

Study No. 13

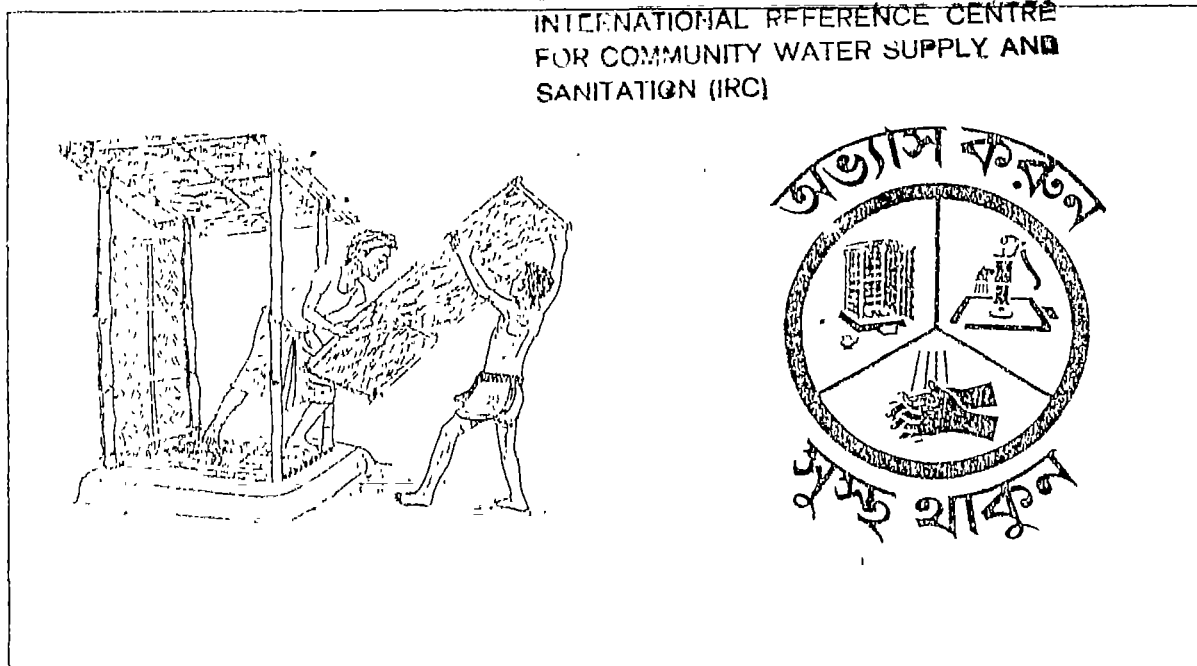
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REPORT ON STUDY ON HOMEMADE (DO-IT-YOURSELF) LATRINES

May-June 1993

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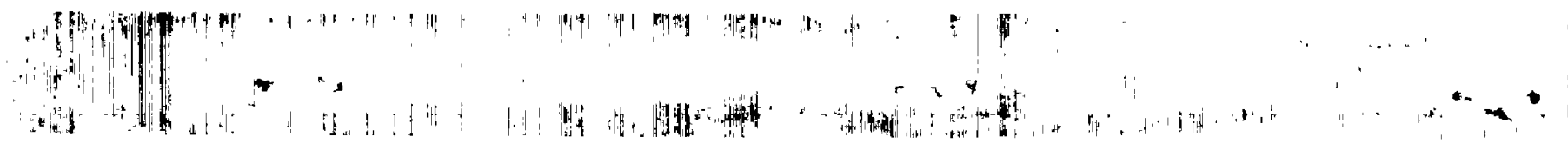


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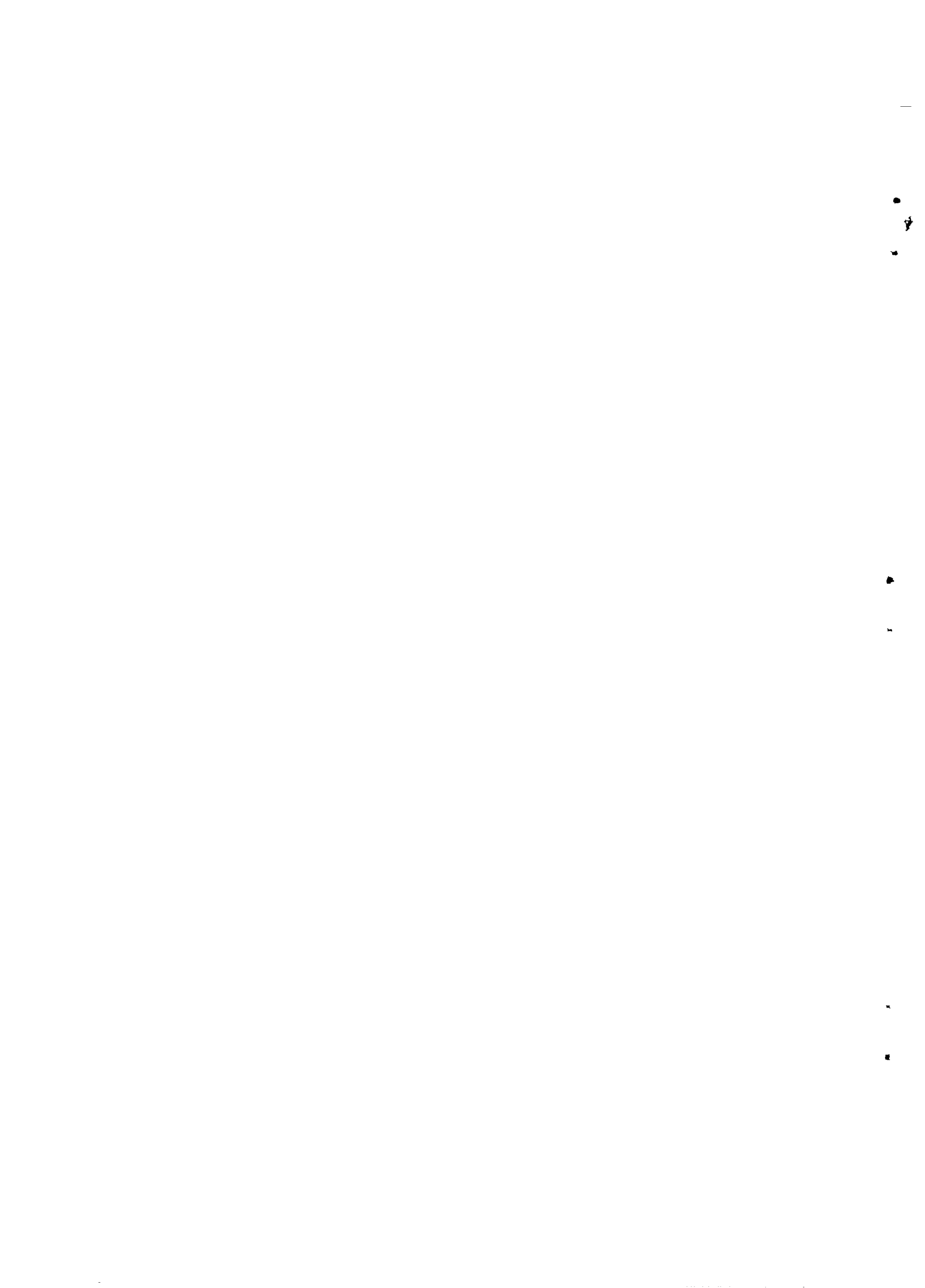
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ANNEXES

Annex I	Request for the study (Unicef memo RWS/407/165 of 17 February 1993 & TOR)
Annex II	List of Sample Unions
Annex III	Questionnaire



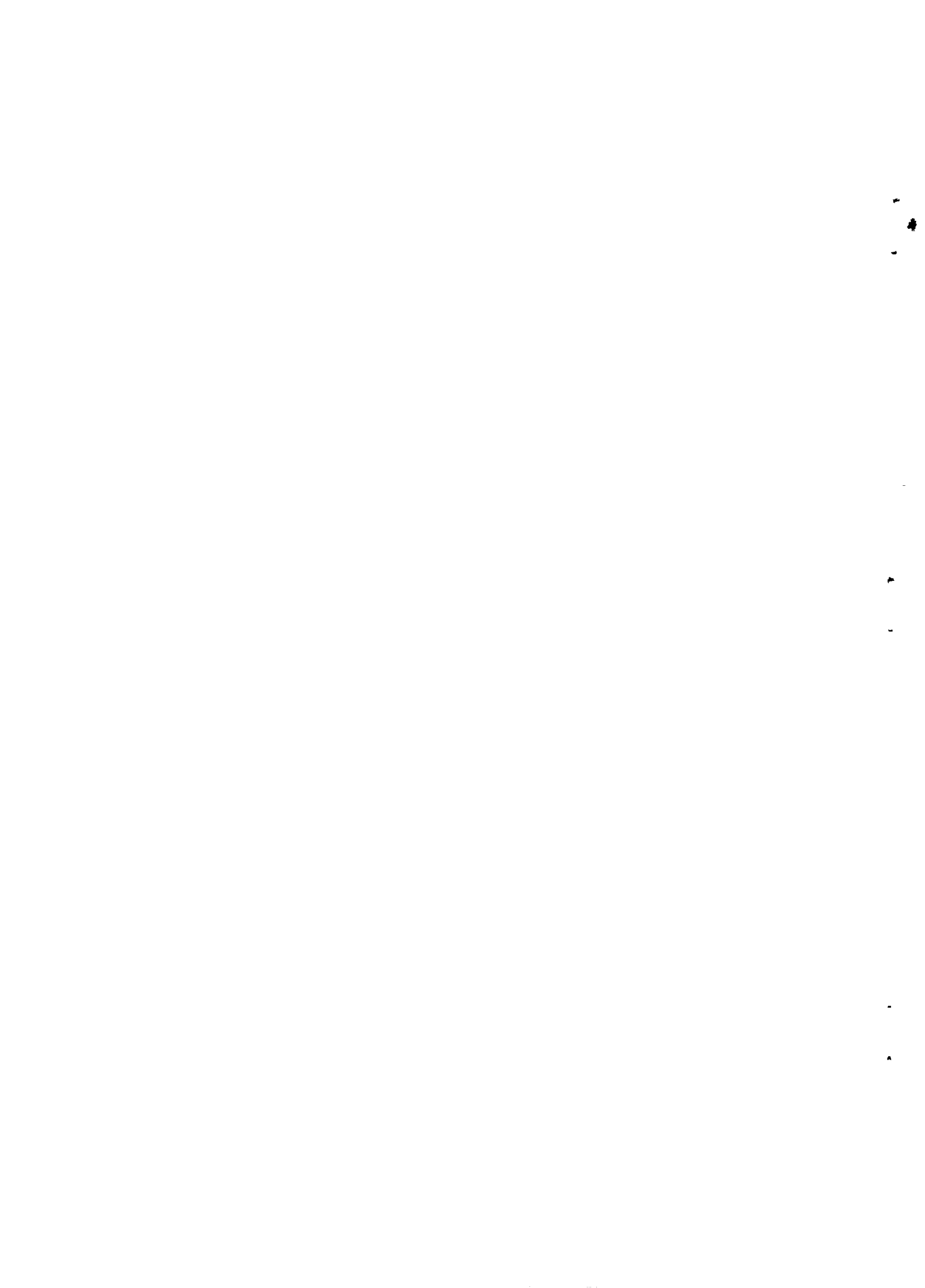
STUDY ON
"DO-IT-YOURSELF (HOMEMADE) LATRINES"

1.0 BACKGROUND

In Bangladesh, approximately 200,000 children under five years of age die of diarrhoeal diseases every year. The causes of diarrhoeal diseases are predominantly due to the limited use of tubewell water for all domestic needs, poor environmental sanitation and personal hygiene practices.

A recent survey by Mitra & Associates in 1991 indicated that the overall sanitation coverage was 26%; 60% with homemade latrines and 40% with water-seal latrines. The incidence of water and sanitation related diseases particularly diarrhoea has remained the major killer of children under 5 years. With the increased coverage of water supply, it was anticipated that there would be a related drop in these diseases. However, unfortunately this drop has not materialized. Increased attention was therefore paid to integrating water supply, sanitation and hygiene education - Integrated Approach (IA), to combat these diseases more effectively.

Since 1987 the homemade (Do-It-Yourself) pit latrines were promoted through the IA programme, for families who could not afford to buy the water seal latrines. It was recognized that the promotion of the homemade pit latrine programme can only be considered as the initial improvement to the existing practice of open defecation. In order to assess the status of the homemade latrine programme, in terms of its technology and user's reaction, it was proposed that a study be undertaken. WHO Community Water Supply & Sanitation Project BAN CWS 001 team was requested to carry out such a study (Annex I).



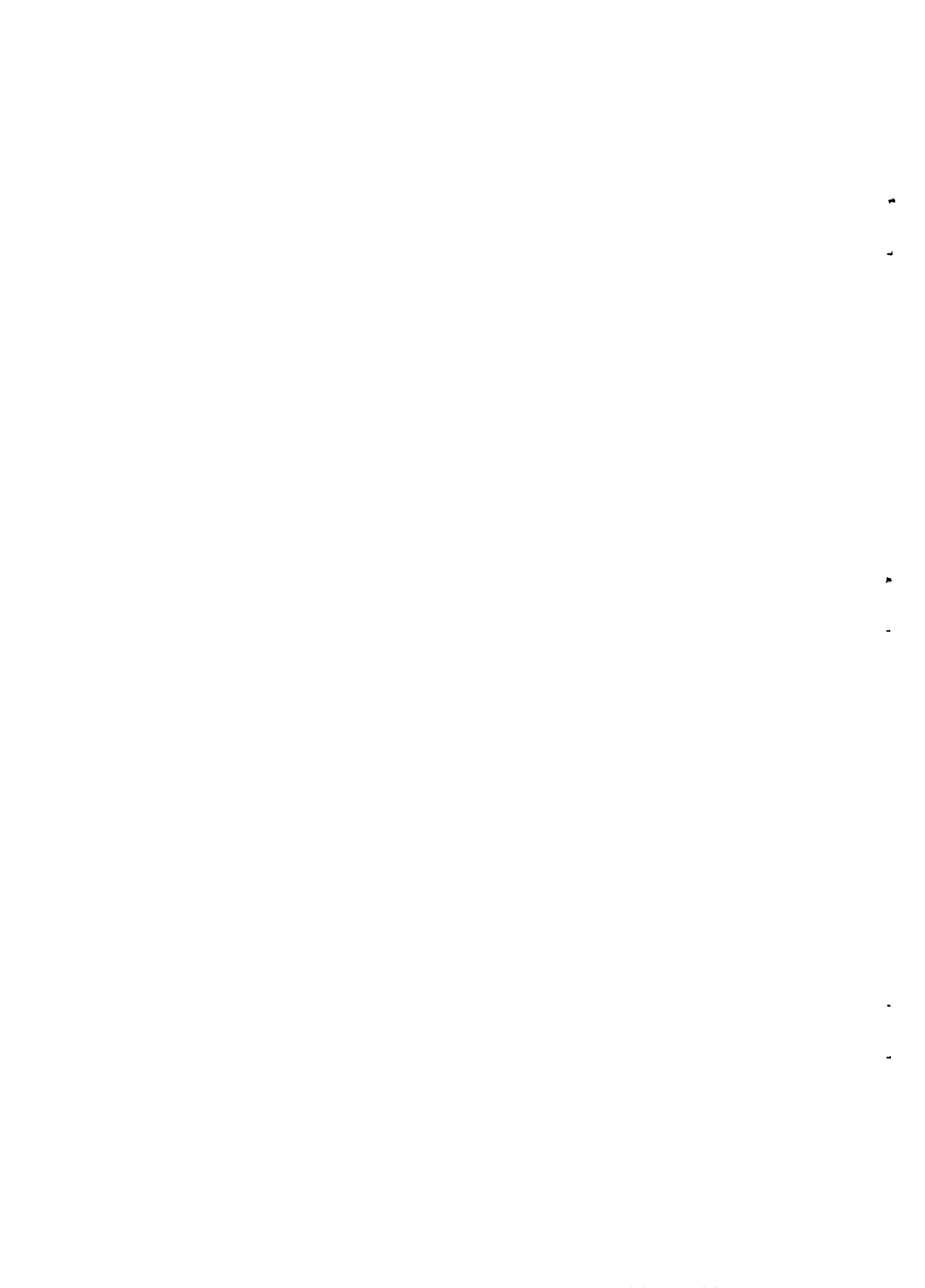
2.0 OBJECTIVES OF STUDY

- (a) To assess the appropriateness, acceptability and affordability of homemade latrines.
- (b) To determine whether homemade latrines are properly constructed, used and maintained.
- (c) To obtain construction details on the different types of homemade latrines, for the purpose of updating low cost latrine manuals.
- (d) To determine what messages, on homemade latrines and hygiene practices were disseminated to the villagers, and how.

3.0 STUDY DESIGN:

The field study was designed, inter-alia to collect the following information:

- Type and dimensions of the homemade latrines.
- Soil conditions.
- The type of materials used for pit lining, squatting platform, pit cover, and superstructure.
- Cost of materials and labour.
- Users' attitudes towards pit latrines.
- Source from where information on construction methods was acquired.
- Life expectancy of latrine pits.
- Economic status of the families, usage level-categorywise (male, female, children) and number of users.
- Steps taken when the pit was filled up.
- Any effects due to weather conditions.
- Sources of messages on latrine usage.



4.0 METHODOLOGY

Sample Areas

A total of 35 sample districts, (an average of) five districts from each of the seven DPHE Circles, were randomly selected. To have a well balanced country-wide distribution of samples, 2 districts out of the 3 districts from Chittagong Hill Tracts Circle were selected and 6 districts in each the larger Circles namely Dhaka, Barisal and Chittagong were chosen. In the remaining two Circles, 5 districts in each were selected.

Within the 35 sample districts, 35 sample Thanas, one from each district, were randomly selected. Similarly the sample Unions (one from each Thana) were also randomly selected. The list of the 35 sample Unions is given in Annex II.

Sample Latrines

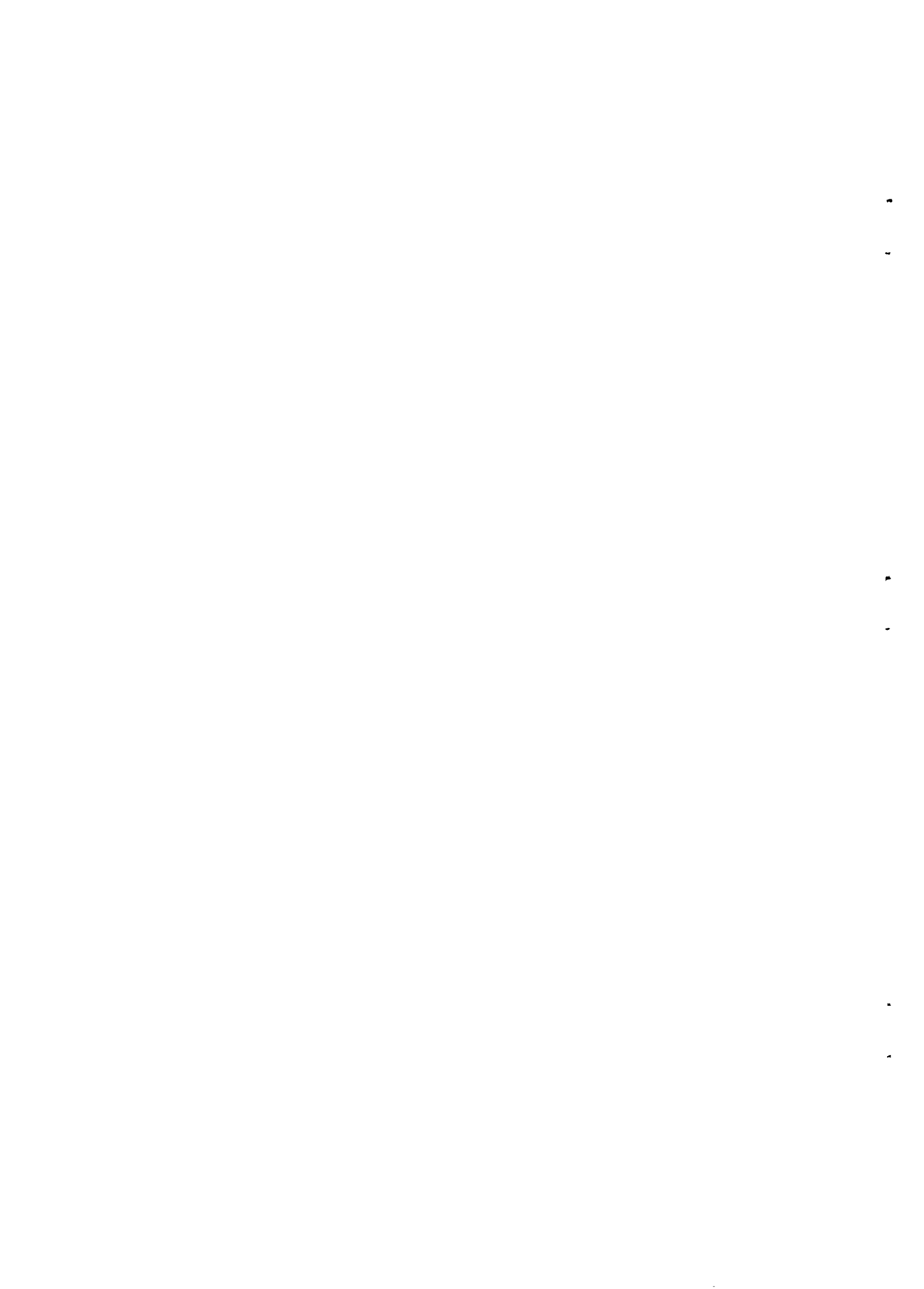
It was planned that in each Union 10 randomly selected latrines in at least 3 villages would be surveyed. The total sample size thus proposed was 350 latrines. The latrines should be at least 2 kms away from the nearest thana HQ.

Study period

May - June 1993

Survey tools

The survey tools were drafted by the WHO BAN CWS 001 Team and finalized after a review with UNICEF and DPHE (Annex III).



Data Collection The National Field Programme Officer (NFPO) BAN CWS 001 briefed the Field Sanitation Officers (FSOs) regarding approaches for information gathering and the recording of data on survey questionnaires. The FSOs visited the latrine sites as instructed and gathered the necessary information.

Reporting The information gathered from the field was processed and analyzed at the BAN CWS 001 project office. A draft report prepared by the WHO Team was reviewed by DPHE and UNICEF and finalized jointly.

5. FINDINGS

(a) Status of beneficiaries of homemade latrines

- Table I shows that 11% of the heads of the households having latrines were service holders; 17% were self employed; 58% were farmers and 14% were labourers. The total number of females, males and children below 10 years in the 238 families surveyed were 595, 680 and 517 respectively.
- Of the heads of the households 17% are illiterate, 33% had received primary education, 36% secondary and 14% above secondary education.
- In terms of income levels, it was indicated that 40% of the households with latrines had yearly savings over Tk. 2000.



- In terms of the status of land occupancy it is noted that 97% of the house-holds surveyed had their houses on the plot of land covering more than 3 decimals.
- This would indicate that sufficient land was available to construct another home-made latrine if required.

(b) Latrine Technology:

General - Location from Thana Headquarters

- It is seen from Table V-1 that 30% of the latrines were located 2- 5 kms from thana headquarters while 70% of the latrines were located further away.

Superstructure

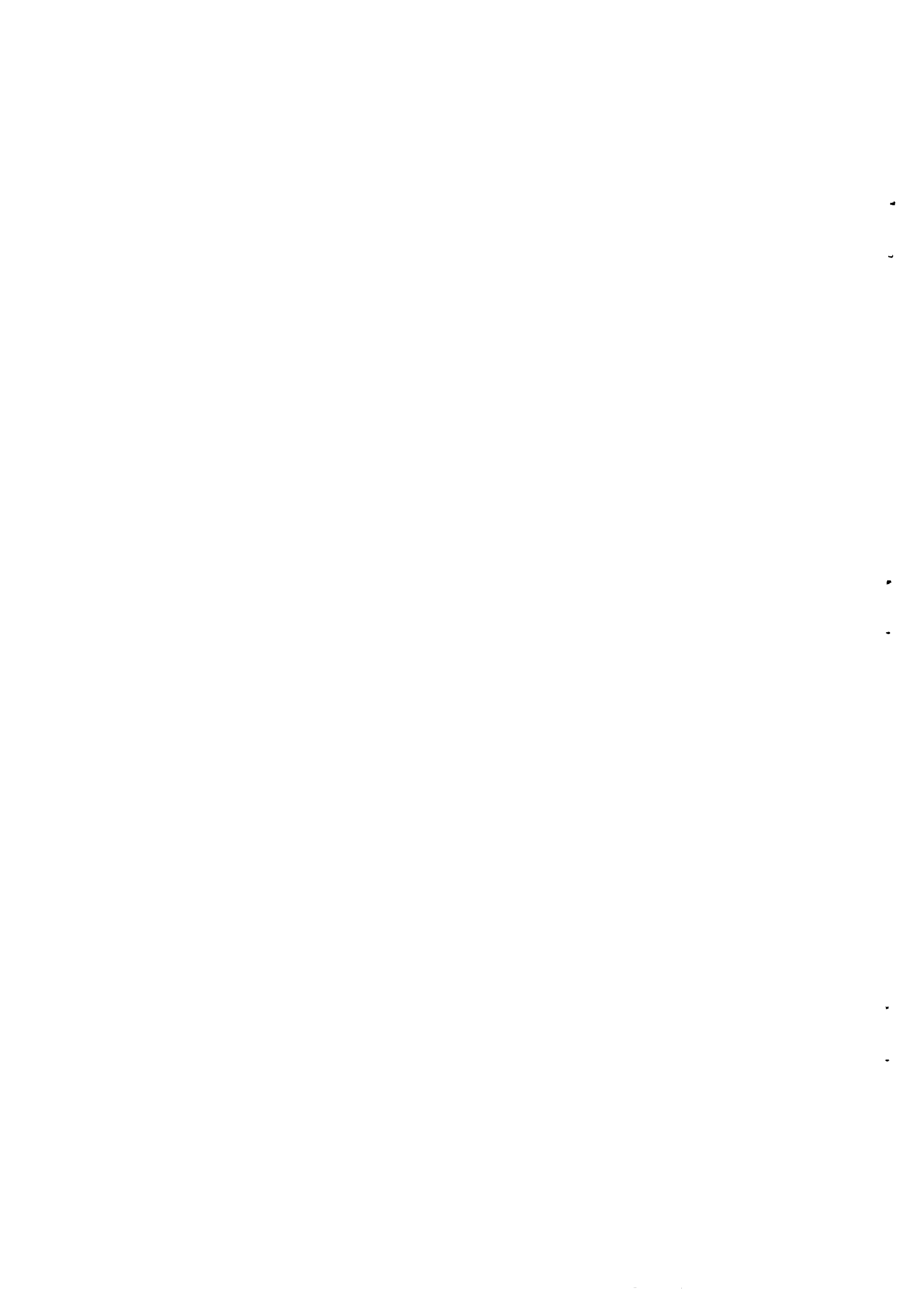
- Table II shows that 67% of the households surveyed had constructed their latrines larger than 4 ft.X4 ft. and 33% smaller.
- Some 83% of the superstructures were erected on bamboo poles and 8% on wooden poles.

Roof

- Some 79% of the home-made latrines did not have any roof and 21% had a roof.
- Out of 50 roofs, 31 were of straw, 11 of leaves of banana, hugla, palm, betelnut or coconut tree and 8 of iron sheet or tarja.

Fencing Wall

- For the construction of fencing walls, 51% of the house-holds used straw and leaves, 20% used tarza/bamboo, 17% used jute stick and 11% used metal sheet etc. Only 2 (1%) of the latrines (located in the bush) had no fence at all.



Door

- The table indicates that 55% of the latrines were provided with a curtain of jute mat, 13% with a curtain of straw/leaves and 13% fenced with jute sticks/Tarja and some 19% latrines were found without any such curtain or door.

Durability of materials

- Of the 41 latrines fenced with jute sticks, 3 had been in use for more than 12 months (without repair).
- Some 122 of the latrines had walls built with leaves/straw; 15 had been in use for more than 12 months (without repair).
- Of the 82 latrines fenced with GI sheets and Tarja, 7 had been in use for more than 12 months (without repair).

(c) Platform (Direct Pit)

- In 8% of the latrines surveyed, only 2 pieces of bamboo/wooden logs were being used in place of a platform.

Height of platform above ground level

- Table III shows that in 58% of the latrines surveyed the floor was raised about 6 inches above the ground level and for the remaining 42%, the floor was raised more than 6 inches.

Size

- It was shown that 47% of the latrines were constructed with platforms of sizes larger than 4 ft. X 4 ft. and 45% smaller.



Materials

- The table shows that 55% of the platforms were made of bamboo, 31% of wood and 6% of other materials. The rest, about 8% of the latrines were supported by 2 wooden/bamboo logs; this could not be classified as a platform.

Size of squatting hole

- The table reveals that the length of the squatting hole, for 43% of the latrines surveyed, was less than 12 inches, for 31% 12-18 inches and for 26% greater than 18 inches.
- The width of squatting holes in 23% of the latrines was up to 6 inches, in 47% latrines 6 - 8 inches and in 30% of the latrines greater than 8 inches.
- Only 7% of the latrines had squatting hole covers. Most of these were located in Barisal Circle.

(d) Platform (Offset pit)

- Table IV shows that of the 15 offset pit latrines, 33% of the platforms were made with brick or concrete, 33% with earth and 34% with other materials like bamboo, coconut leaves etc.
- The chutes were made of plastic in 2 cases, iron sheet in 11 cases and palm/coconut leaves in 2 cases. The length of the chutes was upto 2 ft. in 12 cases.

(e) Latrine pit:

- Of the 238 latrines 223 (94%) were found to be direct pit type and only 15 (6%) were offset pit type latrines.

Distance from drain and water source

- The table reveals that 27% of the latrines surveyed were installed within 30 ft. from drains/tube wells/water sources whereas 73% of the latrines were installed beyond 30 ft.



Diameter of pit

- The table shows that the diameter of the pits for 73% of the latrines was 2.5 - 3 ft., for 17% less than 2.5 ft. and for 10% more than 3 ft..

Shape of pit

- Table V-2 shows that the shape of 50% of the pits was cylindrical, 42% conical and 8.0% oval.

Depth of pits

- The depth of pits for 22% of the latrines was less than 5 ft. for 65% of the latrines 5 ft. to 7 ft. and for 13% greater than 7 ft.
- Of the 101 latrines constructed in clayey soils, 57 (57%) of the pits had depths of 6 ft. or more and 44 (43%) less than 6 ft.
- Of the 86 latrines constructed in silty soils 30 (35%) had depths of 6 ft. or more and 56 (65%) less than 6 ft.
- Of the 51 latrines constructed in sandy soil 13 (25%) had depth of 6ft. or more and 38 (75%) less than 6 ft.

Depth of water table

- Depth of water table for 21% of the latrine locations was less than 3 ft. in the rainy season.

Lining of pit

- Some 97% of the pits were not lined. Where used the lining materials were bamboo and tree branches.



(f) Cost for Latrine (Offset Pit)Cost for lining

- Table VI-1 shows that the unit costs of lining of pits was nil, indicating that the pits were not lined.

Cost for materials of pit cover

- The table shows that the unit costs for materials for 27% of the pit covers was more than Tk. 30 and for 73% the cost was less than Tk. 30.

Cost for materials of platform

- The unit costs for platform materials for 60% of the latrines were upto Tk. 20 and for 40% more than Tk. 20.

Cost for chute

- The unit costs for 53% of the chutes was more than Tk. 15. The cost for 47% of the chutes was Tk. 15 or less.

Cost for materials of super structure

- Unit material costs for the super structure for 47% of the latrines were more than Tk. 40 and for 53% Tk. 40 or less.

Labour cost

- The unit labour costs for the construction of the sub-structure for 33% of the latrines were more than Tk. 25 and for 67% Tk. 25 or less.
- Labour costs for the super-structure for 47% of the latrines were more than Tk. 15 and for 53% less than Tk. 15



Total cost

- Total unit costs for the construction of 47% & of the offset pit latrines were more than Tk. 125 and for 53% less than Tk. 125.

(g) Cost of latrines (Direct pit)Cost for pit lining materials

- Table VI-2 shows that the unit costs for pit lining materials in 4 out of 7 cases were more than Tk. 30 and for the remaining 3 latrines Tk. 30 or less.

Cost for platform materials

- Unit costs for platform materials for 44% of the latrines were more than Tk. 45 and for 56% Tk. 45 or less.

Cost for materials of superstructure

- The unit costs of materials for 62% of the superstructures were Tk. 40 or less and for 38% more than Tk. 40.

Labour cost

- The unit labour costs for 30% of the substructures were more than Tk.30 and for 70 % less than Tk.30.
- The unit labour costs for 67% of the super-structure was Tk.15 or less and for 33% more than Tk.15.

Total cost

- The total unit cost for 50% of the direct pit latrines was Tk. 110 or less and for 50% more than Tk. 110.



(h) Development of Latrine Usage

- Table VII indicates that before the construction of the present latrines, 62% of the families claimed to have developed the habit of using latrines for more than 2 years, 11% of families for less than 2 years and 27% of families had no practice of using latrines.
- Some 33% of the families (238) surveyed had either insanitary disposal systems or defecated in the open.

Pit contents

- The table shows that of the 159 families who had latrines before, 88% of the families covered the content of the filled-up pits with earth and 12% of the users kept the pit contents open posing hazards to public health.

Use of sludge

- Only about 2% of the users utilized the stabilized sludge as fertilizer for plants.

Reasons for latrine Usage

- The table also shows that the reasons for the use of latrines was primarily privacy for 54% of the families, health for 31% of the families and convenience for 15% of the families surveyed.

(i) Latrine PromotionGeneral

- The table indicates that 6% of the families had been exposed to hygiene messages delivered by DPHE officials, 2% delivered by health workers, 13% delivered by NGOs, 13% delivered by Ansar/VDP, 44% delivered by family members and 22% delivered by relatives, neighbors and schools.

- Only 54% of the families knew about the one ring-one slab latrines available from the DPHE Village Sanitation Centres.

Information about latrine construction

- Table VIII shows that only 6% of the families surveyed had received information on the construction of latrines from DPHE staff, 1% from health workers, 4% from NGOs, 13% from Ansar/VDP, 71% from family members and 5% from relatives, neighbors and schools.
- The table also shows that the average life of 16% of the pits was more than 2 years.

Type of latrine preferred

- A comparison of the past and present preferences among poor families indicates that the preference for homemade latrines has declined from 37% to 22% and for waterseal latrines preference has increased from 34% to 72%. The desire to defecate in the open has decreased from 29% to a mere 6%.

Problems encountered

- The user families had indicated that 37% of the superstructures and 31% of the sub-structures were not durable.

(j) Disposal of Children Faeces

- Table IX shows that only 103 latrines were used by at least one child (below 10 years of age) of a family.
- In almost all the cases the children faeces were disposed of in ditches/open places.



Water for latrine Usage

- The sources of water for use in latrines were tubewells, ponds and others like canals/river etc in 56%, 28% and 16% of the cases respectively.
- In 46% of the cases the distance of the water source from the latrine was 50 ft. or less and in 54% of the cases more than 50 ft.

(k) Latrine Habits of family members

- Table X shows that among the families surveyed the latrine users were 581 females, 612 males, and 162 children (below 10 years of age) as against total of 595, 680 and 517 respectively.
- Some 13 latrines were exclusively used by only female members and 59 (25%) of the latrines were used by all members of the families.
- No latrine was exclusively used by male members.
- All the latrines were used by at least one member of the family.

(l) General Observations on Latrines

- Table XI indicates that the superstructures of 54 latrines were attractive and 105 were not attractive.
- Some 76 platforms were well cleaned and 85 platforms were not acceptably cleaned.
- Some 73 pits were intact and 61 pits were found partially damaged.



Table XII reveals that a total of 158 villages were visited by the surveyors. Homemade pit latrines were found in only 79 of the villages (50%) surveyed.

6.0 CONCLUSIONS

Based on the findings the following conclusions may be drawn:

- (i) It is interesting to note that home-made latrines were used by a wide spectrum of families irrespective of varied occupations, literacy and income levels.
- (ii) Privacy and then health are the two primary reasons given by villagers who were using homemade latrines. However, in half of the villages visited no homemade latrines could be found. A great deal of promotional work is required.
- (iii) It would appear that the habit to use latrines takes at least 2 years to develop.
- (iv) The use of digested sludge from pit latrines in agricultural purposes is extremely low.
- (v) There appears to be a willingness to use an improved sanitation technology (water seal latrines) in the future.
- (vi) Some latrines were exclusively used by female members of some families making it necessary to construct at least two latrines in such cases.
- (vii) The use made of offset pit latrines which are safer for children was unfortunately relatively low. The use of offset pit latrines needs to be promoted.
- (viii) A large proportion of the latrines were not being used by children.



- (ix) The faeces of children not using latrines was disposed of indiscriminately in open places.
- (x) A large percentage of latrines surveyed had no roof making it difficult to use such latrines in the rainy season.
- (xi) It appears that villagers are prepared to spend up to Tk. 110 for a direct pit homemade latrine and up to Tk. 125 for an offset pit homemade latrines.
- (xii) Some of the latrines were located within a distance of 30 ft. from water supply sources posing a potential water contamination hazard.

8.0 Recommendations

Based on the preceding findings and conclusions the following recommendations have been drawn:

- (i) Well designed homemade latrines should be promoted where precast/prefabricated latrine components are not available.
- (ii) User friendly, self-instructional manuals or leaflets should be prepared and distributed to villagers to provide practical guidance for the construction of homemade latrines.
- (iii) The social mobilization approach should be adopted. Schools/ Mosques/ Madrasa/ Leaders/Service Clubs/Extension workers/NGOs etc should be involved in this effort.
- (iv) Based on the findings, it is recommended that the cost of homemade pit latrines to be promoted should not exceed Tk. 125.



- (v) Precast/prefabricated latrine elements (pour-flush slabs) should be readily available to those interested in improved sanitation.
- (vi) The following hygiene messages should be disseminated:
- Excreta is a source of pathogens
 - Good sanitation practices protect health
 - Excreta should not be exposed to flies, arthropods, poultry etc. Arrest excreta in a pit or cover with soil or ash.
 - Children faeces are equally dangerous as that of adults.
 - All family members - female, male and children should use latrines.
- (vii) After resting undisturbed for 2 years in a pit, sludge should be removed from pits and used in agriculture as manure and soil conditioner.
- (viii) Latrines (including roof) should be built in such a way that they are useable at all times (irrespective of seasons, time of the day and inclement weather conditions).
- (ix) Latrine pits should be located at least 30 feet away from water sources.
- (x) Consideration should be given to provide separate latrines for females and males to observe cultural norms.
- (xi) For the convenience and safety of children, offset pit latrines should be promoted.

(xii) Based on the findings the following criteria for the design and construction of homemade pit latrines is recommended:

- Size of the cubicle, 4.5 ft.x 4.5 ft.
- Thatched roof;
- Fence may be of jute stick, tarja/bamboo, leaves or straw.
- For doors jute mats are preferred. Straw, leaves and jute-sticks may also be used.
- The fence and roof (if installed) could be supported on 4 bamboo poles.
- The height of the plinth should be 6 inches.
- The size of the platform should be about 4 ft.x 4 ft. utilizing bamboo or wood.
- The platform for an offset pit latrine should be constructed of either concrete or brick and the length of iron sheet/plastic chute should be about 2 ft.
- The size of the squatting hole should be about 15 inches x 8 inches.
- A squatting hole - cover with a handle should be provided
- The diameter of the pit should be about 3 ft.
- The maximum depth of pits without lining in sandy, silty and clayey soils should be 5 ft., 6 ft. and 7 ft. respectively. Normally lining is not required; if needed, bamboo or branches of trees may be used.
- The shape of the pit may be cylindrical, conical or oval depending on soil type.



TABLE I : STATUS OF HOUSE HOLDS HAVING DO-IT-YOURSELF (HOME MADE) LATRINES

Circle	District	Thana	Total no. of latrine visited	Occupation of family head					No. of members			Highest education level in the family			No. of families with savings per year, Tk.		No. of plot of size of (Decimal)		
				Service holder	Self employed	Parker	Labor		Female	Male	Child- dren *	Nil	Primary	Secor- dary	Above	<= 2000	> 2000	<=3	> 3
BARISAL	BARISAL	GOVERNADI	10	2	0	8	0	31	34	10	0	1	9	0	9	1	1	9	
	BEOLA	TAJUNODDIR	4	3	0	4	0	8	15	10	0	4	0	0	2	2	0	4	
	KADAPUPUR	KADAPUPUR (S)	10	1	0	9	0	30	33	17	0	4	6	0	9	1	0	10	
	PATAUKHALI	DASHMINA	10	6	0	4	6	25	23	19	1	4	4	1	7	3	0	10	
	BAJBARI	BALIAKANDI	2	0	0	0	2	3	5	1	0	1	1	0	2	9	0	2	
CHITTAGONG	B BARIA	SARAIL	1	1	0	0	0	2	1	1	0	0	1	0	0	1	0	1	
	PERI	CHHAGALNAYA	10	1	3	3	3	22	25	22	2	5	3	1	5	5	0	10	
	LAKHIPUR	LAKHIPUR	10	3	1	4	2	21	18	27	2	5	2	1	3	7	0	10	
CIG HILL TRACT	KHAGBACHARI	MATIRANGA	10	0	2	7	1	21	25	37	7	3	0	0	2	8	0	10	
	RANGMATI	BAJESTEALI	10	4	2	4	0	33	31	14	0	0	8	2	1	9	0	10	
DEBRA	JAKALPUR	ISLAMPUR	10	1	0	7	2	18	34	16	1	3	5	1	8	2	1	9	
	KISHOREGANJ	BAJIPUR	2	1	0	0	1	3	2	2	0	2	0	0	2	0	2	0	
	MARIKGANJ	GEIGOR	9	1	1	5	2	17	25	10	2	5	2	0	8	1	1	8	
	TANGAIL	DELDOWAR	10	2	2	3	3	25	24	28	4	5	3	1	8	2	0	10	
DIOBHA	JESSORE	SARSEA	10	1	2	6	1	27	28	16	4	4	5	0	5	1	0	10	
	KOSHTIA	KUMARHALI	10	2	0	8	0	24	36	13	3	3	2	2	8	2	0	10	
	MAGURA	SEALIEHA	3	0	0	2	1	11	12	9	2	1	0	0	2	0	0	3	
	MEHERPUR	GANGA	7	0	2	5	0	19	27	18	3	2	1	1	6	1	0	7	
	SEAKHATA	KALIGANJ	10	0	1	9	0	19	15	11	0	2	7	1	9	1	0	10	



TABLE 1 : STATUS OF HOUSE HOLDS HAVING DO-IT-YOURSELF (HOME MADE) LATRINES

Circle	District	Thana	Total no. of latrine visited	Occupation of family head				No. of members				Highest education level in the family			No. of families with savings per year, Tk.		No. of plot of size of (Decimal)	
				Service holder	Self employed	Farmer	Labor	Female	Male	Chil- [*] dren	Nil	Primary	Secun-dary	Above	<= 2000	> 2000	<=3	> 3
RAJSHAHI	CHAPAI N. GANJ	SADAR	10	0	9	0	1	21	24	11	3	3	4	0	6	4	1	9
	HAOGAON	DEAMOTREAT	10	1	0	9	0	28	28	24	0	1	4	5	0	10	0	10
	NATOBE	GERUDASPORE	10	0	1	9	0	33	34	15	3	1	4	2	6	4	0	10
	RAJSHAHI	CHARGEAT	10	0	4	4	2	27	22	21	1	4	4	1	5	5	0	10
BARGUPE	BOGRA	SONATOLA	10	1	3	5	1	24	24	23	1	4	2	3	7	3	1	9
	DINAJPUR	BIRAMPUR	10	2	1	5	2	20	18	43	0	2	2	5	2	8	0	10
	GAIBANDEA	SADULLAPUR	10	0	1	7	2	19	20	18	0	5	3	2	7	3	0	10
	KURIGRAM	ELIPUR	10	2	4	3	2	28	38	26	1	3	4	2	4	6	0	10
	LALMONIRBAT	PATGRAM	10	0	1	9	0	26	32	38	0	1	6	3	6	4	0	10
Total :			58	6	40	15	34	595	680	517	40	79	55	54	144	94	7	131
%			100	10.9	16.8	58.0	14.3				16.8	53.2	25.7	14.3	60.5	39.5	2.9	97.1

* below 10 years of age.

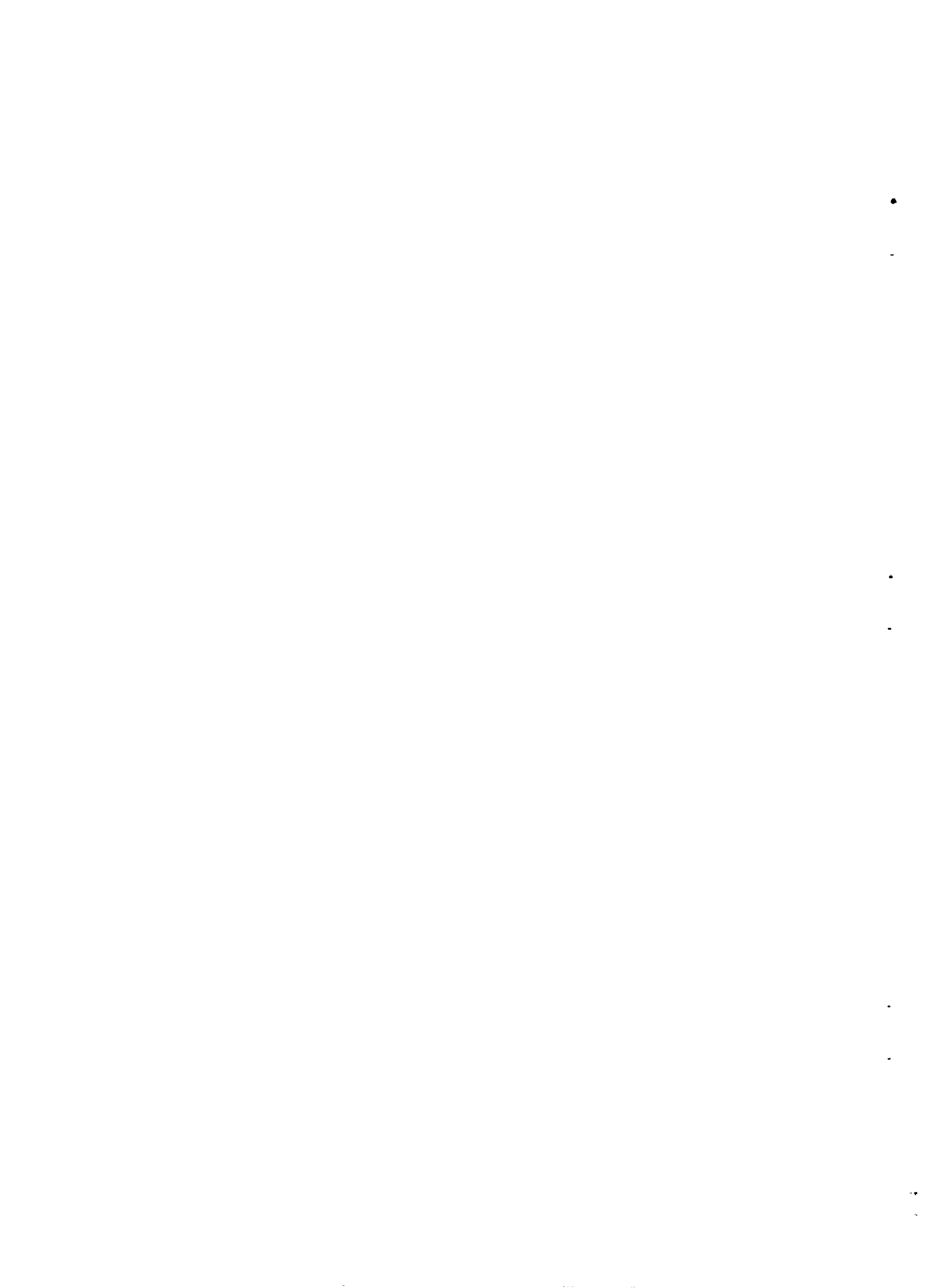


TABLE II : DETAILS OF TECHNOLOGY - SUPERSTRUCTURE

Circle	District	Thana	Total no. of latrine visited	No. of latrines with lenght/ width/dia. (ft)		No. of superstruct. with foundation of			No. of latrine with									Duration without repairing (month)						
				<=4	>4	Poles of		Roof of			Fence of			Door of			Jute stick		Leaves		Others			
						Bamboo	Wood	Others =	Thatched Straw	Leaves** ***	Others ***	Jute stick	Torja/ Bamboo	Leav- es/ straw	Others leaves	Straw/ mat	Jute mat ****	Others ****	<=12	> 12	<=12	> 12	<=12	> 12
BARISAL	BARISAL	GOURNADI	10	3	7	6	3	1	1	3	0	0	0	7	3	6	0	0	0	0	2	5	0	3
	BEOLA	TAJUMODDIR	4	0	4	1	2	1	0	0	0	0	0	4	0	2	2	0	0	0	0	4	0	0
	MADARIPUR	MADARIPUR (S)	10	2	8	10	0	0	1	1	1	3	0	7	0	1	4	1	3	0	6	1	0	0
	PATAUKHALI	DASHMIWA	10	3	7	7	2	1	0	3	0	0	0	9	1	4	1	0	0	0	7	2	1	0
	RAJBARI	BALIAKANDI	2	2	0	2	0	0	0	0	0	2	0	0	0	0	2	0	2	0	0	0	0	0
CHITTAGONG	B BARIA	SARAIL	1	0	1	1	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	
	PEWI	CHEGALHAIYA	10	4	6	7	2	1	0	0	2	0	6	2	2	1	7	2	0	0	2	0	7	1
	LAKHIPUR	LAKHIPUR	10	7	3	1	0	9	0	0	0	0	0	8	0	0	1	0	0	8	0	2	0	
CTG HILL TRACT	KRAGRACHARI	KATIRANGA	10	3	7	10	0	0	3	0	0	0	10	0	0	0	1	8	0	0	0	0	10	0
	BARHAMATI	BAJESTHALI	10	2	8	10	0	0	5	0	0	0	9	1	0	0	3	6	0	0	1	0	9	0
DEBRA	JAKALPUR	ISLAMPUR	10	7	3	8	0	2	0	0	1	6	0	3	1	1	6	0	6	0	3	0	1	0
	KISHORSGANJ	BAJITPUR	2	0	2	2	0	0	0	1	0	0	0	1	1	0	1	0	0	1	0	1	0	
	MANIKGANJ	GHOR	9	6	3	9	0	0	0	1	0	1	0	6	2	0	7	0	1	0	6	0	2	0
	TANGAIL	DELDOWAR	10	0	10	10	0	0	0	0	1	6	0	3	1	0	9	0	6	0	3	0	1	0
DUDHA	JESSORE	SARSEA	10	2	8	6	2	2	3	0	0	0	2	7	1	1	7	2	0	0	7	0	3	0
	KOSHITA	KUKABEHALI	10	4	6	7	3	0	0	0	0	6	2	2	0	0	9	0	6	0	2	0	2	0
	MAGURA	SHALIKHA	3	2	1	3	0	0	0	0	0	0	0	3	0	1	2	0	0	3	0	0	0	
	MEERPUR	GANGA	7	3	4	6	1	0	0	0	0	4	0	2	1	3	4	1	4	0	2	0	1	0
	SHATEKHRA	EALIGANJ	10	3	7	6	3	1	3	2	0	0	0	8	2	0	6	1	0	0	8	0	2	0

TABLE II : DETAILS OF TECHNOLOGY - SUPERSTRUCTURE

Circle	District	Thana	Total no. of latrine visited	No. of latrines with lengt/ width/dia. (ft)		No. of superstruct. with foundation of			No. of latrine with									Duration without repairing (month)						
				<=4	>4	Poles of		Roof of			Fence of			Door of			Jute stick		Leaves		Others			
						Bamboo	Wood	Thatched	Jute stick	Tarja/ Bamboo	Leav- es/ straw	Others	Straw/ leaves	Jute mat	Others	<=12	> 12	<=12	> 12	<=12	> 12			
				*	**	***	****																	
BAJSHAHI	CHAPAI M. GAHJ	SADAR	10	6	4	8	0	2	0	0	2	0	6	2	2	0	7	2	0	0	2	0	8	0
	HAOGAON	PEAKORHAT	10	2	8	10	0	0	2	0	0	3	0	4	3	1	7	2	2	1	4	0	2	1
	HATORE	GURUDASPOR	10	5	5	9	1	0	1	0	0	1	0	8	1	3	5	1	1	0	8	0	1	0
	BAJSHAHI	CHARGHAT	10	0	10	9	0	1	0	0	0	0	0	10	0	0	10	0	0	0	10	0	0	0
RANGPOE	BOGRA	SOHATOLA	10	0	10	10	0	0	0	0	0	4	4	2	0	10	0	0	0	1	3	4	2	
	DIRAJPUR	BIEAMPUR	10	2	8	10	0	0	6	0	0	3	5	2	0	7	1	0	0	5	0	5	0	
	GAIBANDEHA	SADULLAPUR	10	3	7	10	0	0	0	0	0	1	1	8	0	3	7	0	1	0	8	0	1	0
	KORIGRAM	ULIPUR	10	4	6	10	0	0	3	0	1	3	1	6	0	4	2	1	3	0	6	0	1	0
	LALMORIHAT	PATGRAM	10	4	6	9	0	1	3	0	0	5	4	1	0	3	2	3	3	2	3	0	4	0
Total :			258	79	159	197	19	22	31	11	8	41	48	122	25	51	130	31	38	2	107	15	68	7
%			100	33.2	66.8	82.8	8.0	9.2	13.0	4.6	3.4	17.2	20.2	51.3	10.5	13.0	54.6	13.0	16.0	1.3	45.0	6.3	28.6	2.9

- * Banana/Coconut trees
- ** Banana/Ergla/Palm/Betel nut/Coconut leaves
- *** GI sheet/Tarja/Jute stick
- **** Jute stick/Tarja

TABLE III : DETAILS OF TECHNOLOGY - PLATFORM (DIRECT PIT)

Circle	District	Thana	Total no. of direct latrine visited	No. of latrine without plat- form *	Plinth higher from ground level by (inch)		No. of platform of length/width /diameter (ft.)		No. of platform of			No. of platform with holes of						No. of squat- ting hole cover		
					<= 6	> 6	<= 4	> 4	Wood	Bamboo	Others **	Length (inch)			Width (inch)				Dia. (inch)	
												< 12	12-18	> 18	< 6	6-8	> 8		<= 8	> 8
BARISAL	BARISAL	GOURNADI	10	0	6	4	2	8	8	2	0	10	0	0	3	3	4	0	0	2
	BEOLA	TAJUMUDDIN	4	0	4	0	2	2	4	0	0	4	0	0	4	0	0	0	0	2
	MADARIPUR	MADAR PUR (S)	10	0	9	1	3	7	0	10	0	9	1	0	1	9	0	0	0	5
	PATAUKHALI	DASHMUNA	10	0	10	0	5	5	6	3	1	9	1	0	6	4	0	0	0	3
	RAJBARI	BALIAHANDI	2	0	1	1	2	0	0	2	0	2	0	0	0	2	0	0	0	0
CHITTAGONG	B BARIA	SARAIL	1	0	0	1	1	0	0	1	0	0	0	1	0	1	0	0	0	0
	PERI	CEEAGALWAIYA	10	0	8	2	10	0	6	4	0	2	2	6	0	10	0	0	0	0
	LAXMIPUR	LAINIPUR	10	0	5	5	10	0	0	1	9	9	1	0	0	10	0	0	0	0
CTG HILL TRACT	KEAGRACHARI	MATIRANGA	10	0	10	0	5	5	10	0	0	6	2	0	0	8	0	2	0	0
	BANGAMATI	BAJESHALE	10	0	10	0	5	5	9	1	0	3	6	1	0	10	0	0	0	0
DEBRA	JAMALPUR	ISLAMPUR	10	4	9	1	1	5	0	6	0	2	0	2	1	1	2	2	0	0
	EISHOREGANJ	BAJITPUR	2	0	2	0	2	0	0	2	0	2	0	0	0	3	2	0	0	1
	MANIKGANJ	GHIOR	9	2	7	2	5	2	0	7	0	2	0	3	0	4	1	0	2	0
	TANGAIL	DELDORAE	10	0	10	0	8	2	0	10	0	7	0	3	0	6	4	0	0	1
DUNLAWA	BOSSORE	SAESEA	8	0	6	2	2	6	2	6	0	3	5	0	1	0	4	0	0	0
	KUSHTIA	KUMARBEALI	9	3	9	0	4	2	0	5	1	1	3	0	0	1	3	0	2	0
	MAGURA	SEALIEEA	3	2	2	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0
	MEERPUR	GARGAI	6	1	5	1	3	2	5	0	0	4	0	0	0	3	1	1	0	0
	SEATKHIRA	KALIGANJ	9	0	7	2	8	1	4	5	0	3	3	0	2	2	2	5	0	0

TABLE III : DETAILS OF TECHNOLOGY - PLATFORM (DIRECT PIT)

Circle	District	Thana	Total no. of latrine visited	No. of latrine without plat-form *	Plinth higher from ground level by (inch)		No. of platform of length/width /diameter (ft.)		No. of platform of			No. of platform with holes of						No. of squat-ting hole cover		
					<= 6	> 6	<=4	> 4	Wood	Bamboo	Others **	Length (inch)			Width (inch)				Dia. (inch)	
												< 12	12-18	> 18	< 6	6-8	> 8		<= 8	> 8
RAJSHAHI	CHAPAI N. GANJ	SADAR	10	0	0	10	6	4	7	2	1	4	6	0	0	7	3	0	0	0
	BAOGAON	DHAMOIREHAT	10	0	0	10	2	8	6	4	0	4	5	1	3	6	1	0	0	0
	NATORE	GURUDASPUR	9	4	5	0	4	1	0	5	0	0	2	3	0	0	5	0	0	0
	RAJSHAHI	CHARGHAT	10	0	0	10	0	10	0	10	0	8	2	0	0	10	0	0	0	2
BANGPUR	BOGRA	SOMATOLA	6	0	0	6	1	5	0	6	0	0	5	1	0	0	6	0	0	0
	DIRAJPUR	BIRAMPUR	10	0	0	10	2	8	1	9	0	0	9	1	0	0	10	0	0	0
	GATABANDEA	SADULLAPUR	10	0	0	10	3	7	0	10	0	0	9	1	0	2	8	0	0	0
	KURIGRAM	ULIPUR	10	0	0	10	3	7	1	7	2	0	5	5	0	0	10	0	0	0
	LALMONIRHAT	PATGRAM	5	1	1	4	1	3	0	4	0	2	2	0	0	3	1	0	0	0
Total :			223	17	130	93	101	105	69	123	14	95	70	28	21	105	67	9	4	16
%			100	7.6	58.3	41.7	45.3	47.1	30.9	55.2	6.3	42.6	31.4	12.6	9.4	47.1	30.0	4.0	1.8	7.2

* Wooden or bamboo lugs are used in latrine in place of platform

** Branches of trees



TABLE IV : DETAILS OF TECHNOLOGY - PLATFORM (OFFSET PIT)

Circle	District	Thana	Total no. of offset latrine visited	No. of platform of			No. of platform with chute of				
				Brick/ Concrete	Earth- en	Others *	Plastic	Iron sheet	Others **	Length (ft)	
									<=2	>2	
BARISAL	BARISAL	GOURNADI	0	0	0	0	0	0	0	0	0
		DHOLA	0	0	0	0	0	0	0	0	0
		HADARIPUR	0	0	0	0	0	0	0	0	0
		PATAUKHALI	0	0	0	0	0	0	0	0	0
		RAJBARI	BALIARANDI	0	0	0	0	0	0	0	0
CHITTAGONG	B BARIA	SARAIL	0	0	0	0	0	0	0	0	0
	FENI	CHHAGALNAIYA	0	0	0	0	0	0	0	0	0
	LAXMIPUR	LAXMIPUR	0	0	0	0	0	0	0	0	0
CTG HILL TRACT	KHAGRACHARI	HATIRANGA	0	0	0	0	0	0	0	0	0
	RANGAMATI	RAJESTHALI	0	0	0	0	0	0	0	0	0
DHAKA	JAMALPUR	ISLAMPUR	0	0	0	0	0	0	0	0	0
	KISHOREGANJ	BAJITPUR	0	0	0	0	0	0	0	0	0
	HANIKGANJ	GHIOR	0	0	0	0	0	0	0	0	0
	TANGAIL	DELDOWAR	0	0	0	0	0	0	0	0	0
KHULNA	JESSORE	SARSHA	2	1	1	0	0	1	1	2	0
	KUSHTIA	KUMARKHALI	1	0	1	0	1	0	0	1	0
	HAGURA	SHALIKHA	0	0	0	0	0	0	0	0	0
	MEHERPUR	GANGNI	1	0	1	0	1	0	0	1	0
	SHATKHIRA	KALIGANJ	1	0	1	0	0	0	1	0	1
RAJSHAHI	CHAPAI N. GANJ	SADAR	0	0	0	0	0	0	0	0	0
	NAOGAON	DHAMOIRHAT	0	0	0	0	0	0	0	0	0
	NATORE	GURUDASPUR	1	0	1	0	0	1	0	1	0
	RAJSHAHI	CHARGHAT	0	0	0	0	0	0	0	0	0
RANGPUR	BOGRA	SONATOLA	4	4	0	0	0	4	0	4	0
	DINAJPUR	BIRAMPUR	0	0	0	0	0	0	0	0	0
	GAIBANDHA	SADULLAPUR	0	0	0	0	0	0	0	0	0
	KURIGRAM	ULIPUR	0	0	0	0	0	0	0	0	0
	LALMONIRHAT	PATGRAM	5	0	0	5	0	5	0	3	2
Total :			15	5	5	5	2	11	2	12	3
%			100	33.3	33.3	33.3	13.3	73.3	13.3	80.0	20.0

* Bamboo

** Leaves

TABLE V-1 : DETAILS OF TECHNOLOGY - PIT

Circle	District	Thana	Total no. of latrine visited	No. of latrines with pit		Distance of latrine from thana HQ (km)		Distance from drain/tubewell/ water sources (ft)		No. of pit with dia (ft)			No. of pit with depth (ft)		
				Direct	Offset	2-5	>5	<=30	>30	<2.5	2.5-3	>3	<5	5-7	>7
BARISAL	BARISAL	GOURNADI	10	10	0	4	6	5	5	0	10	0	0	9	1
	BHOLA	TAJUMUDDIN	4	4	0	0	4	1	3	4	0	0	4	0	0
	MADARIPUR	MADARIPUR (S)	10	19	0	0	10	6	4	2	8	0	4	6	0
	PATAUKHALI	DASHMINA	10	10	0	8	2	1	9	0	10	0	4	6	0
	RAJBARI	BALIAKANDI	2	2	0	0	2	0	2	1	1	0	0	2	0
CHITTAGONG	B BARIA	SARAIL	1	1	0	0	1	1	0	0	1	0	1	0	0
	FENI	GHAGALMAIYA	10	10	0	4	6	5	5	1	9	0	3	7	3
	LAXMIPUR	LAXMIPUR	10	10	0	0	10	4	6	0	10	0	10	0	0
CTG HILL TRACT	KEAGRACHARI	MATIRANGA	10	10	0	10	0	1	9	0	6	4	0	9	1
	RANGAMATI	RAJESTHALI	10	10	0	0	10	0	10	0	6	4	2	8	0
DHAKA	JAMALPUR	ISLANPUR	10	10	0	3	7	0	10	0	10	0	3	6	1
	KISHOREGANJ	BAJITPUR	2	2	0	2	0	0	2	0	2	0	0	2	0
	MANIKGANJ	GHIOR	9	9	0	0	9	1	8	2	6	1	0	9	0
	TANGAIL	DELDOWAR	10	10	0	0	10	2	8	0	9	1	3	7	0
BHULNA	JESSORE	SARSHA	10	8	2	0	10	0	10	1	8	1	1	2	7
	FUSHIA	KUMAREHALI	10	9	1	1	9	8	2	1	5	4	1	6	3
	MAGURA	SEALIHA	3	3	0	0	3	0	3	0	3	0	2	1	0
	MEHERPUR	GANGNI	7	6	1	7	0	2	5	4	3	0	0	5	2
	SHATELHARA	KALIGANJ	10	9	1	0	10	2	8	2	5	5	1	8	1



TABLE V-1 : DETAILS OF TECHNOLOGY - PIT

Circle	District	Thana	Total no. of latrine visited	No. of latrines with pit		Distance of latrine from thana HQ (km)		Distance from drain/tubewell/ water sources (ft)		No. of pit with dia (ft)			No. of pit with depth (ft)		
				Direct	Offset	2-5	>5	<=30	>30	<2.5	2.5-3	>3	<5	5-7	>7
RAJSHAHI	CHAPAI N. GANJ	SADAR	10	10	0	7	3	0	10	0	10	0	1	8	1
	NAOGAON	DHAMOIRHAT	10	10	0	2	8	3	7	0	9	1	0	5	5
	NATORE	GURUDASPUR	10	9	1	0	10	3	7	1	5	4	1	7	2
	RAJSHAHI	CHARGHAT	10	10	0	0	10	0	10	0	10	0	1	9	0
BANGPUR	BOGRA	SONATOLA	10	6	4	0	10	3	7	0	10	0	2	7	1
	DINAJPUR	BIRAMPUR	10	10	0	7	3	2	9	1	9	0	3	7	0
	GAIBANDHA	SADULLAPUR	10	10	0	10	0	4	6	0	9	1	3	7	0
	KURIGRAM	ULIPUR	10	10	0	5	5	9	1	10	0	0	1	6	3
	LALMONIRHAT	PATGRAM	10	5	5	1	9	1	9	10	0	0	2	5	3
Total :			238	223	15	71	167	64	174	40	174	24	53	154	31
%			100	93.7	6.3	29.8	70.2	26.9	73.1	16.8	73.1	10.1	22.3	64.7	13.0



TABLE V-2 : DETAILS OF TECHNOLOGY - PIT

Circle	District	Thana	Total no. of latrine visited	No. of pit			No. of pits with depth in soils of						Depth of WT in rainy season (ft)		No. of pits lined with	
				Cylindrical	Oval	Conical	Clayey		Silty		Sandy		< 3	>= 3	Bamboo/ Branch	Nil
							<6 ft	>=6 ft	<6 ft	>=6 ft	<6 ft	>=6 ft				
BARISAL	PARISAL	GOURNADI	10	10	0	0	0	10	0	0	0	0	0	10	0	10
	BOHOLA	TAJUMUDDIN	4	4	0	0	2	0	0	0	2	0	3	1	0	4
	MADARIPUR	MADARIPUR (S)	10	0	0	10	7	3	0	0	0	0	0	10	0	10
	PATAUKHALI	DASHMINA	10	10	0	0	10	0	0	0	0	0	10	0	0	10
	RAJBARI	BALIAKANDI	2	2	0	0	0	2	0	0	0	0	0	2	2	0
CHITTAGONG	B BARIA	SARAIL	1	1	0	0	0	0	1	0	0	0	0	1	0	1
	PENI	CHHAGALMAIYA	10	7	2	1	3	2	5	0	0	0	0	10	0	10
	LAXMIPUR	LAXMIPUR	10	5	0	5	0	0	5	0	5	0	0	10	1	9
CFG HILL TRACT	EBRAGRACHARI	MATIRANGA	10	9	1	0	3	5	1	1	0	0	0	10	0	10
	RANGAKATI	RAJESTHALI	10	8	2	0	4	3	0	0	3	0	0	10	0	10
DHAKA	JAMALPUR	ISLAMPUR	10	9	0	1	0	0	3	2	3	2	3	7	0	10
	KISHOREGANJ	BAJITPUR	2	1	0	1	1	1	0	0	0	0	0	2	0	2
	MANIKGANJ	GHIOR	9	1	1	7	0	0	8	0	1	0	1	8	1	3
	TANGAIL	DELDOWAR	10	5	1	4	0	0	9	1	0	0	0	10	0	10
FULNA	JESSORE	SARSHA	10	9	1	0	1	0	0	1	1	2	8	0	10	
	FUSHTIA	KUMARKHALI	10	10	0	0	1	8	0	0	0	1	0	10	3	7
	MAGURA	SHALIKHA	3	3	0	0	2	1	0	0	0	0	2	1	0	3
	MEHERPUR	GANGNI	7	2	5	0	2	5	0	0	0	0	0	0	0	7
	SHATENIRA	KALIGANJ	10	10	0	0	5	4	0	0	0	1	0	10	0	10



TABLE V-2 : DETAILS OF TECHNOLOGY - PIT

Circle	District	Thana	Total no. of latrine visited	No. of pit			No. of pits with depth in soils of						Depth of WT in rainy season (ft)		No. of pits lined with	
				Cylindrical	Oval	Conical	Clayey		Silty		Sandy		< 3	≥ 3	Bamboo/ Branch	Nil
							<6 ft	≥6 ft	<6 ft	≥6 ft	<6 ft	≥6 ft				
RAJSHAHI	CHAPAI N GANJ	SADAR	10	0	0	10	0	0	3	7	0	0	0	10	0	10
	NAOGAON	DHAMOIRHAT	10	0	0	10	0	0	1	9	0	0	0	10	0	10
	NATORE	GURUDASPUR	10	9	1	0	3	6	0	0	0	1	0	10	0	10
	RAJSHAHI	CHARGHAT	10	0	0	10	0	0	0	0	8	2	10	0	0	10
RANGPUR	BOGRA	SONATOEA	10	0	0	10	0	0	0	0	6	4	10	0	0	10
	DINAJPUR	BIRAMPUR	10	0	1	9	0	0	9	1	0	0	10	0	0	10
	GAIBANDHA	SADULLAPUR	10	0	0	10	0	0	0	0	9	1	10	0	0	10
	ZURIGRAM	ULIPUR	10	4	0	6	0	0	5	5	0	0	0	10	0	10
	SALMONIRHAT	FATGRAM	10	0	4	6	0	0	6	4	0	0	0	10	0	10
Total :			238	119	19	100	44	57	56	30	38	13	51	187	7	231
%			100	50.0	8.0	42.0	18.5	23.9	23.5	12.6	16.0	5.5	21.4	78.6	2.9	97.1

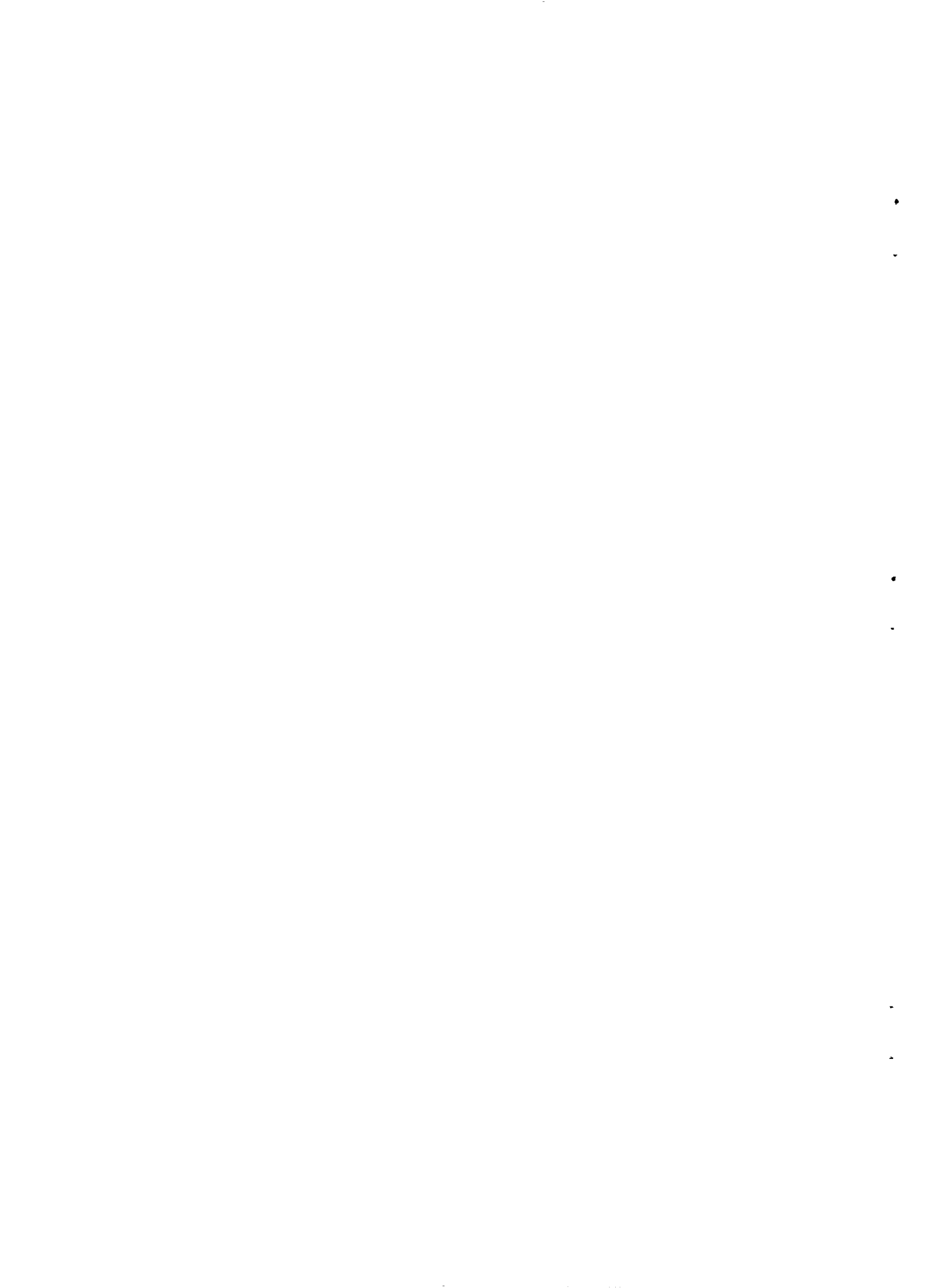


TABLE VI-1 : COST OF LATRINE - OFFSET PIT

Circle	District	Thana	Total no. of latrine visited	No. of pits		No. of latrines with cost for materials						No. of latrines costing (labor)		No. of latrine with total cost				
				costing for offset	lining (Tk)	Pit Cover(Tk)	Platform (Tk)	Chute/Pan(Tk)	of superstr.)	Substruct. (Tk)	Superstr.(Tk)	(Tk)	(Tk)					
				> 0	<=30	>30	<=20	>20	<=15	>15	<=40 Tk	>40 Tk	<=25	>25	<=15	>15	<=125	>125
BARISAL	BARISAL	GOURNADI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	BEOLA	TAJUMUDDI#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MADARIPUR	MADARIPUR (S)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PATAUKHALI	DASHMINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	BAJBARI	BALIAKANDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CHITTAGONG	B BARIA	SARAIL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PERI	CHHAGALWAIYA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	LAXMIPUR	LAXMIPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CTG HILL TRACT	KHAGRACHARI	KATIBARGA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	BANGMATI	RAJESTHALI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DEAKA	JAMALPUR	ISLAMPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	KISHOREGANJ	BAJITPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MANIKGANJ	GHIOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	TANGAIL	DELDOWAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FENLRA	JESSORE	SARSHA	2	0	1	1	2	0	1	1	1	1	0	2	0	2	1	1
	KUSHYA	KUMARHEEL	1	0	0	1	0	1	1	0	0	1	0	1	0	1	0	1
	MAGURA	SHALIKHA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MEHERPUR	GANGUL	1	0	1	0	1	0	1	0	0	1	0	1	0	1	0	1
	SHATKHIRA	HALIGANJ	1	0	0	1	1	0	1	0	0	1	0	1	0	1	0	1

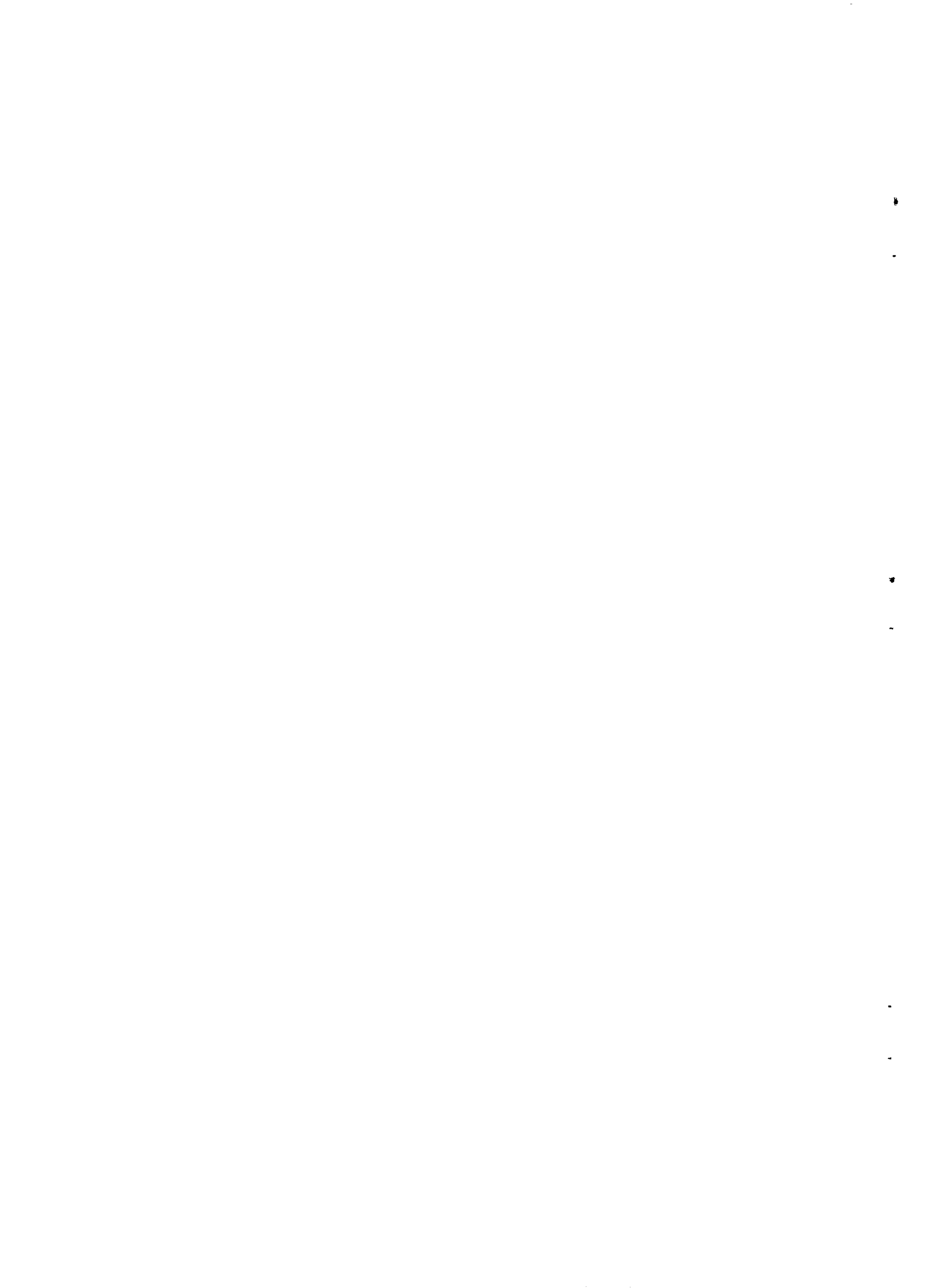


TABLE VI-1 : COST OF LATRINE - OFFSET PIT

Circle	District	Thana	Total no. of offset latrine visited	No. of pits costing for lining (Tk) > 0	No. of latrines with cost for materials				No. of latrines costing (mater. of superstr.)				No. of latr. costing (labor) Substruct. (Tk); Superstr. (Tk)				No. of latrine with total cost (Tk)	
					Pit Cover (Tk) <=30	Platform (Tk) >30	Chute/Pan (Tk) <=20	>20	<=15	>15	<=40 Tk	>40 Tk	<=25	>25	<=15	>15		<=125
RAJSEHI	CHAPAI N. GARJ	SADAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	HAOGAON	DEAMOIREAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	HATOREE	GURUDASPUR	1	1	0	1	0	1	0	1	0	1	0	0	0	1	1	0
	RAJSEHI	CHARGHAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BANGPORE	BOGRA	SONATOLA	4	0	3	1	3	1	0	4	4	0	4	0	4	0	4	0
	DINAJPUR	BIRAMPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	GAIBANDEA	SADULLAPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	KURIGRAM	ULIPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	LALMONIRHAT	PATGRAM	5	0	5	0	1	4	2	3	2	3	5	0	4	1	2	3
Total :			15	0	11	4	9	6	7	8	7	10	5	8	7	8	7	
%			100	0.0	73.3	26.7	60.0	40.0	46.7	53.3	53.3	46.7	66.7	33.3	53.3	46.7	53.3	46.7



TABLE VI-2 : COST OF LATRINE - DIRECT PIT

Circle	District	Thana	Total no. of latrine visited	No. of pits costing (for lining) (Tk)		No. of latr. with costing Platform (Tk)		No. of latrines costing (mater. of superstr.)		No. of latr. costing (labor) Substruct. (Tk)		No. of latrine Superstr. (Tk)		No. of latrine with total cost (Tk)	
				<=30	>30	<=45	>45	<=40 Tk	>40 Tk	<=30	>30	<=15	>15	<=110	>110
BARISAL	BARISAL	GOURNADI	10	0	0	8	2	9	1	9	1	5	5	6	4
	BEOLA	TAJUMUDDIN	4	0	0	0	4	4	0	4	0	4	0	0	4
	MADARIPUR	MADARIPUR (S)	10	0	0	3	7	8	2	9	1	3	7	2	8
	PATAUKHALI	DASHMINA	10	0	0	7	3	7	3	2	8	8	2	6	4
	RAJBARI	BALIAKANDI	2	2	0	0	2	0	2	0	2	0	2	0	2
CHITTAGONG	B BARIA	SARAIL	1	0	0	1	0	0	1	0	1	0	1	0	1
	FENI	CHHAGALMAIYA	10	0	0	1	9	1	9	5	5	5	5	1	9
	LAXMIPUR	LAXMIPUR	10	1	0	9	1	9	1	8	2	10	0	9	1
COG HILL TRACT	EHAGRACHARI	MATIRANGA	10	0	0	0	10	1	9	7	3	9	1	1	9
	RANGAWATI	RAJESTHALI	10	0	0	2	8	5	5	6	4	9	1	3	7
DEBRA	JAMALPUR	ISLAMPUR	10	0	0	8	2	3	7	6	4	4	6	3	7
	KISHOREGANJ	BAJITPUR	2	0	0	0	2	0	2	0	2	2	0	0	2
	MANIKGANJ	GHIOR	9	0	1	3	6	3	6	6	3	5	4	2	7
	TANGAIL	DELDOWAR	10	0	0	0	10	4	6	3	7	6	4	0	10
JESOLNA	JESSORE	SARSHA	9	0	0	2	6	4	4	0	8	0	8	0	8
	KUSHTIA	KUMAREHALI	9	0	3	3	6	3	6	2	7	1	8	2	7
	MAGURA	SHALIKHA	3	0	0	3	0	2	1	1	2	2	1	2	1
	MEHERPUR	GANGNI	6	0	0	1	5	3	5	3	3	1	5	1	5
	SHATEKHRA	KALIGANJ	9	0	0	1	8	4	5	7	2	4	5	2	7

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TABLE VI-2 : COST OF LATRINE - DIRECT PIT

Circle	District	Thana	Total no. of direct latrine visited	No. of pits costing (for lining) (Tk)		No. of latr. with costing Platform (Tk)		No. of latrines costing (mater. of superstr.)		No. of latr. costing (labor)		No. of latrine with total cost			
				<=30	>30	<=45	>45	<=40 Tk	>40 Tk	<=30	>30	<=15	>15	<=110	>110
RAJSHAHI	CHAPAI N. GANJ	SADAR	10	0	0	10	0	5	5	10	0	10	0	9	1
	NAOGAON	DHAMOIRHAT	10	0	0	9	1	10	0	10	0	10	0	10	0
	NATORE	GURUDASPUR	9	0	0	3	6	9	0	7	2	2	7	3	6
	RAJSHAHI	CHARGHAT	10	0	0	10	0	6	4	10	0	10	0	10	0
RANGPUR	BOGRA	SONATOLA	6	0	0	6	0	5	1	6	0	6	0	6	0
	DINAJPUR	BIRAMPUR	10	0	0	10	0	10	0	10	0	10	0	10	0
	GAIBANDHA	SADULLAPUR	10	0	0	10	0	10	0	10	0	10	0	10	0
	EURIGRAM	ULIPUR	10	0	0	10	0	9	1	10	0	10	0	9	1
	LALMONIRHAT	PATGRAM	5	0	0	5	0	4	1	5	0	4	1	4	1
Total :			223	3	4	135	98	133	25	156	67	150	73	111	112
%			100	1.3	1.8	56.1	43.9	61.9	38.1	70.0	30.0	67.3	32.7	49.8	50.2



TABLE VII : DEVELOPMENT OF LATRINE

Circle	District	Thana	Total no. of latrine visited	Length of habit of latrine use before having existing latrine			Action taken when previous latrine were filled up			No. of cases where stabilized sludge used for		Reasons for latrine			Message received on latrine use from					No. of families know about 1S+1R latrine	
				0 yr	>0-2 yrs	>2 yrs	Covered with earth	Kept open	Not applic.	Agricul.	None	Privacy	Coven- ence	Health	DPHE	Health worker	HGO	Ansar/ VDP	Family member		Others =
BARISAL	BARISAL	GOURNADI	10	7	3	0	4	0	6	0	4	0	0	10	10	0	0	0	0	0	0
	BEOLA	TAJUNODDIN	4	4	0	0	0	0	4	0	0	0	0	4	0	0	0	4	0	0	0
	KADARIPUR	KADARIPUR (S)	10	10	0	0	0	0	10	0	0	0	0	10	0	0	0	10	0	0	0
	PATAUKHALI	DASHMINA	10	1	1	8	9	0	1	0	9	0	0	10	0	0	3	7	0	0	0
	RAJBABI	BALIAKANDI	2	0	0	2	2	0	0	0	2	0	0	2	0	0	0	2	0	0	0
CHITTAGONG	B BARIA	SABAIL	1	0	0	1	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0
	PERI	CHHAGALRAIYA	10	1	2	7	1	2	7	0	3	4	4	2	1	1	1	0	0	7	0
	LALMIPUR	LALMIPUR	10	1	2	7	1	0	9	0	1	5	4	3	0	2	0	8	0	0	0
ONG HILL TRACT	KHAGRACHARI	KATIRANGA	10	1	0	9	7	1	2	0	8	4	5	0	0	1	0	0	0	9	0
	BARGAMATI	RAJESHALI	10	0	0	10	6	1	3	0	7	4	6	0	0	1	0	0	0	9	3
DEBRA	JAMALPUR	ISLAMPUR	10	4	0	6	5	2	3	0	7	10	0	0	0	0	3	0	7	0	1
	KISHOREGARH	BAJITPUR	2	0	0	2	2	0	0	0	2	2	0	0	0	0	0	0	2	0	0
	MANIKGANJ	GHUOR	9	2	0	7	8	0	1	0	8	9	0	0	0	0	8	0	1	0	4
	TANGAIL	DELDOWAR	10	0	2	8	10	0	0	0	10	10	0	0	0	0	10	0	0	0	0
ENCINA	JESSORE	SABSHA	10	3	0	7	6	2	2	0	8	6	3	1	0	0	0	0	10	0	9
	KUSHTIA	KUMARKEALI	10	1	0	9	7	2	1	0	9	7	2	1	0	0	0	0	8	2	6
	MAGURA	SEALINEHA	3	0	0	3	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0
	KHEERPUR	GANGRI	7	4	0	3	3	0	4	0	3	3	2	0	1	0	0	0	4	2	7
	SEATREHA	KALIGANJ	10	1	0	9	9	1	0	0	10	4	1	5	0	0	0	0	10	0	9



TABLE VII : DEVELOPMENT OF LATRINE

Circle	District	Thana	Total no. of latrine visited	Length of habit of latrine use before having existing latrine			Action taken when previous latrine were filled up			No. of cases where stabilized sludge used for		Reasons for latrine			Message received on latrine use from					No. of families know about latrine	
				0 yr	>0-2 yrs	>2 yrs	Covered with earth	Kept open	Not applic.	Agricul.	None	Privacy	Coveni- ence	Health	DPHE	Health worker	NGO	Ancsar/ VDP	Family member		Others *
RAJSHAHI	CEAPAI N. GANJ	SADAR	10	1	4	5	9	0	1	0	9	9	0	1	0	0	0	0	8	2	19
	NAOGAON	DEAMOI BHAT	10	2	1	7	7	0	3	0	7	7	0	3	0	0	1	0	7	2	10
	WATORE	GURUDASPUR	10	0	1	9	4	5	1	1	8	6	3	1	1	0	0	0	6	3	9
	RAJSHAHI	CEARBEAT	10	8	1	1	3	0	7	0	3	7	1	2	0	0	0	0	6	4	10
BANGPUR	BOGRA	SORATOLA	10	5	1	4	5	0	5	0	5	7	0	3	0	0	0	0	5	5	10
	DISAJPUR	RIBAMPUR	10	3	1	6	9	0	1	0	9	6	1	3	0	0	0	0	6	4	10
	GAIBARDEA	SADULLAPUR	10	1	3	6	7	1	2	0	8	6	3	1	1	0	0	0	5	4	10
	KURIGRAM	ULIPUR	10	1	4	5	9	0	1	0	9	6	0	4	0	0	3	1	6	0	10
	BALMOWIBHAT	PATGRAM	10	4	0	6	6	0	4	2	4	3	0	7	0	0	0	10	0	8	
Total :			100	65	26	147	140	19	79	2	156	129	26	50	14	5	50	32	104	53	129
%			100	27.3	10.9	61.8						54.2	15.1	30.7	5.9	2.1	12.6	13.4	43.7	22.3	54.2

* Friends, Relatives, Neighbours, Teachers, Students etc.



TABLE VIII : INFORMATION ON LATRINE

Circle	District	Thana	Total no. of latrine visited	Ideas on construction of latrine from						Type of latrine preferred						No. of pit with average life of (yrs)		Problems		Action proposed when the pit will be filled up	
				DPPE	Health worker	KGO	Ansar/VDP	Family member	Others *	Before existing latrine			At present			<=2	> 2	Super-structure not durable	Substructure not durable	Cover with earth	Keep open
										EM/pit	WS	Open	EM/pit	WS	Open						
BARISAL	BARISAL	GOURNADI	10	10	0	0	0	0	0	0	0	10	6	4	0	4	0	0	0	10	0
	BHOLA	TAJUMUDDIN	4	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	4	0
	KADARIPUR	KADARIPUR (S)	10	0	0	0	10	0	0	0	0	10	9	1	0	0	0	0	0	10	0
	PATAKHALI	DASHMINA	10	0	0	3	7	0	0	0	0	10	10	0	0	9	0	0	0	10	0
	RAJBARI	BALIAKANDI	2	0	0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	2	0
CHITTAGONG	B BARIA	SARAIL	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	1	1	0
	PERI	CHHAGALHAIYA	10	1	0	1	0	8	0	4	0	6	3	6	1	3	0	5	5	5	5
	LAKMIPUR	LAKMIPUR	10	0	2	0	8	0	0	1	3	6	0	8	2	1	0	10	4	10	0
CTG HILL TRACT	TEAGBAGHARI	KAPIRASGA	10	0	0	0	0	10	0	8	0	2	10	0	0	2	8	8	6	10	0
	BANGAKATI	RAJESYALI	10	0	0	0	0	10	0	10	0	0	6	4	0	1	6	5	5	10	0
DEAKA	JAMALPUR	ISLAMPUR	10	0	0	1	0	7	2	8	2	0	0	10	0	7	0	9	10	10	0
	EISHORBAGANJ	BAJITPUR	2	0	0	0	0	1	1	2	0	0	0	2	0	2	0	1	2	2	0
	MARIKANJ	GHIOR	9	0	0	0	0	9	0	9	0	0	0	9	0	8	0	7	9	9	0
	YARGAIL	DELDOWAR	10	0	0	0	0	10	0	2	8	0	0	10	0	10	0	10	10	10	0
KEMUNA	JESSORE	SARSHA	10	0	0	0	0	8	2	4	6	0	1	9	0	6	2	8	3	10	0
	KUSHTIA	KUMABEEALI	10	0	0	0	0	6	4	0	2	8	0	4	6	3	6	6	4	10	0
	MAGURA	SEALTEHA	3	0	0	0	0	2	1	3	0	0	1	2	0	3	0	3	2	3	0
	MEGERPUR	GANGA	7	1	0	0	0	5	1	1	1	5	0	6	1	1	2	5	4	7	0
	SEATEGIRA	KALIGANJ	10	0	0	0	0	10	0	2	8	0	0	10	0	9	1	10	3	10	0

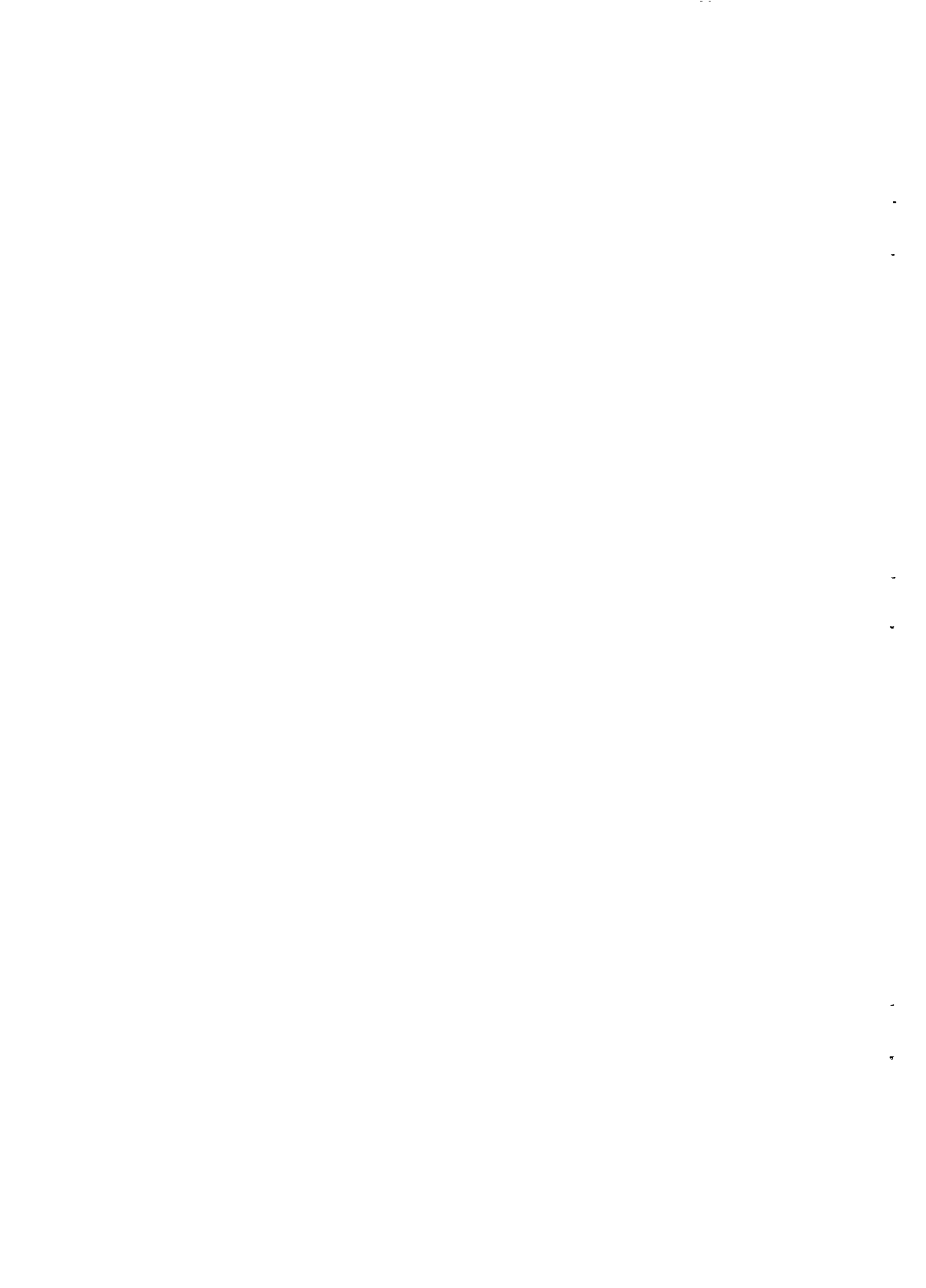


TABLE VIII : INFORMATION ON LATRINE

Circle	District	Thana	Total no. of latrine visited	Ideas on construction of latrine from						Type of latrine preferred						No. of pit with average life of (yrs)		Problems		Action proposed when the pit will be filled up	
				DPHE worker	Health worker	NGO	Arsar/VDP	Family member	Others *	Before existing latrine			At present			<= 2	> 2	Super-structure not durable	Substructure not durable	Cover with earth	Keep open
										HM/pit	WS	Open	HM/pit	WS	Open						
RAJSHAHI	CHAPAI H. GANJ	SADAR	10	0	0	0	0	10	0	0	10	0	0	10	0	9	0	0	0	10	0
	BAOGAON	DHAMOIRHAT	10	0	0	1	0	9	0	1	9	0	0	10	0	7	0	0	0	10	0
	NATORE	GURUDASPUR	10	1	0	0	0	8	1	0	4	6	0	6	4	9	0	2	6	6	4
	RAJSHAHI	CHARGHAT	10	0	0	0	0	10	0	0	10	0	0	10	0	3	0	0	0	10	0
BANGPUR	BOGRA	SONATOLA	10	0	0	0	0	10	0	8	2	0	0	10	0	3	2	0	0	9	1
	DIHAJPUR	BIRAMPUR	10	0	0	0	0	10	0	0	10	0	0	10	0	9	0	0	0	10	0
	GAIBANDEHA	SADULLAPUR	10	0	0	0	0	10	0	5	5	0	0	10	0	8	0	0	0	8	2
	KURIGRAM	ULIPUR	10	0	0	3	1	6	0	10	0	0	0	10	0	9	0	0	0	0	10
	LALMONIRHAT	PATGRAM	10	0	0	0	0	10	0	10	0	0	0	10	0	6	0	0	0	8	2
Total :			238	13	2	9	32	170	13	88	80	70	53	172	14	154	25	89	73	214	24
%			100	5.5	0.8	3.8	13.4	71.4	5.0	37.0	33.6	29.4	22.8	72.3	5.9	64.7	10.5	37.4	30.7	89.9	10.1

* Friends, Relatives, Neighbours, Teachers, Students etc.

TABLE IX : USE OF LATRINE

Circle	District	Thana	No. of	No. of	No. of	Disposal of children		Sources of water for			No. of water	
			families having at least 1 child	latrine used by at least 1 child	families with at least 1 child not using latr.	feces in Latrine	Ditches / open places	use in latrine Tube- wells	Pond	Others	<=50 ft	>50 ft
BARISAL	BARISAL	GOURNADI	9	9	1	0	1	0	10	0	9	1
	BHOLA	TAJUMUDDIN	4	4	0	0	0	0	4	0	0	4
	MADARIPUR	MADARIPUR (S)	9	8	4	0	4	2	4	4	10	0
	PATAUKHALI	DASEMIWA	7	8	0	0	0	2	8	0	2	8
	RAJBARI	BALIAKANDI	1	1	0	0	0	0	2	0	2	0
CHITTAGONG	B BARIA	SARAIL	1	0	1	0	1	0	1	0	1	0
	FENI	CHHAGALNAIYA	9	4	9	0	9	1	9	0	6	4
	LAXMIPUR	LAXMIPUR	10	6	10	0	10	0	10	0	4	6
CTG HILL TRACT	KEAGRACHARI	MATIRANGA	10	9	9	0	9	0	0	10	0	10
	RANGAWATI	RAJESTHALI	9	3	8	0	8	5	1	4	0	10
DHAKA	JAMALPUR	ISLAMPUR	7	5	6	0	6	8	2	0	2	8
	KISHOREGANJ	BAJITPUR	2	2	0	0	0	1	6	1	0	2
	MANIKGANJ	GHIOR	7	5	3	0	3	2	5	2	4	5
	TANGAIL	DELDOWAR	9	4	6	0	6	6	4	0	2	8
KHULNA	JESSORE	SARSHA	10	7	9	0	9	7	1	2	3	7
	KUSHTIA	KUMARKHALI	7	5	4	1	3	3	3	4	9	1
	MAGURA	SHALIKHA	2	0	2	0	2	3	0	0	1	2
	MEHERPUR	GANGNI	7	2	7	0	7	6	0	1	3	4
	SEATKHIRA	KALIGANJ	7	5	5	0	5	6	3	1	3	7

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TABLE IX : USE OF LATRINE

Circle	District	Thana	No. of families having at least 1 child	No. of latrine used by at least 1 child	No. of families with atleast 1 child not using latr.	Disposal of children feces in		Sources of water for use in latrine			No. of water sources at distance	
						Latrine	Ditches / open places	Tube-wells	Pond	Others	<=50 ft	>50 ft
RAJSHAHI	CHAPAI N.GANJ	SADAR	8	1	8	0	8	9	0	1	1	9
	NAOGAON	DHAMOIRHAT	8	2	8	0	8	10	0	0	6	4
	NATORE	GURUDASPUR	8	1	7	0	7	9	0	1	6	4
	RAJSHAHI	CHARGHAT	9	2	8	0	8	10	0	0	1	9
RANGPUR	BOGRA	SONATOLA	9	0	9	0	9	10	0	0	10	0
	DINAJPUR	BIRAMPUR	8	3	7	0	7	10	0	0	3	7
	GAIBANDHA	SADULLAPUR	7	3	6	0	6	10	0	0	7	3
	KURIGRAM	ULIPUR	10	2	9	0	9	10	0	0	7	3
	LALMONIRHAT	PATGRAM	10	2	9	0	9	2	0	8	4	6
Total :			204	105	155	1	154	132	67	39	106	132
%					100	0.6	99.4					

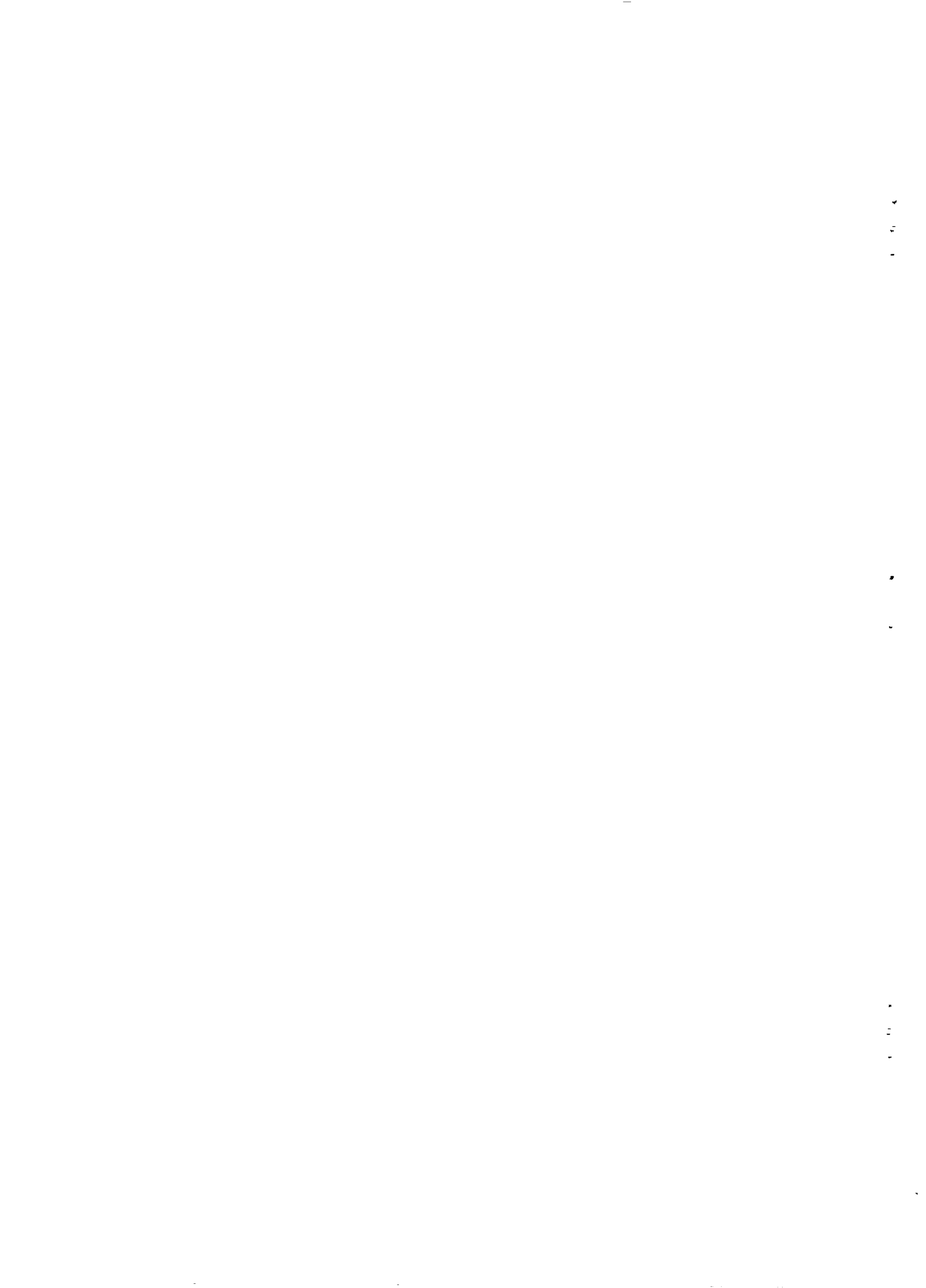


Table X : HABITS OF THE FAMILY MEMBERS

Circle	District	Taana	No. of latrine visited	No. of users			No. of latrines used by			
				Female	Male	* Children	All female members only	All male members only	At least one member	All members
BARISAL	BARISAL	GOURNADI	10	22	31	13	0	0	10	2
	BIOLA	TAJUMUDDIN	4	6	9	11	0	0	4	2
	WADARIPUR	WADARIPUR (S)	10	25	33	15	0	0	10	3
	PATAUKHALI	DASHMINA	10	20	22	20	0	0	10	6
	RAJBARI	BALIAKANDI	2	3	5	1	0	0	2	2
CHITTAGONG	B BARIA	SARAIL	1	2	1	0	0	0	1	0
	PENI	CHHAGALNAIYA	10	23	22	4	0	0	10	1
	LAXMIPUR	LAXMIPUR	10	21	18	9	0	0	10	0
CTG HILL TRACT	KNAGRACHARI	MATIRANGA	10	22	23	11	0	0	10	1
	RANGAMATI	RAJESTHALI	10	32	26	3	0	0	10	2
DHAKA	JAMALPUR	ISLAMPUR	10	18	24	7	2	0	10	3
	KISHOREGANJ	BAJITPUR	2	3	2	2	0	0	2	2
	MANIKGANJ	GHIOR	9	16	27	8	0	0	9	4
	TANGAIL	DELDOWAR	10	25	15	4	3	0	10	3
KHULNA	JESSORE	SARSHA	10	41	32	12	0	0	10	1
	KUSHTIA	KUMARKHALI	10	24	35	8	0	0	10	6
	MAGURA	SHALIKHA	3	11	0	0	0	0	3	0
	MEHERPUR	GANGHI	7	15	23	3	0	0	7	0
	SHATKHIRA	KALIGANJ	10	29	42	5	0	0	10	5
RAJSHAHI	CHAPAI N. GANJ	SADAR	10	21	24	1	0	0	10	1
	NAOGAON	DHAMOIRHAT	10	28	28	4	0	0	10	2
	NATORE	GURUDASPUR	10	34	7	1	5	0	10	2
	RAJSHAHI	CHARGHAT	10	23	26	2	0	0	10	1
RANGPUR	BOGRA	SONATOLA	10	25	28	0	0	0	10	1
	DINAJPUR	BIRAMPUR	10	20	18	3	0	0	10	3
	GAIBANDHA	SADULLAPUR	10	19	20	5	0	0	10	4
	KURIGRAM	ULIPUR	10	27	39	6	0	0	10	1
	LALMONIRHAT	PATGRAM	10	26	32	4	0	0	10	1
Total :			238	581	612	162	13	0	238	59
%			100				5.5	0.0	100	24.8

* below 10 years of age.

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TABLE XI : COMMENTS OF SURVEYORS

Circle	District	Thana	No. of comments on *					
			Superstructure		Platform		Pit	
			Attrac- Live	Not attractive	Cleaned	Not cleaned	Pit intact	Pit damaged partially
BARISAL	BARISAL	GOURNADI	0	10	10	0	10	0
	BIHOLA	TAJUHADDIN	0	4	4	0	4	0
	MADARIPUR	MADARIPUR (S)	2	8	10	0	10	0
	PATAUKHALI	DASHMINA	0	10	9	1	10	0
	RAJBARI	BALIAKANDI	2	0	2	0	0	0
CHITTAGONG	B BARIA	SARAIL	1	0	1	0	0	1
	FENI	CHHAGALNAIYA	3	7	3	7	2	7
	LAXMIPUR	LAXMIPUR	0	10	4	6	3	7
CTG HILL TRACT	KHAGRACHARI	HATIRANGA	10	0	9	0	7	3
	RANGHATI	RAJESTHALI	6	4	5	5	3	7
DHAKA	JAMALPUR	ISLAMPUR	5	2	4	2	1	4
	KISHOREGANJ	BAJITPUR	0	2	2	0	1	1
	MANIKGANJ	GHIOR	4	4	2	7	0	2
	TANGAIL	DELDOWAR	3	7	1	9	5	3
KHULNA	JESSORE	SARSHA	2	2	1	6	0	1
	KUSHTIA	KUMARKHALI	3	2	2	5	1	4
	MAGURA	SHALIKHA	1	1	1	2	0	1
	MEHERPUR	GANGNI	1	2	2	1	0	0
	SHATKHIRA	KALIGANJ	2	3	1	5	0	2
RAJSHAHI	CHAPAI N. GANJ	SADAR	1	5	0	5	2	0
	NAOGAON	DHAMOIRHAT	1	9	2	8	8	0
	NATORE	GURUDASPUR	2	3	1	6	1	4
	RAJSHAHI	CHARGHAT	1	0	0	0	0	1
RANGPUR	BOGRA	SONATOLA	0	2	0	0	4	2
	DINAJPUR	BIRAMPUR	1	0	0	1	0	5
	GAIBANDHA	SADULLAPUR	0	2	0	4	0	2
	KURIGRAM	ULIPUR	1	4	0	3	1	1
	LALMONIRHAT	PATGRAM	3	2	0	2	0	3
Total :			55	105	76	85	73	61

* Comments were not received in all the cases

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TABLE XII : DETAILS DISTRIBUTION OF SAMPLES

Circle	District	Thana	Total	No. of		Total
			no. of vill- ages visited	with latrine	without latrine	no. of latrine visited
BARISAL	BARISAL	GOURNADI	3	3	0	10
		BHOLA	4	1	3	4
		HADARIPUR	3	3	0	10
		PATAUKHALI	5	5	0	10
		RAJBARJ	3	1	2	2
		FARIDPUR	BHANGA	3	0	3
CHITTAGONG	B BARIA	SARAIL	8	1	7	1
	FENI	CHHAGALNAIYA	6	3	3	10
	LAXMIPUR	LAXMIPUR	4	3	1	10
	CHITTAGONG	HATHAZARI	6	0	6	0
	COX'S BAZAR	TEKNAF	6	0	6	0
	SUNAMGONJ	JAMALGONJ	5	0	5	0
CTG HILL TRACT	KHAGRACHARI	HATIRANGA	3	3	0	10
	RANGAMATI	RAJESTHALI	4	3	1	10
DHAKA	JAMALPUR	ISLAMPUR	7	4	3	10
	KISHOREGANJ	BAJITPUR	6	2	4	2
	MANIKGANJ	GHIOR	5	3	2	9
	TANGAIL	DELDOWAR	8	3	5	10
	KUNSIGONJ	SRINAGAR	9	0	9	0
	NARSINGDI	NARSINGDI (S)	8	0	8	0
KHULNA	JESSORE	SARSHA	3	3	0	10
	KUSHTIA	KUMARKHALI	3	3	0	10
	MAGURA	SHALIKHA	5	2	3	3
	MEHERPUR	GANGNI	4	2	2	7
	SHATKHIRA	KALIGANJ	5	5	0	10
RAJSHAHI	CHAPAI N. GANJ	SADAR	3	3	0	10
	NAOGAON	DHANOIRHAT	3	3	0	10
	NATORE	GURUDASPUR	3	3	0	10
	RAJSHAHI	CHARGHAT	3	3	0	10
	PABNA	BERA	6	0	6	0
RANGPUR	BOGRA	SONATOLA	3	3	0	10
	DINAJPUR	BIRAMPUR	3	3	0	10
	GAILBANDHA	SADULLAPUR	3	3	0	10
	KURIGRAM	ULIPUR	3	3	0	10
	LALMONIRHAT	PATGRAH	2	2	0	10
		Total	158	79	79	238

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United Nations Children's Fund

অতিসংঘ শিশু তহবিল (ইউনিসেফ)

Mr Alex Redekopp
WHO Sanitary Engineer
DPHE, Dhaka

17 February 1993
RWS/407/165

Dear Mr Redekopp:

Subject: Study on Do-it-yourself (Homemade) latrine

Further to the meeting on 21 January 1993 chaired by Mr A R Mridha, Project Director, Village Sanitation, DPHE with the participation of DPHE, WHO and UNICEF, kindly find enclosed a TOR for the above study. We hope that the proforma for the study will be initially developed by WHO, and finalized with inputs from DPHE and UNICEF, as necessary. Sample sizes and number of clusters have been suggested in the TOR. However, you may look into this and propose amendments in the next meeting with DPHE and us.

With best regards,

Yours sincerely,

P Wan
Chief, WES Section

cc: Mr A R Mridha, Project Director, VS, DPHE

cc: HP/AH/SK

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Terms of Reference for study on do-it-yourself
(Homemade) latrine

Background

In Bangladesh approximately 260,000 children under five years of age, die of diarrhoeal diseases every year. The causes are predominantly due to limited use of tubewell water for all domestic needs, poor environmental sanitation and personal hygiene practices.

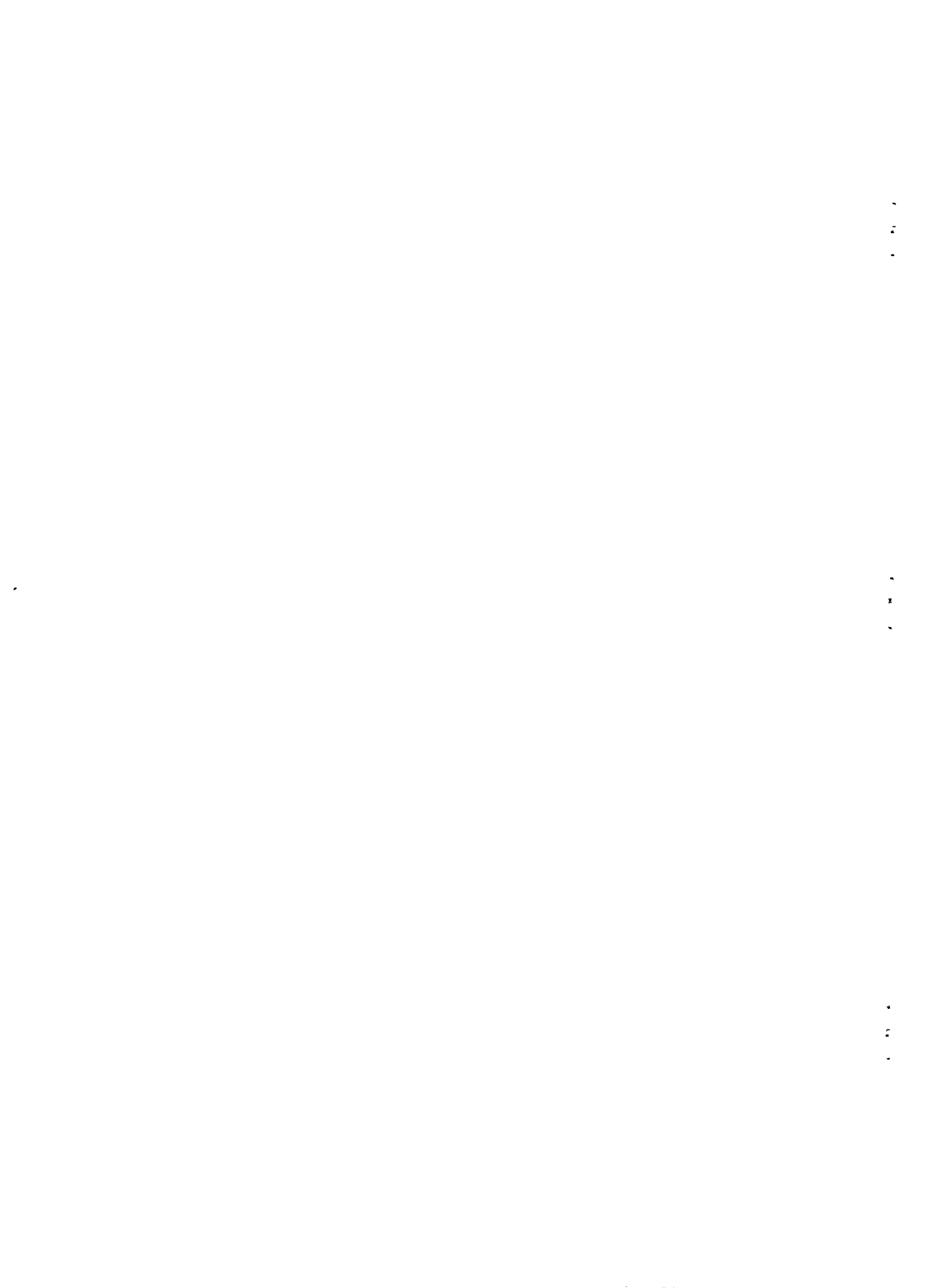
A recent survey by Mitra Associates in 1991 indicated that the sanitation coverage was 26% of which 60% of the latrines were homemade latrines and 10% were of the water seal type. Since 1987 through IA programme, homemade pit latrines were promoted for families who could not afford to buy, the water seal latrines. In order to assess the status of the homemade latrines in terms of the technology and users reaction, it is proposed that a study be undertaken.

Objective of study

Homemade latrine (do-it-yourself latrine)

The study will include the following:

1. Type and dimensions of the pit latrine.
2. Soil conditions.
3. The type of material used for pit lining, squatting platform, pit covers, and superstructures.
4. Cost of materials and labour.
5. Users' attitude towards pit latrine.
6. Source from where construction technique was learnt?
7. Life of latrine pits.
8. Economic status of the families, usage level, category-wise (male, female, children) and number of users.
9. Steps taken when the pit is filled up.
10. Any effects due to weather condition.



Methodology

The study will be undertaken by using pre-tested questionnaires and interviewing a sample of users.

The study can be done in 2 unions in each of the 7 circles of DPHE. Data will be collected from 10 users in each village of the 35 Unions.

Time Period

The study shall be completed in 4 - 6 weeks.

Study Proposal

The study will be done by WHO FSOs. Questionnaire will be finalized in consultation with DPHE and UNICEF.

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STUDY OF DO-IT-YOURSELF LATRINES

List of Sample Unions

<u>Circle</u>	<u>District</u>	<u>Thana</u>	<u>Union</u>
Dhaka	Manikganj	Ghior	Baratia
	Munshiganj	Srinagar	Atpara
	Kisoreganj	Bajitpur	Baliadi
	Jamalpur	Islampur	Apdhari
	Norsingdi	Norsingdi (S)	Alurbali
	Tangail	Delduar	Alasin
Rajshahi	Naogaon	Dhamoirhat	Isabpur
	Pabna	Bera	Puranbharenga
	Nowabganj	Nowabganj(S)	Khamar
	Natore	Gurudaspur	Chapila
	Rajshahi	Charghat	Yusufpur
Rangpur	Gaibandha	Sadullapur	Jamalpur
	Lalmoirhat	Patgram	Dahagram
	Bogra	Sonatala	Digdail
	Dinajpur	Birampur	Khanpur
	Kurigram	Ulipur	Tabokpur
Khulna	Kushtia	Kumarkhali	Chandpur
	Jessore	Sarsha	Bagachara
	Saikhira	Kaliganj	Krishnapur
	Meherpur	Gangni	Gangni
	Magura	Shalikka	Gangarampur
Barisal	Bhola	Tajumuddin	Baramalangchara
	Patuakhali	Dashmina	Banshbaria
	Rajbari	Baliakandi	Jamalpur
	Madaripur	Madaripur(S)	Kalikapur
	Faridpur	Bhanga	Kaulibera
	Barisal	Gournadi	Nalchira
Chittagong	Cox's Bazar	Teknaf	Teknaf
	Brahmanbaria	Sarail	Ashikati Paschim
	Laxmipur	Laxmipur(S)	Kushakhali
	Feni	Chagalnaiya	Mahamaya
	Sunanganj	Jamalganj	Shatna Bazar
	Chittagong	Hathazari	Gumanmardan
Chittagong HT	Khagrachari	Matiranga	Tabalchari
	Rangamati	Rajesthali	Gainda

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WORLD HEALTH ORGANIZATION
 COMMUNITY WATER SUPPLY & SANITATION, BAN CWS 001
 SURVEY OF "DO-IT-YOURSELF" LATRINES

Date of Survey: _____

Circle: _____

District: _____

Thana: _____

Union: _____

A. Family status

Sl.No.	Name of family and Village	Occupation of family head	Interviewee age	No. of members			No. of members having education				Expenditure per year	Income per year	Area of built up plot of land Decimals
				Female over 10 yrs	Male over 10 yrs	Children below 10 yrs	Nil	Primary	Secondary	Above			
1	2	3	4	5	6	7	8	9	10	11	12	13	14

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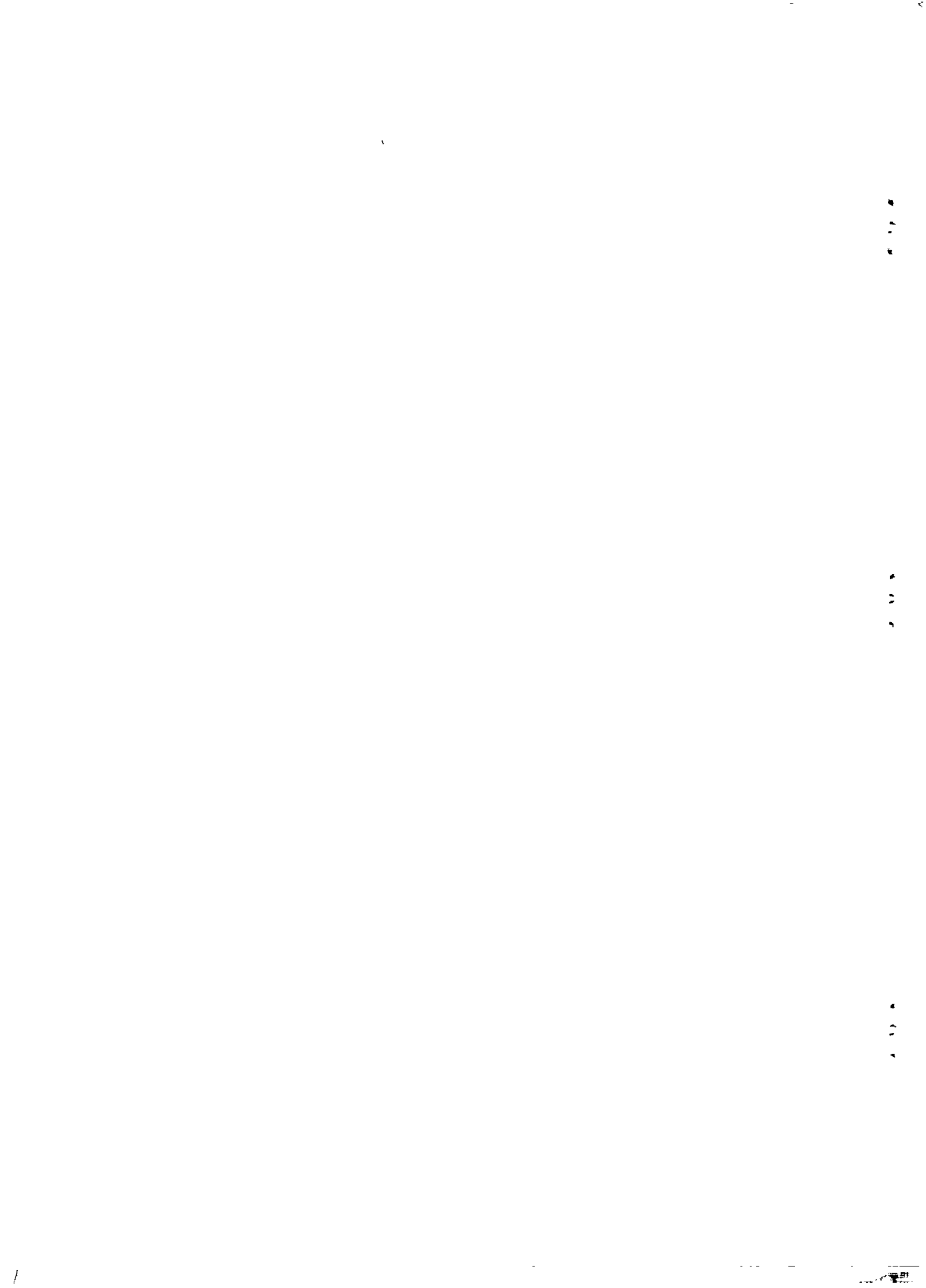
D. History of latrine:

D (i)

Name of family	Date of start of continuous use of latrine	Date of installation of first latrine	Date of installation of existing latrine	What was done when previous latrine was filled up	What was done with stabilized sludge	What will be done when the existing latrine will be filled up	Why the family built latrine	Who is (are) pioneer in giving ideas of		Resistance/obstacles encountered at the time of construction	
								latrine use	latrine construction	Type	by whom
1	2	3	4	5	6	7	8	9	10	11	12

D (ii)

Does he know about lining & slab latrine	Type of latrine preferred		Average life of latrine pit (s) yr.	Problems encountered with do-it-yourself latrine and responses in the past (on existing latrine)		
	Before existing latrine	At present		Superstructure	Substructure	Others
13	14	15	16	17	18	19



E. Use of latrine

Use of latrine by			How the children faeces are disposed			Water for use in latrine	
Females over 10 yrs	Males over 10 yrs	Children below 10 yrs	Disposal of faeces	Washing hand with soap/ash	Disposal of waste water with faeces	Source	Distance from latrine #
1	2	3	4	5	6	7	8

F. Comments of Surveyors

Superstructure	Platform	Pit	Use of latrine
1	2	3	4

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WORLD HEALTH ORGANIZATION
BAN/CWS/001 PROJECT TEAM

Mr. Alex Redekopp, Sanitary Engineer & Team Leader

Mr. Azizur Rahman, Secretary/Office Manager

Mr. N. Motazzal Hoque, National Field Programme Officer

Mr. Atal Kumar Sarker, Management Information System (MIS) Officer

Mr. Qul Bahar Sarker, Chemist/Lab. Coordinator

Mr. Aowlad Hussain, Field Sanitation Officer

Mr. Ratan Kumar Saha, Field Sanitation Officer

Mr. Shahidul Islam, Field Sanitation Officer

Mr. A.F.M. Wahid Hassan, Field Sanitation Officer

Mr. Shahidul Alam, Field Sanitation Officer

