

# HOW TO BUILD A SINGLE CHAMBER URINE DIVERTING TOILET

#### **HOW TO USE THE FLIPCHART**

- The flipchart is designed to stimulate interaction with community members. Encourage the audience to ask questions and make comments.
- 2. The questions in the text will help you to guide the discussion. Possible answers to these questions are included so that you can supplement the comments from the audience.
- 3. The flipchart is more effective when used with a small audience (15-25 persons). If you have more than 25 persons in a community, have two or more sessions.
- 4. Select a comfortable place and make sure everybody can see the illustrations very well.
- 5. Hold the flipchart straight. Talk loudly.
- 6. Demonstrate as much as possible
- 7. Have the audience summarise the major stages of the day's discussions.

#### **ILLUSTRATION 1**

Let us learn about how to build single chamber urine Diverting toilets in our households/communities

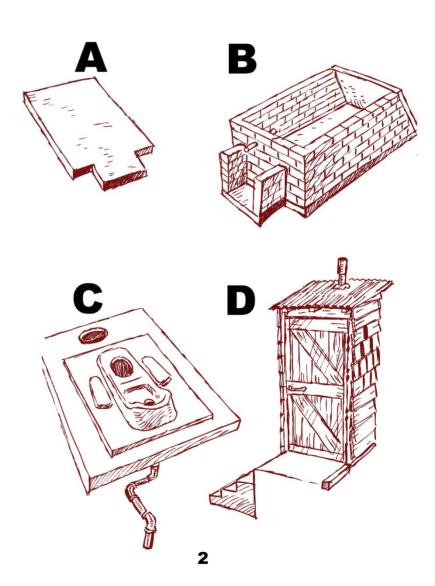
## The components of a single chamber urine diverting toilet

#### NOTE TO THE COMMUNITY OFFICER

- 1. Discuss the components of the single chamber urine diverting toilet
- 2. Discuss the steps in making the various components of toilet

#### **ANSWERS:**

- 1. Parts of the urine diverting toilet:
- A. The concrete base slab
- B. The brick chamber (vault) that houses the faeces
- The concrete latrine slab which fits on top of the chamber
- D. The toilet house (superstructure) which provides privacy and security
- 2. Steps in making the various components
- Make a concrete base slab on a level ground to form the base of the toilet
- Cast a concrete latrine slab off-site
- Cast holes in the latrine slab for the squat plate and the vent pipe
- Build a chamber preferably with fired/burnt bricks and mortar to house the bucket (faeces container)
- Make a chamber access slab to fit at the rear of the chamber
- Make a superstructure with relevant and affordable materials to offer privacy
- Make a hole in the roof for a ventilation pipe to pass through



Building the concrete base slab of a single chamber urine diverting toilet

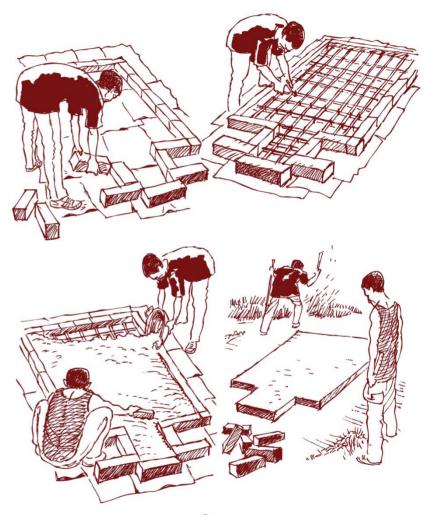
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#### NOTE TO THE COMMUNITY OFFICER

- 1. Explain the various steps in making the base slab
- 2. Demonstrate the various steps in making the base slab

#### **ANSWERS:**

- 1. Making the concrete base slab
- Make the slab of concrete (5 parts river sand to 1 cement or 3 parts river sand, 2 parts small stones and 1 part cement))
- Cast within a mould of bricks with dimension 1.35m long x 0.9m wide x 75mm deep
- Place steel reinforcing wires in the concrete and leave to cure for at least two days
- Lay the base slap on level ground to form the base of the toilet



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Building the latrine slab of a single chamber urine diverting toilet

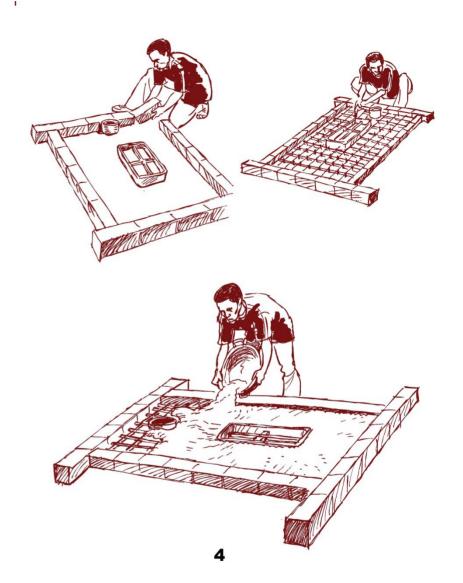
#### NOTE TO THE COMMUNITY OFFICER

- Explain the various steps in making the latrine slab
- 2. Demonstrate the various steps in making the latrine slab in a single vault urine diverting toilet

#### **ANSWERS:**

### 1. Making the latrine slab

- Cast off-site using the same method as for the base slab
- Make dimension of slab 1.2m long and 0.9m wide and 40mm deep
- Cast holes in the slab for both the squat plate and vent pipe



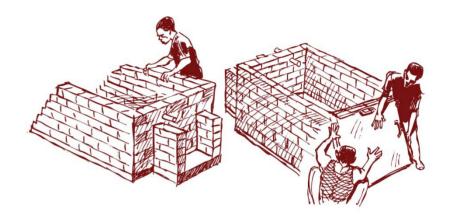
## How to build the chamber that houses the faeces

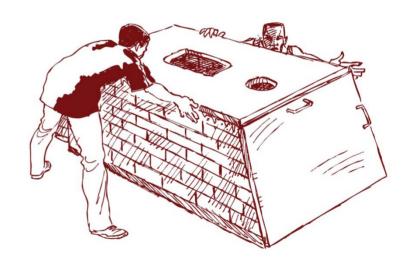
#### NOTE TO THE COMMUNITY OFFICER

- 1. Explain the various steps in making the chamber and fitting the concrete toilet slab on top of the chamber
- 2. Demonstrate the various steps in making the chamber in a single vault urine diverting toilet

#### **ANSWERS:**

- 1. Making the chamber
- Build chamber with fired (burnt) bricks and mortar to the required height on the base slab
- Build chamber about 40cm high if a 20litre bucket is used
- Make the chamber access slab and
- Place the concrete toilet slab on top of the chamber bonded with a cement mortar





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## Fixing the squat plate and the urine diverter

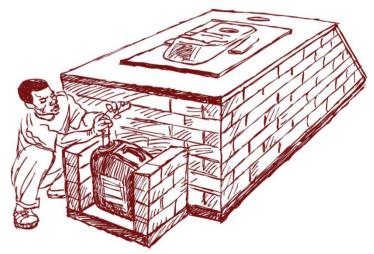
#### NOTE TO THE COMMUNITY OFFICER

- 1. Explain how the squat plate and the urine diverter are mounted
- 2. Demonstrate how the squat plate and the urine diverter are mounted

#### **ANSWERS:**

- 1. Fixing the squat plate and the urine diverter
- A squat plate is mounted on the holes cast in the concrete latrine slab
- A plastic elbow is fixed to the urine diverting outlet of the squat plate through which a plastic pipe directs the urine into a storage container





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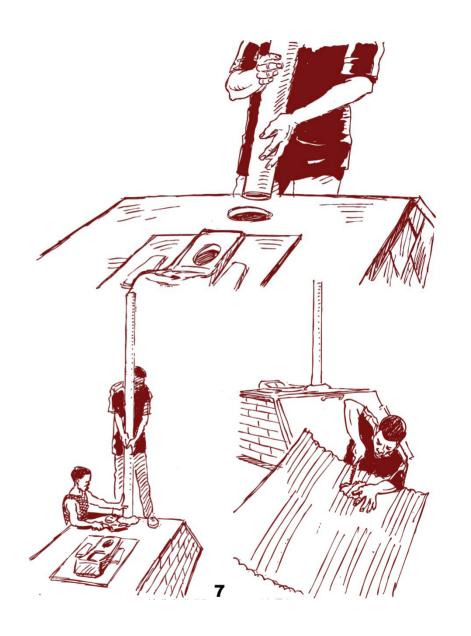
How to place the vent pipe within the single chamber urine diverting toilet

#### NOTE TO THE COMMUNITY OFFICER

- 1. Explain the various steps in placing the vent pipe in the structure
- 2. Demonstrate the various steps in placing the vent pipe in the structure

#### **ANSWERS:**

- 1. Placing the vent pipe
- Place the vent pipe through the vent hole cast in the concrete latrine slab
- Make a hole in the roof for the ventilation pipe to pass through



### How to build the superstructure

#### NOTE TO THE COMMUNITY OFFICER

- 1. Explain the various steps in making the superstructure
- 2. Demonstrate the various steps in making the superstructure

#### **ANSWERS:**

### 1. Making the superstructure

- Can be made from timber, bricks, metal sheeting, grass or any material that offers privacy
- Use suitable roofing materials such as galvanized corrugated iron, thatch or precast concrete
- Make a hole in the roof for the ventilation pipe to pass through
- Create openings through the structure to provide ventilation and light

