to ascertain its acceptability. It was evidenced that one-ring one-slab latrine was unacceptable to almost every one. The reasons for the unacceptability lies in the following disadvantages:

- pit fills up quickly;
- frequent shifting is hazardous and expensive;
- frequent digging of the pit is hazardous and expensive;
- pit is filled because of the sandy soil;
- soil erosion of the pit wall in rainy season;
- pit fills up with water in rainy season in low-lying areas;
- deposit of soil from rat holes;
- roots of trees penetrate into the pit wall;
- ring and slab tilt because of soil erosion;
- causes crack in the ring;
- shortage of land for poor families;
- the ring might break during shifting, etc.

Although less emphatically mentioned by an insignificant minority, the following advantages of one-ring one-slab may merit presentation:

- cheaper than multiple ring-slab latrine;
- lesser carrying cost;
- no money is required for cleaning the pit;

- the cost of cleaning multiple ring pit is higher than the price of a ring and slab;
- even if the pit is filled with earth including the ring, the slab can still be shifted;
- the old pit soil can be used as manure;
- if a sapling is planted in the old pit, the soil nutrients gives it a healthy and strong growth, etc.

Due to the disadvantages cited above, people do not want to buy latrine if multiple rings are not given. DPHE officials mentioned that since DPHE is unable to give more than one ring, their sale figures have dropped in many places. Some respondents, specially in high coverage areas, tend to believe that the DPHE officials are trying to show high coverage quickly by selling latrine at a cheaper price. Some respondents also said that people think DPHE officials are embezzling fund by not giving more than one ring.

The customary practice of using 5-7 rings might have influenced most people to think that latrine with at least 5 rings is appropriate.

### 3.5.2. Cleaning of the pit:

Data on procedures being used for cleaning the pit were obtained from FGD participants separately for (a) multiple ring slab latrines and (b) one-ring one-slab latrines.

**Cleaning of multiple ring-slab latrines:** Latrines with multiple rings need to be cleaned when it is filled up. The procedures used for cleaning the pit and the associated problems as mentioned by the participants were as follows:

- clean the pit using sweepers;
- sweepers are expensive;
- some sweepers charge money per ring;
- cost of cleaning is higher than a new installation;
- for fear of cost some people abandon the latrine and install a new one, while some others go back to traditional practices;
- to avoid cost, some people drain the excreta to water sources and open outlets;
- if the disposal pit is dug smaller than the volume of excreta cleaned, it spoils the neighborhood and pollutes soil surface and water;
- for cleaning, excreta is disposed in open space; the stench pollute the surrounding areas creating serious resentment among the neighbours;
- some people make twin pits and connect each other for automatic disposal;
- use saline/lime/soda water for melting of faeces.

**Cleaning of one-ring one-slab latrines:** Due to its recency of introduction limited number of participants mentioned having cleaned the one-ring one-slab latrine. The following answers were given by them:

- pit is abandoned and the ring-slab is shifted;
- if the excreta touches the ring, only the slab is shifted and a new ring is bought;
- beneficiaries need training and demonstration on how to install and shift the ring-slab.

### 3.5.3. Shifting of homemade pit latrines:

Respondents, especially in high coverage areas, are almost universally mentally prepared to shift homemade latrines when the pit is filled up. The following answers reflect the mental preparedness for shifting:

- abandon the pit and dig another by its side;
- superstructure is not expensive, and in any way need to be repaired/replaced almost every year;
- plant a sapling next year to have healthy growth; a few however don't want to eat fruits from those trees, sell them in the market;
- very poor people have problems due to scarcity of land;
- some people feel that two pits can be dug side by side and alternately used, in such case the manure can be used in each year; etc.

### 3.5.4. Productive use of faeces:

Although no specific question was asked about mental preparedness of the beneficiaries to use faeces as manure, the issue came up during indepth probing on shifting of homemade and one-ring one-slab latrine, specially for those having shortage of land. The perception of the respondents are reflected in the following answers:

- human faeces is repellent/filthy to touch;
- majority of the people do not know that human faeces can be used as manure;
- heard that in some urban areas human faeces is used as manure;
- if people are informed, they will be willing to use human faeces as manure;
- it takes more than a year for faeces to become manure;
- when cowdung is widely used as manure and for other productive purposes, why human faeces cannot be used;
- very few people use soil from latrine area as manure.

### 3.5.5. Innovative ideas for homemade latrines:

Innovations in installing homemade hygienic latrines were found to be limited in special programme areas. It is obvious that to go for innovative ideas people must feel the urge of having a hygienic latrine which is affordable, suitable, and sustainable. However, few of the innovative ideas as generated from this research are presented below:

- a. **Burnt pit:** In some areas people were found using only a slab on top of an indigenous pit. Some people have innovated pits burnt with straw, twigs, dry leaves, firewood, etc. Experimentation of such a pit prepared with moulded clay on all sides of the pit wall and raising the neck of the pit at a reasonable height from the water level in different soil conditions and regions of the country may be extremely worthwhile. Although a

SANPLAT is less expensive than a slab, it may be assumed that a slab will be more acceptable to people because SANPLAT is fixed on an indigenous platform which is not only expensive but also hazardous for maintenance and shifting. A water-seal slab on top of a burnt pit is likely to be quite hygienic and having the potential to cross out the criticism of indigenous pit covers being unhygienic, uncomfortable and difficult to maintain. Therefore, a latrine with a slab on top of a burnt pit is likely to be a leastcost innovation for Bangladesh and will suit the need of the poorest section of the population.

- b. **Motki-pit:** In Banaripara thana people prepared pits with two or three motkis (large earthen container, usually used for storing foodgrains). When a motki cracks or breaks it is not usually used for storage, but can be used for making a pit. So the cost is nominal. The motki pit has two great advantages. It works as a pit lining and protects the pit walls from falling down. Motki-mouth is small and does not need a large cover on top of the pit and as such the cost of pit cover is almost nil. The idea of use of SANPLAT may get support from this innovation. If proper experimentation is done, this innovative idea may be useful for sandy soil and low-lying areas. This will also be a leastcost technology to suit the need of the poorest section of the population.
- c. **Indirect pit:** Hazards for shifting the superstructure and cleaning the pit perhaps led some people to innovate the idea of an indirect pit. The customary practice is not to shift the latrine from one place to another. Therefore, both rich and poor people have been resorting to this device. Rich people use a water-seal slab and connect it to an indirect pit made out of rings and cover with another slab. This is more expensive but less hazardous for cleaning the pit. Poor people use indigenous indirect pit with burnt earthen pan (as found in Banaripara) or with polytene seal. Therefore, the indirect pit latrine has the potential to cater to the need of both rich and poor people, even when productive use of faeces is not quite acceptable.
- d. **Twin pits:** Hazards of shifting the superstructure and cost and hazards of cleaning the excreta when the pit is filled might have led some rich people to install twin pit latrines. In this case, usually both the pits are made of rings and is inter-connected like a septic tank. The second pit is again connected into the ground so that the water can pass away and cleaning is not necessary.

### 3.5.6. Sustainability:

Sustainability is discussed separately for (a) multiple ring-slab latrines and (b) one-ring one-slab and homemade latrines.

**Multiple ring-slab latrines:** Cleaning of the pit poses to be a problem. If the slab is installed on top of the pit, the superstructure and the slab need to be removed at the time of cleaning the pit. So it is not only the cost of cleaning but also the cost and hazards of shifting the superstructure and the slab and re-installing those after cleaning. This research revealed that to avoid cost of cleaning and the cost and hazards of shifting and re-installing the superstructure

and the slab, people are digging another pit by the side of the latrine and connecting the old pit with the new one. Some people are connecting the pit with water sources. Some others are abandoning the old pit and reverting to traditional practices.

**One-ring one-slab/homemade latrines:** This research revealed that one-ring one-slab was unacceptable to almost every one. The reasons for the unacceptability have been discussed earlier. It may be assumed that the reasons (most of which are hypothetical) can be addressed with proper demonstration of the techniques of installation and shifting. However, there will be problem with availability of land for frequent shifting, despite the fact that people are mentally prepared to shift the latrine when the pit is filled-up. Thus, identification of a suitable means for removal of faeces is not only necessary to avoid frequent shifting but also to cope with non-availability of land.

### **3.6. Coverage and voluntarism:**

#### **3.6.1. How to increase coverage:**

Major hurdles to increase the coverage of hygienic latrines are lack of knowledge among the beneficiaries, poverty, idleness, carelessness, stubbornness, shortage of land, and landlessness.

Poverty and landlessness can not be easily addressed, but appropriate information and education to the beneficiaries can eliminate all other hurdles to universal coverage. However, idleness, carelessness, and stubbornness may need to be dealt with certain amount of social pressure. More detailed discussions on legal and social pressure are made in Chapter-4.

Indepth interview results revealed that the reasons for people not installing hygienic latrines were 'lack of money/poverty' (69 percent), 'lack of awareness/education/ motivation' (51 percent), and 'laziness/negligence/indifference' (25 percent) (Table-3.13).

Replying to the question on how to encourage people to install hygienic latrines four-fifths of the respondents mentioned that 'educate people/motivate them/make publicity'. Nearly one-third mentioned 'distribute free/reduce price' (Table-3.14).

When asked about what steps can be taken to strengthen the sanitation program, the responses made in the indepth interviews were as follows:

- educate people about the need for hygienic latrine and to inform about the consequences of unhygienic disposal of faeces
- more publicity on radio/TV; postering in hat, bazar, villages; film show, miking, seminars, and meetings
- inform about the source and price of sanitary latrine
- organize meetings with chairman/member/teacher/student/imams/educated villagers
- form committees in each village

- visit door to door for motivation
- create pressure, give threat, introduce law, compel well off people, take administrative measures for failure
- frequent visits to the villages by government officials and field workers of all other departments
- demonstrate how easily sanitary latrines can be installed

**Table 3.13: Reasons why people do not install hygienic latrines.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripa	NGO	All
(Percent)							
Lack of money/poverty	81	76	78	47	75	60	69
Lack of awareness/ education/motivation	57	47	49	57	39	60	51
Laziness/negligence/ indifference	16	21	20	23	35	32	25
Unwilling to change traditional practice	12	6	20	20	5	36	17
so poor that unable to spend money or time for digging a pit	12	10	18	19	7	12	13
Lack of space/lives in others' land	7	15	7	15	4	14	11
Most villagers have hygienic latrine now	1	2	-	-	15	1	3
Other	4	10	8	20	-	3	3
N	74	74	74	95	94	91	502

**Table 3.14: How to encourage people to install hygienic latrines.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripa	NGO	All
(Percent)							
Educate people/motivate them/make publicity	76	75	80	92	73	89	81
Distribute free/reduce price	37	38	26	15	39	15	28
Introduce law/legal pressure	8	3	4	-	9	4	5
Educate that cost of latrine is lower than doctor's fees	3	3	3	2	5	4	3
Demonstrate homemade/ no-cost latrine	7	3	3	3	2	1	3
Help in installation	1	-	1	2	4	2	2
Provision for install- ment loan	1	4	4	-	-	1	2
Other	1	2	3	1	2	-	2
N	74	74	74	95	94	91	502



- follow-up visit to ensure sustainability
- free distribution to poor families by both GOB and NGOs
- sale of ring-slab at reduced price or previous price
- provision for loan with low interest rate
- government should seek co-operation of the credit programs to facilitate loan for sanitation
- discussion on sanitation in the mosques
- discussion on sanitation in the schools
- inclusion of sanitation in the school syllabus
- deployment of more workers in the field
- deployment of volunteers in the villages
- training of field workers, respectable villagers, government employees, teachers, students
- allowance, other facilities, and administrative help to the social workers and volunteers in the villages
- demolish all open unhygienic latrines and introduce homemade pit if supply of ring-slab is inadequate
- raise money from the well off villagers
- group saving scheme for sanitation
- delivery of ring-slab at the door step.

The FGD participants were asked about what steps the government can take in strengthening the sanitation programme. A wide range of responses were obtained as follows:

- free supply of ring-slab latrines;
- supervision/monitoring of whether people are following the instructions;
- involve people of all walks of life;
- involve all government workers;
- create legal pressure, threat should be given by using police force, because our people are used to obey commands;
- large-scale use of mass media about the program and also about punitive measures in case of non-compliance;
- engage unemployed rural youths with some remuneration to motivate people;
- organise monthly meetings with workers and volunteers;
- publicity/motivation by Union Parishad Chairman, Member, Dafader and Chawkider;
- HA/FWA can prepare a list of HHs having no hygienic latrine;
- arrange for public latrines for public places/schools;
- introduce sanitation in primary and high school curricula;
- subsidize ring-slab latrine/sell through each Union Parishad, people will know/save carrying cost;
- make provision for rewarding community/individuals;
- WFP wheat distribution through GOB or NGO should be tied to installation of hygienic latrines;
- mobile film show on sanitation.

### 3.6.2. How to motivate people:

Teachers and students were asked in the FGDs about, what do they tell to motivate people. The following responses were obtained:

- defecation in open latrines/places spread diseases/cause warm infections/harmful for health;
- use of hygienic latrine helps prevent environmental pollution;
- inform about sources of ring-slab latrine;
- inform about how to construct low-cost latrine;
- construction of latrine will help maintain privacy of females;
- cost of a latrine is much less than the cost of medicine and doctor's fees in case of diarrhoeal diseases;
- your neighbour has a hygienic latrine, why shouldn't you have one ?

In the indepth interviews the workers and volunteers were asked how to motivate people about hygienic latrine, tubewell, and personal hygiene. Frequently mentioned responses included, 'explain benefits of sanitation' (59 percent), 'discuss in meetings/gatherings/mosques' (19 percent), 'supply latrine/ tubewell at cheaper rate' (17 percent), 'postering' (12 percent), 'inform about how diseases spread' (10 percent) and 'create pressure' (5 percent). Further details are available in Table-3.15.

When asked whether they ever faced any problem while working for the sanitation program, about a quarter of the workers and volunteers answered in the affirmative. The problems were very general in nature. For example, 'people want us to make the latrines for them/want financial help (48 percent), 'village people do not understand easily (27 percent), 'people do not listen even after motivational efforts (15 percent), and 'many elderly people do not want to give up traditional habits' (13 percent) (Table-3.16).

Detailed analysis of how to motivate people was made classifying the responses by different types of workers and volunteers, and the results are presented in table D-23 in Appendix-D. The following responses were given by all the different categories of respondents:

- inform/educate in details about benefits of sanitation/disadvantages of unhygienic practices;
- organise seminar, symposium, meetings, group discussions, processions, etc.;
- use mass media for wide publicity including mobile film show;
- involve community leader/teacher/student/chairman/member/H & FP worker/trained educated youths for motivation through home visit;
- provide financial/material support.

**Table 3.15: How to motivate people about hygienic latrine, tubewell, and personal hygiene.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
(Percent)							
Explain benefits of sanitation	52	70	53	55	50	71	59
Discuss in meetings/gatherings/mosque	37	9	17	23	16	16	19
Supply ring-slab/tubewell at cheaper rate/for installment	30	22	17	9	13	13	17
Postering	15	-	23	9	6	13	12
Inform about how diseases spread	4	9	7	9	13	13	10
Extensive publicity through radio/TV	19	9	3	5	-	4	6
Create pressure	4	4	7	-	9	4	5
Train youths	-	4	7	5	6	2	4
Tell that cost of latrine is lower than cost for doctor	7	4	3	-	3	2	3
Activate DPHE workers	-	-	13	-	3	-	3
H&FP worker can motivate people	-	-	13	-	3	-	3
Train elderly people/leaders and ask them to motivate people	-	4	3	-	9	2	3
Condition installation of latrine to sanction of tubewell	-	4	3	5	-	-	2
Tell women that it is shameful to defecate in open places	-	-	-	5	3	-	1
Other	-	-	10	9	6	4	5
N	27	23	30	22	32	45	179

**Table 3.16: Problems faced while working for the sanitation programme.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
(Percent)							
People want us to make the latrines for them/want financial help/tell about shortage of land	55	33	67	25	38	46	48
Village people do not understand easily	18	67	11	50	25	31	27
People do not listen even after lot of motivational efforts	46	-	11	25	-	-	15
Many elderly people do not want to give up traditional habits	9	-	-	-	13	31	13
Village people resist	-	-	-	-	25	-	4
Dogs were let loose to chase students	-	-	-	-	25	-	4
No access to females/no access to rich people	-	-	-	-	13	-	2
Other	-	-	11	-	-	-	2
N	11	3	9	4	8	13	48

→ very much directed to latrine construction

### 3.6.3. Who can influence most:

DPHE field personnel have strong opinion that to launch a successful IEC campaign, the initiative should come from the district level officials, especially the civil administration, to be followed by active participation of the Thana level officials, field workers of GOB (health, family planning, education, and agriculture departments) and NGO programs, and Union Parishad Chairmen, Members, Dafadars, and Chowkidars. Informal community leaders, religious leaders, and social workers will have to be involved in the process. The members of the VDP have been playing an important role in some areas. Possibility of their involvement need to be assessed.

Respondents in the indepth interviews were also asked about the persons who can influence people most to install a hygienic latrine. About one-half of the respondents made mentions of UP Chairman/member (53 percent), followed by teacher/student (42 percent), DPHE worker (40 percent), H & FP workers (34 percent), and NGO workers (20 percent) religious/community leaders (10 percent) (Table-3.17).

When asked about whether the respondent ever motivated any one, nearly two-thirds (63 percent) replied in the affirmative.

**Table 3.17: Persons who can influence people most to install a hygienic latrine.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
	(Percent)						
Chairmen/member	68	64	54	40	73	24	53
Teacher/student	47	38	32	31	72	31	42
DPHE worker	44	44	50	19	67	16	40
H & FP worker	27	47	41	22	50	19	34
NGO worker	4	14	19	16	1	65	20
Friend/relative/neighbor	15	14	18	10	9	15	13
Religious/local leader	12	9	7	15	2	14	10
Other	-	1	-	-	1	1	1
N	74	74	74	95	94	91	502

### 3.6.4. Voluntarism vs. coercion:

Respondents were asked, "How the community people will react if the government decides to dismantle all open/hanging/unhygienic latrines to be replaced with sanitary latrines?" The purpose of this question was to ascertain whether certain social and legal pressure to the owners of unhygienic latrines would be considered as a coercion for installation of hygienic latrines. Responses obtained from the indepth interviews and FGDs do suggest that the perception of the words, 'coercion' and 'voluntarism' slightly vary among the different categories of respondents. Similarly, the opinion on application of pressure or allowance for voluntary installation of hygienic latrines also vary to some extent.

Results from the FGDs may be summarized as follows:

- there will be no reaction, people will obey;
- some differ, specially poor males, they think people will react because government is not helping them, only ordering;
- a general consensus is that, the vast majority will be convinced if properly educated and motivated, social pressure by the community will be appropriate on the rest of the people;
- even after all these efforts, if some families do not listen, there must be legal pressure by the government;
- if the legal pressure does not work, exemplary punishment/fine should be imposed.



Results from indepth interviews also revealed similar findings. One-third of the respondents opined that there will be no reaction and two fifths mentioned that people should be motivated first, while about a quarter (28 percent) considered that people will face difficulty and another quarter mentioned that people might be annoyed/aggrieved. It is important to note that a quarter of the respondents thought that if the unhygienic latrines are demolished, people will install hygienic latrines (Table-3.18).

As need for pressure to ensure total coverage was felt, possible reactions to pressure was also equally felt. Educated and well-to-do respondents usually felt that to ensure universal coverage certain social and legal pressure would be necessary, while those who are poor areas usually felt that people might react to any pressure. Poores can not afford money to buy ring-slab latrines or spare their own labour/time to prepare a homemade latrine. Some households do not have competent male personpower or land for installing a latrine, while many of those who live on somebody else's land are not allowed to install a latrine. Most poores think that they can not manage food for them and the government is not providing any support, why should the government give pressure. Poores need subsidies, while landless need community latrines. Some people think that pressure is given only on poores, not on rich or influential persons; while some others feel that 'pucca' but open latrines of influential persons should be dismantled first to create examples.

Contrarily, educated, influential and well-to-do people, especially in Banaripara areas where majority of households have installed sanitary latrines, consider that some amount of pressure, social and/or legal will have to be given to ensure universal coverage. According to them, people behave properly when there is a pressure. Laggards need a pressure, so do the stubborn. People, who are less concerned about environmental hygiene and pollute the environment by use of unhygienic latrines should not be allowed to create bad examples for the community. However, extreme caution should be exercised by implementors so that execution of the pressure by some over enthusiastic workers/volunteers may not turn into coercion.

The Banaripara experience as well as those in some NGO areas show that if people are properly informed and educated, most of them are easily motivated to install hygienic latrines. A general consensus was that when the vast majority will install hygienic latrines, community

pressure will be effective for the laggards and stubborn. However, distressed families may need help in cash or kind, or personpower support from volunteers.

**Table 3.18: Perceived reactions of the people if the government decides to dismantle all unhygienic latrines.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	ALL
	(Percent)						
People need to be motivated first	55	41	51	27	23	44	39
No reaction from those who are solvent	27	40	31	23	38	43	34
Poor people will face difficulty/cannot afford	20	34	34	24	15	40	28
If demolished they would install hygienic latrine	15	23	24	21	62	17	27
People might be annoyed/aggrieved	31	16	20	33	29	24	26
People will obey the legal pressure	26	19	11	17	7	18	16
Being aggrieved may defecate indiscriminately	14	10	19	9	7	13	12
other	15	-	4	5	4	-	5
N	74	74	74	95	94	91	502

### 3.7. Role of workers and allies:

#### 3.7.1. Workers' feelings about participation:

Indepth interviews were conducted with workers and volunteers who participated or are likely to participate in promoting the sanitation programme, and FGDs were made with teachers and students who participated in the sanitation programme. In both the methodologies one area of interest was to know how do the workers/volunteers feel about their participation in the sanitation programme. In general the feelings were good among those who had participated, but some of them had some frustrations too. In the FGDs the reasons for their good feeling were recorded as follows:

- contributing something to the society;
- contributing to health promotion;
- working for national development;
- feel proud, when people listen to us;
- students suffer less from diseases, school attendances increased;
- shouldering some responsibility as an educated person; and
- feel proud for advancement of people by health education.

The frustrations were limited to teachers only.

Major reasons for their frustrations were that their good work has not been rewarded or even recognised. They could not even provide some snacks to their students when they had attended meetings or returned from voluntary participation in the mobilization campaigns. Some of the teachers also felt that dismantling of open latrines is an act of indignity. Some others remarked that it is not fair to engage teachers only, others should also be engaged.

Similar to the FGD findings, the indepth interview results also revealed that the workers/volunteers feel good because they are able to do good to others (34 percent), they feel good when people listen to them and install latrines (31 percent), and that the environment will be cleaner (13 percent) (Table-3.19).

When asked whether they will be willing to work for the sanitation programme 95 percent of the respondents replied in the affirmative.

The FGD participants were also asked about the works they like and dislike. The following aspects of their activities they liked most.

- personally learnt a lot about sanitation;
- due to our efforts coverage has substantially increased, and environment is not being polluted;
- everybody listen to us, we feel good;
- enjoy working in a team;
- young students are doing a noble work under our guidance, in future this orientation will help them to contribute more to the society, with this training they will not be terrorists, rather they will be constructive.

The following things were frustrating to them:

- why teachers alone will do this, why not others;
- contributions are not properly evaluated, no recognition, no reward;
- government/DPHE should be more active;
- government becomes too lenient sometimes, we then feel frustrated;
- government does not control unhygienic latrines in public places, such as, hat/bazars, cinema halls, river-crafts, street-corners, etc.;
- unprestigious work;
- feel frustrated when people do not want to attend meetings;
- some people think that we get money from the government and work as their agent;
- when people do not listen even after repeated motivation, we feel frustrated;
- some people say, "we cannot eat, and you are telling us to install sanitary latrines", we feel sorry for them.

**Table 3.19: Feeling of the respondents about participation in the sanitation programme.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	ALL
	(Percent)						
Feel good that we are able to do good to others	37	37	50	32	41	20	34
When people listen to us and install latrine we feel good	26	30	18	41	25	40	31
Environment will be cleaner	11	17	14	14	6	16	13
It is a nice feeling to make village people understand	15	-	14	18	9	11	11
We are glad that we could discharge a moral duty	7	-	-	5	9	7	5
Feel good to help reduce the spread of disease	4	17	-	-	6	-	5
Feel good when people change their bad habits	-	7	9	-	13	-	5
Feel bad when people fail to understand	7	7	-	9	3	13	7
N	27	30	22	22	32	45	178

### 3.7.2. Job performances of workers and allies:

Three-fifths of the workers and volunteers interviewed mentioned having done something for promotion of the sanitation programme. The proportion having done something was highest in the NGO areas (74 percent) followed by IA areas with 3+ years of intervention (68 percent), Banaripara (65 percent), and Non-IA areas (64 percent), while in the remaining two areas the proportion was no larger than 44 percent.

When asked about the specific jobs the respondents performed, the frequently mentioned responses included, 'motivate people' (42 percent), 'discuss about benefits of hygienic latrines' (26 percent), 'provide education' (24 percent), 'tell how to purify water' (16 percent), and provide information (10 percent). Further details are available in Table-3.20.



**Table 3.20: Specific jobs the respondents performed for promotion of the sanitation programme.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
	(Percent)						
Motivate people	50	39	17	55	53	39	42
Discuss about benefits of hygienic latrine	27	22	48	9	16	30	26
Provide education	35	39	28	-	16	25	24
Tell how to purify water	15	22	24	-	13	18	16
Discuss with students about the sanitation	4	4	10	41	9	11	13
Provide information	15	4	10	5	-	18	10
Educate on how to make a low-cost latrine	12	9	14	-	6	11	9
Discuss about sanitation in meetings and seminars/ friday congregations	4	4	7	-	13	16	9
Visit households with students in groups	-	-	-	5	28	-	6
Tell people to replace unhygienic by hygienic latrine	4	-	-	5	3	2	2
Repair tubewells	8	-	3	5	3	-	3
Demolished kutcha latrines	-	-	-	-	6	-	1
Work on allotment of tubewell	-	-	3	9	3	-	2
Provide financial assistance	4	-	-	-	3	-	1
Collect report	-	-	-	9	-	-	1
Other	4	4	-	-	-	4	3
<b>N</b>	<b>26</b>	<b>23</b>	<b>29</b>	<b>22</b>	<b>32</b>	<b>44</b>	<b>176</b>

Teachers and students who participated in the FGDs mentioned having performed the following jobs:

- formation of groups;
- organising group meetings;
- IEC to community people by house to house visits;
- educate students on how to make contributions;
- dismantling of unhygienic latrines;
- address meetings whenever get a chance;
- help people with information on purchasing/installing hygienic latrines;
- counsel people at the DPHE sub-centers;
- constructed latrines in school premises.

Detailed analysis were made of the jobs the workers and volunteers performed for the sanitation program, and the results are presented in Table 3.20.1. As it appears from the table, most of the different types of workers and volunteers mentioned that they do the following jobs:

- counsel people in the villages not to defecate indiscriminately;
- teach people the techniques of installation of latrines;
- motivate people about sanitary latrine, safe water, and personal hygiene.

**Table 3.20.1: Jobs the workers and volunteers do for the sanitation programme.**

Jobs the workers and volunteers do for the sanitation programme.	D P H E worker	PWA/HA	N G O worker	School teacher	School student	Comm. leader	Relg. leader
Counsel people in the villages not to defecate indiscriminately	x		x	x	x	x	x
Teach the techniques of installation of latrines to people	x		x	x	x		x
Motivate people about sanitary latrine, safe water, and personal hygiene	x	x		x	x	x	x
Tell about the sources of supply			x	x	x		
Make home visits to tell people to demolish unhygienic latrines and install sanitary latrines	x		x				
Discuss how unhygienic defecation causes diarrhoea, cholera, dysentery, and worm infections			x				x
Counsel the very poor to make home-made hygienic latrines			x		x		
Counsel to maintain cleanliness							
Counsel relatives, neighbours to follow hygienic practices.						x	x
Participated in meetings, seminars etc.		x	x				
Physically help in installation of latrine			x				x
Install latrine in the school	x						
Ask students to tell their parents to install hygienic latrines at their homes	x						
Counsel to use tubewell water for all purposes				x			
Educate school children on sanitation through lecture and film show				x			
Work to create awareness together with my colleagues and students						x	
Making to inform people about installation of hygienic latrines						x	
Provide free treatment to those who install sanitary latrines							x
Counsel on not to eat stale food							x
Accompanied DPHE workers to make home visits		x					
Tell people how to purify water			x				
Organize courtyard meetings in villages			x				
Educate students on model latrines			x				
Repair tubewells	x		x				
Inform that loan is available for installation of latrines				x			
Counsel not to dispose children's faeces here and there				x			
Form groups and motivate group members to purchase latrines				x			

### 3.7.3. Training needs for workers and allies:

Out of the total sample of workers and volunteers covered in the indepth interviews, less than one-half (48 percent) had ever obtained any training or orientation on sanitation (Table-3.21). The proportion trained was highest in the NGO areas (67 percent) and second highest in Banaripara (59 percent), while lowest in Rajshahi Division (22 percent). The training/orientation was received at the Thana HQ auditorium (26 percent), DPHE office (19 percent), primary/secondary schools (16 percent), and for NGOs at the NGO offices. School teachers and students who participated in the FGDs mentioned the following arrangements for the training/ orientation:

- Only Head Masters obtained some orientation/training:
- Seminar at Thana headquarters, organised by TNO/DPHE;
- In some areas, meetings were organised at the Union Parishads with all teachers;
- In some areas, Head Masters also attended meetings at the district headquarters;
- In Rajshahi Division, meetings were organised in schools; and
- GOB/DPHE officials discussed different aspects of sanitation.

Frequently mentioned contents of the training/orientation programmes were 'use of hygienic latrine' (91 percent), 'use of safe drinking water' (76 percent), 'cleanliness/maintenance of clean environment' (43 percent), and personal hygiene (14 percent) (Table-3.22).

**Table 3.21: Whether ever received any training or orientation on the sanitation programme.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripa	NGO	All
	(Percent)						
Yes	43	43	48	22	59	67	48
No	57	57	52	78	41	33	52
Total	100	100	100	100	100	100	100
N	42	54	44	50	49	61	300

**Table 3.22: Contents of the training/orientation programme.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripa	NGO	All
	(Percent)						
Use of hygienic latrine	89	78	91	100	100	90	91
Use of safe water	78	74	71	91	89	66	76
Cleanliness/maintenance of clean environment	50	44	43	55	32	44	43
Personal hygienic	6	13	24	27	7	15	14
Use of oral saline	11	9	14	-	-	12	9
About immunization of children/mother's TT	6	9	14	-	18	5	9
How to prevent communicable diseases	6	4	5	-	-	7	4
Family Planning	17	-	19	-	-	2	6
MCH	11	4	5	-	-	7	5
Other	-	4	-	-	-	-	1
N	17	23	21	11	29	41	142

School teachers and students who participated in the FGDs mentioned that the following topics were discussed/demonstrated in the training/orientation:

**A. Discussions:**

- sanitation in general;
- Disadvantages of open latrine;
- disadvantages of use of unsafe water;
- EPI;
- FP;
- how to utilize students for educating and motivating people;
- requested for educating students on sanitation;
- collection of information/record keeping by students;
- requested for construction of model latrines in each school;
- how to form batches;
- how to educate and motivate people; and
- removal of hanging latrine.

**B. Demonstrations:**

- how to install hygienic latrine; and
- practical demonstration on construction of home-made latrine.

Among the wide range of topics on which the training is needed, the frequently mentioned ones were 'techniques of motivation (45 percent), 'detailed knowledge about the sanitation programme' (28 percent), 'benefits of using a hygienic latrine (20 percent), 'personal hygiene' (16 percent), 'how to install low-cost latrine (14 percent), and 'benefits of using safe water' (11 percent) (Table-3.23).

Teachers and students who participated in FGDs mentioned the following topics on which they need training:

- advantages of sanitary latrines;
- disadvantages of unhygienic latrines;
- providing a written job description;
- mobile cinema shows/A-V shows;
- how to organise meetings/seminars with union/ward/ village level people;
- how to organise group meetings with community people;
- detailed knowledge on how to keep the environment clean;
- detailed discussion on how different diseases spread; and
- how to prepare inexpensive homemade hygienic latrine.

**Table 3.23: Training needs for workers and volunteers.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
Techniques of motivation	46	48	48	44	48	38	45
Detailed knowledge about the sanitation program	27	23	26	16	40	34	28
Benefits of using a hygienic latrine	29	19	21	14	27	15	20
Personal hygiene	20	11	7	20	-	31	16
How to install a low- cost latrine	17	9	21	8	15	15	14
Benefit of using safe drinking water	7	2	21	-	2	30	11
How diseases spread from faeces	10	6	12	8	8	12	9
Details about cleanliness	5	6	5	2	-	12	5
Demonstration ability	-	-	7	18	-	3	5
How tubewell water can be used in a proper way	10	6	2	-	4	3	4
Techniques of follow-up	-	4	5	4	2	2	3
Prevention and cure of diarrhoea	-	2	5	4	-	2	2
How to install a tubewell	2	2	-	-	4	2	2
Maintenance of latrine	2	-	2	-	-	3	1
Whatever is the content of the training, everything should be shown in video	-	-	-	4	-	-	1
No more training is required	2	6	5	-	8	-	3
Don't know	2	8	-	20	2	5	6
Other	7	6	7	8	10	5	7
N	41	53	42	50	48	61	295

Detailed analysis of the training needs has been made classifying the responses by the different types of workers and volunteers, and the results are presented at table 3.23.1. As it appears from the table that 'techniques of installing latrines', 'techniques of motivating illiterate rural people' and 'benefits of hygienic latrines' were felt as training needs for all the different types of workers and volunteers interviewed.

**Table 3.23.1: Topics on which training is needed for different categories of workers and volunteers.**

Topics on which training is needed	D P H E Worker	FWA/HA	N G O worker	School Teacher	School Student	Comm. leader	Rel. leader
Techniques of installing latrines	x	x	x	x	x	x	x
Techniques of motivating illiterate rural people	x	x	x	x	x	x	x
Benefits and importance of hygienic latrines/disadvantages of unhygienic latrines	x	x	x	x	x	x	x
Benefits and importance of using safe water	x	x	x	x	x	x	x
Benefits and importance of maintaining personal hygiene	x		x	x		x	
Knowledge about diseases that can spread due to use of unhygienic latrines and unhygienic living			x	x	x		
Treatment of common ailments			x	x	x		
Knowledge about infectious diseases			x				
Preventive measures against infectious/contagious diseases	x	x	x	x		x	
How to maintain latrines and tubewells		x	x				
Installation of tubewells				x	x	x	
Methods of purifying water				x			
Causes of contamination of water				x			
How and where patients have to be referred in case of emergency					x		
Refresher training after every six months on the sanitation programme	x						
Site selection of latrines and tubewells		x	x				
How tubewell water can be used in a proper way		x					
Regular monthly training on hygienic latrine, safe water and personal hygiene		x					
Techniques of installing home made pit latrine		x					
How to protect children from different types of diseases		x					
How to keep environment clean			x				
How people can be influenced to organize committees			x				
How poor people can obtain loan			x				
How poor people can collect latrines and tubewells from proper sources			x				
How to motivate people using different religious mentions							x
How the overall health condition can be improved							x
Maternal child health care							x
How to get rid of different types of bad habits							x

### 3.7.4. Incentives and rewards:

The FGD participants were also asked about what will inspire them more to work for the sanitation programme. The following responses were obtained:

- people from all walks of life should be involved;
- more administrative help from the government;
- arrangement for evaluation, recognition, and reward;
- declaration of best worker/school/group, etc.;
- certificate of best performance;
- special grant for successful work;
- provision for upgrading private schools to government;
- prizes for students, recognition of their work;
- provision for allowances;
- provision for entertainment cost for meeting/organising rallies, etc.;
- provision for additional increment; and
- provision for training on sanitation, at least once a year.

A similar question was also asked to the respondents in the indepth interviews. Details of the answers may be seen at (Table-3.24), while the frequently mentioned answers were as follows:

More training	46 percent
Allowance/grant/financial help/refreshment	33 percent
Specific job responsibilities/increased number of workers	15 percent
Government should organise frequent meetings/seminars	11 percent

**Table 3.24: What will inspire the respondents more to do a much better job for the sanitation programme.**

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
More training	43	28	55	45	41	62	46
Allowance/grant/financial help/refreshment	26	49	21	31	29	37	33
Specific job responsibi- lities/increased number of workers	24	19	9	8	20	10	15
Government should arrange frequent meetings/ seminars	14	11	16	6	8	12	11
Supply of low-cost ring- slab/free distribution	7	2	5	16	6	7	7
Award for best performance	5	9	9	8	6	2	6
Officers should regularly supervise	2	2	7	14	8	5	6
Production centers at the union level	7	4	5	2	4	5	4
Allowance must be increased/regular payment of salary							
promotion for workers	7	2	7	4	-	5	4
Transport facilities	5	2	9	-	-	3	3
Given financial support to poors	5	-	5	-	6	-	2
Compulsory hygienic latrine for all govt. employees	-	2	2	4	-	-	1
School syllabus should include sanitation	-	-	2	6	-	-	1
Exchange of ideas	-	-	-	2	-	2	1
Don't know	5	8	9	6	2	-	5
Other	2	2	5	-	4	5	3
<b>N</b>	<b>42</b>	<b>53</b>	<b>44</b>	<b>49</b>	<b>49</b>	<b>60</b>	<b>297</b>

Detailed analysis of the responses are made by different categories of workers and allies, and the results are presented in table-3.24.1.

**Table-3.24.1 What will inspire the workers and allies to work for the sanitation programme.**

What will inspire the worker to work for the sanitation programme	D P H E worker	FWA/HA	N G O worker	School teacher	School student	Comm. leader	Relg. leader
Provide training on sanitation	x	x	x	x	x	x	x
Monetary incentive/remuneration/ additional allowance	x	x	x	x	x	x	x
Increase number of sales centers/ensure adequate supply	x		x	x	x		x
Free latrine for the poor people	x	x			x	x	x
Reduce the price of latrines			x	x	x		x
Reward for good performance/ appreciation for good work	x	x	x	x			
Use of mass media to inform people	x	x	x		x		
Organise orientation, seminars, meetings	x			x	x	x	x
Provide transport facilities			x	x		x	x
Interested to become volunteer, if govt. utilize our services	x	x			x		x
Supply books and leaflets on sanitation/more publicity to make people aware	x	x		x			
Govt. should create pressure		x				x	x
Assurance of T.A. and D.A.				x	x		x
Co-ordination between government and NGOs departments	x						x
Encourage teachers/community leaders to accompany workers for motivation door to door	x						x
Increase number of NGO workers/govt. workers			x		x		
Co-ordination between govt. employees and community leaders	x						x
Installation of sanitary latrines in govt./semi govt./mosques/ other institutions	x						x
Appropriate time and opportunity must be given						x	x
Show film to the people	x						x
Delegate some authority to the workers/volunteers	x						
School curriculum should include sanitation		x					
Initiative of the school authority for social campaign		x					
Distribute tubewell parts free			x				
Eliminate confusion of the people that tubewell parts are no longer given free			x				
Change of current designation			x				
Meeting to be organised by member/ chairman where we can discuss the issue			x				
Supply of latrine on installment							
Involve NGO's in production and sale of latrine					x		
Task force to be formed					x		x



### **3.7.5. Beneficiaries' perception about the workers and volunteers:**

In general beneficiaries' impression about the workers and volunteers are quite good. However, some beneficiaries have grievances about workers' job performances. The results of the indepth interviews revealed the following positive and negative impressions of the beneficiaries on the job performances of the workers and volunteers:

#### **A. Positive aspects:**

- they work for our benefit;
- they have good relationship with villagers;
- they do not create any inconvenience;
- workers give good advice and provide knowledge on health aspects;
- our condition has improved because the workers work;
- villagers had no knowledge before, now they know many things;
- village people are being advised about the benefit of hygienic latrine and many households have installed latrines;
- NGOs are helping the poor by giving loans for installation of sanitary latrines;
- lot of enthusiasm about the program has been observed in the area, so people's impression about worker is good; and
- provision for sale of latrine in installment is convenient.

#### **B. Negative aspects:**

- people do not know anything about the sanitation programme;
- people have no idea about who works for the sanitation programme;
- no body works for promotion of the sanitation programme;
- workers do not perform their duties properly, some workers dodge their duty;
- DPHE workers do not come even in a month or two; and
- they do not explain things properly.

#### **C. Neutral aspects:**

- they are busy with tubewell, with sale of latrines;
- workers do not come to the villages, have delegated their responsibilities to the teachers;
- no uniformity of work in different areas;
- government initiative is lacking;
- do not give importance to poor people;
- sometimes the workers give threat;
- sometimes they forget that they work for us; and
- they do not provide us any help, only advise.

### **3.8. Problems as perceived by DPHE field functionaries:**

During the informational discussions with DPHE field functionaries, especially the Sub-Assistant Engineers (SAEs), in different Thanas, a wide range of issues were raised. Among the

programmatic barriers and obstacles as perceived by them, the following may merit presentation:

- because of production limit, supply fall short of demand in areas where people are motivated;
- due to shortage of supply 300 customers had to be rejected in 1991-92 in one IA Thana with 3 + years of intervention;
- sudden increases in the price of ring-slab adversely affect the level of motivation;
- conditionality of one-ring one-slab caused sharp decline in the demand;
- inferior cement supplied by UNICEF caused deterioration in the quality of the product;
- homemade latrine is not fully hygienic because it cannot suppress the bad smell;
- indigenous platform is damaged every year and is costlier than ring-slab, as such homemade latrines should not be promoted;
- free distribution of ring-slab by some NGOs discredit the DPHE programme;
- provision for supply of multiple rings by NGOs in the face of one-ring one-slab conditionality for DPHE and its unacceptability by the people is highly frustrating for DPHE staff;
- water-seal is broken by some users to avoid flushing hazards; commercial sector is producing slabs without water-seal which is preferred by many;
- inadequacy of personpower for motivational activities;
- curing of ring-slab is affected due to absence of the mason and labour during leave/holidays, and as such product quality cannot be maintained;
- carrying of material from Thana headquarters is hazardous for the beneficiaries from remote areas, sometimes it breaks while carrying;
- lack of fund for carrying costs of materials adversely affect organising mobile centers;
- disbursement of salaries from district level instead of from Thana level causes delay and unnecessary expenses, and frustrate the masons and labours; and
- non-absorption of the masons and labours in the revenue budget make them feel insecure causing lack of inspiration.

The DPHE field functionaries made the following suggestions to help solve the perceived problems:

- advances should be given to the SAEs to help organise mobile centers;
- post of mechanics to be created on the basis of population or number of Unions in a Thana; one mechanic for each Union is necessary;
- field staff of concerned other departments should be involved for motivation;
- seminars and meetings should be organised not only at the Thana level but also at Union and village level;
- cooperation from credit programmes should be sought to provide loans to beneficiaries;
- waive the conditionality of one-ring and reward the SAEs selling lowest average number of rings per slab;
- Malawi type low-cost SANPLAT latrine may be introduced;
- reduce the cost of ring-slab;

- target should be fixed taking opinion from SAEs regarding stock and fund position; if necessary fund from one Thana may be diverted to another Thana basing on the sale proceeds of the previous year;
- review meetings should be organised annually with SAEs and Mechanics in each Division to identify problems and solutions;
- reward should be given to best performing field staff;
- if the number of Mechanics is not increased, provide 50 CC motorcycle to the existing Mechanics for greater mobility;
- change in the design of ring-slab may be considered to avoid cracking while carrying;
- for curing of products, labour on work-charge basis may be appointed to substitute the mason and labour in their absence;
- NGOs should be directed to work in coordination with DPHE;
- price of ring-slab should not be abruptly increased, prior to any increase it should be properly publicized through mass media so that DPHE staff is not blamed; and
- quality cement should be supplied or local purchase be allowed.

### 3.9. Contributions of NGOs:

NGO activities on sanitation are varied in nature. NGOs having extension workers for IEC activities, provide information and education on environmental sanitation and personal hygiene. Those who have credit programmes educate their loanees on sanitation, provide them with loan for installation of latrines, and help them to buy the latrines from DPHE or commercial sources. Some NGOs attach conditions for installation of latrines to get a housing loan. Other NGOs engaged in rural development, rehabilitation, and dealing with other vulnerable groups provide latrines free of cost with varying number of rings per slab. NGOs providing free tubewells also provide free latrines for ten surrounding families.

Current NGO activities thus may be classified into three distinct types --- (a) field workers are providing IEC, (b) credit programmes encouraging their beneficiaries and providing loans for latrines, and (c) free distribution of tubewells/latrines. As mentioned earlier, the free distribution and also providing multiple rings conflict with the DPHE existing policy of promoting one-ring one-slab. Beneficiaries can not be sure of the merit of one-ring one-slab and DPHE field functionaries get frustrated.

This research has considered a sample of three small NGOs who are among those considered by the NGO Forum as active on sanitation.

All the three NGOs work through organising and forming of groups with poor women in the village for creating awareness and improve their economic condition. The activities include skill development, income generation, health, family planning, water and sanitation, agriculture, fishery, etc. A brief description of sanitation activities, of these NGOs are presented below:

**Palashipara Samaj Kallyan Samity (PSKS):** PSKS started working in a Union in Gangni Thana of Meherpur district in 1970 as a library program. Subsequently the program activities expanded to other areas.

The sanitation activity started in 1989-90. The organisation has two sets of workers, one set works for family planning and the other set for legal aid to females. Both the groups of workers motivate people on sanitation. These workers received training on sanitation from VHSS and ADAB. There is one Sanitation Caretaker.

For promotion of sanitation, the NGO organizers themselves did install hygienic latrines at their own homes first and then started motivating people. NGO group members were the primary target of the sanitation programme. Each village has several female groups. It is compulsory for each group member to install a sanitary latrine to get loans. However, the poorest group members are offered loan for installation of sanitary latrine.

For promotion of sanitation, this NGO disseminate three simple messages:

- excreta should not be visible;
- it should not spread bad smell; and
- flies and insects should not have access to excreta.

Three simple messages are also disseminated for the promotion of personal hygiene:

- wash hands before eating;
- wash hands with soap or ash after defecation; and
- brush teeth before going to bed.

In addition to the normal activities, the organisation has school orientation programmes involving school children from grade 3-10. In the school they start with the theme 'water is life', 'water is death'. Students are explained how safe water is different from polluted water and how water spread diseases. In subsequent sessions sanitation is discussed explaining in detail the difference between unhygienic and hygienic disposal of faeces.

PSKS produces sanitary latrines and sell them to the people and group members. So the local people do not go to the DPHE office for purchasing ring-slabs.

The communication materials mainly used is a set of flipchart and a film titled 'Pani-O-Paribesh' (water and environment).

PSKS management believes that initiative and enthusiasm of NGO officials and workers have inclined the local people to be more dependent on the NGO services, as NGO service providers show more concern about them. The perception of the villagers have changed and awareness has been raised.

The management suggested that before taking any organised initiative for the promotion of sanitation programme wide spread publicity should be made for popularizing the programme. They also believe that involvement of H & FP field workers would be very useful for programme promotion.

**Palli Unnayan Prayash (PUP):** PUP started its activities in 1983 by forming groups with the poorest males and females of the villages in Phulpur Thana of Mymensingh District. Health

education and sanitation program and distribution of tubewell started in 1987. Following a widespread diarrhoea in 1988 intensive health education was undertaken through visits by PUP's 27 field workers. They use posters (received from UNICEF and NGO Forum) and flipchart for motivation. They also organise 'jarigan' and theatre for motivating the villagers. Group meetings are also organised with 15-30 participants. Sometimes video film shows (UNICEF film) are also arranged. The male workers motivate the male beneficiaries while the female workers motivate the female beneficiaries. Those who have sanitary latrines and tubewells are also utilized as motivating agents to tell others about the benefits of sanitation.

The trainers of the organisation received training from the NGO Forum but the workers did not receive any external training. The management felt that their workers needed detailed training on sanitation and personal hygiene. The organisation does not produce latrine but only has motivational activities. Because of their motivation people's perception has changed. Because of the increased awareness, most households have homemade pit latrines and the incidence of diarrhoea has reportedly been reduced in the area.

The management suggested that high coverage can be obtained if loan facilities are created, ring-slab is provided at reduced rate, regular motivation through home visit is sustained, and regular monthly meetings are organised.

**Gandhi Asram (Asram):** Gandhi Asram's origin goes back to 1946. But the name Gandhi Asram was given in 1975. Ashram organises poor males and females in groups for income generating activities, and has several other activities including health and sanitation. The sanitation unit has 2 females 1 male production staff and two male installation staff. The Asram is assisted by DANIDA, ADAB, and NGO Forum. The average annual production is about 100 set of latrines.

The group members attend meetings every week. In the meetings the benefits of using a hygienic latrine is discussed. These members again discuss these issues in their neighbourhood and in surrounding villages. Latrines are supplied by the Asram to group members only. The distribution of latrine is tied to their housing scheme. So it is compulsory for anyone taking housing loan to take loan for latrine although the price of Tk.650 for 5 rings and a slab appeared to be very high. But because of the provision for installment payment, it does not immediately affect the loanee.

Five staff of the Asram received training on sanitation and another one received a special training in Rajshahi (provided by ADAB) on tubewell, sanitary latrine, and personal hygiene.

The villagers do not have a very good relationship with the Asram, because people are conservative about the organisation. Villagers knowledge about sanitary latrine is poor and although many families use ring-slab latrines, the pit is connected to water sources.

Asram intends to increase the number of workers and simultaneously increase the volume of production and distribution.

The management suggested that subsidy should be given to the poorest. They intend to initiate a movement against open/unhygienic latrines.

### 3.10. Comparison between different types of programmes:

One of the objectives of the study was to assess the strengths and weaknesses of the different programmes. As mentioned earlier for the purpose of this research the existing programmes on sanitation were classified under.

- Non-IA areas (areas where the Integrated Approach (IA) of the DPHE programme has not yet been implemented);
- IA-areas with <3 years of interventions;
- IA-areas with >3 years of interventions;
- Primary school programme in Rajshahi Division;
- Special programme in Banaripara Thana; and
- NGO programmes.

With the realization that a combination of expanded use of tubewell water, improved sanitary practices, and improved personal hygiene practices are necessary conditions for significant health impact, the government has started implementing the Integrated Approach since the later half of 1986. Out of 464 Thanas, 256 were covered by June 1992. The whole country will be brought under this approach by 1995.

Results of this research revealed that the success of the special programme in Banaripara is unparalleled. NGO programmes have also achieved a commendable success depending upon the programme strategies of specific NGOs. The NGOs having extension workers and providing IEC services on sanitation through home visits are doing much better than those whose promotional activities are limited to their credit programme participants or group members and who are distributing tubewells and latrines free of cost to selected families as part of a rehabilitation or housing programme.

The primary school programmes in Rajshahi Division in general has not made a much headway in areas where the Integrated Approach has not been implemented for considerable number of years.

IA-areas with 3+ years of interventions have been slowly making some progress in providing information regarding the sanitary latrines. Dissemination of knowledge on personal hygiene still remains limited due to lack of clarity of the messages.

IA-areas with less than 3 years of interventions and Non-IA areas hardly show any difference. Between the IA and Non-IA areas, the DPHE personpower strength remains the same --- one SAE and four Tubewell Mechanics per Thana. With this limited personpower educational and motivational efforts remain limited. Thus, the Integrated Approach itself may be unlikely to bring a desired result unless supported by a programme strategy that mobilizes the people in general. It is important to note that apart from the programme interventions, the DPHE field functionaries, specially the SAE and his team plays a significant role in promoting the programme. Where the team is active, the programme gets promoted.

Success indicators of the sanitation programme are clearly visible in Banaripara. A brief description of the Banaripara programme may thus be helpful in developing strategies for its replicability.

**Brief on Banaripara Programme:** In April 1990, there was a serious out break of Diarrhoea in many Thanas of Barisal. Following the incident, Deputy Commissioner (DC) of Barisal called a

meeting of the District and Thana level officials and planned a strategy to educate and motivate people of rural areas on use of safe water and installation of hygienic latrine. Subsequently, under the direction of the DC, the Thana Nirbahi Officer (TNO) of Banaripara started a social mobilization campaign to educate and motivate people on important aspects of the various programmes undertaken by the different departments of the government. Twenty teams were organised, each consisting of 20 members representing each government departments. SAE Banaripara took special interest and enthused 16 volunteers to join the 4 Tubewell Mechanics to represent DPHE in each of the 20 teams. Using his ingenuity and personal money the SAE prepared for each member a bag with posters, leaflets, and instruments to repair tubewell. Each member was also provided with an uniform. The first wave of the campaign thus created an awareness among the people about hygienic latrines.

The IA programme was inaugurated by the DC in a seminar on November 5, 1990. After the IA seminar, the SAE with the help of TNO organised a grand rally. All the participants were using badges having message to dismantle unhygienic latrines. In the rally, the DC announced that the best performing institutions will be awarded with development fund and a quota of wheat/rice. A large-scale awareness was created and volunteers from all walks of life, especially school teachers and students, UP Chairmen and Members participated in the campaign.

Many different groups started approaching the TNO for awards claiming installation of sanitary latrines. The SAE used his ingenuity again and demanded specific identification about installation of sanitary latrines by using a filled-in form. DPHE office began a monitoring. The introduction of the monitoring form allowed the SAE to have records of households having sanitary latrines. Subsequently, the TNO issued two letters -- (a) to all schools to make model latrines in front of their institutions and (b) to all head of households to install sanitary latrines. Miking was done requesting all to replace unhygienic latrines. Services of Ansar and VPD members were also utilized.

Subsequently, a letter was issued by the DC reminding all about the provision of punishment under the civil law for the people using unsanitary latrines. Messages on sanitary latrines were given on the back of the letter. School teachers and students formed groups, visited households, and educated and motivated people to replace unhygienic latrines. In many cases, the team members helped distressed families to install a homemade latrine, and in some other cases they had to be harsh for repeated non-compliances.

In December 1991, the DC demanded a report on the programme activities. The SAE convinced the TNO to demand weekly reports from different groups so that the report submitted to the DC has a basis. DPHE staff inspected coverage on the basis of reporting.

The above description may seem to suggest that the Banaripara programme achieved its objectives because of the initiatives taken by the DC and the TNO as well as the work procedure devised by the SAE.

## Chapter-4

### DISCUSSIONS AND RECOMMENDATIONS

#### 4.1. Discussions:

The primary purpose of this chapter is to recapitulate issues related to coverage and sustainability of hygienic latrines and to make recommendations relevant to the research findings.

##### 4.1.1. How to ensure 100 percent coverage:

Major hurdles to increase the coverage of hygienic latrines are lack of knowledge, poverty, idleness, and landlessness among the beneficiaries. Poverty and landlessness can not be readily addressed, but education and motivation of the people about the need for hygienic latrine can help increase coverage.

Among the six different types of programmes considered for investigation in this research, the special programme in Banaripara appeared to have achieved the highest success. Banaripara experience shows that the thrash for the social mobilization had come from the civil administration at the district level. All concerned district level officials (members of the District Co-ordination Committee) were involved under the chairmanship of the Deputy Commissioner (DC). The DC provided guidance to the thana level officials through the Thana Nirbahi Officer (TNO). The actual mobilization of the people started at the Thana level and was expanded up to the union, ward, and village level. To ensure sustainability of the campaign, involvement of the Union Parishad (UP) Chairmen and Members along with the Dafadars and Chowkidars were ensured, and the civil administration was represented at the peripheral level by the UP. With this backing of the civil administration, the field workers of DPHE and other government departments and NGOs, teachers and students, women groups and youth organizations, formal and informal community leaders, and religious leaders (Imams, Pirs, Preachers) participated in the campaign. Should the programme be replicated nationwide, back-up support must be provided through the mass media showing high level political commitment for the sanitation programme, although it was absent in the Banaripara programme.

Voluntary participation of the people must be ensured for coverage as well as sustainability of the programme. The Banaripara experience as well as those in some NGO areas show that if people are properly informed and educated, most of them are easily motivated to install hygienic latrines. But the distressed and the landless have problems that cannot be readily addressed. A general consensus was that when the vast majority will install hygienic latrines, social pressure will be effective for the unyieldings. However, extreme caution should be exercised by implementors so that execution of the social pressure by some over-enthusiastic workers/volunteers do not turn into coercion.

Job performance of the workers and allies need to be substantially expanded both in terms of its quality and quantity. The orientation with which the existing Tubewell Mechanics joined



the DPHE, their level of education, their growing age, and the level of motivational skill may preclude a maximum utilization of their services. DPHE to come out of the traditional strategy and to implement the integrated approach to create a significant health impact may need to enhance their personpower, recast their job responsibilities, and train them appropriately.

The training needs for the workers and allies have been collected in details in this study. The existing training curricula should be reviewed and refined incorporating the training needs as detailed earlier. Local appropriate technological options to be cultivated and promoted.

Programmatic barriers and obstacles must be eliminated in order to avoid or minimize the frustration that has been engulfing the DPHE field functionaries. Details of barriers and obstacles as mentioned by the DPHE field functionaries have been presented earlier. Also, the perception of the workers and allies about rewards, recognition, and incentives have been detailed in a foregoing section.

Despite the fact that NGOs have been making significant contributions in promoting the sanitation programme, their strategies are varied and sometimes frustrating the DPHE. DPHE's policy is to supply only one ring with a slab, while NGOs are supplying multiple rings; DPHE is charging money, while NGOs are supplying free of cost; DPHE are selling on cash payment, while NGOs are supplying on installments or giving loans. These are all frustrating for DPHE field functionaries. Furthermore, some NGOs are limiting their motivational activities within their credit program/group members, while some others are using their extension workers for motivating the people in general. The later approach was found to be more effective in order to ensure coverage. An effective coordination between the GOB and NGO programmes is extremely essential.

#### **4.1.2. How to ensure sustainability:**

Findings of this research strongly suggest that sustainability of hygienic defecation practices is related to appropriateness of the technology (type of latrine), procedure for cleaning the pit and mental preparedness for shifting of the latrine. Removal of excreta when it is raw is a serious problem; on the other hand, shifting of latrine is impeded by shortage of land as well as by age-old perception of latrine areas as filthy. Thus, in order to ensure sustainability of hygienic defecation practices, innovative ideas on developing suitable latrine options and the possibility of productive use of faeces must be taken into consideration.

The issue related to the promotion of one-ring one-slab latrine appears to have conflicting dimensions. Multiple ring slab latrines are preferred by the beneficiaries. Such latrines are expensive and inconvenient to clean (because the excreta is still raw) when the pit is filled up and run a risk of abandonment and reverting to traditional practices. One-ring one-slab latrine is not acceptable due to its many disadvantages, but in reality it may be more suitable because shifting is easy and cleaning of pit is not necessary. Some people feel that only a slab can be used without a ring. The initial high cost of multiple ring-slab latrines will hinder increases in the coverage, and its sustainability is also likely to be affected due to cost of cleaning even for those

who can afford the cost of installation. Therefore, an innovative technology (discussed in section-3.5.5) can address the issue with much greater prospect.

Pit covers prepared with indigenous materials for homemade latrines are almost equally expensive as the DPHE subsidized slabs if considered for duration up to which it will last. Homemade indigenous platforms do not usually last longer than one rainy season. This research results revealed that reduction of cost of the ring-slab latrine alone is unlikely to ensure sustainability, because cost of cleaning, cost of shifting the superstructure, and shortage of land for shifting must also be taken into consideration.

Innovation of suitable latrine type(s) may be viewed by several dimensions--cost, convenience, acceptability, and sustainability. Since people can not afford to buy the subsidized latrines, the innovations must come up with less expensive technology. Secondly, convenience of use and acceptability of type, including durability of the device is also related to sustainability. It has been revealed that harmful measures like connecting the pit to water sources are taken by users to avoid the cost of cleaning. On the other hand, frequent shifting of the pit is likely to pose a problem if productive use of faeces can not be promoted. Therefore, sustainability will likely to be dependent on invention of durable low-cost technology having provision for productive use of faeces.

Innovations may be expected from DPHE, commercial sources, and the people in general. Broadly speaking DPHE innovations were primarily directed towards low-cost technology suitable to beneficiary need and has been succinctly described in Bjorn Brandberg (Brandberg, 1992). Commercial sources have been trying to attract buyers with slight improvements or modifications in the DPHE model (such as, with a gas pipe, thick slab, etc.). Users have been trying to innovate indigenous technology primarily for cost savings. If considered in terms of durability of use, the indigenous homemade latrines are in no way less expensive than the subsidized one-ring one-slab latrines. It is understood that a least-cost durable technology is a must to increase coverage. To that respect only a slab or a SANPLAT instead of one-ring one-slab may be more appropriate. SANPLAT needs to be set on top of an indigenous platform on the pit. If the cost and durability of the indigenous platform is considered, a slab covering the entire pit may be more appropriate. Therefore, appropriateness of a SANPLAT or only a slab needs to be carefully researched.

This research has identified that one-ring one-slab latrine is not acceptable to most of the people and that multiple ring-slab latrines are not affordable by poor people, and the disposal of excreta is a serious problem. It may be assumed that if proper education is given on the advantages of one-ring one-slab or only a slab or SANPLAT or homemade latrine, people will prefer these over multiple ring-slab latrines. However, if they are not mentally prepared to use faeces for productive purposes, they are likely to face shortage of land for new installations every year. According to the customary practices people do not shift their open/hanging latrines from one place to another, primarily because shifting is not necessary and the latrine area is not generally used for any other purpose even after many years of abandonment. Therefore, unless people are mentally prepared for productive use of faeces, sustainability of hygienic latrine will be difficult.

Experiences with productive use of faeces in other countries, e.g. India, China, and Vietnam may be shared with the research community and experts in Bangladesh so that appropriate research protocols can be developed to identify ways and means for productive use of faeces in Bangladesh. A visit to India or China of a Bangladeshi expert group can be of immense benefit in the long run.

#### **4.2. Recommendations:**

- 1. Information and education should be provided on price, place, and process of procurement of ring-slab latrines.**
- 2. Appropriate information and education should be provided to all on advantages of one-ring one-slab latrines.**
- 3. Information and education on correct use of latrine should be widely disseminated.**
- 4. Appropriate information and education should be provided to all on proper desludging of multiple ring-slab latrines.**
- 5. Sale centers should be organised in every union with demonstration of pit and superstructure.**
- 6. Mobile sale centers should be made more effective.**
- 7. Information on installation should be provided along with sale of latrines.**
- 8. Appropriate information and education should be provided to all on possible use of human faeces as manure.**
- 9. Appropriate demonstration should be provided for all on:**
  - installation of one-ring one-slab latrine;**
  - installation of only a slab latrine;**
  - do it yourself type of latrines;**
  - use of two side by side pits alternately; and**
  - removal and use of faeces as manure.**
- 10. Options for multiple ring latrines at a reasonable price may be given as per individual liking of the beneficiaries.**
- 11. The national level social mobilization campaign for promotion of the sanitation programme should be intensified; appropriate type(s) of latrine to be promoted should be rapidly ascertained basing on scientific research.**

12. Behavioral and operations research should be undertaken on the following:
  - suitability of one-ring one-slab latrine and only a slab latrine with innovative pits under seasonal and regional variations;
  - appropriateness of use of twin pits for multiple ring slab latrines;
  - appropriateness of different options of hygienic latrines in different regions of Bangladesh;
  - possibilities of productive use of faeces;
  - appropriateness of selected interventions for social mobilization; and
  - identification of means for behavioral changes for defecation practices and disposal of children's faeces.
13. A visit to India or China of a Bangladeshi expert team may be organised to gather experiences on productive use of faeces.
14. DPHE field staff should be increased at least at the rate of one per union.
15. Job responsibilities of the DPHE workers should be reviewed and refined to suit the need to develop their motivational skills.
16. Designation of the DPHE field workers should be changed to demonstrate that they are not mere tubewell mechanics rather public health assistants.
17. Awards for best performances may be given to individuals and institutions on local, regional, and national basis as part of the social mobilization drive.
18. More linkages between workers and allies at all levels should be established.
19. A guideline should be prepared for the NGO participation ensuring that their activities are in line with the sanitation programme policies. Improved collaboration between GOB and NGO at all levels is needed and mechanisms for sub-national collaboration should be activated.

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**APPENDIX A**  
**FGD GUIDELINES**





**NEEDS ASSESSMENT FOR SANITATION PROGRAM  
GUIDELINE FOR FGD WITH BENEFICIARIES**

**Moderator:** \_\_\_\_\_ **Name of the Program:** \_\_\_\_\_  
**Addl. Moderator:** \_\_\_\_\_ **Thana:** \_\_\_\_\_  
**Rapporteur:** \_\_\_\_\_ **District:** \_\_\_\_\_  
**Date:** \_\_\_\_\_ **Time started:** \_\_\_\_\_

**Introduction (Narrate and explain):**

(Welcome to the discussion session, objectives of the discussion, rules of discussion, maintenance of confidentiality, and permission for use of tape recorder)

Perhaps you are aware that government has undertaken a country-wide programme on sanitation. The objective of this programme is to have improvements on environmental sanitation and personal hygiene. In order to strengthen the sanitation programme the government seeks support of the field workers of concerned government and non-government programs, school teachers and students, community leaders, religious leaders, and the community people in general.

We are conducting a study on "Needs Assessment for the Sanitation Programme". The purpose of the study is to assess the level of knowledge of the beneficiaries, field workers and allies of the sanitation programme; their attitude towards the programme and the level of voluntarism and motivation of the community people.

The purpose of our effort today is to learn from you how the sanitation program can be further strengthened and how you can extend help to the sanitation program.

**List of Participants of the FGD:**

Sl. No.	Name of Participants				
01.					
02.					
03.					
04.					
05.					
06.					
07.					
08.					

**A. Knowledge about sanitation:**

1. Did any one ever discuss with you about sanitation and personal hygiene ? Who discussed these with you ?
2. According to you, what is a sanitary latrine ? (Types of sanitary latrine, source of availability, and cost)
3. What according to you is safe water ?
4. What else other than safe water and sanitary latrine will improve the health status of your family member ?
5. Where do the infants of your family defecate ? Where are infants; faeces disposed off?
6. Where do children (1-5 years) of your family defecate. Where are childrens' faeces disposed of ? At what age, according to you children can go to latrine used by elders?
7. What can be done to avoid environmental pollution from children's faeces ? How children can be practiced to go to latrine used by elders ?
8. Which, children's or elderly peoples faeces, according to you, has the more risk of spreading diseases ? Why do you think so ?
9. Do you have any idea of any latrine innovated by the people in your area ? What are its advantages and disadvantages ? What is the cost of such latrine ?
10. The sanitation programme now encourages people to install latrine with one-ring one-slab ? What, according to you, are its advantages and disadvantages ? How many rings do you think will be appropriate ? Why ?
11. What do people usually do when the pit of a ring-slab latrine is filled ?
12. What do people usually do when the pit of homemade latrine is filled ?
13. What is your perception about faeces ?
14. What relations does sanitation have with religion ? Is there anything against sanitation in religion ? What ?

**B. Programmatic aspects and obstacles:**

15. Do you like the way the sanitation programme has been trying to help people install tubewells and sanitary latrines, and develop appropriate health practices ? What are the measures of the programme do you like most ?
16. What measures you do not like or are frustrated of ?

**C. Coverage and sustainability:**

17. In your community there are many households that do not have hygienic latrine, why ?
18. How they can be motivated to have hygienic latrine ?
19. Who in your community can influence the people most to install a sanitary latrine ?
20. How, do you think, people from your locality can help in strengthening the government sanitation program ?
21. How the community people would react if the government decides to dismantle all open/hanging/unhygienic latrine to be replaced with sanitary latrines (Water sealed or homemade) ?

**D. Job performance:**

22. Did you receive any training/orientation on sanitation ? If yes, where did you receive the training/orientation ?
23. What were the topics discussed in the training/orientation program(s) ?
24. What are the other areas on which field workers and volunteers need training to perform a better job ?
25. What are the specific things you do for the sanitation program ?
26. In case of educating and motivating people on sanitation what do you unusually tell them?
27. How do you feel about your participation in the sanitation program ?
28. What are the most enjoyable and satisfying things you do for promotion of the sanitation program ?
29. What are the things you do which you find difficult and frustrating ?
30. According to you what are the steps the government can take in order to ensure that every household has a sanitary latrine ?
31. Do you want to work for the sanitation program ? If not, why ?
32. What, do you think, will inspire you more to do a much better job for the sanitation program ?



**APPENDIX B**

**INDEPTH INTERVIEW QUESTIONNAIRE**



Converted Number

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## NEEDS ASSESSMENT FOR SANITATION PROGRAM

### QUESTIONNAIRE

WORK RECORD					
	Interviewed by	Edited by	Verified by	Data Entry	Validated by
Name					
Date					

ASSOCIATES FOR COMMUNITY AND POPULATION RESEARCH  
3/10, BLock-A, Lalmatia, Dhaka-1207, Bangladesh

### SAMPLE IDENTIFICATION

Stratum	IA area ≥ 3 years	1	IA area < 3 years	2	Non- IA area	3
	Banaripara	4	Rajshahi Division	5	NGO	6

Type of Respondent:	BENEFICIARY MALE	1	TEACHER	3	DPHE WORKER	5	NGO WORKER	7
	BENEFICIARY FEMALE	2	STUDENT	4	MOHFW FW	6	VOLUNTEER	8

Division: \_\_\_\_\_  District: \_\_\_\_\_

Thana: \_\_\_\_\_   Union: \_\_\_\_\_

### RESPONDENT IDENTIFICATION

Name of Respondent: \_\_\_\_\_

Name of Husband/Father: \_\_\_\_\_

Address: Village: \_\_\_\_\_

Union: \_\_\_\_\_ Thana: \_\_\_\_\_ District: \_\_\_\_\_

### INTERVIEW INFORMATION

Attempt No.	1	2	3	4
Date				
Result code*				
Interviewer code	<input style="width: 40px; height: 20px;" type="text"/> <input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/> <input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/> <input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/> <input style="width: 40px; height: 20px;" type="text"/>

#### \* RESULT CODES

Completed	1	Refused/Deferred	3
Not at home	2	Other (Specify) _____	4



Section-1

BACKGROUND CHARACTERISTICS

(ONLY FOR BENEFICIARIES, MALES AND FEMALES)

	RESPONSE	SKIP TO
101. Please tell me your name.	Name: _____	
102. What is your age ?	<input type="text"/> <input type="text"/>	Years
103. Are you currently married ?	Currently married 1 Widowed 2 Divorced 3 Separated 4 Never married 5	--> 106
104. Have you ever given birth to any child ?	Yes 1 No 2	--> 106
105. How many living sons and daughters you have now ? (IF NO, WRITE '0')	Son <input type="text"/> Daughter <input type="text"/>	
106. Have you ever attended school ? If yes, what was the highest class you have passed ? (IF NEVER ATTENDED SCHOOL, WRITE 00)	<input type="text"/> <input type="text"/>	Class
107. What is your religion ?	Islam 1 Hinduism 2 Budhism 3 Christianity 4 Other 5 (specify)	

RESPONSE

SKIP TO

108. (ONLY FOR FEMALES) Apart from  
doing normal household work, do  
you do any other work (for cash  
or kind) ?

Yes 1  
No 2 --> 110

109. What is your primary occupation ?

Occupation: \_\_\_\_\_

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110. What is the total annual income  
of your family ?

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Taka

Section-2

KNOWLEDGE AND ITS SOURCES

RESPONSE

SKIP TO

201. You may know that there are different types of latrines people use in this country. Which of these types of latrines you have heard about ?

INTERVIEWER: CIRCLE CODE 1 IN Q. 201 IF MENTIONED SPONTANEOUSLY; CODE 2 IN Q. 202 IF MENTIONS AFTER PROMPTING; AND CODE 3 IF SAYS 'NO' EVEN AFTER PROMPTING.

202. People in our country also use types of latrines other than those you have mentioned about. I want to be sure whether you have heard about any of them ?

INTERVIEWER: READ THE NAMES OF THE LATRINES THE RESPONDENT HASN'T MENTIONED ABOUT AND CIRCLE RESPONSE IN COLUMN-3

203. Have you ever used \_\_\_\_\_ latrine in your own homestead ?  
(Type of latrine)

INTERVIEWER: ASK QUESTION 203. FOR ALL QUESTIONS CIRCLED YES IN COLUMN-2 & 3, AND CIRCLE RESPONSES IN COLUMN-4

Table-2.1: Knowledge about types of latrines.

Types of latrines	201. Knowledge unprompted			202. Knowledge prompted			203. Types of latrine ever used in own homestead		
	Yes	1		Yes	2	No 3	Yes	1	No 2
Water sealed/ slab latrine	Yes	1		Yes	2	No 3	Yes	1	No 2
Septic tank latrine	Yes	1		Yes	2	No 3	Yes	1	No 2
Home made pit latrine	Yes	1		Yes	2	No 3	Yes	1	No 2
Open/hanging/ Kutchra latrines	Yes	1		Yes	2	No 3	Yes	1	No 2
Other _____ (specify)	Yes	1		Yes	2	No 3	Yes	1	No 2

	RESPONSE	SKIP TO
204. What type of latrine do you currently use ?	Water sealed/	
	Ring slab latrine	1
	Septic tank latrine	2
	Home-made	
	pit latrine	3
	Open/Hanging/ unhygienic latrine	4
Other	5	
	(specify)	

205. What do you understand by a sanitary latrine ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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206. What are the benefits of using a sanitary latrine ?

Bad smell	
cannot spread out	1
Environment is	
not polluted	2
Nobody can see	
from outside	3
Bacteria cannot	
spread out	4
Does not become	
sick	5
Others	6
(Specify)	

207. Do the males and females in your household use the same latrine or they use different latrines ?

Same latrine	1	--> 209
Different		
latrine	2	
Other	3	
(Specify)		

208. Why do they use separate latrine ?

Verbatim: \_\_\_\_\_

--	--

\_\_\_\_\_

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\_\_\_\_\_

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	RESPONSE	SKIP TO
209. Where do the children and toddlers in your household defecate ?	Lawn/courtyard	1
	Around the homestead	2
	Field/Open space	3
	In latrine used by elders	4 --> 212
	Other (Specify)	5
210. Why do toddlers and young children defecate in _____ ? (place)		
Verbatim: _____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
211. How do you clean the place where children defecate ?	Remains there/dries up/spoils	1
	Covered with ashes	2
	Cleaned and disposed in a distant place	3
	Disposed in the latrine	4
	Other (Specify)	5
212. (Question Omitted, Keep Blank)		
213. After cleaning the children who had defecated, how do mothers/(Person cleaning the child) wash their hands ?	Only water	1
	Water and soil	2
	Water and ash	3
	Water and soap	4
	Other (Specify)	5
214. How do you wash your hands after defecation ?	Only water	1
	Water and soil	2
	Water and ash	3
	Water and soap	4
	Other (Specify)	5
215. Do you think it can cause any health hazard if hands are not washed properly after defecation ?	Yes	1
	No	2 --> 217

RESPONSE

SKIP TO

216. What, according to you, may be the possible health hazard ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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217. Do you know where sanitary latrines are available ?

DPHE office 1  
Market 2  
Don't know 3  
Other 4  
(Specify)

218. What is the price of a ring-slab latrine ?

1 ring

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2-3 ring

--	--	--

4-5 ring

--	--	--

6+ ring

--	--	--

219. (THOSE WHO HAVE INSTALLED RING-SLAB LATRINE)

How many rings you have used for your ring-slab latrine ?

--	--

Number

(THOSE WHO HAVE NOT INSTALLED RING-SLAB LATRINE)

How many rings people in your area usually use for a ring-slab latrine ?

--	--

Number

220. The government now encourages that people should install ring-slab latrine with only one ring. What, according to you, are the advantages of a one ring slab-latrine ? What are the disadvantages ?

Advantages: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

--	--

Disadvantages: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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221. What is (may be) the approximate cost of a hygienic latrine made of bamboo/wood ?  
(IF DON'T KNOW, WRITE 997)

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Taka

222. Did anyone ever tell you anything about a hygienic latrine ?

Yes	1
No	2 --> 226

223. Who told you first about a hygienic latrine ?

DPHE worker	1
H & FP Worker	2
NGO worker	3
Friend/relative/ neighbor	4
Chairman/member	5
Teacher/student	6
Other	7
(specify)	

224. Who influenced or motivated you most to use a hygienic latrine ?

DPHE worker	1
H & FP Worker	2
NGO worker	3
Friend/relative/ neighbor	4
Chairman/member	5
Teacher/student	6
Other	7
(specify)	

RESPONSE

SKIP TO

225. What did they tell you about these ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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226.

INTERVIEWER: CHECK 204 AND TICK THE APPROPRIATE BOX BELOW

USING A SANITARY LATRINE

NOT USING A SANITARY LATRINE

!

(Skip to 240)

227. Who in your family you discussed with about installing a sanitary latrine ? (NOT APPLICABLE FOR STUDENTS)

- |                             |   |
|-----------------------------|---|
| Husband/wife                | 1 |
| Father/                     |   |
| Father-in-law               | 2 |
| Mother/                     |   |
| Mother-in-law               | 3 |
| Brother/                    |   |
| Brother-in-law              | 4 |
| Sister/                     |   |
| Sister-in-law               | 5 |
| Other                       | 6 |
| (specify)                   |   |
| Not applicable for students | 7 |

228. Who in your family took the decision to install a sanitary latrine ?

- |                |   |
|----------------|---|
| Husband/wife   | 1 |
| Father/        |   |
| Father-in-law  | 2 |
| Mother/        |   |
| Mother-in-law  | 3 |
| Brother/       |   |
| Brother-in-law | 4 |
| Sister/        |   |
| Sister-in-law  | 5 |
| Other          | 6 |
| (specify)      |   |

229. Who influenced most in taking the decision ? (PROBE, ANYONE OUTSIDE THE FAMILY)

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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230. How has (s)he influenced ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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231. Who helped you to install a sanitary latrine at your household ?

Verbatim: \_\_\_\_\_

--	--

\_\_\_\_\_

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(IF NONE, SKIP TO 233)

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232. Please tell me in detail how did they help you ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

--	--

\_\_\_\_\_

--	--

233. Did you face any problem, or difficulty in installing the sanitary latrine ?

Yes 1  
No 2 --> 235

234. What were the problems or difficulties you faced ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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235. What do you (would you) do if the pit of the latrine is filled ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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236.

TICK THE APPROPRIATE BOX BELOW

EVER CLEANED  
THE PIT

!

NEVER CLEANED  
THE PIT

(Skip to 240)

237. By whom do you clean  
the pit ?

Sweeper/cleaner	1
Servant/labourer	2
Self	3
Other family	
member	4
Other	5
(Specify)	

238. How much money is required for  
one time cleaning ?  
(IF NONE, WRITE 000)

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Taka

239. How often it needs cleaning ?

--	--

Month

240. In your area there are many families  
that do not have hygienic latrine.  
What are the reasons ?  
(PROBE)

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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241. How all the people in your area  
can be motivated to have hygienic  
latrine ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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241a. Have you ever motivated any one ?

Yes	1
No	2

RESPONSE

SKIP TO

242. Who in your community can influence people most to install a sanitary latrine ?	DPHE worker	1
	H & FP worker	2
	NGO worker	3
	Friend/relative/neighbor	4
	Chairman/member	5
	Teacher/student	6
	Other _____	7

243. How they can influence the community people ?

Verbatim: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

244. How do you think the community people will react if the government decides to dismantle all open/hanging/unhygienic latrines to be replaced with sanitary latrines ?

Verbatim: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

245. How,do you think,people from yourlocality can help in strengthening the government sanitation program ?

Verbatim: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Section-3

KNOWLEDGE ABOUT SAFE WATER AND PERSONAL HYGIENE

	RESPONSE	SKIP TO
301. What do the community people understand by safe drinking water ?		
Verbatim: _____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
302. From where do your family members drink water currently ?	Tubewell water 1 Ring well 2 Pond/River/Chara/Canal 3 Other 4 (Specify)	
303. We have learnt that some people drink tubewell water but use unsafe water for cooking and washing hands and dishes. Is it true ?	Yes 1 No 2 Don't know 3	1 2 3 --> 305
304. Why they don't use tubewell water for purposes other than drinking ?		
Verbatim: _____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
305. Do women put a lid on the pitcher while bringing tubewell water or they bring it open ?	Put a lid 1 Put no lid 2 Other 3 (Specify)	
306. Do they put a lid on the pitcher while they preserve it home ?	Put a lid 1 Put no lid 2 Other 3 (Specify)	
307. Did anyone ever tell you anything about safe drinking water ?	Yes 1 No 2	1 2 --> 310
308. Who told you that ?	DPHE worker 1 H & FP Worker 2 NGO worker 3 Friend/relative/neighbor 4 Chairman/member 5 Teacher/student 6 Other 7 (specify)	

309. What did they tell you about safe drinking water ?

Verbatim: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_


310. Many people in your locality do not drink tubewell water, can you tell us why ?

Verbatim: \_\_\_\_\_  
 \_\_\_\_\_


311. What else other than safe water and sanitary latrine will reduce the incidence of diseases ?

Verbatim: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_


312. Do women wash their hands, fruits, knives before cutting fruits ?

Yes 1  
 No 2

313. How do women usually clean their hands before serving/eating food ?

Verbatim: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_


314. Did any one ever tell you anything about personal hygiene ?

Yes 1  
 No 2 --> 317

	RESPONSE	SKIP TO
315. Who told you about that ?	DPHE worker	1
	H & FP Worker	2
	NGO worker	3
	Friend/relative/ neighbor	4
	Chairman/member	5
	Teacher/student	6
	Other	7
	(specify)	

316. What did they tell you about that ?

Verbatim: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

317. Where and how did you hear about the things you know about safe water, sanitary latrine, and personal hygiene ?

Hospital/Doctor	1
Home visit by worker	2
Group meeting	3
Meeting/Workshop	4
Theater/Jari	5
Mobile cinema	6
Newspaper	7
Radio/Television	8
Poster/leaflet	9
Other	10
(Specify)	

318. Do you know why lot of people suffer from and die of diarrhoeal disease every year ?

Verbatim: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

319. What do you think should be done to reduce morbidity and mortality from diarrhoeal diseases ?

Verbatim: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Section-4

COVERAGE AND SUSTAINABILITY

RESPONSE

SKIP TO

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401. Perhaps you are aware that the Government has undertaken various measures to improve environmental sanitation and personal hygiene. Among the different measures, what are the ones you like most ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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402. What are the measures you do not like ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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403. In your opinion, what are the important information people should get about the sanitation program ? (PROBE)

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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404. What additional measures do you think can strengthen the sanitation program ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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405. What is your perception about the people who work for the sanitation program ? Do they work to help you or do they make problems for you ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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406. Are there any mentions in religion about, personal hygiene, safe water and use of sanitary latrine ? If yes, what are those ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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Section-5

JOB PERFORMANCE AND RELATED PROBLEMS  
(ONLY FOR TEACHERS, STUDENTS, VOLUNTEERS AND FIELD WORKERS)

	RESPONSE	SKIP TO
501. Did you ever receive any training or orientation on the sanitation program ?	Yes 1 No 2 --> 504	
502. Where did you receive the training/orientation ?  Name of the place: _____	<input type="text"/>	
503. What were the contents of the training/orientation program ?  Verbatim: _____ _____ _____	<input type="text"/> <input type="text"/> <input type="text"/>	
504. What are the other areas on which field workers and volunteers need training in order to strengthen the sanitation program ?  Verbatim: _____ _____ _____	<input type="text"/> <input type="text"/> <input type="text"/>	
505. What can be the role of students in promoting the sanitation program ?  Verbatim: _____ _____ _____	<input type="text"/> <input type="text"/> <input type="text"/>	

	RESPONSE	SKIP TO
506. Do you do anything for the sanitation program ?	Yes 1 No 2	--> 512
<hr/>		
507. What are the specific things do you do for promotion of the sanitation program ? (PROBE)		
Verbatim: _____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
508. How people can be motivated about sanitary latrine, tubewell and personal hygiene ?		
Verbatim: _____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
509. Did you ever face any problem while working for the sanitation program ?	Yes 1 No 2	--> 511
<hr/>		
510. What were those problems ?		
Verbatim: _____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		

511. How do you feel about your participation in the sanitation program ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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512. Do you want to work for the sanitation program ?

Yes 1 --> 514  
No 2

513. Why don't you want to work for the sanitation program ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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514. What, do you think, will inspire you more to do a much better job for the sanitation program ?

Verbatim: \_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

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Time Interview ended: \_\_\_\_\_

Section-6  
OBSERVATION OF LATRINE  
(NOT FOR WORKERS)

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601. Type of latrine currently using: \_\_\_\_\_

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602. What materials were used to build the latrine, how deep is the pit, what type of bamboo/wood used for construction ?

\_\_\_\_\_

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603. Why this type of latrine is built ?

\_\_\_\_\_

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604. How much money was spent \_\_\_\_\_

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605. Whether the site selection is appropriate \_\_\_\_\_

\_\_\_\_\_

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606. Distance from water sources:

\_\_\_\_\_

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607. How long it will be durable ?

\_\_\_\_\_

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608. What is done for maintenance

a. How it is cleaned when the pit is filled \_\_\_\_\_

\_\_\_\_\_

b. How the superstructure is repaired when it is damaged ?

\_\_\_\_\_

c. What precaution is taken so that dirt/garbage from the surrounding areas do not fill the pit

\_\_\_\_\_

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609. Whether satisfied with the latrine currently using ?

\_\_\_\_\_

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Section-7

INTERVIEWER'S COMMENTS

701. About sanitary latrine:

702. About safe drinking water:

703. About personal hygiene:

704. On other general aspects:



**APPENDIX C**  
**LIST OF MANPOWER**





## LIST OF PERSONPOWER

### Key Personnel

Mr. Ghulam Mustafa Kamal  
Mr. Jamil Hussain Chowdhury  
Ms. Tauhida Nasrin  
Mr. Shafiur Rahman

### FGD Rapporteurs

Ms. Rezina Sultana  
Ms. Rabeya Khan  
Ms. Sonali Sarker  
Dr. Raushan Akhter  
Ms. Tamanna Tariq  
Ms. Nasima Ashraf

### FGD Organizers

Mr. Humayun Kabir Chowdhury  
Mr. Mainul Islam

### Field Investigator

Ms. Rowgan Jahan Chowdhury  
Ms. Afia Khanam  
Ms. Jannatul Ferdous  
Ms. Taslima Rahman  
Ms. Roushan-e-Ferdous  
Mr. Noman Farid  
Mr. Ashraf Hossain  
Mr. Khan Jahangir Ali  
Mr. Humayun Kabir  
Mr. G.M. Nasiruddin  
Mr. Al-Mamun  
Mr. Mozammel Hossain

### Secretarial staff

Ms. Nuron Nahar  
Mr. Md. Abdur Rahim Khan



**APPENDIX D**  
**SET OF ADDITIONAL TABLES**



Table D-1: Characteristics of beneficiaries.

Characteristics of beneficiaries	Non IA area	IA area > 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripa	NGO	All
(Percent)							
<b>A. Mean age:</b>							
Female	28.5	28.5	31.0	28.5	30.1	26.5	28.9
Male	43.5	41.6	43.1	41.7	36.9	37.2	40.5
<b>B. Marital status:</b>							
<b>Female</b>							
Currently married	96	92	100	100	100	100	98
Not currently married	4	8	-	-	-	-	2
<b>Male</b>							
Currently married	80	86	90	100	87	100	91
Not currently married	20	14	10	-	13	-	9
<b>C. Mean number of living children:</b>							
Female	3.1	2.9	4.0	2.7	3.8	2.5	3.1
Male	6.1	3.5	4.6	3.9	3.5	3.8	4.1
<b>D. Education:</b>							
<b>Female</b>							
No schooling	50	54	50	27	20	45	39
1-5 yrs.	41	38	30	40	40	40	39
6 + yrs.	9	8	20	33	40	15	22
<b>Male</b>							
No schooling	-	36	30	-	20	30	19
1-5 yrs.	20	28	30	47	33	20	31
6 + yrs.	80	36	40	53	47	50	50
<b>E. Religion:</b>							
<b>Female</b>							
Muslim	91	96	95	80	97	80	90
Non-Muslim	9	4	5	20	3	20	10
<b>Male</b>							
Muslim	80	93	100	80	100	90	91
Non-Muslim	20	7	-	20	-	10	9
<b>F. Occupation:</b>							
<b>Female</b>							
House-wife	82	81	95	90	77	95	86
Other	18	19	5	10	23	5	14
<b>Male</b>							
Agricultural work	30	50	40	80	20	90	51
Business	60	14	30	7	47	10	27
Service	10	21	-	13	13	-	11
Other	-	15	30	-	20	-	11
<b>G. Mean Annual Family Income:</b>							
Female	25307	33149	24745	43991	29233	14695	29757
Male	38500	34000	17610	30666	18413	33400	28477

Table D-2: Measures other than safe water and sanitary latrine that will reduce the incidence of diseases.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	ALL
(Percent)							
Maintenance of cleanliness	73	58	70	57	59	73	65
Not to eat stale/ rotten food	37	35	42	19	37	27	33
Food should be kept covered	18	27	20	39	48	21	30
Disposal of garbage in a definite place/keep the environment clean	28	27	26	13	48	28	29
To take nutritious food	10	7	24	19	10	27	16
To wash hands and face before taking food	12	9	6	19	22	12	14
To wash food items properly before cooking/ wash hands utensils before serving food	13	8	15	20	8	14	13
To keep clothes washed and clean	15	8	20	7	18	18	14
To keep finger nails cut/ to have sandals on to avoid worm infestation	13	8	3	-	17	8	8
To wash hand with soap/ ash/soil after defecation	2	3	6	1	-	10	4
To keep the body clean/ regular taking of bath	5	8	6	1	11	11	7
Physical exercise/taking rest	7	1	6	10	-	5	4
Other	2	1	3	3	1	1	2
N	60	89	66	70	91	89	465

Table D-3: Whether anyone ever told anything about a hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Yes	57	55	61	58	90	69	66
No	43	45	39	42	10	31	34
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502

Table D-4: Respondent's handwashing practice.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Water and soap	65	61	57	42	63	53	56
Water and soil	34	36	43	51	36	22	37
Water and ash	5	11	7	11	29	21	14
Only water	10	3	5	1	2	4	4
Other	4	1	3	-	2	6	3
N	74	74	74	95	94	91	502

Table D-5: Whether there is any health hazard if hands are not washed properly after defecation.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
Yes	97	98	100	100	100	100	99
No	3	2	-	-	-	-	1
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502

Table D-6: Knowledge about where sanitary latrines are available for purchase.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
DPHE office	89	77	78	81	88	68	80
Market	8	16	10	13	10	19	13
Don't know	1	6	9	5	2	3	4
Other	2	1	3	1	-	10	3
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502

Table D-7: Price of ring-slab latrine (only for those who are using ring-slab latrines).

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
<b>One ring-slab:</b>							
1-50	22	-	21	-	6	8	10
51-100	11	20	7	14	41	17	20
101-150	87	70	57	86	41	67	61
151 +	-	10	14	-	12	8	9
N	9	10	14	7	17	12	69
Mean	103	129	120	117	115	120	117
<b>2-3 ring-slab:</b>							
1-50	-	-	-	-	-	-	-
51-100	-	-	33	14	-	-	11
101-150	-	25	-	-	-	-	4
151-200	-	-	17	14	50	25	8
201-250	-	25	17	29	-	50	27
251-300	100	50	17	29	25	25	31
301-350	-	-	-	14	25	-	8
351-400	-	-	-	-	-	-	8
401+	-	-	16	-	-	-	4
N	1	4	6	7	4	4	26
Mean	300	228	216	246	312	297	257

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
<b>4-5 ring-slab:</b>							
1-50	-	-	-	-	-	-	-
51-100	-	7	-	-	-	-	1
101-150	9	7	20	20	12	-	12
151-200	9	-	20	7	-	-	4
201-250	27	14	40	33	-	-	15
251-300	36	14	20	7	19	14	18
301-350	-	21	-	20	27	-	17
351-400	-	21	-	7	12	57	14
401+	9	14	-	7	31	29	18
N	11	14	5	15	26	7	78
Mean	500	546	600	380	518	460	497

Table D-8: Number of rings people use for ring-slab latrines.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
1	4	3	11	2	4	6	5
2	4	1	5	-	2	13	4
3	9	10	16	23	13	19	15
4	19	14	11	9	13	11	13
5	45	37	28	34	36	36	36
6	8	12	7	17	12	4	10
7 +	11	23	22	15	20	11	17
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502
Mean	5	6	5	5	5	4	5



Table D-9: Perception of the people about advantage of a one-ring one-slab latrine (only for those who are using ring-slab latrines).

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
Less expensive	70	64	77	98	71	79	75
Ring-slab can be shifted to make a new latrine	10	14	17	13	23	24	18
The old pit soil can be used as manure	3	-	-	-	11	3	4
Healthy growth of plants in the old pit soil	3	-	3	13	-	9	4
Carrying of one-ring one- slab is easier/less expensive	-	19	11	3	7	12	9
No cost of cleaning	-	-	-	-	-	3	0
None	27	14	11	3	19	6	14
Other	-	-	-	-	-	-	-
Don't know	-	7	3	-	2	3	3
N	30	42	35	30	65	33	235

Table D-10: Disadvantage of one-ring one-slab latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
Pit fills-up frequently	70	66	76	62	66	74	69
Frequent digging of pit is expensive/abominable/ hazardous/cleaner is not available	30	25	35	30	40	25	31
Soil erosion if the pit is dug deep	34	23	19	14	30	14	22
Pit fills with water in rainy season in low lying areas	10	5	10	-	17	10	8
Lack of space for frequent shifting	3	6	3	-	2	6	3
Soil erosion cause tilting of the ring- slab	1	3	1	-	6	1	2
Deposit of soil from rat-holes/soaking of water through pit- walls	3	1	4	2	2	1	2
Making of superstructure is expensive if frequently shifted	-	2	1	-	2	1	1
No disadvantage	8	9	8	18	9	12	11
Other	1	-	-	-	-	1	0
N	74	74	74	95	94	91	502

Table D-11: Perception of the people about the cost of a home-made hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
1-50	4	7	1	3	16	11	8
51-100	8	19	19	21	29	19	20
101-150	15	20	7	16	16	17	15
151-200	15	16	20	18	22	15	18
151-200	12	5	4	4	3	4	5
201-250	20	9	11	8	2	10	10
251-300	-	-	1	-	-	-	0
301-350	3	5	8	-	1	1	3
351 +	12	7	11	11	6	7	8
Don't know	11	11	18	19	5	16	13
Total	100	100	100	100	100	100	100
N	74	74	74	95	94	91	502
Mean	112	110	179	192	56	168	135

Table D-12: Person motivated most to use a hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
DPHE worker	41	30	44	20	51	48	32
H & FP Worker	24	29	18	7	9	-	13
Teacher/student	7	6	7	18	20	6	12
NGO worker	2	9	9	8	1	22	17
Friend/relative/neighbor	24	17	9	38	10	21	17
Chairman/member	2	2	9	-	7	-	4
VDP	-	2	-	-	-	-	1
Other	-	5	4	9	2	3	4
Total	100	100	100	100	100	100	100
N	42	52	45	55	85	63	342

Table D-13: Family members with whom discussed about installing a hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
	(Percent)						
Spouse	41	66	37	57	61	41	52
Father/Father-in-law	33	40	29	19	17	41	29
Mother/Mother-in-law	20	17	18	13	14	32	19
Brother/Brother-in-law	28	20	35	13	22	24	23
Sister/Sister-in-law	10	3	6	5	5	8	6
Other	20	17	29	13	15	14	17
Don't know	16	8	10	11	13	14	17
N	51	65	49	63	92	63	383

Table D-14: Family members who influenced most in installing a sanitary latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana-ripara	NGO	All
	(Percent)						
Self	20	29	22	8	18	36	22
Spouse	31	39	29	60	49	19	39
Father/Father-in-law	35	22	22	19	21	22	23
Mother/Mother-in-law	-	-	-	5	2	5	2
Brother/Brother-in-law	4	8	16	5	10	10	9
Sister/Sister-in-law	-	2	3	-	-	-	1
Other	10	-	8	3	-	8	4
Total	100	100	100	100	100	100	100
N	51	65	49	63	92	63	383

Table D-15: Person influenced most in taking the decision.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Own decision	53	42	43	65	17	30	39
DPHE field worker	14	15	22	10	44	6	20
Friend/relative/neighbor	14	25	14	14	12	10	15
NGO worker	2	3	8	2	2	32	8
H&FP worker	2	7	-	2	5	6	4
Teacher/students	2	-	-	3	11	3	4
Chairman/Member/Imam	-	3	5	-	7	-	3
Seminar/paper/phamplets	-	2	-	2	1	2	1
Other	13	3	8	2	1	11	6
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>N</b>	<b>51</b>	<b>65</b>	<b>49</b>	<b>63</b>	<b>92</b>	<b>63</b>	<b>383</b>

Table D-16: Persons helped in installing a hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
None helped	74	60	82	72	90	70	76
Labour/mason	30	25	16	40	11	25	24
Friend/neighbor/ relative	2	10	2	2	4	7	5
Chairman/Member	-	-	-	-	-	-	-
Teacher/students	5	-	2	-	4	-	2
DPHE Worker	5	-	2	2	2	-	2
NGO worker	-	2	-	-	-	2	1
Other	-	-	-	-	-	2	0
<b>N</b>	<b>43</b>	<b>63</b>	<b>44</b>	<b>60</b>	<b>92</b>	<b>56</b>	<b>358</b>

Table D-17: Types of help extended for installation of a hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area > 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Helped in digging the pit/with materials/ land in buying rings/ calling masons	58	38	55	83	34	67	54
Gave labour in exchange of money	13	9	35	39	-	26	18
Monetary help by father/ brother-in-law/maternal uncle/son/others	17	-	20	14	2	37	13
Demonstrated how latrine can be installed	8	3	-	-	2	7	3
Gave advice on site selection/maintenance	8	-	10	11	19	-	10
None helped	25	13	30	31	13	4	18
Helped with both money and physical labour	4	-	5	-	4	-	2
Other	-	3	-	-	-	-	1
Don't know	4	44	5	-	28	-	9
N	24	32	20	36	47	27	186

Table D-18: Whether respondent faced any problem or difficulty in installing the hygienic latrine.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Yes	6	1	6	2	4	13	5
No	94	99	94	98	96	87	95
Total	100	100	100	100	100	100	100
N	51	65	49	63	92	63	383

Table D-19: Measures taken (to be taken) when the pit is filled.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Cleaned by sweepers and the excreta is buried in another pit	58	58	68	65	48	52	57
Old ring is buried with the pit	15	15	15	19	20	16	17
Shifting the latrine to a new pit	10	18	4	8	17	18	13
Salt/lime/urea used to reduce volume of excreta	6	3	4	-	7	5	4
Connect the old pit digging a new one by its side	4	2	4	-	5	4	3
Pit is connected to water sources	4	-	-	2	2	-	1
Clean the pit after few months when excreta absorbed with the soil	2	-	5	3	-	4	2
Pit has not filled yet	-	-	-	3	1	2	1
Return to traditional practice	2	-	-	-	-	-	0
Other	2	4	-	-	-	-	2
N	48	62	47	62	92	56	367

Table D-20: Persons who usually clean the pit.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
(Percent)							
Sweeper/cleaner	83	86	91	89	82	71	84
Servant/labourer	-	-	9	11	4	15	5
self	17	8	-	-	6	-	6
Other family member	-	3	-	-	4	-	2
Other	-	3	-	-	4	14	3
Total	100	100	100	100	100	100	100
N	14	30	11	9	30	7	101

Table D-21: Amount required for one time cleaning.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
0	17	17	-	11	14	14	14
1-50	8	3	18	22	14	43	14
51-100	17	38	27	22	32	-	28
101-150	8	21	18	33	18	-	18
151-200	17	3	18	12	7	14	9
201-250	-	3	9	-	3	-	3
251-300	8	7	-	-	7	-	5
301-350	-	-	-	-	-	14	1
351-400	8	3	10	-	5	15	5
401 +	17	5	-	-	-	-	3
Total	100	100	100	100	100	100	100
N	12	29	11	9	28	7	96
Mean	208	150	156	102	123	156	146

Table D-22: Role of students in promoting the sanitation programme.

	Non IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Bana- ripara	NGO	All
	(Percent)						
Students can motivate their neighbors	62	59	42	56	65	72	60
Students should motivate their family members	62	48	47	54	41	69	54
Students can help the poors to make latrines	10	15	-	12	31	8	13
Students can demonstrate installation of ring- slab latrine	14	6	16	2	2	10	8
Students can organise meetings processions	-	11	-	2	10	3	5
Students can compel villagers to install sanitary latrine	-	-	5	6	2	-	2
Students should cannot do this sort of things	2	4	-	-	2	-	1
Other	2	2	2	-	4	3	2
N	42	54	43	50	49	61	299

Table D-23: How people can be motivated for sanitary latrine, tubewell, and personal hygiene.

How people can be motivated	DPHE Worker	FWA/HA	NGO worker	School teacher	School student	Comm. leader	Relg. leader
Inform/educate in details about benefits of sanitation/disadvantages of unhygienic practices	x	x	x	x	x	x	x
Organise seminar, symposium, meetings, group discussions, processions, etc.	x	x	x	x	x	x	x
Use mass media for wide publicity including mobile film show	x	x	x	x	x	x	x
Involve community leader/teacher/student/chairman/member/H & FP worker/trained educated youths for motivation through home visit	x	x	x	x	x	x	x
Provide financial/material support	x	x	x	x	x	x	x
Free distribution of sanitary latrine & tubewell to the poor	x		x			x	
Inform/frighten people about the serious consequences of unhygienic practices		x		x	x		
Creation of pressure for unyielding/laggard/stubborns		x	x	x			
Explain in details how diarrhoeal diseases are spread and children are affected			x	x		x	
Demonstration of installation technique & cleaning procedure of low-cost latrine	x		x			x	
Inform villagers that installation of latrine is less expensive than doctor's fee	x	x					
Disseminate knowledge through workers			x	x			



How people can be motivated	DPHE Worker	FWA/HA	NGO worker	School teacher	School student	Comm. leader	Relg. leader
Provide training to the teachers/ workers/religious leaders	x			x			
More subsidised distribution of latrine				x			
Provide health education to villagers				x			
Students can motivate their parents and neighbours					x		
Appreciation for those who practices	x						
Publicity through film-show		x					
Participation of women in meetings & group discussions		x					
Distribution of posters		x					
Provision for loan and installment						x	
Increase supply of materials						x	
Reduce the current price of sanitary latrine & tubewell						x	
Voluntary installation by students in household having no manpower						x	
Motivate people in the mosques							x
Organize orientation session in mosques							x

Table D-24: Knowledge about why lot of people suffer from and die of diarrhoeal diseases every year.

Knowledge about why lot of people suffer from and die of diarrhoeal diseases every year	Non-IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi Division	Banari para	NGO	All
By taking rotten/ adulterated/contaminated food	88	81	78	76	69	71	77
By drinking contaminated water/using polluted water for washing/cooking	51	58	58	46	56	55	54
For keeping food uncovered/flies/insects sit on foods	46	43	56	44	36	40	44
For indiscriminate defecation/using open or hanging latrine/spread of diseases in rainy season or during floods	34	36	53	28	53	57	44
Don't maintain cleanliness /don't wash the hands before taking food/don't properly clean the hands after defecation	34	41	41	26	48	44	39
For nasty/unhygienic living/polluted environment	23	14	15	11	17	22	17
Lack of knowledge/ carelessness	12	5	9	3	3	4	6
If regularity in taking food is not maintained	1	3	7	1	1	4	3
Nutritional deficiency	1	1	1	-	1	1	-
Don't know	4	7	1	3	1	1	3
Other	-	1	3	1	-	-	
N	74	74	74	95	94	91	502

Table D-25: Measures need to be taken to prevent diarrhoeal diseases.

Measures need to be taken to prevent diarrhoeal diseases	Non-IA area	IA area < 3 yrs	IA area ≥ 3 yrs	Rajshahi division	Banari para	NGO	All
Foods have to be covered to protect from flies/dust	54	57	50	59	43	54	53
Maintain cleanliness	47	57	49	45	60	57	52
Drink safe water/tubewell water/boiled water	63	50	47	40	48	53	50
Use safe water for all household works	16	16	18	7	15	9	13
Not to eat rotten foods	32	51	39	38	43	46	42
Clean hands before taking food/wash hands after defecation	18	23	20	18	23	33	23
Use of hygienic latrine/defecate at a fixed place	47	41	47	26	46	47	42
Cleanliness of households/environment	26	16	7	5	11	13	13
Carefull about maintaining personal hygiene/regular dietary habits	8	19	24	11	5	10	12
Take balanced/nutritious food	1	8	11	6	7	8	7
Don't know	3	5	1	3	1	1	2
Other	-	3	4	2	1	1	2
N	74	74	74	95	94	91	502



