Water for the World

Operating and Maintaining Bucket Latrines

Technical Note No. SAN. 1.O.5

A bucket latrine consists of a shelter, slab, and platform enclosing a bucket. Operating a bucket latrine involves emptying the bucket every one to three days, carting the excreta to a disposal site and usually burying it. For other types of disposal sites, see "Operating and Maintaining a Composting System," SAN.3.0.2, and "Operating and Maintaining a Biogas System," SAN.3.0.4. Maintaining a bucket latrine system requires routinely cleaning the latrine, including buckets and containers, and periodically inspecting the latrine and trenching site for damage.

Proper maintenance of a bucket latrine is necessary to prevent fly-breeding and to avoid possible health hazards due to contamination from excreta. This technical note describes how to operate and maintain a bucket latrine.

Useful Definitions

CONTAMINATE - To make unclean by introducing an infectious (disease-causing) impurity such as bacteria from excreta.

EXCRETA - Human body wastes.

Caution!

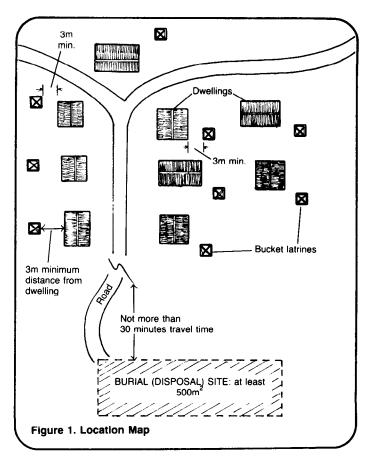
- 1. Wear boots and gloves when handling excreta to prevent possible health problems.
- 2. After disposing of excreta, wash hands, buckets, containers, and scrapers to prevent possible contamination from excreta.

Materials Needed

To operate each latrine: a lid to cover the squatting hole, anal cleansing materials, box or jar of ashes or fine earth, can or coconut shell.

To dispose of excreta: map similar to Figure 1 showing latrine and disposal site locations and materials list similar to Table 1 provided by project designer, and all personnel and materials described in the materials list.

To repair latrines: the same materials used for construction such as cement, wood, bamboo, hammer and nails.



Operating and Cleaning the Latrine

- 1. After each use of the latrine, sprinkle ashes or fine earth onto the contents of the bucket. This will help prevent fly-breeding and foul odors.
- 2. Replace the lid over the hole after each use.
- 3. At least once each week, clean the slab and the compartment that holds the bucket with either ashes or soap and water, and a broom, brush, or mop. See Figure 2.

Disposing of Excreta

- 1. Every one to three days, preferably every day, remove the used bucket from the latrine and empty it into a container equipped with a lid. Replace the bucket with a clean one. Tightly close the fly-proof door. See Figure 3.
- 2. When every latrine shown on the location map has been serviced, cart the containers and the dirty buckets to the disposal site.
- 3. The site may be a composting system, a biogas system, or a burial site. If it is a burial site or trenching ground, excavate a trench 0.5-1.0m wide, 0.5-1.0m deep, and long enough to contain the excreta. Empty the containers into the trench and cover with the excavated soil. See Figure 4.
- 4. Wash all buckets, containers, scrapers, and shovels. Then wash your hands.

Inspecting the Bucket Latrine and **Trenching Ground**

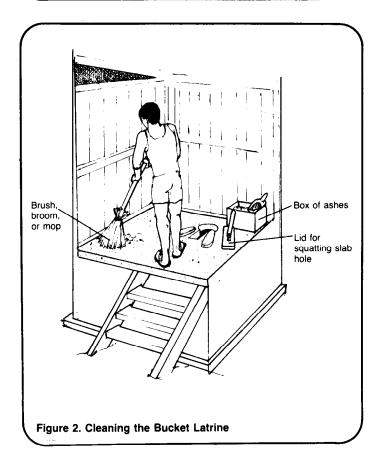
Once each month inspect the flyproof door. It should close tightly and completely cover the rear wall opening. Repair or replace it if necessary.

Inspect the base of the latrine for cracks and repair them with concrete mortar. Inspect the privy shelter and repair or replace damaged parts. Once each month inspect the trenching ground. Fill in with soil any eroded

Table 1. Sample Operations Materials List

I,tem	Description	Quantity	Estimated Cost
Labor	Foreman Laborers	1 3	
Supplies Tools, and Vehicles	Containers with lids (40-60 liters each) Scrapers with long handles Carts (hand-drawn) Showels Pairs of gloves Pairs of boots Brushes for cleaning Containers for soap and water Other		

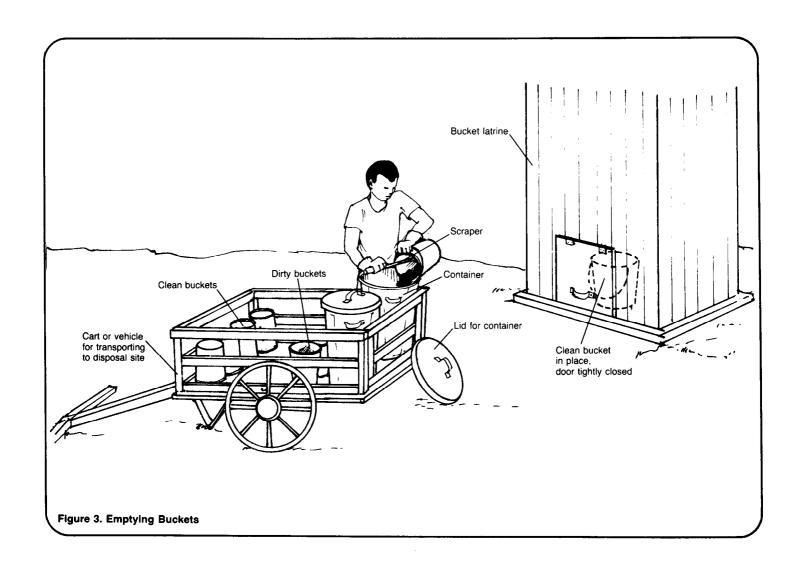
Total Estimated Cost =

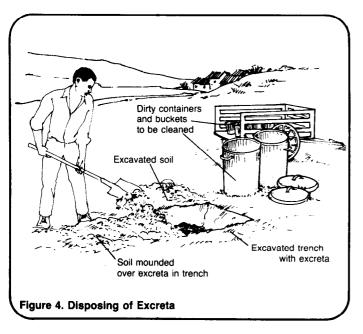


areas or holes made by burrowing animals. If burrowing animals are a constant problem, set traps or erect fences to keep them away.

Surface water should not be allowed to flow over the burial site. If necessary, divert water with shallow trenches or small dams.

Keep a maintenance record similar to Table 2 showing the dates of excreta collection and other related tasks.





e of reta lection disposal	Other Tasks
10/28/81	
10/30/81	Cleaned latrines.
11/1/81	
11/3/81	
11/5/81	
11/7/81	cleaned latrined.
	Inspected latrenia. Okay. Inspected
-	burial site - fieled in eroseon.
11/11/81	
11/13/81	Cleaned latrenes.
11/15/81	