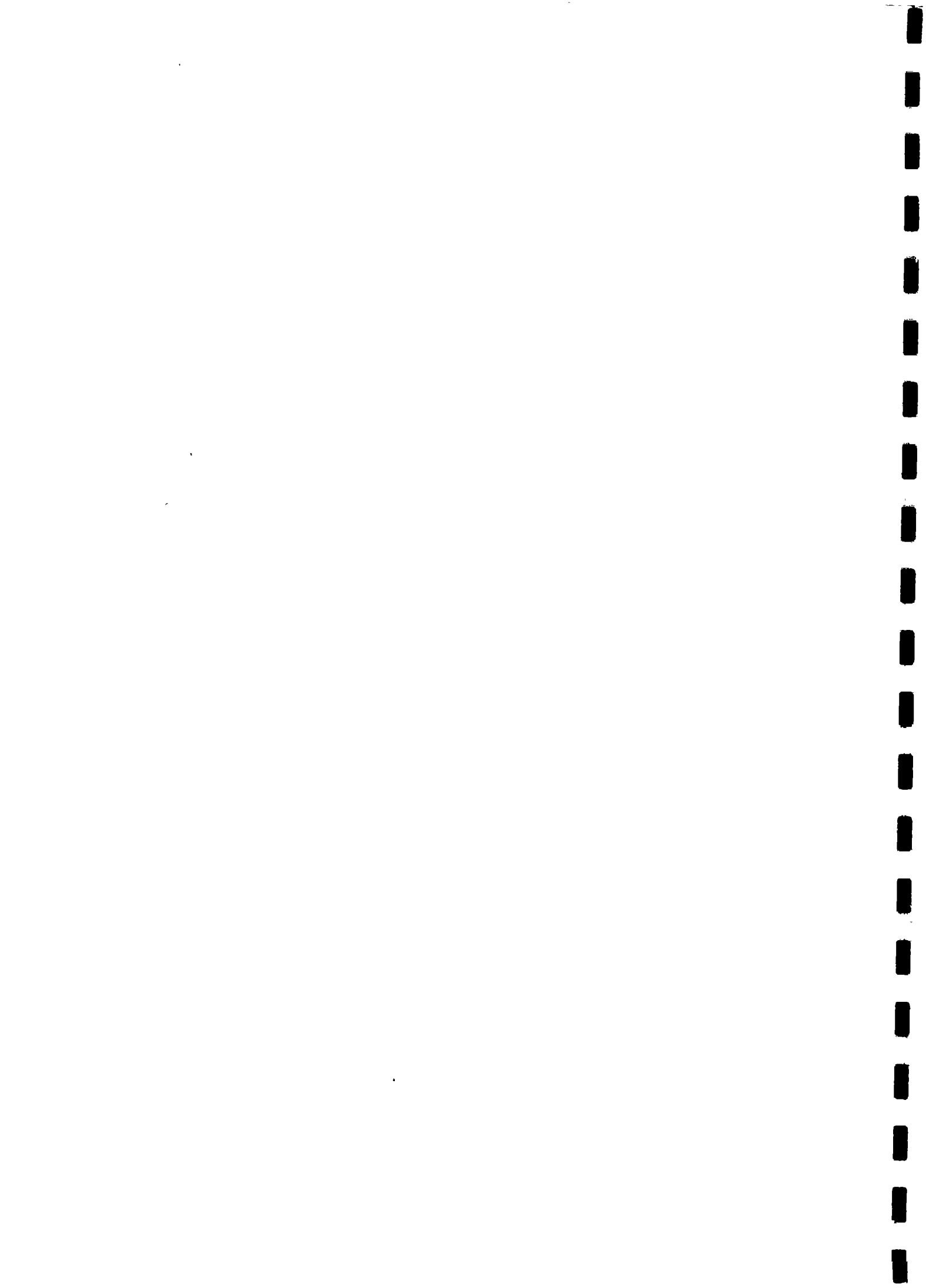


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IMPLEMENTATION GUIDELINES
FOR
THE SANITATION PROGRAMME IN URBAN SLUMS
AND
FRINGE AREAS OF THE 18DTP POURASHAVAS

OFFICE OF THE PROJECT DIRECTOR,
DPHE, DUTCH ASSISTED PROJECTS,
190, ARAMBAGH, DHAKA.



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PREFACE :

In Bangladesh diarrhoea is causing 2,00,000 Child deaths annually (1-5 yrs). Prevalance of parasitic infections in children under 14 years is approximately over 80%, leading to nutritional problems, especially in the urban slums and fringes.

In order to eliminate the diarrhocal diseases and parasite infection in children and to improve the health condition of the poorest people living in the urban slums and fringes, water supply, Sanitation, Drainage and hygiene education in 18 District Towns are now under implementation with assistance from the Netherlands Government.

An important feature of this sanitation programme is to provide an approach through WSSC's, an accepted institutional frame-work involving participation of ward-based communities, especially the women.

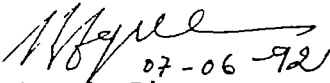
Provision has been made within the programme to provide a sustainable sanitation design to render permanent benefits for the households by installing Double Direct Pit (DDP) pour flash latrines. This is an extension of the SDP. The DDP design is considered to be the least-cost option.

Manufacturing and assisting in the installation of latrine units and follow-up will be done by the trained local female workers employed through local NGO's with the approval of the Project Director.

These guidelines contain the why and how of the implementation of the sanitation programme for the poor involving the community in particular the women, through NGOs.

It is hoped that these guidelines will help the Engineers of DPHE under 18 DTP, the concerned Pourashava authorities, NGO's staff and workers in the rapid implementation of this sanitation programme.

We shall appreciate very much the proper utilization of these guidelines and the full co-operation from all quarters in implementing the project objectives.


07-06-92
(S.A.K.M. Shafique)
Project Director, DPHE,
Dutch Assisted Projects,
Dhaka.

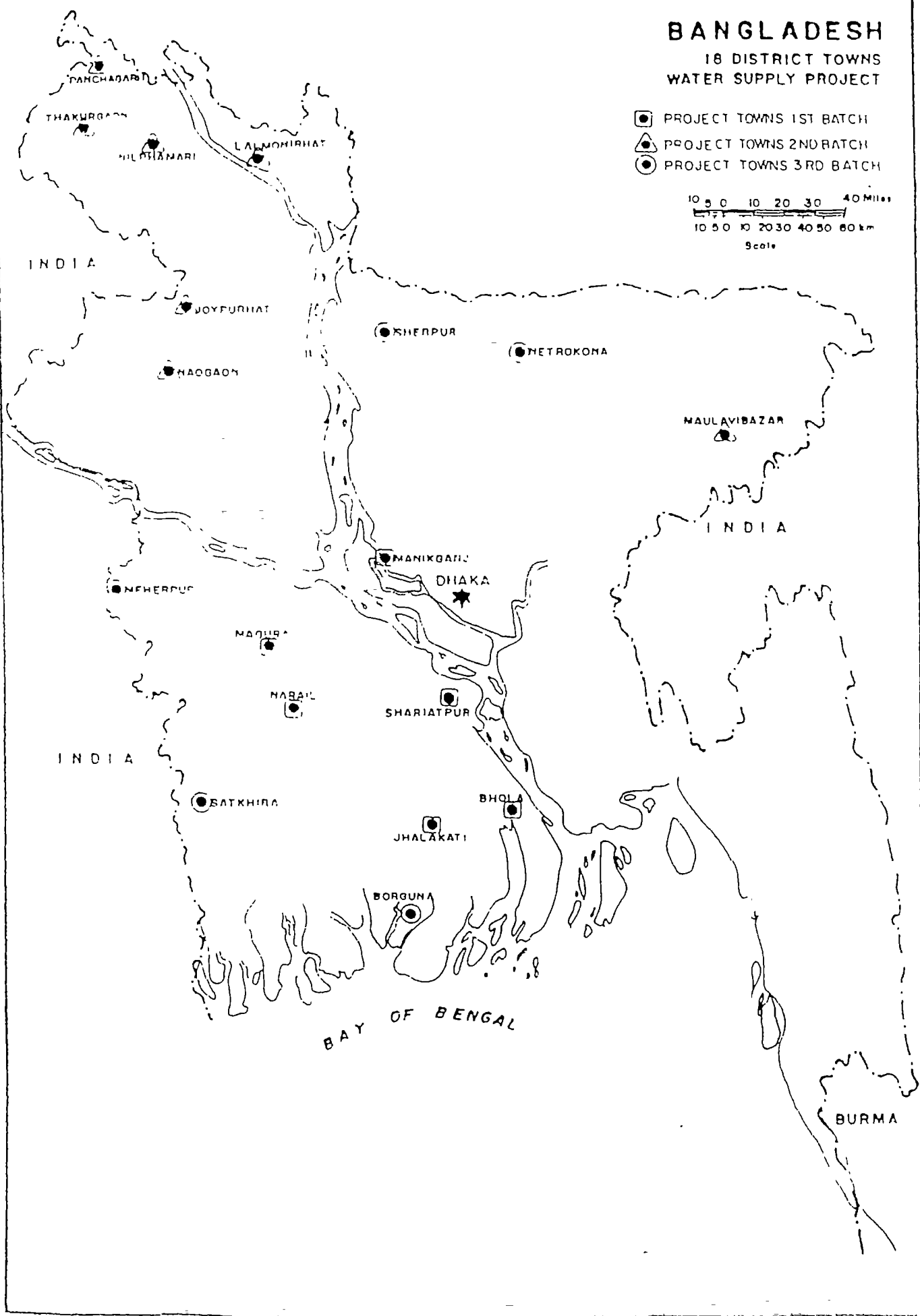
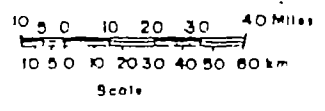


BANGLADESH

18 DISTRICT TOWNS

WATER SUPPLY PROJECT

- ◻ PROJECT TOWNS 1ST BATCH
- ◐ PROJECT TOWNS 2ND BATCH
- PROJECT TOWNS 3RD BATCH





18 District Towns Water Supply, Sanitation and Drainage Projects.

1. INTRODUCTION :

The 18 DTP is a combined "Package" for the provision of water supply, sanitation, drainage and hygiene education to 18 District Towns in Bangladesh.

The project is implemented through the Department of Public Health Engineering of the Ministry of Local Government, Rural Development and Co-operatives with assistance from the Netherlands Government.

Pourashavas and Communities will be involved in its implementation and will carry operational responsibility.

1.1 18 DTP Objectives :

The primary objective of the District Towns Projects 18DTP is to improve the health condition of the communities of these towns through the provision of :

- sustainable water supply and sanitation in the fringe and slum areas.
- sustainable active participation of community workers, especially women beneficiaries.

2. Components of the 18 DTP Sanitation Programme :

- a) Construction of Community Sanitation Centres.
- b) Construction of Covered Production Centres.
- c) Production, delivery and installation of latrines.
- d) Training of female masons and helpers on the production of latrine units and on hygiene education.
- e) Training of N.G.O. staff for operational management of CSC'S.

3. Formation of Project Committees :

Pourashavas receiving assistance under the project will set up the following three committees to facilitate proper execution, supervision, operation and maintenance of the project components involving community support.

Committees :

- a) water supply and surveillance committee (WSSC)
- b) supervisory board (SB)
- c) task force (TF)



4. Sanitation Programme Organisation :

It has been decided that a community sanitation centre with an associated latrine production centre will be established in each ward with the ward's WSSC having supervisory responsibility through an appointed NGO. The NGO will provide the staff to run the CSC/CPA in consultation with SDE, DPHE, 18 DTP.

4.1 Sanitation Responsibilities :

The Project Director (PD) DPHE with the overall responsibility for 18 DTP will be responsible for the smooth execution of the sanitation programme through the Executive Engineer, DPHE 18 DTP; and SDE, PHE 18 DTP at Pourashava level. Subsequently the responsibilities will be handed over to the Pourashava and community for operational management and maintenance after three years of the implementation of the Project.

4.1.2 Implementation Manpower :

The SDE, PHE 18 DTP with all his staff will implement the sanitation programme under the supervision of the zonal E.E., DPHE, 18 DTP and under the guidance of the Project Director (PD) DPHE.

He will also be directly responsible for operational management and monitoring of the programme till the appointment of a strong, suitable local NGO for this purpose by the Pourashava and the Project Director.

4.1.3 Payment of Staff :

Payment to CSC Staff (which is provided by the appointed NGO) would be funded from a special project allocation for NGO involvement in the project sanitation programme.

5. CSC Building:

Physical requirements are :-

- A small office to implement the sanitation programme and other similar programmes of the Pourashava.
- A small store for storing weekly supplies.
- A covered production area.
- Support items such as a tubewell, latrine, water tank

6. Production of Latrine Components :

6.1 Design :

Considering sanitary, economic, social and technical factors, the double direct pit pour flush water seal latrine with 5 rings has been recommended for installation and use in the project areas.

In this system both the pits are dug and lined at the same time during initial installation.



6.1.2 Double Direct Pit Latrines :

Here two pits are dug and each pit is lined with 5 rings. The water seal slab is fitted to the 1st pit and the latrine completed for use. The second pit is temporarily left empty duly covered with a spare RCC cover. It could be used temporarily for composting organic household waste.

The capacity of each pit with 5 rings will be sufficient to serve 8 persons for 3 years.

When the 1st pit is full the 2nd pit will be brought into use transferring the water seal slab and super structure from the 1st pit to the 2nd pit.

The excreta in the 1st pit have to be covered with soil/ash and left for 1-2 years for digestion it then could be dug out and used in the field as manure or fertilizer.

In this way the pits will be used alternatively, maintaining sustainable sanitation.

6.2 Basic latrine components :

- a) one RCC slab with F.C pan (1mX1mX51 mm thick)
- b) Ten RCC rings (914 mm I.D. X 304mm height X 38mm thick)
- c) One RCC spare pit cover (1m dia X 51 mm thick)

6.3 Manufacturing of Latrine Units with Community Involvement:

The water supply and sanitation committees in the 18 District Towns were entrusted to select 8 nos of capable community women from 3 different wards of each pourashava to receive training on production of latrine units. The training course was designed for a period of 14 days (1 day theoretical + 12 days practical + 1 day for a performance test).

By this time, training has been completed successfully in 10 towns.

The training of female masons in Moulovibazar is likely to start soon.

Similar training will be conducted in the remaining Purashavas of 18 DTP in due course.

After the training, provision is made to select the best trainees to work as masons in the production centre. The remaining trainees will work as helpers. The number of masons and helpers depends on the volume of works. The selection is based on the performance test conducted at the end of the training.



6.3.1 Wages for the work done :

It is recommended that these female masons will be working in the production centres for the production of latrine units and also for the supervision for the installation of latrine units. Work rates will be fixed by the Project Director, according to the components made or installed and paid on the recommendation of the SDE, DPHE, 18 DTP and Executive Engineers, 18 DTP.

Suggested rates are :

- a) casting of one pan - @ Tk. 16/-
- b) casting of one RCC slab- @ Tk. 25/-
- c) casting of one RCC ring - @ Tk. 15/-
- d) Assisting in the installation of each latrine - @ Tk. 10/-

The rates against a,b,c includes proper curing as per guidance:

There should be a minimum standard of quality below which payment to a trained mason/mistry should be refused.

6.3.2 The CSC chowkider appointed through the NGO in consultation with the SDE, DPHE, 18 DTP will also work as a labourer helping in lifting and loading of latrine components and will receive a salary from the special NGO fund.

6.4 Delivery, distribution and sale of latrines :

a) The WSSC concerned will prepare the priority list of the potential group of beneficiaries who are to receive latrine units free of cost. The list will be submitted to the SB for approval.

b) On receipt of the list the supervisory board will check and verify the same and issue a clearance.

c) On receipt of approval of the SB, the potential beneficiary group will be entitled to take delivery of DDP sets free of cost, provided:-

i) Beneficiaries are to dig two pits as required for the installation of the DEP type as per guidance of trained DPHE or NGO staff.

ii) Beneficiaries are to construct the super structure/ fencing walls of the latrine unit with locally available materials (suitable) at their own cost.



6.4.1 Sale :

Well-to-do customers of the Pourashava not included in the priority list may purchase latrine units at production cost as decided by the Chairman of the Pourashava and the SDE, DPHE, 18 DTP.

The approximate cost of each component is given below :-

- a) RCC slab with pan @ Tk.250/=
- b) RCC ring each @ Tk.120/-
- c) RCC spare cover each @ Tk.200/-

7. Monitoring :

7.1 Monthly Progress Report :

Progress reports will be prepared by SAE, PHE/Supervisor (NGO) for submission to SDE, 18 DTP with the copy to the Chairman of the Pourashava.

The SDE will submit copies to EE & PD.

The PWSS will review the progress every two months.

The EE, DPHE, 18 DTP will submit a monthly progress report to the Project Director with copy to the Chairman of the Pourashava.

7.2 Daily Consumption and Production Register

The SAE, PHE, 18 DTP or the Supervisor appointed by the NGO will maintain a daily consumption and production register (a Proforma is annexed at-I)

7.3 Monthly Production, Installation & Sale.

The SAE, PHE, 18 DTP or the Supervisor NGO will prepare and submit the report to the SDE, PHE, 18 DTP with copy to the Chairman of the Pourashava and EE, DPHE, 18 DTP (a Proforma is annexed at-2).

7.4 Latrine Installation Register :

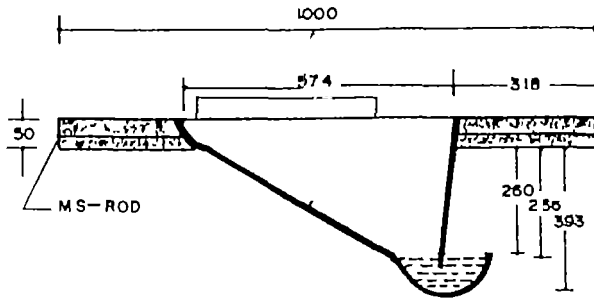
The SAE and the Supervisor NGO will also maintain a latrine installation register as per the proforma, annex-3. He will collect the information through the Supervising Staff/Field Staff/WSSC members.



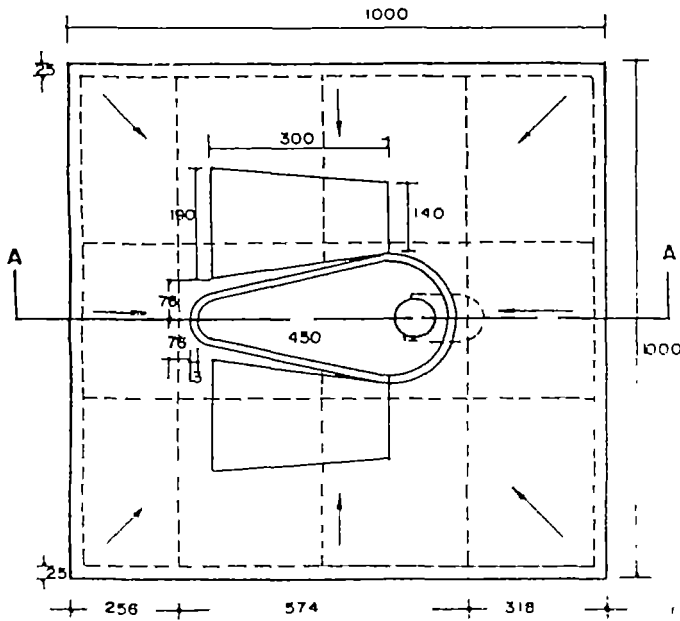
FIG-1

12-DETAILS OF R.C.C SQUATING PLATE & FOOT REST

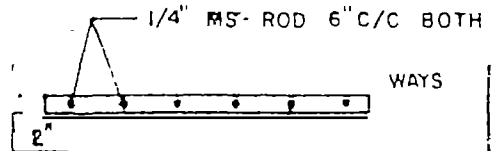
Prop. 1:3:6



SECTION A-A
SCALE 1/4"

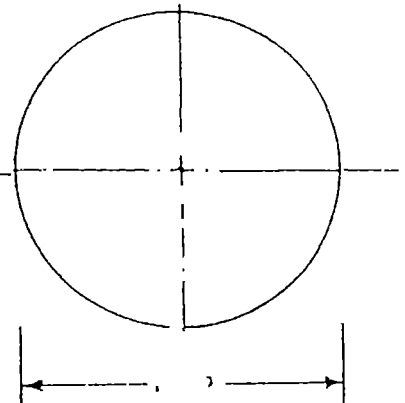


PLAN



ELEVATION

2" THICK RCC (1:2:4) BLANK SLAB



PLAN

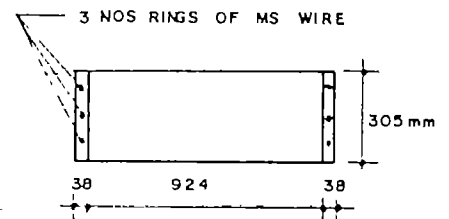


FIG - 2

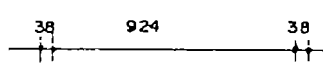
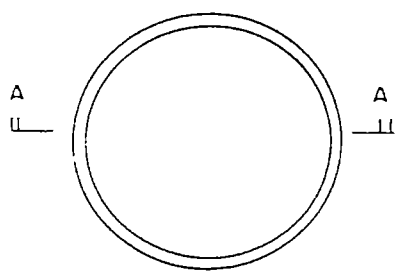
924 mm DIA (inside) R.C.C RINGS (1 . 3 6)



ELEVATION



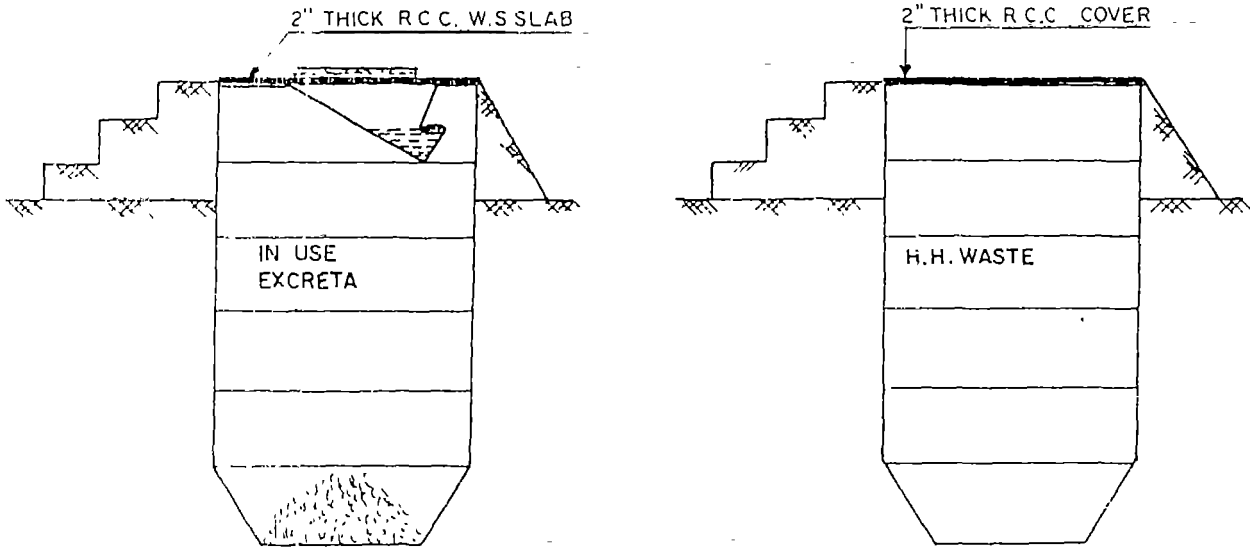
SECTION-A A



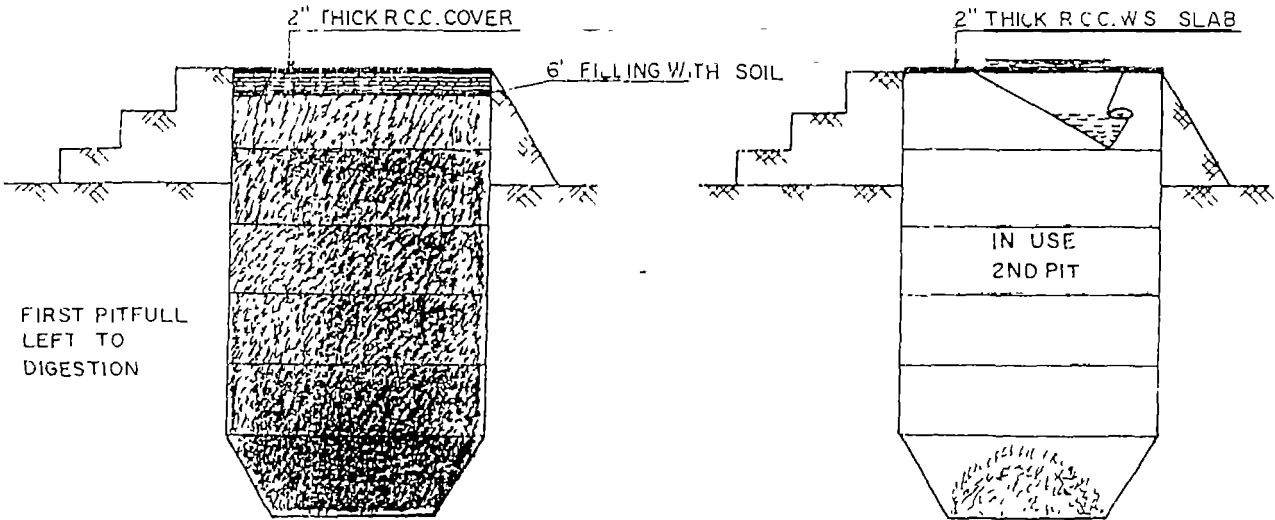
PLAN
SCALE 1/29



DOUBLE DIRECT PIT



FIRST CYCLE



SECOND CYCLE



নেদারল্যান্ড বাংলাদেশ হেল্পপেমেন্ট
কো - অপারেশন প্রগ্রাম

সংযুক্তি - ১ -

১৮- হেল্পা শহর পানি সরবরাহ, পয়ঃনিষ্কাশন ও বর্দমা নির্মাণ প্রকল্প

স্বাস্থ্যখানা নির্মাণ কেন্দ্র দৈনিক মালামাল উৎপাদন ও খরচের হিসাব।

কেন্দ্রের নাম - _____ পৌরসভা _____ মাসের নাম _____

মালামাল		উৎপাদন				সংরক্ষণ	
ক্রমিক	বালু	সংখ্যা	এম,এস	সংখ্যা	সংখ্যা	সংখ্যা	সংখ্যা
কোড	কোড	কোড	কোড	কোড	কোড	কোড	কোড
১	২	৩	৪	৫	৬	৭	৮
৯	১০	১১	১২	১৩	১৪	১৫	১৬
১৭	১৮	১৯	২০	২১	২২	২৩	২৪
২৫	২৬	২৭	২৮	২৯	৩০	৩১	৩২
৩৩	৩৪	৩৫	৩৬	৩৭	৩৮	৩৯	৪০
৪১	৪২	৪৩	৪৪	৪৫	৪৬	৪৭	৪৮
৪৯	৫০	৫১	৫২	৫৩	৫৪	৫৫	৫৬
৫৭	৫৮	৫৯	৬০	৬১	৬২	৬৩	৬৪
৬৫	৬৬	৬৭	৬৮	৬৯	৭০	৭১	৭২
৭৩	৭৪	৭৫	৭৬	৭৭	৭৮	৭৯	৮০
৮১	৮২	৮৩	৮৪	৮৫	৮৬	৮৭	৮৮
৮৯	৯০	৯১	৯২	৯৩	৯৪	৯৫	৯৬
৯৭	৯৮	৯৯	১০০				



১৮ জেলা শহর পানি সরবরাহ, পয়ঃনিষ্কাশন ও বর্দমা নির্মাণ প্রকল্প

জনবদ্ধ পায়খানা নির্মাণ কার্যের মাসিক অগ্রগতির প্রতিবেদন।

পৌর পতাল নাম ----- মাস ----- বৎসর -----

খালিয়াল							উৎপাদিত সামগ্রী			নির্মিত	মন্তব্য
মাস	বিল	কোটা	সিমেট	১৫ এম. এম. ইউ	১০ নং তার	ওয়্যার মাস	সি.সি. ম্যান	সি.সি. ড্রাইং	সি.সি. ম্যান	পায়খানা	
কিঃ	মিঃ	মঃ	কিঃ	কিঃ	মিঃ	মিঃ	সংখ্যা	সংখ্যা	সংখ্যা	সংখ্যা	

১। প্রকল্পের শেষ দিনের অবশিষ্ট খালিয়াল

বর্তমান মাসে প্রাপ্তি

২। প্রাপ্তি

বর্তমান মাসের নোই খরচ/ব্যয় বিতরণ

৩। প্রকল্পের অবশিষ্ট

৪। প্রকল্পের অবশিষ্ট

৫। নির্বাহী প্রকৌশলী, ১৮ জেলা শহর প্রকল্প - জনস্বাস্থ্য প্রকৌশলী অফিস, ঢাকা।

৬। সিস্টেম এনালিস্ট/প্রকৌশলী -

৭। উপ-বিভাগীয় প্রকৌশলী, জনস্বাস্থ্য প্রকৌশলী অফিস - ১৮ জেলা শহর প্রকল্প, উপ-বিভাগ।

দায়িত্ব - স্যানিটেশন প্রমোটর
স্যানিটেশন - সুদান জাইজার।

এব, সি, এ





TRAINING SCHEDULE FOR TRAINING OF FEMALE MASONS AND LABOURER

Period - 2 weeks

Day	Mor	Eve	MORNING	EVENING	Resource person.
			Class	Class	TRAINER
1st	8.30 12.00	14.00 17.00	Introduction, Water, Sanitation Health hazards	Water related diseases. Transmission of disease How to cut transmission cycle	SAE/ SDE, DPHE DPHE/PO Consultant
2nd	8.30 12.00	14.00 17.00	Class Safe water, Sanitation, Latrine Practice personal Hygiene	Class Type of Material/Construction material /Equipment/Tools	SAE/ SDE, DPHE DPHE/PO Consultant
3rd	8.30 12.00	14.00 17.00	Practice Selection of materials Quality of materials	Practice Breaking of Khoa (gradation) screening-khoa/sand/cement	SAE/SDE DPHE/PO Consultants
4th	8.30 12.00	14.00 17.00	Practice Mixing, Different Mix. Use of water, more or less?	Practice/Demonstration Use of Moulds, Demonstration on Pan, Rings, Slabs.	SAE/Mason SDE
5th	8.30	14.00	Practice 3 groups 1st - rings 2nd - slabs 3rd - pan	Practice 3 groups 1st - slabs 2nd - pan 3rd - rings	SAE/Mason
6th	8.30 12.00	14.00 17.00	Practice 3 groups 1st - pan 2nd - rings 3rd - slabs	Practice 3 groups 1st - rings 2nd - slabs 3rd - pan	SAE/Mason SDE
7th	Off				
8th	8.30 12.00	14.00 17.00	Practice 3 groups 1st - slabs 2nd - pans 3rd - rings	Practice 3 groups 1st - pans 2nd - rings 3rd - slabs	SAE/Mason
9th	8.30 12.00	14.00 17.00	Practice 3 groups 1st - rings 2nd - slabs 3rd - pan	Practical , Test (Group wise) Selection of Masons	SAE/Mason
10th	8.30 12.00	14.00 17.00	Practice (Production) Masons 1-pan 4-pan 2-pan 5-pan 3-pan	Practice 1. pan 4. pan 2. pan 5. pan 3. pan	SAE/Mason
11th	8.30 12.00	14.00 17.00	Practice 1-pan 3-pan 5-pan 2-pan 4-pan	Practice 1st-pan 3rd-pan 5th-pan 2nd-pan 4th-pan	SAE/Mason
12th	12.00	14.00 17.00	Practice 1st-slab 3rd-slab 2nd-slab 4th-slab	Practice 1. slab 3. slab 2. slab 4. slab	Mason/SAE/SDE DPHE/PO Consultant
13th	8.30 12.00	14.00 17.00	Practice 1-rings 3-rings 5-rings 2-rings 4-rings	Practice 1st-rings 3rd-rin 5th-rings 2nd-rings 4th-rings	SAE/Mason DPHE/PO consultants
14th	Off				
15th	8.30 12.00	14.00 17.00	1st - pan + slab + rings 2nd - pan + slab + rings 3th - pan + slab + rings 4th - pan + slab + rings	1st - pan + slab + rings Test 2nd - pan + slab + rings Test 3th - pan + slab + rings Test 4th - pan + slab + rings	SAE/SDE DPHE/PO Consultants
16th	8.30 12.00	14.00 17.00	Demonstration on Installation/use/Maintenance of Latrine	Test on performance	SAE/SDE DPHE/PO Consultants

