

How to Build a Sulabh Toilet ? for 10 users

(CONSTRUCTION GUIDE LINES)

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EAST SULABH TOILET ACTION PROGRAM
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TOILET LOCATION

Outside the House :

- 1) Locate the toilet close to the house.
- 2) Better if attached to one wall of the house.

Disadvantages of Outside Construction :

- Cost of toilet house is high (additional walls and roof needed).
- Difficult access during rains and night hours.
- More chance of outside people using the toilet.

Inside the House :

- 1) Select a convenient place in the ground or first floor for the toilet seat.
- 2) Pits can be outside or inside.

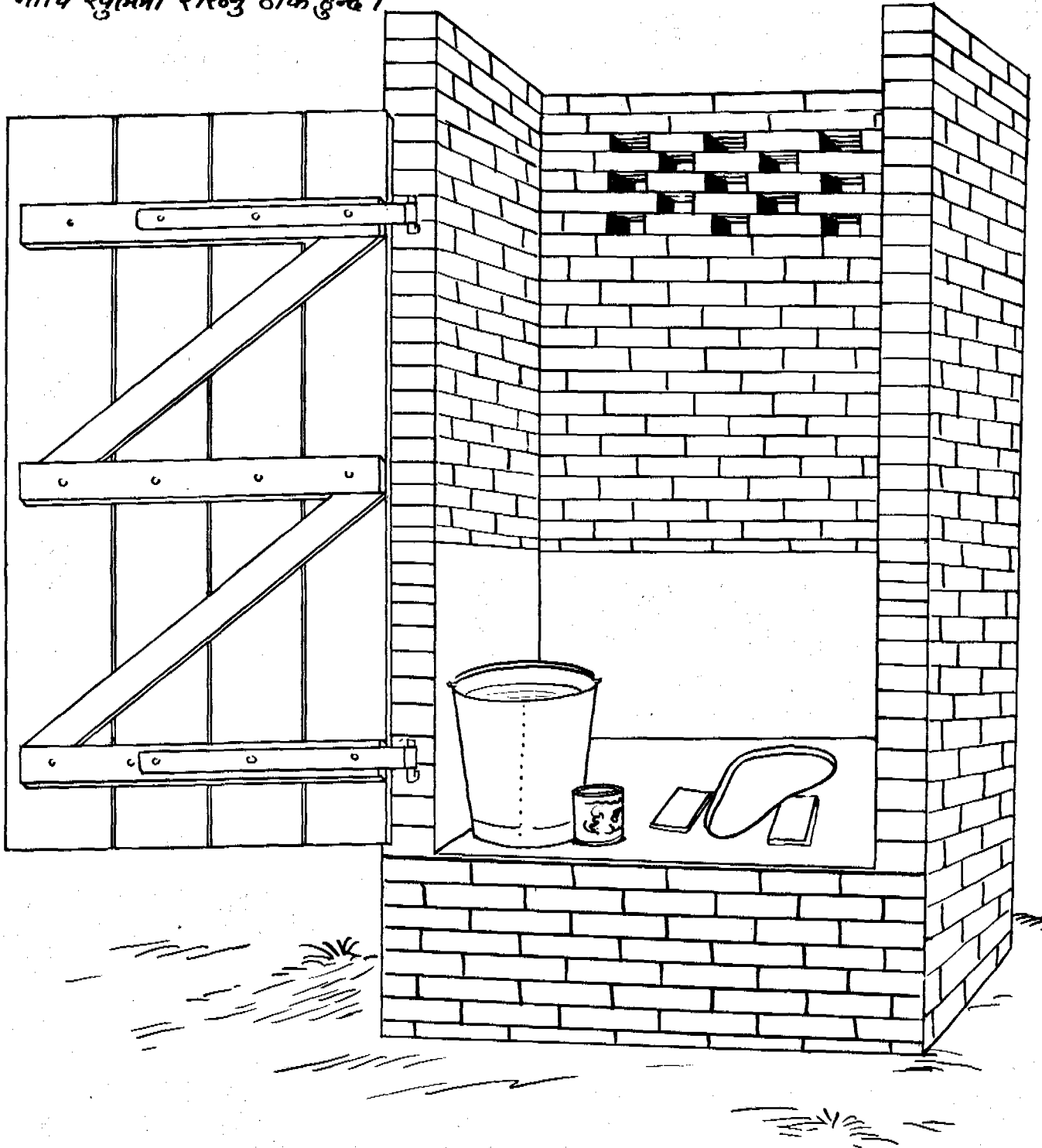
Advantages of Inside Construction :

- Cost of toilet house is low.
- No possibility of foul smell spreading inside the house.
- Easy access to toilet during rains and night hours.
- Convenient for kids, sick and old people.
- No possibility of outside people using the toilet.

Final selection should, however, be made with the help of a toilet promoter.

चर्पी घरको निर्माण

१. घरवालाको इच्छा अनुसार चर्पी घर बनाउन सकिन्छ।
२. चर्पीको ढोका चित्रमा देखाएको प्रकारको बनाएमा चौकोस खर्च बचनुको साथै बलियो पनि हुन्छ।
३. यस्तो ढोका हालनाले चर्पी भित्र उज्यालो जान ढोका माथि १२ देखि १५ इन्च-सम्म खुला राख्न सकिन्छ।
४. चर्पी भित्र बनाएमा चर्पी घरको खर्चमा झण्डै आधा जति बचत हुन्छ।
५. चर्पी घर बनाउँदा इटा, सिमेन्ट मसाला प्यानबाट भित्र खसेर चर्पी झक (बन्द) हुन सक्ने हुनाले, चर्पी घर बनाउनु अगाडि प्यानलाई बोरा अथवा कुनै झुप्रो कपडाले ढाँप्न नविर्सनासाथ अत्यन्त जरुरी छ।
६. चर्पीलाई सफा राख्न प्रशस्त उज्यालो चर्पीमा हुनु पर्छ त्यसैले गाह्रो वा ढोका माथि खुल्ना राख्नु ठीक हुन्छ।



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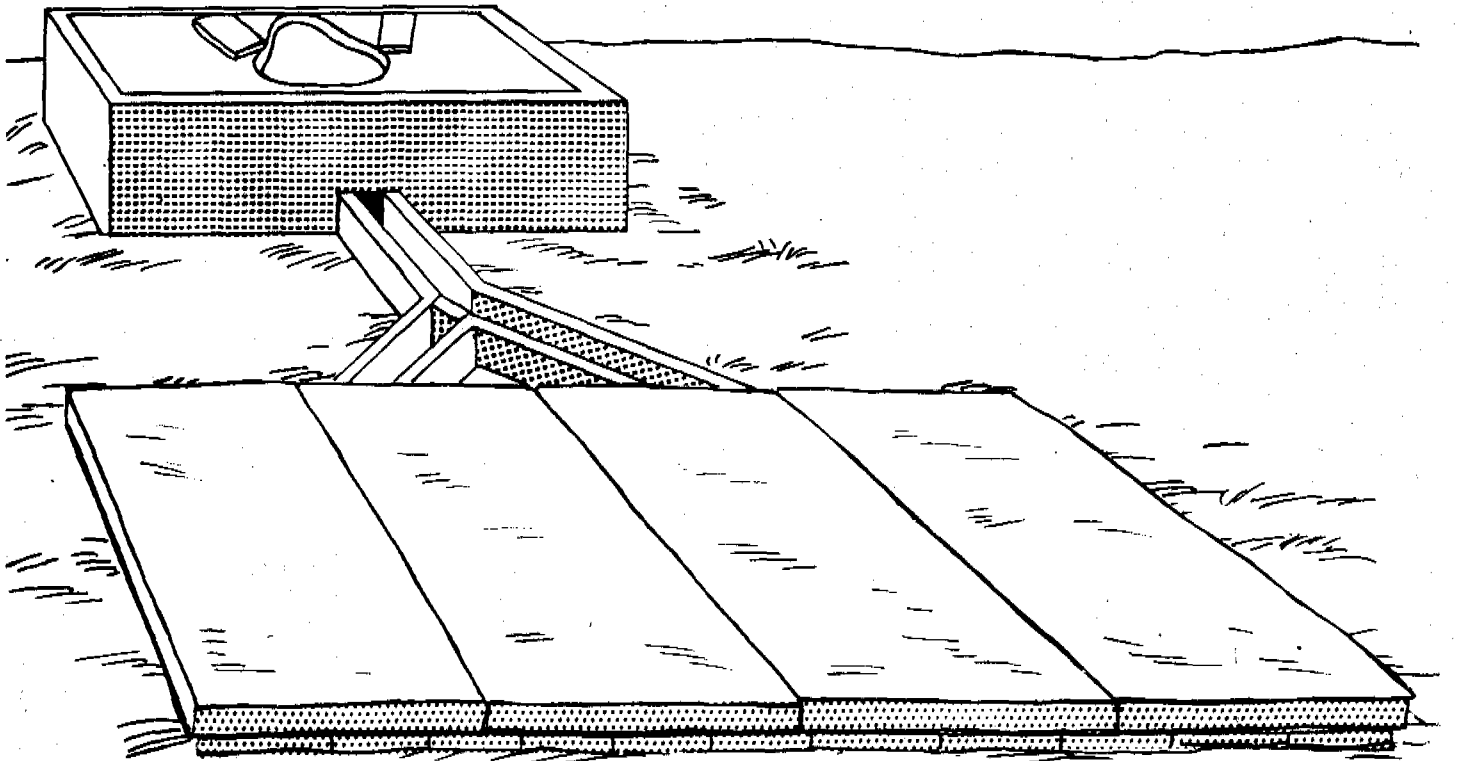
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TOILET HOUSE CONSTRUCTION

1. The toilet house can be made of any materials which the owner chooses.
2. The batten door shown is cheaper and more durable than a door with frame.
3. When you construct your toilet house, do not forget to cover the pan hole so that nothing drops into the water seal and clogs the toilet.
4. Make sure that enough light gets inside, either from above the door or through an opening left in the brick work.

रवाडलहरूलाई ढलान गरेका स्ल्याबले छोप्ने तरिका

१. १० दिनसम्म भिजाएर राखे पछि ढलान गरेका स्ल्याबहरूलाई विस्तारै उठाउने ।
२. तल पट्टीको (जमिन पट्टीको) स्ल्याबको सतहमा प्वाल वा उफ्केको ठाउँहरूमा १ भाग सिमेन्ट र २ भाग बालुवाको मसालाले प्लास्टर गर्ने ।
३. रवाडलको गाह्रोको वरिपरि १ इन्च मोटो गिलो माटो राखेर त्यस माथि स्ल्याबहरू एक एक वटा गरेर एक कुनादेखि छोप्दै ल्याउने । माटोले रवाडलबाट दुर्गन्ध बाहिर आउन दिदैन र स्ल्याब फ्रिक्न पनि सजिलो पर्छ ।
४. स्ल्याबको जोर्नीहरू १ भाग सिमेन्ट र १० भाग बालुवाको मसालाले जोड्ने ।



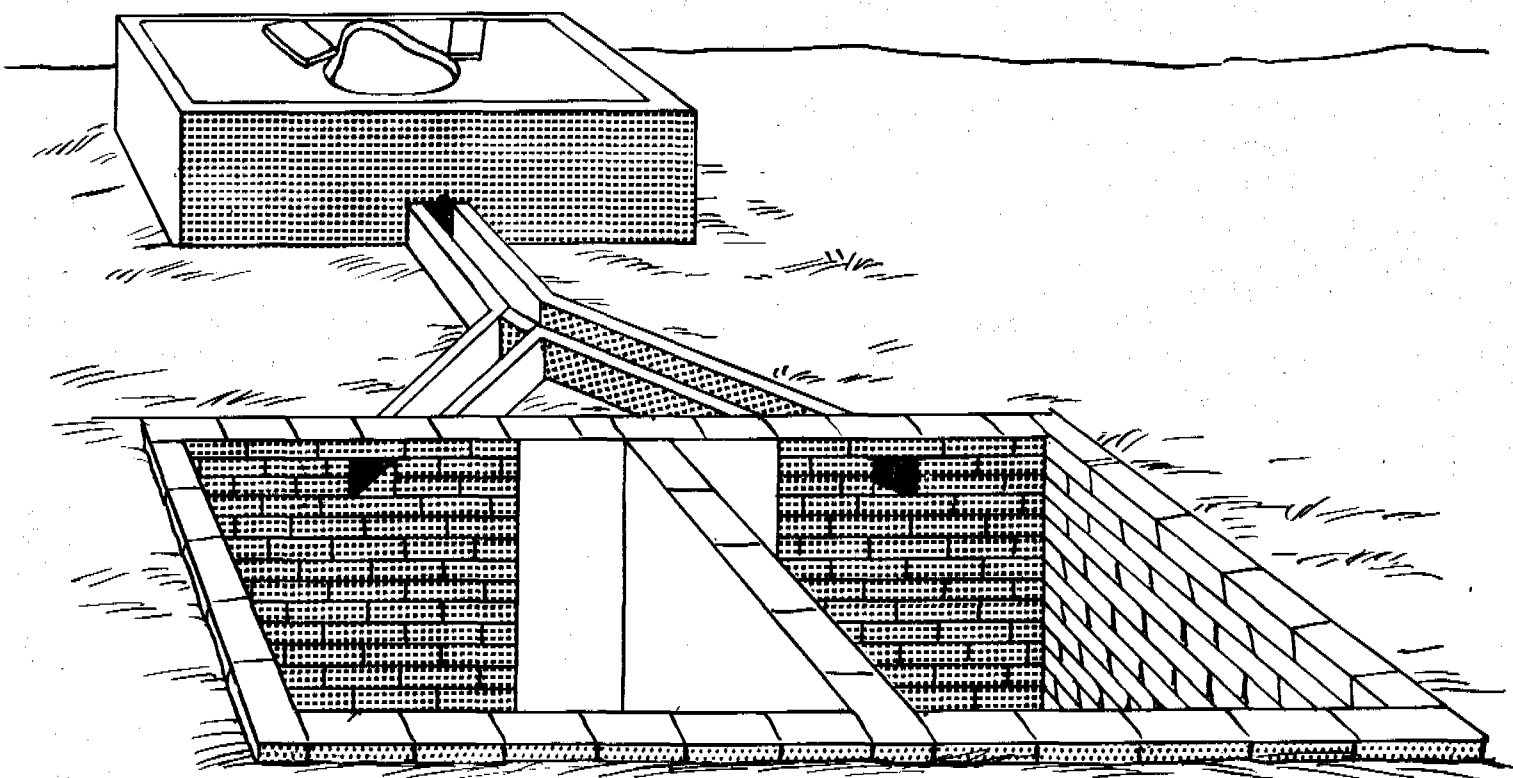
COVERING THE PITS WITH THE SLABS

1. After curing for 10 days, slowly lift the slabs and clean the back surface.
2. Plaster uneven surfaces and small pockets with mortar made of 1 part cement and 2 parts sand.
3. Before placing the slabs over the pits, put a 1" layer of mud on top of the pit walls. This will prevent foul gases in the pits from escaping.
4. Place the slabs tightly next to each other over the pit.
5. Fill the joints with either mud mortar or mortar made of 1 part cement and 10 parts sand.

अंग्रेजीको Y आकारको दिशा जाने ढल बनाउने तरिका

Y आकारको ढलले चर्पी घर र दिशा जम्मा हुने खाडलहरूलाई जोड्दछ। चर्पी-बाट दिशा परेवालेर पठाएपछि दिशा यही ढल भएर एक वर्षसम्म एउटा खाडलमा जान्छ र अर्को वर्ष अर्को खाडलमा पठाउन सकिन्छ।

1. ढल बनाउने ठाउँमा ६ इञ्च गहिरो र ८ इञ्च चौडा सोतो खाडल खन्ने।
2. ढलको दुई तिर अलिकति तेर्सो पारेर ठाडो ईटा सिमेन्ट मसालामा लगाउने।
3. ढलको आकार; माथि ४ इञ्च, तल ३ इञ्च र गहिरो ४ इञ्च हुनु पर्दछ।
3. ढलको भित्र पट्टी १ भाग सिमेन्ट ४ भाग मसिनो गरी ढानेको बालुवाको मसालाले प्लास्टर गर्ने र तल पट्टीको दुवै कुना बोटलले घिसेर गोलो पार्ने।
४. १ भाग सिमेन्ट र १० भाग बालुवाको मसाला र ईटाले ढललाई माथिबाट ढोप्ने।
५. ढलको Y आकारको जोर्नी माथि चाहीं गिलो माटो र ईटाको जोडले मात्र ढोप्ने, किनकी बर्ष बर्षमा ढल सार्न यो ढोपेको ईटा फिकी रहनु पर्ने हुन्छ।



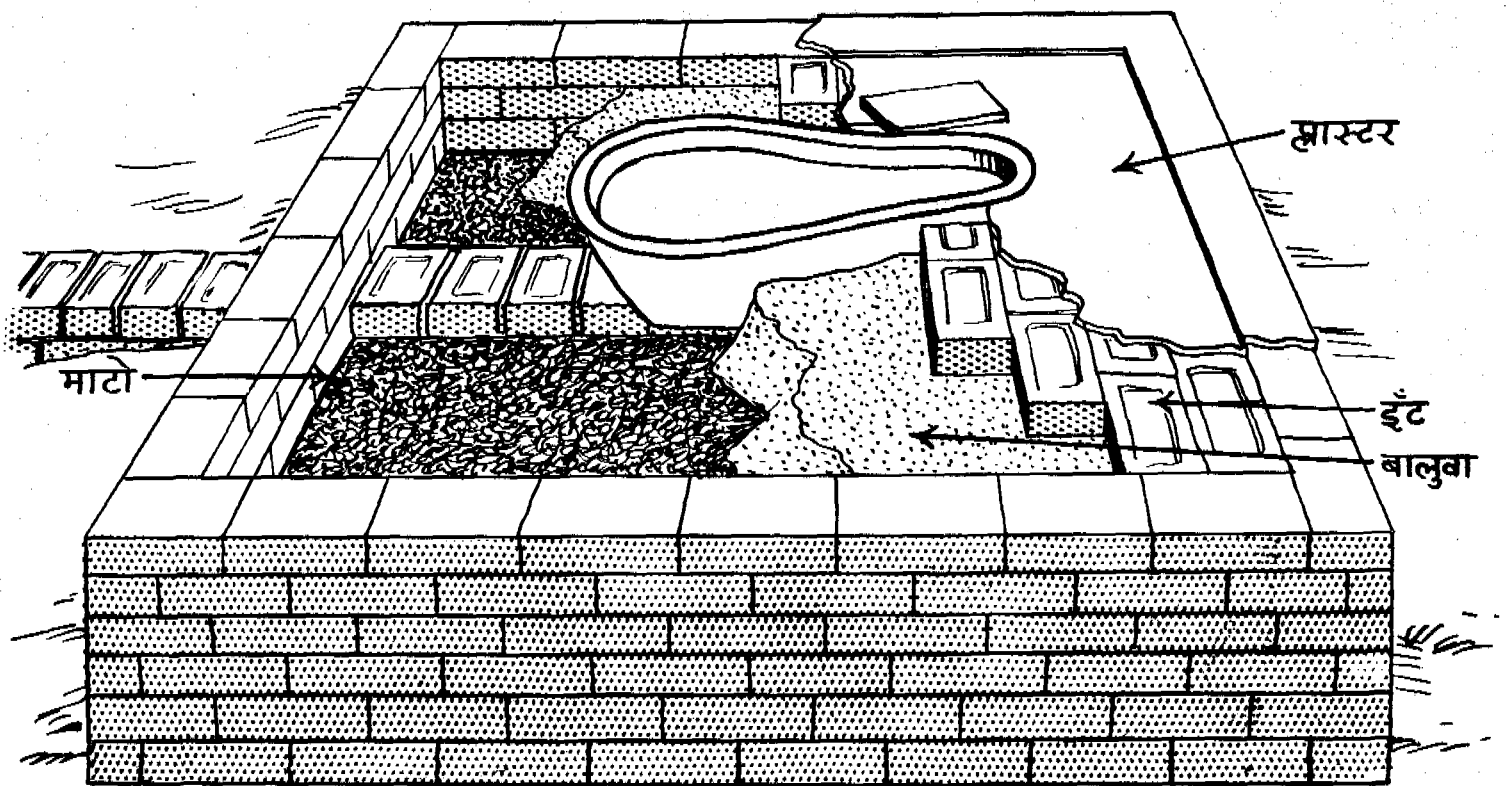
Y-SHAPED DRAIN CONSTRUCTION

The Y-shaped drain connects the squatting pan with the two composting pits. It sends the excreta to one pit during the first year and then to the other pit during the next year.

1. Dig a trench 6" deep and 8" wide along the center line of the Y-shaped drain.
2. Place the bricks on edge on both sides of the drain in an inclined position so that the drain is 5" wide at the top and 3" wide at the bottom.
3. Plaster the drain with mortar made of 1 part cement and 4 parts fine sand and round off the bottom corners with a glass bottle.
4. Cover the drain with bricks using mortar made of 1 part cement and 10 parts sand.
5. Just above the Y-junction, the bricks should be laid in mud mortar, so that it can be opened easily.

चर्पी घरको जग र दिसा बस्ने ठाउँ बनाउने तरिका

- १, ढलको भाग वाहेक वाटर-सिलको माथिल्लो लेवलसम्म माटोले पुर्ने।
- २, चर्पी घर भित्रको भागको ढललाई ईटाले राम्ररी ढोप्ने।
- ३, अब प्यानको माथिल्लो भागबाट ३ इच तलसम्म बालुवा भर्ने र बालुवामा २-३ बाल्टीन पानी हाल्ने।
- ४, भरेको बालुवालाई ईटाले ठोकेर सम्याउने र चित्रमा देखाए अनुसार इटा विछ्याउने र १ भाग सिमेन्ट र ६ भाग बालुवाको मसालाले ४ लाइन मोटो फ्लास्टर गर्ने र त्यस माथि एक भाग सिमेन्ट र १ भाग बालुवाको मसिनो छोत्ने। पाउदानलाई प्यानको दाँया बाँया पछार्डि पट्टी आलि उठ्ने गरेर चित्रमा देखाए जस्तो गरेर राख्ने र सिमेन्ट मसालाले जाम गर्ने।
- ५, २४ घण्टा जति पछि माथिको भाग र गाहोलाई थप २ दिन पानीले भिजाएर राख्ने।



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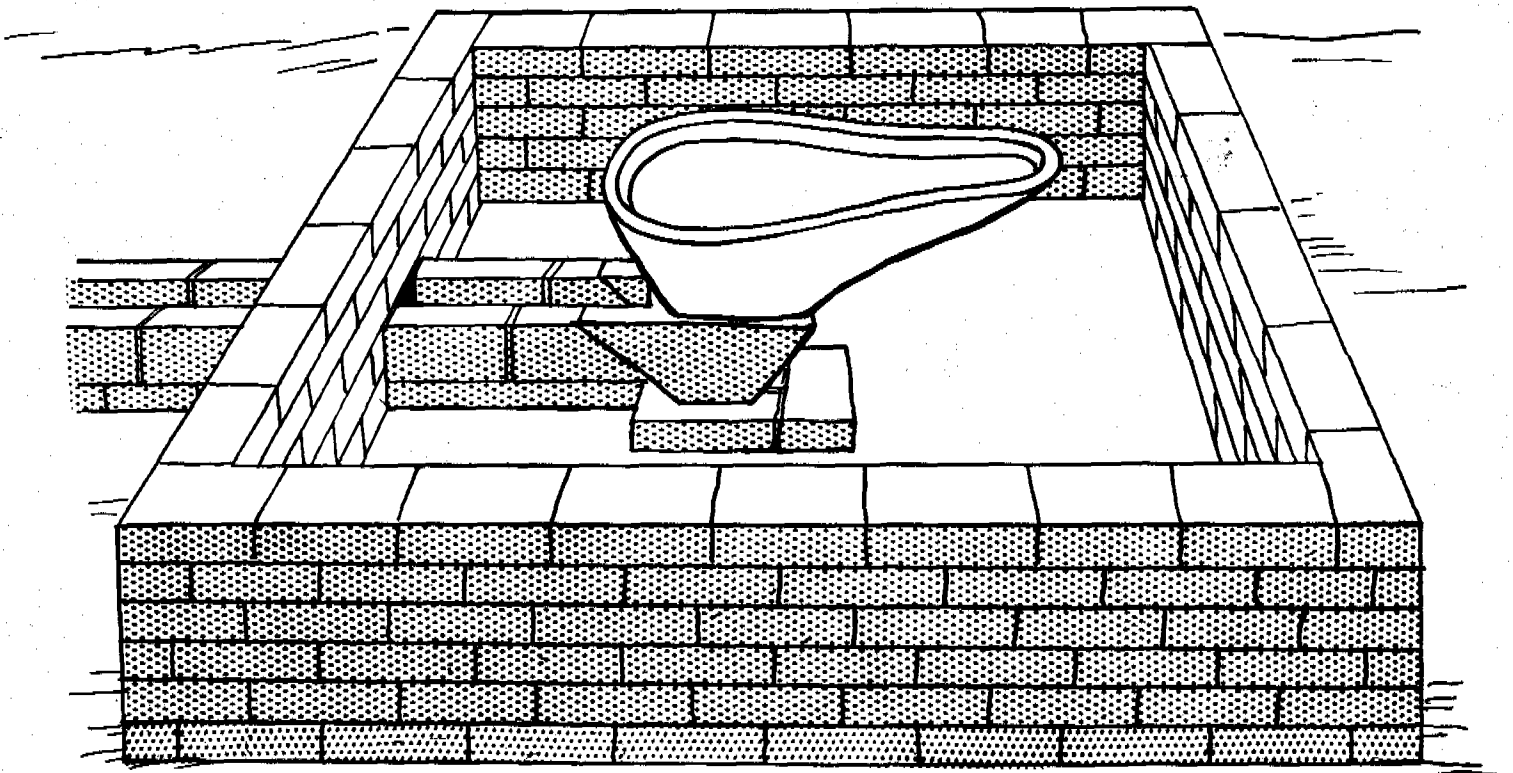
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MAKING THE TOILET PLATFORM

1. Except where the drain is, fill other parts of the platform with earth up to the top of the water seal and compact it.
2. Cover the top of the drain properly with bricks and cement mortar.
3. Then fill coarse sand until the sand level is 3" below the top surface of the squatting pan. Soak the sand with water.
4. Cover the whole platform with flat bricks and fill the joints with fine sand.
5. Plaster the top surface with $\frac{1}{2}$ " thick mortar made of 1 part cement and 6 parts sand.
6. Place the foot rests as shown and make a smooth cement finish with 1 part cement and 1 part sand. Raise the foot rest 1" at the heel.
7. After 24 hours, cure the top surface and walls with wet gunny bags for 2 days.

चर्पी घरको जग र दिसा बस्ने ठाउँ बनाउने तरिका

१. यो साढे चार फिट लामो र साढे तीन फिट चौडा बनाउनु पर्द। यसको लागि १ फुट चौडा र १ फुट गहिरो जग चारै तिर खन्ने।
२. १ भाग सिमेन्ट र ६ भाग बालुषाको मसाला बनाउने।
३. ४ सल ईटाको गाहो जमिन मुनि सिमेन्ट मसालामा लगाउने।
४. ६ सल ईटाको गाहो जमिन माथि सिमेन्ट मसाला लगाउने, खाडल तिर जाने ढलको लागि ठाउँ छोडी राख्नु पर्द।
५. चौडाई तर्फबाट ठीक बीचमा पर्ने गरी एउटा लेवल मिलाएको ईटा माथि 'सुलभ' वाटर-सिल राख्ने। लेवल मिले नमिलेको हेर्नलाई वाटर-सिलमा पानी भरेर हेर्नु पर्द।
६. प्यानलाई वाटर-सिल माथि (जता फर्काएर राखे पनि हुन्छ) मिलाएर राख्ने।
७. प्यान र वाटर-सिलको जोर्नी सिमेन्ट मसालाले राम्ररी जोड्ने।



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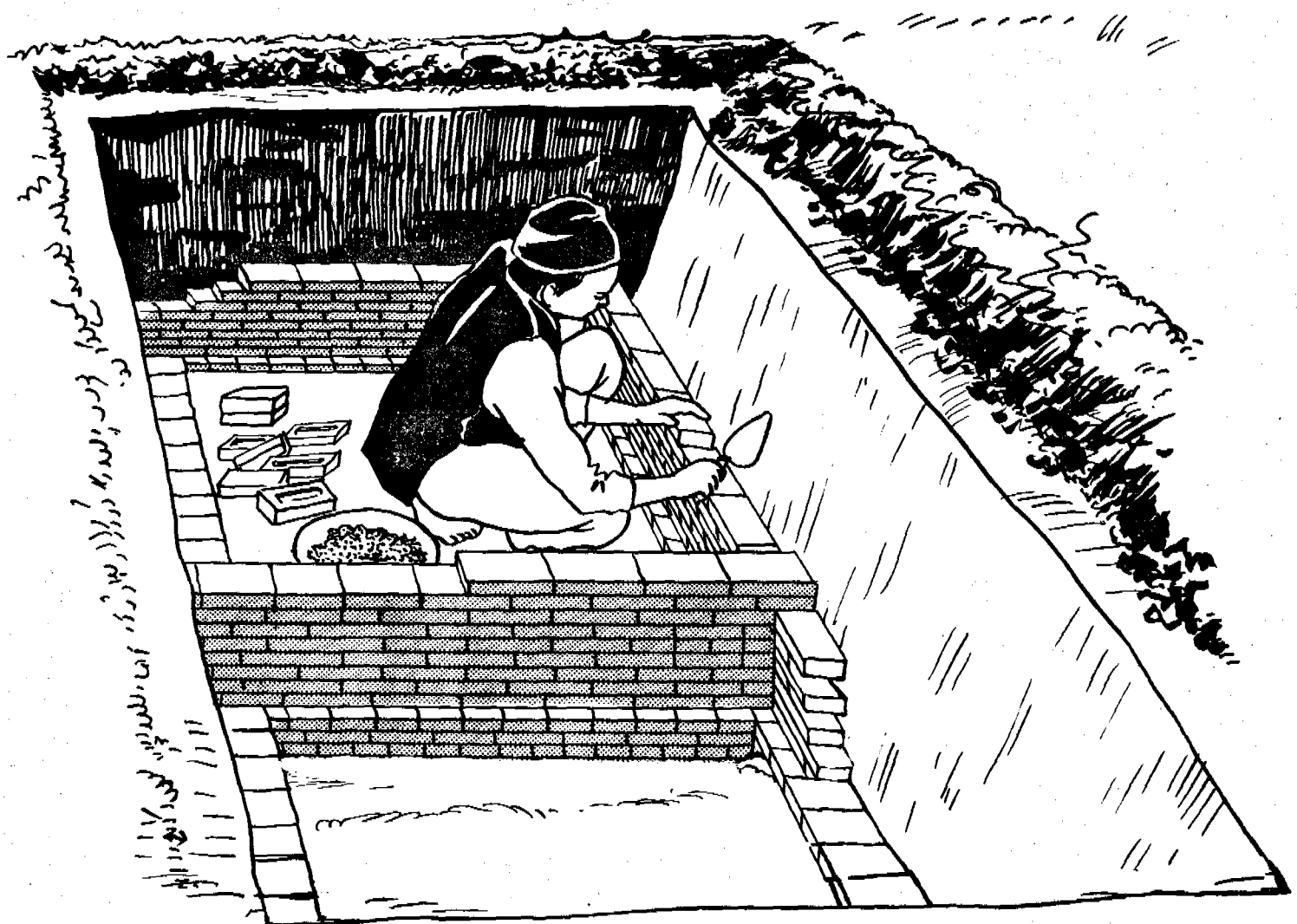
MAKING THE TOILET PLATFORM

Outside measurements of the toilet platform are 4'4" by 3'6".

1. Dig a trench for the foundation wall 1' deep and 1' wide.
2. Make the mortar of 1 part cement and 6 parts sand.
3. Lay 4 layers of bricks for the foundation. The wall is half-brick thick all around.
4. Lay 6 layers of bricks above the ground. Be sure that you leave an opening for the drain.
5. Place the "Sulabh" water seal on top of a brick base. The seal's opening should be towards the pits. Pour water in the water seal and see that there is at least 20 mm of water seal. Fix the water seal in this position.
6. Place the squatting pan on top of the seal. (See over.)
7. Seal properly the joint between pan and seal with cement mortar.

खाडल वरिपरी इटाको गाहो लगाउने

- १, बीचको गाहो (जस्ले खाडललाई बराबर दुई भागमा बाड्दछ), जमिन भन्दा ३ सल तलदेखि उठाउनु पर्ने भएकोले पहिले बनाउन शुरू गर्नु पर्छ।
- २, तल चित्रमा देखाए अनुसार खाडलको चारै तिरको गाहो (ईटाको गाहो) लगाउन शुरू गर्नु अगाडि, भुईमा ८ इञ्च चौडा ईटाको जग राख्ने र त्यस माथि ४ सल ईटाको गाहो, सिमेन्टको मसालामा लगाउने, त्यस पछि ६ सल गाहो (बीचको गाहो बाहेक) लगाउँदा, ठाडो जोर्नीमा सिमेन्ट मसाला नराख्ने र माथिको ४ सल फेरी पुरै सिमेन्ट मसालामा लगाउने।
- ३, बीचको गाहोमा दुबै तिर र १ फुट जति वर परको गाहोमा समेत (चित्रमा देखाए अनुसार) गरी १ भाग सिमेन्ट र ४ भाग बालुवाको ४ लाइन मोटो प्लास्टर गर्ने।
- ४, २ दिनसम्म गाहो र प्लास्टर गरेको ठाउँ पानीले भिजाएर राख्ने र प्लास्टर गरेको ठाउँमा एक भाग सिमेन्ट, एक भाग बालुवाको पातलो प्लास्टर गर्ने।
- ५, खाडल वरिपरी थुपारेर राखेको माटो गाहो बाहिर पट्टी हालेर ठोक्दै पुर्दै गर्ने।



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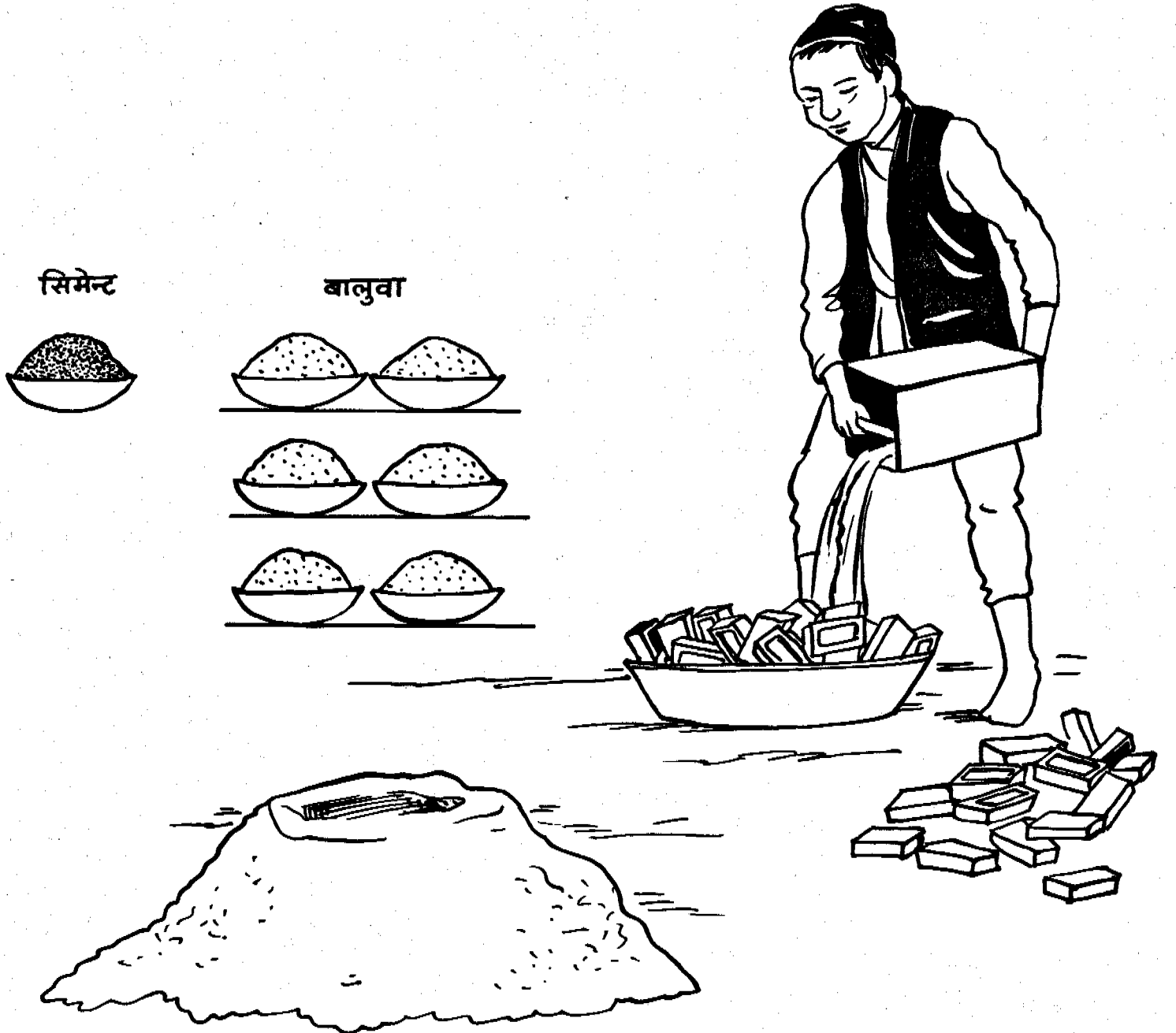
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PIT LINING WITH BRICKS

1. Start with the partition wall foundation since it is 3 layers of bricks deeper than the other walls.
2. Lay 1 layer, 8" wide, as base, all around the pits. All the following will be half-brick walls. On top of that, 4 layers of bricks are laid with full mortar joints. Then, the next 6 layers are laid with vertical joints open except the partition wall which is built with full mortar joints. The top 4 layers are again laid with full mortar joints.
3. Cure the brick-work for two days with wet gunny bags.
4. Plaster the partition wall on both sides with mortar made of 1 part cement and 4 parts sand. Also plaster the pit walls 12" wide on either side of the partition wall. Give a neat cement coat over the plaster.
5. Refill the excavated soil layer by layer and compact it.

सिमेन्ट बालुवाको मसाला बनाउने तरिका

१. जमिन सफा पार्ने । चित्रमा देखाए अनुसार एक भाग सिमेन्ट & भाग बालुवा मिसाउने।
२. राम्ररी मिसाएपछि विस्तारै पानी हाल्दै मुद्दै जाने ।
३. चित्रमा देखाए अनुसार सकेसम्म नफुटेको इटाहरूलाई पानीमा राम्ररी भिजाएर राख्ने ।



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MAKING MORTAR FOR PIT LINING

1. Soak the bricks fully in water. Use whole bricks as far as possible.
2. Clean the ground. Mix 1 part of cement and 6 parts of sand.
3. Cement and sand are thoroughly mixed dry; then start adding water until you get a workable mortar.

खाडल खन्ने

1. चर्पीको खाडल बनाउन रोजेको ठाउँमा, साढे सात फिट लम्बा र साढे तीन फिट चौडा चिनो लगाएर खन्न थाल्ने।
2. खाडल साढे तीन फिट गहिरो खन्ने।
3. खन्दा निक्लेको माटो खाडल वरिपरी नै राख्ने, ताकि इटाको गाह्रो लगाई सकेपछि बाहिर पट्टी पुर्न सजिलो होस्।



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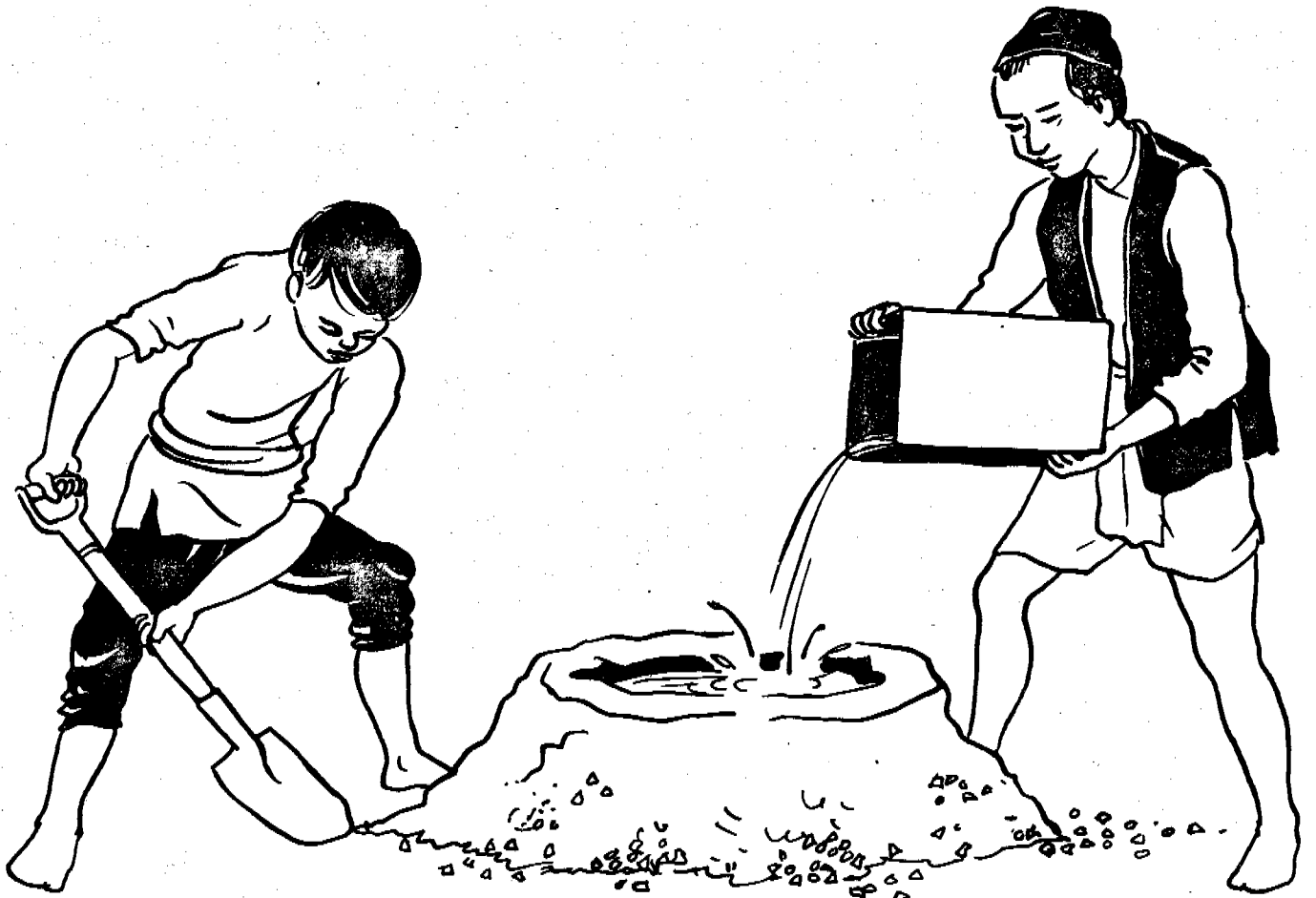
DIGGING THE PITS

1. At the selected site for the toilet pits, mark 7'6" by 3'6" on the ground for excavation.
2. Dig the pit 3'6" deep.
3. Put the excavated earth all around the pit. This will be needed later for re-filling the sides.

स्ल्याब बनाउने तरिका

एक, दुई, चारको कंकृत बनाउने तरिका तल दिइन्छ ।

१. कंकृत मुहने ठाउँ सफा पार्ने र सम्याउने ।
२. पहिले १ बोरा सिमेन्ट र दुई बोरा बालुवा अलि अलि गरी सुरबवा अवस्था मै राम्ररी (हेर्दा ए नै रंग नआउन्जेलसम्म) मिसाउने ।
३. यस्तो सिमेन्ट र बालुवाको सुरबवा मसालालाई ४ बोरा गिट्टीको थुप्रो माथि विस्तारै फिजाउने र कम्तीमा ३ पटकसम्म उल्टो पाल्टो पारेर राम्ररी मिसाउने ।
४. सिमेन्ट, बालुवा र गिट्टीको सुरबवा मसालामा तल चित्रमा देखाए अनुसार जवसम्म राम्रो कंकृत बन्दैन, पानी हाल्दै मुह्दै पानी हाल्दै मुह्दै गर्ने ।
५. यसरी राम्ररी मुहको कंकृतलाई फर्माँमा राखेर माथिल्लो भाग काठको मुड्गोले विस्तार विस्तार ठोक्ने । यसरी ठोक्दा माथि पट्टी सिमेन्ट देखिन थालेपछि ज्यावलले सम्म बनाउने ।
६. ढलान गरेको २४ घण्टा जति पछि स्ल्याबलाई भिजेको जुट बोरा वा चिसो परालले छोपेर कम्तीमा १० दिनसम्म दिन दिनै पानीले भिजाएर राख्ने ।



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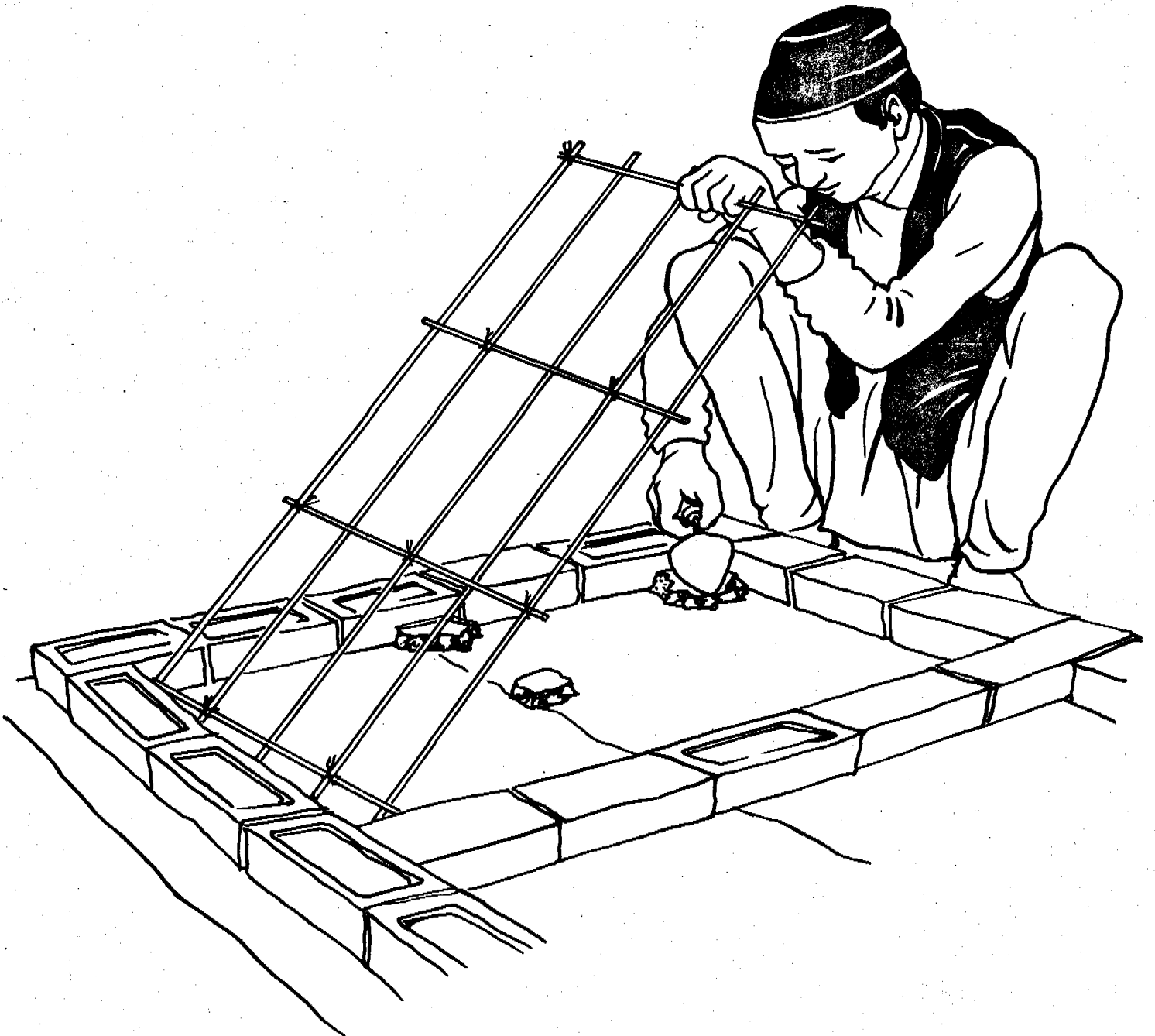
REINFORCED CONCRETE SLABS

To make concrete of 1 part cement, 2 parts sand and 4 parts gravel or crushed stones :

1. Clean the ground and make a smooth surface.
2. Mix dry 1 bag cement with 2 bags of sand thoroughly to give an even colour.
3. Spread this dry cement-sand mix over the gravel heap and mix by turning it over at least three times, still dry.
4. Slowly add water and continue mixing until you get a thick workable concrete mix.
5. Pour the concrete into the reinforcing frame slowly. Tamp it sufficiently, so that the top surface becomes smooth and the cement starts bleeding. Make the top surface smooth by troweling.
6. After 24 hours, start curing the slabs and continue curing for at least 10 days.

स्ट्याब बनाउने तरिका

- १, नाप बमोजिमको डण्डीहरू काट्ने र तल चित्रमा देखाए अनुसार लम्वाई तर्फ ५ वटा र चौडाई तर्फ ४ वटा डण्डी राखेर तारले फसेर बाँध्ने। हुक बनाउनु पर्दैन।
- २, चारै कुनामा र बीचमा अन्दाजी १ इञ्चको कंक्रेट राखी त्यस माथि डण्डीको फ्रेमलाई राख्ने।



2

2

REINFORCED CONCRETE SLABS

1. Make the reinforcing frame as shown on the other side of this page. Place 5 bars along the long side and 4 bars cross-wise. Tie them firmly with binding wires. No hooks at the ends of the bars are necessary. However, place two 6" long bars in each corner, as shown on the other side of this page.
2. Place the reinforcing frame 1" above the ground. This can be done by placing concrete patches 1" thick at the corners and in the middle.

स्त्याब ढलान कसरी गर्ने ?

चर्पी बनाउने ठाउँ रोजी सके पछि र चर्पी निर्माण गर्नु भन्दा हप्ता दिन अगाडि स्त्याब ढलान गर्नु पर्छ।

१. स्त्याब ढलान गर्न निम्न वमोजिमको सामानहरू जुटाउनु होस्।

- ५० केजीको सिमेन्ट १ बोरा
- बालुवा ३ बोरा
- गिट्टी ५ बोरा
- ढड (२ लाइनको) ६ केजी (२ फुट ९ इञ्च लामो २० वटा) र (१ फुट ६ इञ्च लामो १६ वटा)

- ढड बाध्ने मसिनो तार

- पोलिथिन सिट वा सिमेन्टको खाली बोराहरू

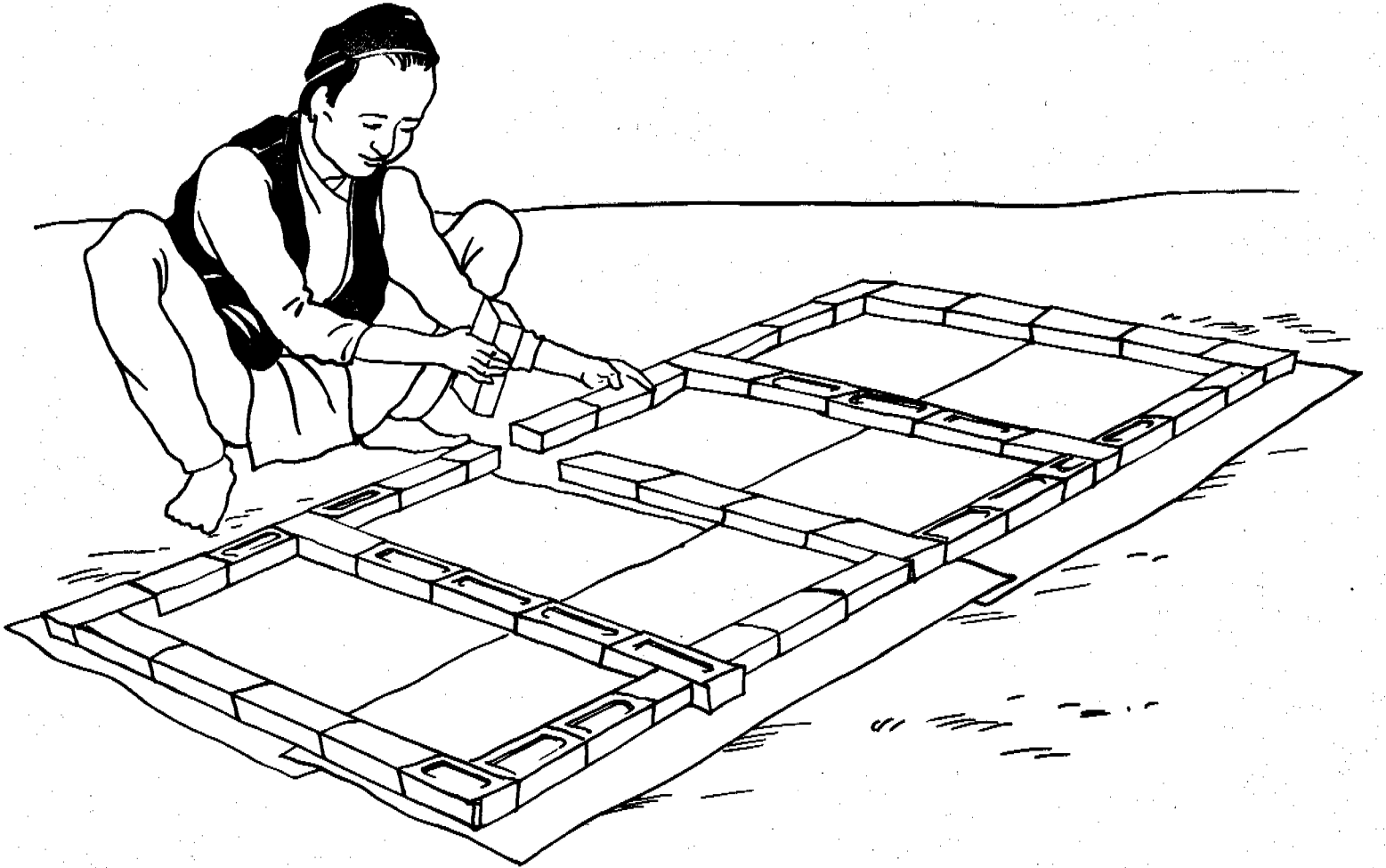
- जुट बोरा वा पराल इत्यादी

- सावेल, डण्डी काट्ने सामान, कराही, बाल्टीन इत्यादी

२. स्त्याब ढलान गर्ने ठाउँ घर भित्र ढिंडी इत्यादी चिसो घाम नलाग्ने ठाउँ हुनु पर्छ।

३. जमिनलाई ठोकेर सम्म पार्ने र त्यस माथि पोलिथिन सिट वा सिमेन्टको बोराहरू विह्याउने।

४. तल चित्रमा देखाए अनुसार ईटाको फर्मा बनाउने, ४ वटा स्त्याब, प्रत्येक २१ इञ्च चौडाई र ३६ इञ्च लम्वाईको बनाउनु पर्छ।



REINFORCED CONCRETE SLABS

Choose the site of the toilet with the help of a toilet promoter. You will need 4 slabs, each 36" long, 21" wide, and 2½" thick.

Cast these slabs in the shade, one week before the toilet construction.

1. Assemble the following materials:

- | | |
|--|---|
| * Cement (50 kg. bag) | 1 bag |
| * Sand | 3 bags, 3 cu.ft. |
| * Gravel or crushed stones | 5 bags, 5 cu.ft. |
| * Iron rods 6 mm size | 6 kg.: 20 main bars,
2'9" long; 16 cross-
bars, 1'6" long |
| * Binding wire | |
| * Plastic sheets or empty cement paper bags | |
| * Bricks to put around the slabs | |
| * Gunny bags or straw mats for curing the slabs. | |

2. Ram the ground and make it level and smooth.

3. Spread the plastic sheet or empty paper bags on the ground.

4. Place bricks all around so that you get the right size for your slabs.

USE OF THE TOILET

1. The toilet is now ready for use. Everyone in the house should use the toilet, including young children and old family members.
2. Use shoes when you enter the toilet.
3. Remember, using a toilet is good for your own health. Stop defecating outside.
4. Put a bucket full of water and a small flushing container (3-4 liters) inside the toilet.
5. After use, flush the toilet. Never allow excreta to remain in the squatting pan or in the water seal.
6. Clean your hands with soap after defecation.
7. Very old, sick people and infants should be allowed to defecate in a squatting bowl. Then the contents should be flushed down the toilet.
8. If you lock the toilet, children might start to defecate again in the open.

चर्पीको उचित प्रयोग

१. तपाईंको चर्पी अब तैयार भैसकेकोछ। यसलाई प्रयोगमा ल्याउनुहोस्। परिवारका सबै साना केटा केटी तथा बृद्धजनले समेत चर्पी प्रयोग गर्नुहोस्।
२. चर्पी भित्र जाँदा सकेसम्म जुत्ता लगाएर जाने बानी बसाल्नुहोस्।
३. तपाईंलाई थाहानै होला, चर्पी प्रयोग गर्नाले तपाईं तथा तपाईंका घर-हिमेकी सबैलाई फाइदा हुनेछ, बाहिर दिसा गर्ने बानी छोडी दिनुहोस्।
४. चर्पी भित्र एक बाल्टिन पानी र एउटा ठिक्को दिसा धुने भाँडो (द्वारक) राख्न नबिर्सनुस्।
५. दिसा बसीसकेपछि पानीले चर्पी सफा गर्नु पर्छ। प्यानमा र वाटर-सिल-मा फोहर जम्मा हुन नदिनु होला।
६. दिसा गरीसकेपछि साबुनले हात धुने गर्नु होस्।
७. चर्पीमा तात्घा मारी राख्नाले बच्चाहरू फेरी बाहिर जहाँतहीं दिसा गर्न थाल्नेछन्।
८. एकदमै साना केटा केटी, बिरामी तथा अशक्त बुढा बुढी जो चर्पी-सम्म पनि जान सक्दैनन्, तिनलाई कोपामा दिसा गर्न लगाउने र कोपराको दिसा चर्पीमै हाली बगाई दिने गर्नुहोस्। कोपराको दिसा यताउति फाल्नाले चर्पी भएको कुनै फाइदा हुँदैन।

MAINTENANCE OF THE TOILET

1. The best way to keep the toilet pan clean is to brush it once every day with 3 to 4 handfuls of kitchen ash with a locally made broom. The use of ash will kill pathogens and enrich the manure composted in your toilet pit.
2. Use the broom for cleaning the pan only, not for the floor. The excreta of sick people will make other people sick. So if excreta of sick people are on the broom and you brush the floor, you might become sick.
3. Every year during the driest season (April or May) open the unused pit and take out the compost. Use it as manure and soil conditioner.
4. Now open the Y-shaped drain and turn the brick so that the excreta will flow to the emptied pit.
5. Replace the cover slab and seal the joints again with mud or cement/sand mortar to prevent a foul smell coming out.

In this way, your 'Sulabh' toilet can function for many years without any trouble.

चर्पीको सफाई र मलको प्रयोग

- १, तपाईंको चर्पी सफा राख्न, दिनको एक पटक फुर्सतको बेला ३-४ सुठी भान्साको खरानी चर्पीको प्यानमा हाल्नुहोस् र एउटा साधारण लट्टीमा कपडा वा जुटले बेरेर लुँडो बनाउनुहोस् र त्यसैले मलेर प्यान सफा पार्नुहोस्। खरानीले प्यान सफा गरेपछि र खाडलमा जम्मा भएको दिसालाई किटानु रहित राम्रो उत्पादक कृषि मलमा परिणत गर्न सहायता गर्छ।
- २, लुँडोले प्यान भित्र मात्र सफा गर्ने गर्नुहोस्, किनकी यसमा दिसा लागेको हुन सक्छ र यसलाई चर्पी भित्र एउटा फुनामा राख्नुहोस्।
- ३, प्रत्येक वर्ष सुरक्षा याममा भनी बैशाखको अन्त वा जेठको शुरू तिर प्रयोग नभएको खाडलको मल तपाईं आफैले निकाल्न सक्नु हुनेछ किनकी यो विलकूल दुर्गन्ध रहित कालो रंगको, फिटानु रहित तथा उत्पादक मलमा परिणत भै सकेको हुन्छ।
- ४, Y आकारको ढल खोली, ढलको विकास खालि भएको खाडलमा तिर सारी दिने।
- ५, खोलेको स्ल्याब राम्ररी बन्द गरी दिनुहोस् र जोर्नीहरू राम्ररी माटो वा खस्रो सिमेन्ट मसालाले टाली दिनुहोस्।

माथि उल्लेखित किसीमले चर्पीको सफाई र मल भिकी प्रयोग गर्ने बानी बसाल्नु भए तपाईंको सुलभ चर्पी बर्षौं बर्षसम्म विना कुनै समस्या चालू राख्न सकिन्छ।

CONSTRUCTION MATERIALS

- Cement (50 kg per bag)	3 bags
- Bricks (8" long; 4" wide, 2" thick)	1000
- Iron rods (6 mm size)	6 kg or 25 m long
- Sand	30 bags or cu. ft.
- Gravel or crushed stones	5 bags or cu. ft.
- Low-volume water seal	1
- Squatting pan	1
- Foot rests	1

Squatting pans and low-volume water seals are available in different materials, shapes and sizes in Kathmandu. The cost, July 1984, is as follows:

- Mosaic pan + foot rest	Rs. 62.00
- Concrete 'Sulabh' type water seal	Rs. 36.00
- Fibreglass pan and water seal	Rs.200.00
- China clay (Indian made) pan and foot rest	Rs.280.00

LABOUR REQUIREMENT

- Supervisor	1	1 day
- Skilled mason	2	2 days
- Unskilled workers	3	2 days

चर्पी बनाउन लाग्ने निर्माण सामग्रीहरू

- सिमेन्ट ५० केजीको ----- ३ बोरा
- ईट (८ इन्च लामो, ४ इन्च चौडा, २ इन्च मोटो) -- १००० वटा
- छड (२ लाइनको) ----- ६ केजी वा जम्मा ८० फिट लम्बाई
- बालुवा ----- ३० क्यू. फि. वा बोरा (१ क्यू. फि. बराबर १ बोरा)
- गिट्टी ----- ५ क्यू. फि. वा बोरा (१ क्यू. फि. बराबर १ बोरा)
- प्यान, वाटर-सिल र फुट रेस्ट ::- १ सेट

विभिन्न प्रकारका प्यान, वाटर-सिल र फुट रेस्ट (पाउदान) बजारमा निम्न दर भाउमा उपलब्ध छन्।

- मोज्याक गरेको प्यान, फुट रेस्ट र सिमेन्टको वाटर-सिल १ सेटको रू. ५८/=
- फाइबर ग्लास प्यान र वाटर-सिल (विना फुट रेस्टको) १ सेटको रू. २००/=
- चिनिया माटोको प्यान र फुट रेस्ट १ सेटको रू. २८०/=

लाग्ने ज्यामी

- १ जवान सुपर भाइजर ----- १ दिन
- २ जवान सिपालु दकमी ----- २ दिन
- २ जवान ज्यामी ----- ३ दिन

चित्र प्रयोग गर्ने तरिका:

१. कसको कसको सभै देखा काठको चित्र माथि नले गरी छुईमा हुईहोस् ।
२. निर्माण गर्ने क्रममा यी चित्रका कसको सिलसिला फिरेर जाउनु पर्छ पछि लगाउन कोशिस गर्नुहोस् ।
३. यही काठको पछाडी पट्टी लेखिका तस्को क्रमसग मिल्छ मिल्दैन दाखुहोस् ।

यस निर्माण निर्देशिका सम्बन्धी कुनै सुझाव/सल्लाह कृपया तलको ठेगानामा लेखी पठाउनु होला:

सामुदायिक विकास शाखा
भक्तपुर विकास परियोजना
पो. ब. नं. ७३०
काठमाडौं, फोन: २-१३२३५

शौचालय निर्माण सम्बन्धी कुनै समस्या/बाधा/परेशानी कृपया तलको ठेगानामा लेखी राख्नु होला:

इष्ट सुलभ वर्षी सकृय कार्यक्रम
इष्ट्याम
पो. ब. नं. ११६२
काठमाडौं, फोन: ४-१३२६७

USE OF PICTURE CARDS:

1. THROW THE WHITE CARDS ON THE GROUND, PICTURES UPWARDS.
2. FIND OUT IN WHICH ORDER THE CARDS SHOULD COME FOLLOWING THE CONSTRUCTION PROCESS.
3. THEN COMPARE WITH THE NUMBERS ON THE BACK SIDE OF THE CARDS.

IF YOU HAVE ANY SUGGESTIONS ON THE CONSTRUCTION GUIDELINES PLEASE WRITE TO:

COMMUNITY DEVELOPMENT UNIT
BHAKTAPUR DEVELOPMENT PROJECT
P. O. Box 730
KATHMANDU, PHONE: 2-13235

IF YOU HAVE ANY PROBLEMS WITH THE CONSTRUCTION OF YOUR LATRINE, PLEASE CONTACT:

EAST SULABH TOILET ACTION PROGRAM
EASTAP
P. O. Box 1192
KATHMANDU, PHONE: 4-13267

चर्पी बनाउने उपयुक्त ठाउँ

घर बाहिर बनाएमा

1. सकेसम्म घरको नगिचै राख्ने।
2. घरको बाहिर पट्टी तर घरमै जोडेर राख्नु वेश हुन्छ।

बेफाइदाहरू

1. चर्पी घर बाहिर बनाउँदा खर्च बढ्दछ (दाना र पर्यालहरूको खर्च थप पर्दछ)।
2. वर्षातमा, जाडो मौसममा तथा राति अंधारोमा चर्पी जान कठिनाई पर्दछ।
3. ताल्चा नलगाए घर बाहिरका मानिसले चर्पी प्रयोग गरी दिन सक्छन्।
4. ताल्चा लगाउने गरे घरका साना केटाकेटीहरू ताल्चा खोल्ने भ्रंभटले चर्पी बाहिर वरिपरी दिसा गर्न थाल्छन्।

घर भित्र बनाएमा

1. भुईँ तल्लामा सजिलो पायक पर्ने ठाउँ रोज्नुहोस्, नभए एक तल्ला माथि पनि यो चर्पी राख्न सकिन्छ।

फाइदाहरू

1. चर्पी घरको खर्चमा निकै बचत हुन्छ।
2. वाटर-सिल भएको चर्पी हुनाले घर भित्र दुर्गन्ध फैलिएला भन्ने चिन्ता लिई राख्नु पर्दैन।
3. दिसा जम्मा हुने खाडलहरू घर बाहिर वा ठाउँ भए भित्र पनि बनाउन सकिन्छ।
4. वर्षात, जाडो मौसम तथा राति अंधारोमा पनि चर्पी जान कुनै कठिनाई पर्दैन।
5. केटाकेटी, अशक्त बुढाबुढीलाई र विरामीलाई पनि उपयोग गर्न सजिलो पर्छ।
6. बाहिरका मानिसले चर्पी प्रयोग गरी देलान् भन्ने डर हुँदैन।

- घर भित्र वा घर बाहिर जहाँ बनाए पनि चर्पी भित्र प्रशस्त उज्यालो आउने गरी भित्ता र ढोका माथि खुला ठाउँ छोड्न लगाउनुहोस्।

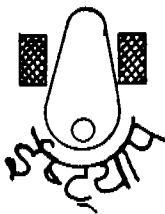
- चर्पी बनाउने उपयुक्त ठाउँ रोज्दा र अन्तिम निर्णय गर्दा यस्ता चर्पी बनाई सकेका अनुभवी व्यक्ति वा संस्थानको राय लिनु बेश हुनेछ।

शुलभ चर्पी कक्षर्ण बनाउने ?

(१० जवानको निजी प्रयोगको लागि)



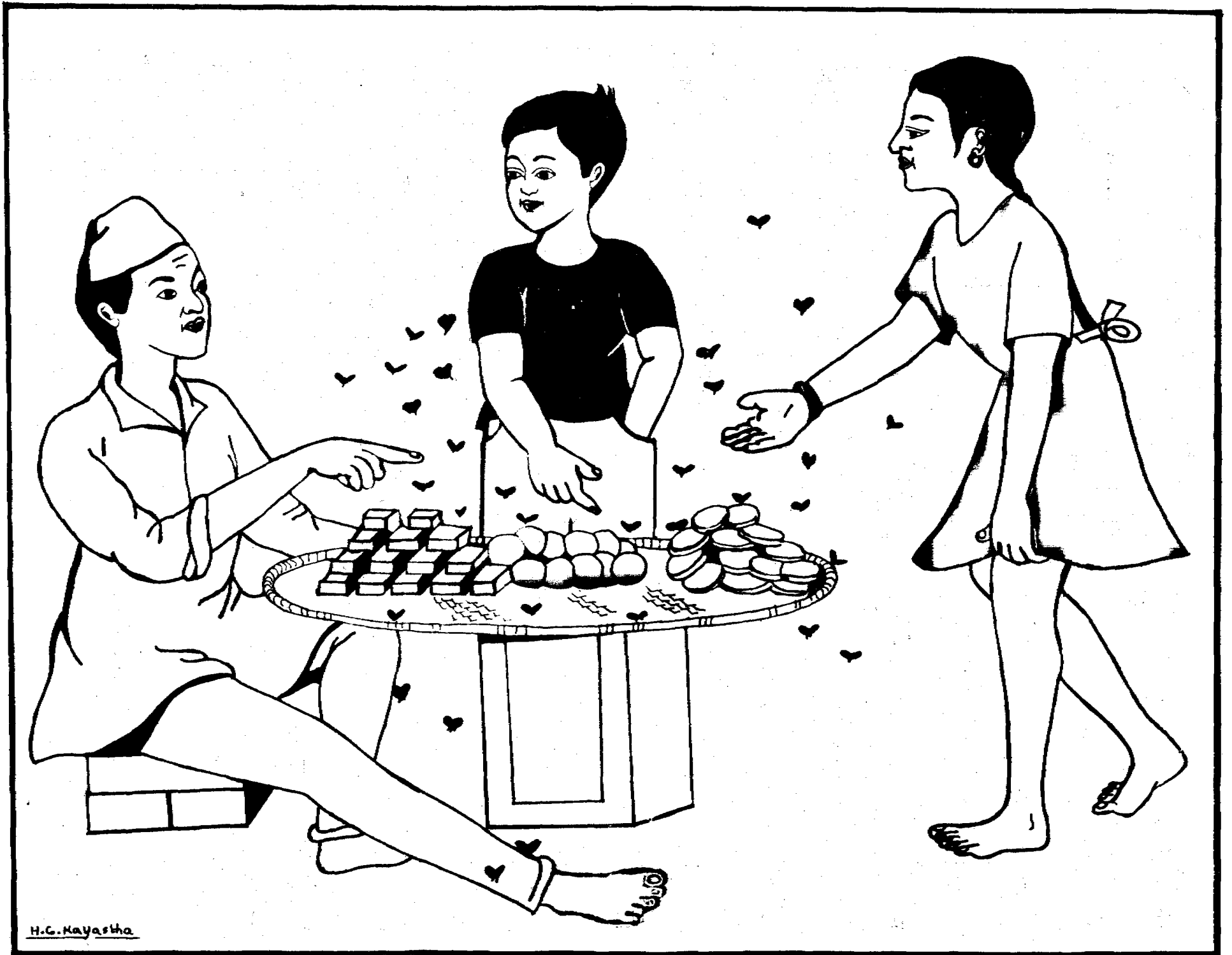
(निर्माण गर्ने सरल विधि)
तयार गर्ने



इष्ट्याप
ईष्ट शुलभ चर्पी सकृय कार्यक्रम
पो.ब.नं. ११२२
काठमाडौं। फोन ४-१३२६७

सामुदायिक विकाश शाखा
मक्तपुर विकाश परियोजना
पो.ब.नं. ७३०
काठमाडौं

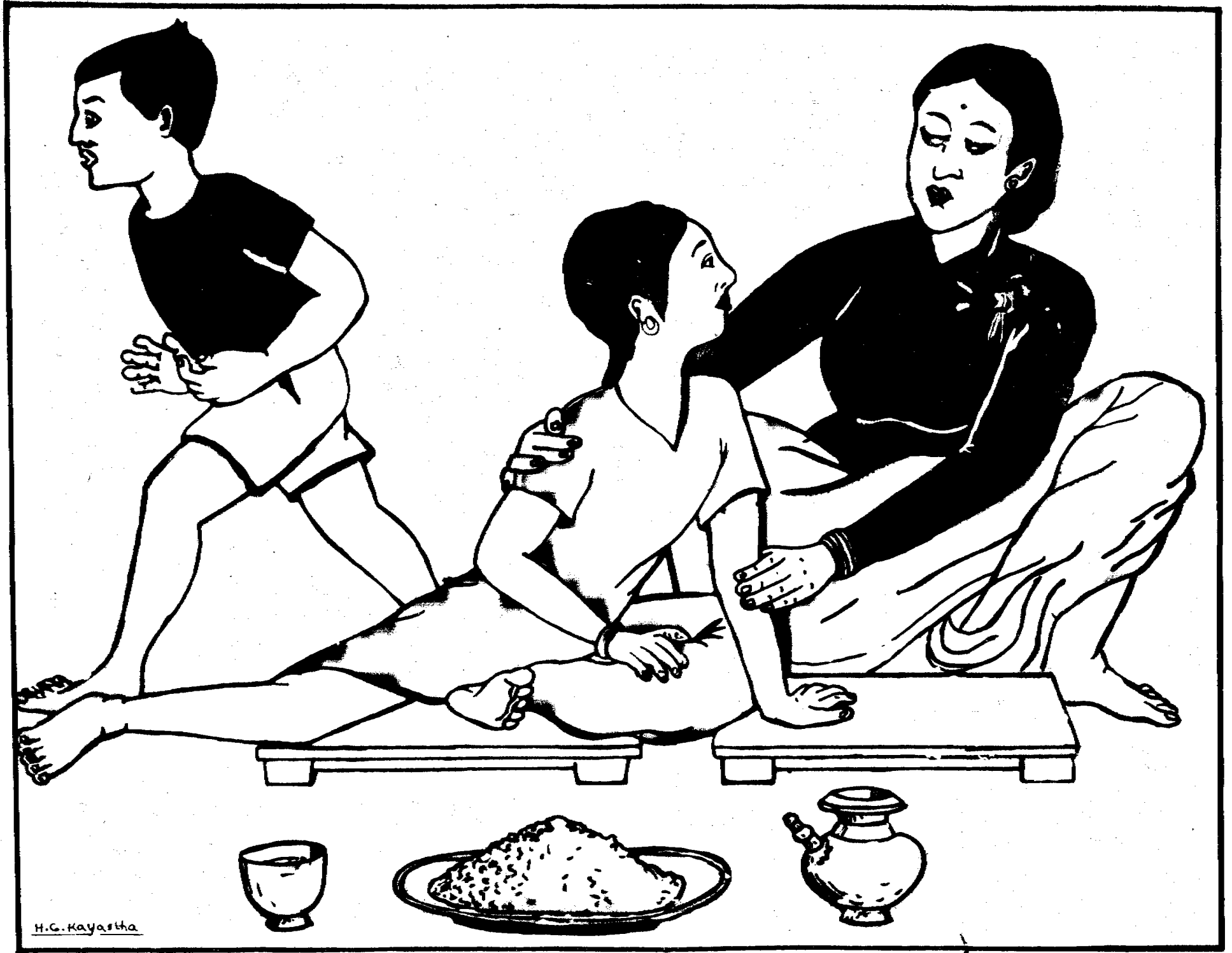
श्रावण २०४१



H.C. Nayasha

कार्ड १ प्ररु केटाकेटीहरु जस्तै गीता र राम पनि मिठाई मन पराउँछन् । एक दिन उनीहरुको मामाले दुबैलाई पचास पचास पैसा दिए । तुरुन्तै ती दुबै एउटा मिठाई पसलमा मिठाई किन्न गए । पसलमा मिठाईहरु छोपेर राखेको थिएन र त्यहाँ थुप्रै सिगाहरु भन्को रहेका थिए ।

CARD 1. LIKE ALL CHILDREN, GITA AND RAM ARE FOND OF SWEETS. ONE DAY THEIR UNCLE GAVE THEM 50 PAISA EACH. THEY IMMEDIATELY WENT TO A SHOP TO BUY SWEETS. THE SWEETS IN THE SHOP WERE NOT COVERED AND THERE WERE MANY FLIES ON THEM.



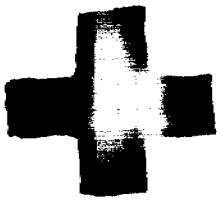
H.C. Kayastha

कार्ड २

भोलिपल्ट आमाले तिनीहरूलाई भात खान बोलाइन । गीता र राम दुबैले भात खान इच्छा गरेनन । ती दुबैलाई पखाला लागेको थियो । उनीहरूले नपचेको खाने कुरा र सिंगान जस्तो पातलो दिशा गरे । गीतालाई साह्रै पेट दुख्यो । राम पनि कमजोर र बिरामी भयो । उनीहरूको आमाले दुबैलाई डाक्टर कहाँ लाने निधो गरिन ।

CARD 2.

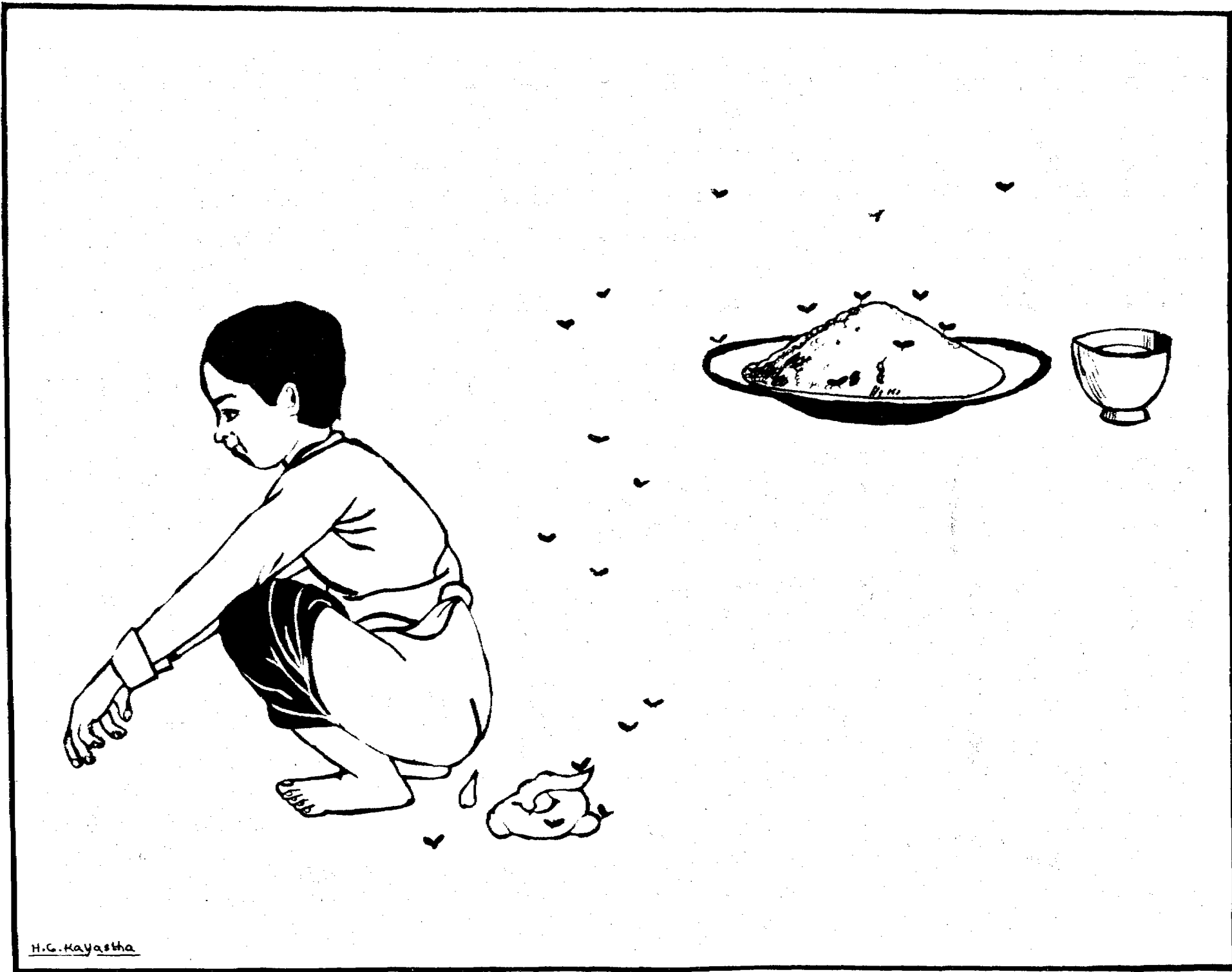
THE NEXT DAY WHEN THEIR MOTHER CALLED THEM FOR LUNCH, GITA AND RAM DID NOT WANT TO EAT. THEY WERE BOTH SUFFERING FROM DIARRHOEA. THEIR STOOL WAS VERY LOOSE WITH MUCUS AND UNDIGESTED FOOD. GITA HAD SEVERE ABDOMINAL CRAMPS. RAM ALSO WAS WEAK AND SICK. SO THEIR MOTHER DECIDED TO TAKE THE CHILDREN TO THE DOCTOR.



H.G. Kaya

कार्ड ३ डाक्टरले रामको दिसा किटाणु पत्ता लगाउने शक्तिशाली यन्त्रले जांच्यो । त्यसमा आंखाले देख्न नसकिने ज्यादै साना साना किटाणुहरू देखिए । ती किटाणुहरूले गर्दा नै पखाला लागेको हो । डाक्टरले राम र गीतालाई औषधी पानी (जिवन-जल) र अन्य औषधीहरू दिए । उसले पखाला कसरी फैलिन्छ र परिवारमा यसको रोकथाम कसरी गर्नुपर्छ भन्ने कुरा बताए ।

CARD 3. THE DOCTOR EXAMINED A SAMPLE OF RAM'S LOOSE STOOL UNDER A POWERFUL GLASS. IT CONTAINED VERY SMALL ORGANISMS, OR GERMS, WHICH CAN NOT BE SEEN BY THE NAKED EYE. THOSE SMALL ORGANISMS ARE THE CAUSE OF DIARRHOEA. THE DOCTOR GAVE SPECIAL MEDICINE (JEEVAN JAL & OTHER MEDICINE) TO RAM AND GITA. HE ALSO EXPLAINED HOW DIARRHOEA IS SPREAD AND HOW SIMPLE PRECAUTION CAN BE TAKEN TO PREVENT DIARRHOEA IN THE FAMILY.

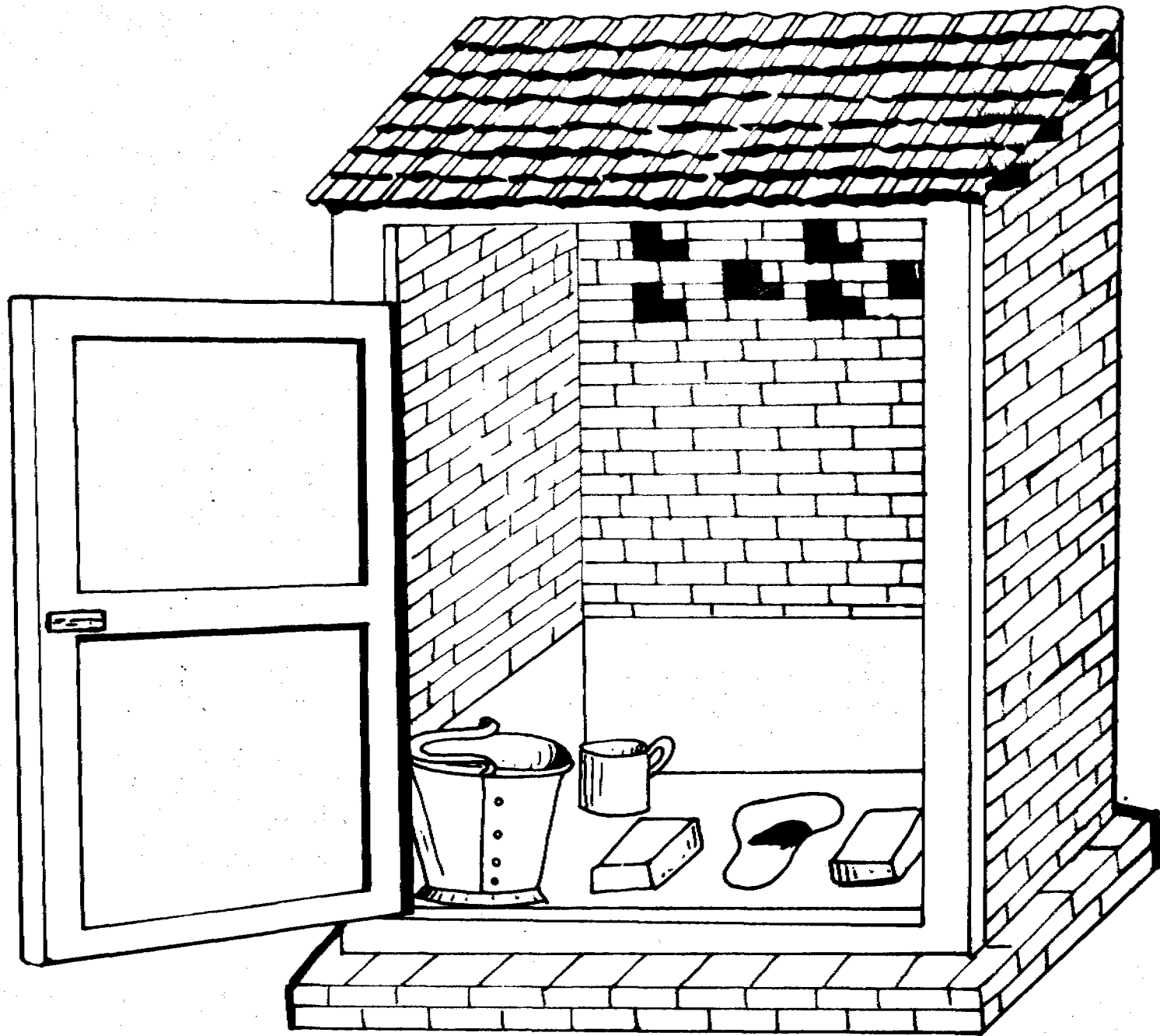


H.C. Kayastha

कार्ड ४ बिरामीको बिसामा पखालाको किटाणुहरू हुन्छन् जसले पखाला लाग्छ । झिगा बिरामीको बिसामा बसेर जब हाँस्रो खानामा बस्छ, त्यसबेला त्यसको खुट्टामा टाँस्सीएको ती ज्यादै साना किटाणुहरू हाम्रो खानामा सर्दछ । त्यस्तो खाने कुरा खाएको केही समयपछि हामीलाई पखाला लाग्छ र हामीहरू बिरामी हुन्छौं । झिगाबाट यसरी फैलिने रोगको रोकथाम गर्नको लागि सबभन्दा राम्रो उपाय चर्पी बनाउनु र यसको प्रयोग गर्नु नै हो ।

CARD 4. THE STOOL OF PEOPLE WHO ARE SICK CONTAINS THE GERMS WHICH CAUSE DIARRHOEA. WHEN FLIES SIT ON THE STOOL OF A SICK PERSON AND THEN FLY TO THE FOOD WE EAT, THEY CARRY THOSE VERY SMALL GERMS WITH THEM ON THEIR LEGS FROM THE STOOL TO THE FOOD. AFTER WE HAVE EATEN THAT CONTAMINATED FOOD, WE MAY BECOME SICK WITH THE SAME DISEASE WITHIN A SHORT PERIOD.

THE BEST WAY TO PREVENT FLIES FROM SPREADING DISEASES IS TO BUILD AND USE A LATRINE.



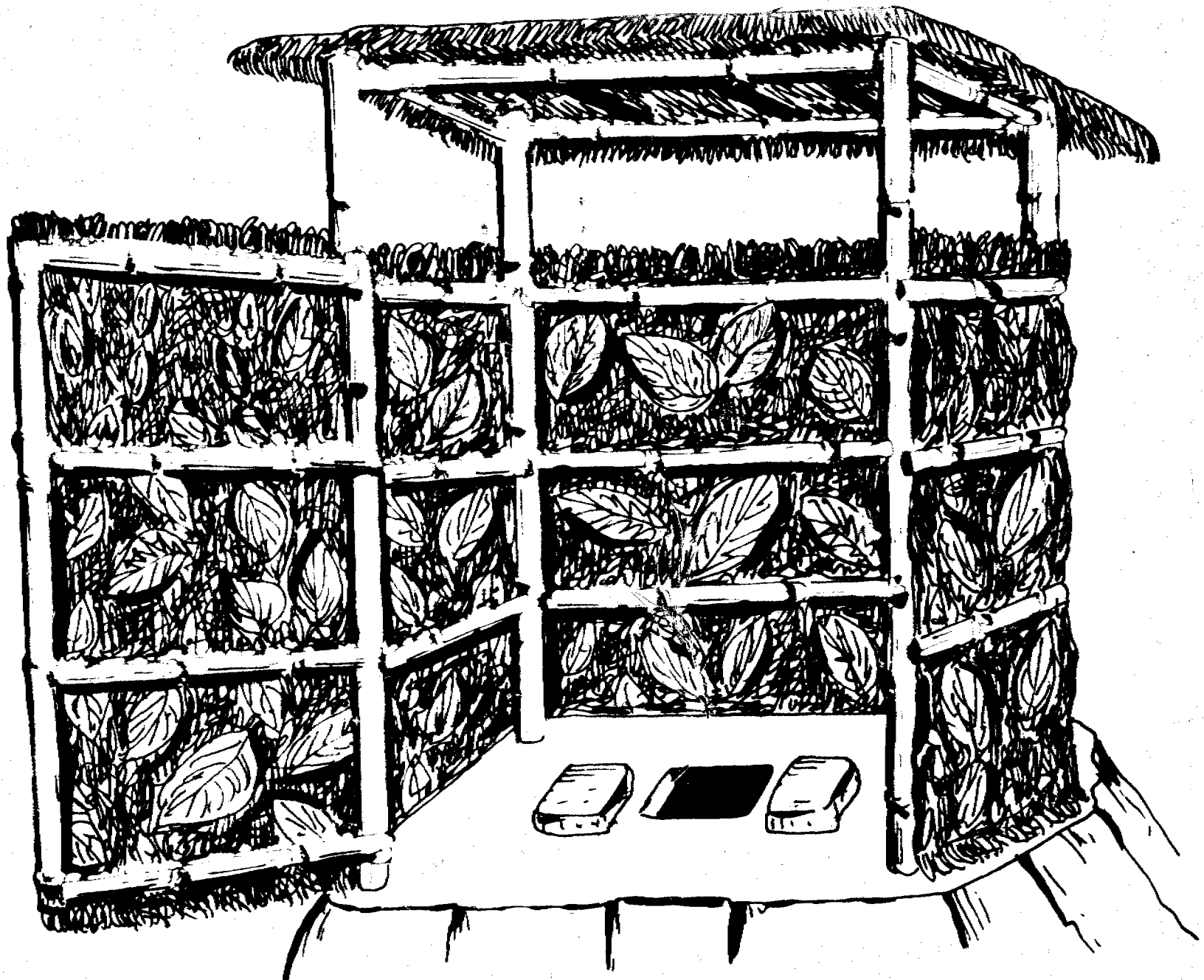
H.G. Kayastha

कार्ड ५

असल स्वस्थकर चर्पी मानिसको दिसामा सिगा बस्न नसक्ने गरी बनाएको हुन्छ । यो चित्रमा देखाइएको जस्तो चर्पीलाई वाटरसील चर्पी भनिन्छ । यस्तो चर्पीमा दिशा गरीसकेपछि पानी खन्याइन्छ । पानीले दिशालाई बगाई तल खाल्डोमा पुऱ्याउछ र अलिकति पानी चर्पीको प्वालमा जहिले पनि रहिरहन्छ, जस्ले गर्दा दुर्गन्ध आउदैन र सिगालाई खाल्डो भित्र पस्नबाट रोक्छ । यदि यस्तो चर्पी तपाईंहरूको आफ्नो घरमा बनाउनु भयो र प्रयोग गर्नु भयो भने रोगको रोकथाम हुन्छ ।

CARD 5.

A GOOD SANITARY LATRINE IS ONE BUILT IN SUCH A WAY THAT FLIES CAN NOT COME INTO CONTACT WITH THE STOOL PASSED BY HUMAN BEINGS. THE LATRINE SHOWN IN THE PICTURE IS KNOWN AS THE 'WATER-SEAL' LATRINE. AFTER PASSING STOOL, WATER IS Poured INTO THE LATRINE. THE WATER WASHES THE STOOL DOWN IN THE PIT, SOME OF THE WATER ALWAYS REMAINS IN THE LATRINE, WHICH PREVENT SMELL AND FLIES FROM ENTERING THE PIT. IT WOULD PREVENT DISEASES TO SPREAD IF YOU CONSTRUCT A LATRINE AT HOME AND USE IT.



H.C. Kaya bha

5B

कार्ड ५ बि.

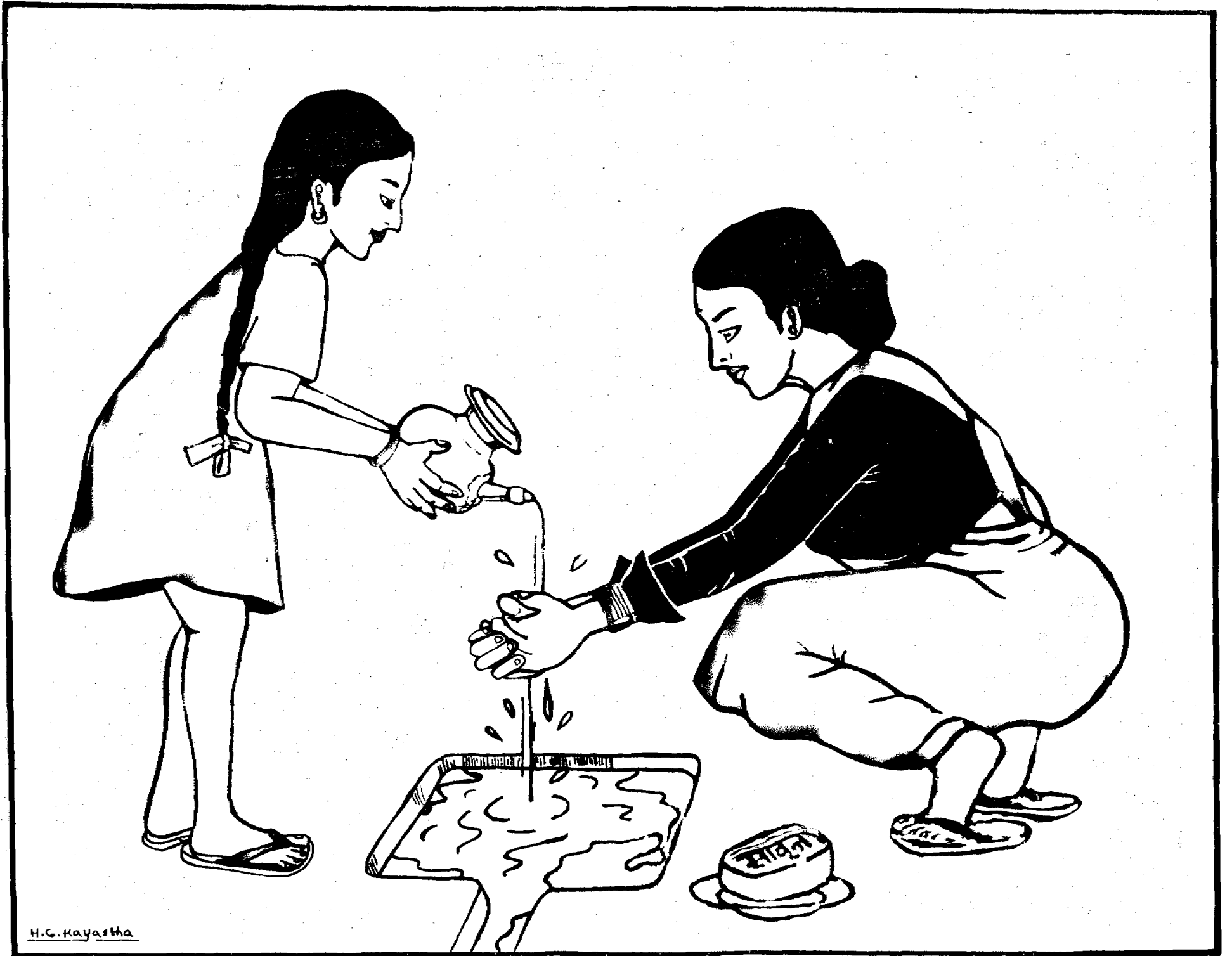
दिशाबाट फैलने रोगबाट बच्ने सजिलो उपाय चर्पीको निर्माण गर्नु र केटाकेटीहरू समेत परिवारको सबै सदस्यहरूले प्रयोग गर्नु हो । यो चित्रमा देखाएको जस्तो चर्पीलाई खाँडे चर्पी भन्दछन् । यस चर्पीमा दिशा सिधा खाँडोमा खस्य जुन दिशा बस्ने प्वाल र ढकनी मुनि बनाएको हुन्छ । दुर्गन्ध र सिगाबाट बच्न चर्पी सधैं सफा राख्नु पर्दछ र दिशा बस्ने प्वाललाई प्रयोग नहुने बेलामा काठको ढकनीले छोपेर राख्नु पर्दछ । पटक पटक माटो, सुकेको पात ईत्यादी खाँडोमा छर्ने गरेमा पनि दुर्गन्ध फ्राउँदैन । यस्तो चर्पी स्थानीय ठाउँमा पाइने श्रोत साधनले सजिलैसित बनाउन सकिन्छ ।

CARD 5 B.

THE EASY METHOD OF PREVENTION OF EXCRETA-BASED DISEASES IS TO BUILD AND USE THE LATRINE BY ALL MEMBERS OF THE FAMILY INCLUDING CHILDREN. THE LATRINE SHOWN IN THIS PICTURE IS KNOWN AS PIT LATRINE. WHILE DEFECATING IN THIS TOILET, THE STOOL GETS DIRECTLY INTO THE PIT BUILT BELOW THE COVER AND THE SQUATTING HOLE.

IN ORDER TO PREVENT FLIES AND SMELL, THE LATRINE MUST BE KEPT CLEAN, AND THE HOLE CAN BE COVERED BY A WOODEN LID WHILE NOT IN USE. IF ASHES, EARTH OR DRY LEAVES ARE SPREAD ON THE PIT FROM TIME TO TIME, IT WILL NOT SMELL.

SUCH A LATRINE CAN BE EASILY BUILT WITH LOCALLY AVAILABLE MATERIALS.



H.C. Kayastha

कार्ड ६

फोहर हातले गर्दा पनि हामीहरू बिरामी हुन सक्छौं । हामीहरू हरेक दिन फोहर कुराहरू छोई रहेका हुन्छौं । हाम्रो भ्रौलाफो नडको कापमा धेरै किसिमका रोगका किटाणुहरू भएको फोहरहरू टाँसिन्छन्, जसले गर्दा रोग लाग्छ । नड छोटा काट्नुहोस र नड भित्र पसेका फोहरहरू पर्याकी सफा पार्नु होस । हरेक पटक दिसा गरे पछि र खाना खान अघि साबुन र पानीले राम्ररी हात धुनु अति जरुरी छ ।

CARD 6.

WE CAN ALSO BECOME SICK THROUGH DIRTY HANDS. WE TOUCH MANY THINGS EVERYDAY WHICH ARE NOT CLEAN. OUR FINGER NAILS COLLECT DIRTS CONTAINING MANY KIND OF SMALL GERMS WHICH CAUSE DISEASES. KEEP THE FINGER NAILS CUT SHORT AND BRUSH AWAY THE DIRT WHICH COLLECTS UNDER THE NAILS. IT IS VERY IMPORTANT TO WASH OUR HANDS WELL WITH SOAP AND WATER EVERY TIME AFTER PASSING STOOL AND EVERY TIME BEFORE EATING.



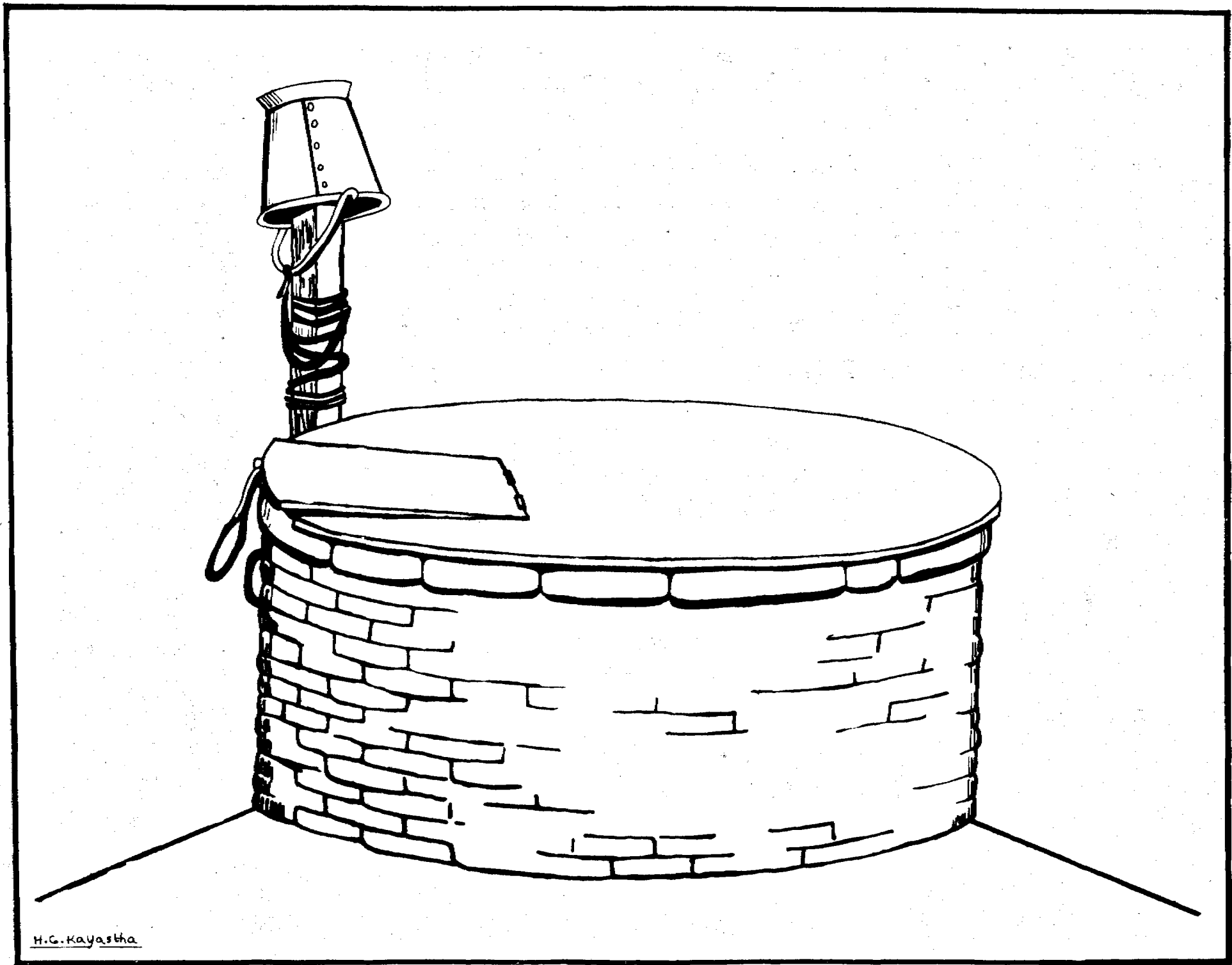
H.C. Kayastha

कार्ड ७

सार्वजनिक धारा

हामी खाने पानी हामीले सधैं चोखो सुरक्षित मुहानबाट लिएको हुनुपर्छ। यदि यो सार्वजनिक धारा हो भने धाराबाट पानी लिएर जाँदा स्वच्छ पानी फोहर हुन नदिने विचार पुऱ्याउनु पर्छ। पानी राख्ने भाँडो प्रयोग गर्दा भाँडो सफा हुनुपर्छ। घेरें जसो भाँडो बाहिर सफा देखिए पनि भित्र पट्टि त्यसो भएको हुदैन। भाँडोको भित्रपट्टि सफा गर्न गाह्रो हुने भएकोले भाँडाको भित्रि सस्रो तहमा किटाणुहरू टाँसीएर रहेका हुन सक्छन्। ती किटाणुहरूले पानी दुषित पार्दछन् र हामी बिरामी हुन्छौं त्यसैले भित्रपट्टि सफा गरी भाँडो प्रयोग गर्ने बानी गर्नु भने राम्रो हुन्छ।

CARD 7. WE MUST ALWAYS BE SURE TO TAKE OUR DRINKING WATER FROM A SAFE SOURCE. IF IT IS A PUBLIC TAP, WE SHOULD MAKE SURE THAT THE CLEAN WATER FROM THE TAP DOES NOT GET DIRTY WHEN CARRYING IT HOME. WE SHOULD MAKE SURE THAT THE CONTAINER WE ARE USING FOR CARRYING THE WATER IS CLEAN. EVEN IF IT IS CLEAN OUTSIDE, MOST OF THE TIME THE PROBLEM IS INSIDE. SINCE IT IS DIFFICULT TO CLEAN THE INSIDE OF THE CONTAINER, THE GERMS CAN REMAIN ON THE ROUGH SURFACE OF THE POT. FROM THERE THEY ARE POLLUTING THE WATER AND WE ARE GETTING SICK. IT IS BETTER TO USE THE POT, ONLY IF IT CAN BE CLEANED INSIDE.



H.C. Kayastha

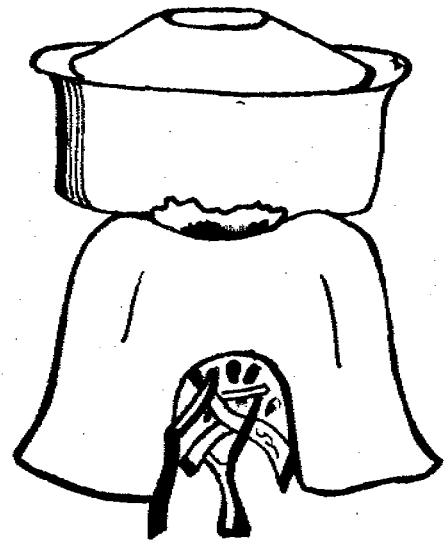
कार्ड ७ बी-

इंनार

घर्को कुरा, साने पानी चोखो सुरक्षीत ठाउँबाट लिएको हुनु पर्छ। पानी लिन गाउँदा धेरैले आफ्ना बाँस्टीन धेरै जसो सफा नगरी राखेको ठाउँमा राख्ने हुँदा, बाँस्टीनमा फोहर लागेको हुन्छ अनि इंनारमा डुबाउँदा पानी पनि फोहर हुन्छ। यसको मतलब पानीमा जताततै रहेका किटाणहरू पानीमा मिसिन्छन् र यस्तो पानीले मानिसहरूलाई बिरामी पार्छन्। इंनारबाट पानी मिक्नलाई एउटा सफा बाँस्टीन हुनुपर्छ। यसलाई सफासग बाँधी जमीनभन्दा झालो गरी एउटा सफा काठको खम्बामा घोट्ट्याएर राख्नु पर्छ। इंनारको ढकनी हुनुपर्छ। र खुला ठाउँमा इंनार बनाएको हुनुपर्छ जसले गर्दा पात पर्तिगर चरा चुरंगीले झारेको फोहर र झर फोहर इंनार भित्र नपरोस। नयाँ इंनार बनाउने ठाउँ रोज्दा सफा, झालो र दिसा पिसाबरसायन नमिसियोस भन्नको लागि चर्पी भन्दा टाढाको ठाउँ रोज्नु पर्छ।

CARD 7 B.

NEXT. WE MUST ALWAYS BE SURE TO TAKE OUR DRINKING WATER FROM A SAFE SOURCE. IF IT IS A WELL, THEN THAT WELL SHOULD HAVE A WALL TO PREVENT DIRTY WATER FROM DRAINING INTO IT. WHEN MANY PEOPLE BRING THEIR OWN BUCKETS, MOST OF THE TIME THE BUCKETS GET DIRTY WHEN THEY ARE PLACED IN THE LINE. THEN THEY ARE LOWERED INTO THE WELL AND THE WATER ALSO GETS DIRTY. THIS MEANS THAT GERMS WHICH ARE EVERYWHERE IN THE DIRT GET INTO THE WATER AND THAT WATER WILL MAKE PEOPLE SICK. THERE SHOULD BE A COMMON BUCKET FOR DRAWING THE WATER. IT CAN BE KEPT CLEAN BY KEEPING IT UPSIDE DOWN ON A POLE HIGH ABOVE THE GROUND. THE WELL SHOULD HAVE A COVER AND BE BUILT IN AN OPEN SPACE SO THAT LEAVES AND BIRD DROPPINGS DO NOT FALL INTO THE WELL. WHEN CHOOSING A SITE FOR A NEW WELL WE SHOULD BE CAREFUL TO BUILD IT ON A HIGHER SITE AND FAR AWAY FROM THE LATRINE SO THAT HUMAN STOOLS WILL NOT DRAIN INTO IT.

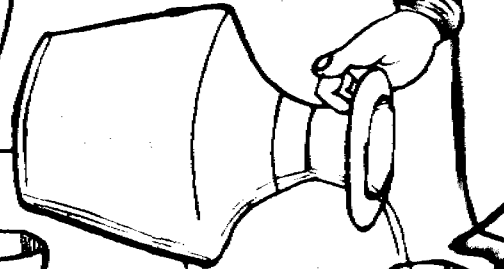
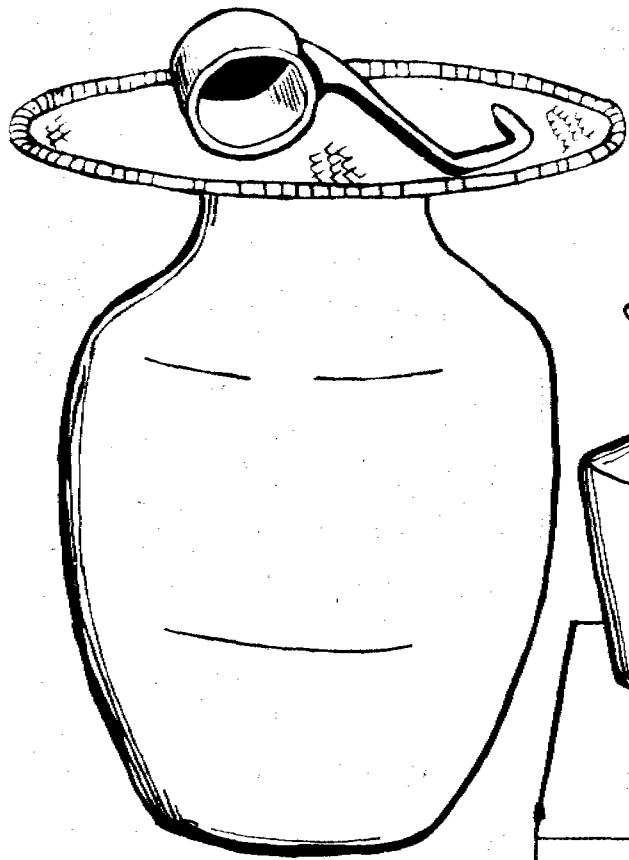


H.G. Kayastha

कार्ड ८

यदि सफा मुहानबाट पानी पाउन सकिएन भने पानीलाई छानेर र उमालेर सफा बनाउन सकिन्छ । पहिले सफा कपडाको टुक्राले पानी छान्ने अनि उमाल्ने र सफा भाँडोमा छोपेर राख्ने । पिउनलाई पानी शिक्ता खेरी एउटा सफा भाँडो प्रयोग गर्नु पर्छ ।

CARD 8. IF YOU CAN NOT GET WATER FROM A CLEAN SOURCE, YOU CAN ALWAYS CLEAN THE WATER BY STRAINING AND BOILING IT. STRAIN IT FIRST THROUGH A CLEAN CLOTH, BOIL IT AND COVER THE POT WITH A LID. USE CLEAN DIPPER FOR TAKING THE WATER OUT FOR DRINKING.



H.G. Kayastha

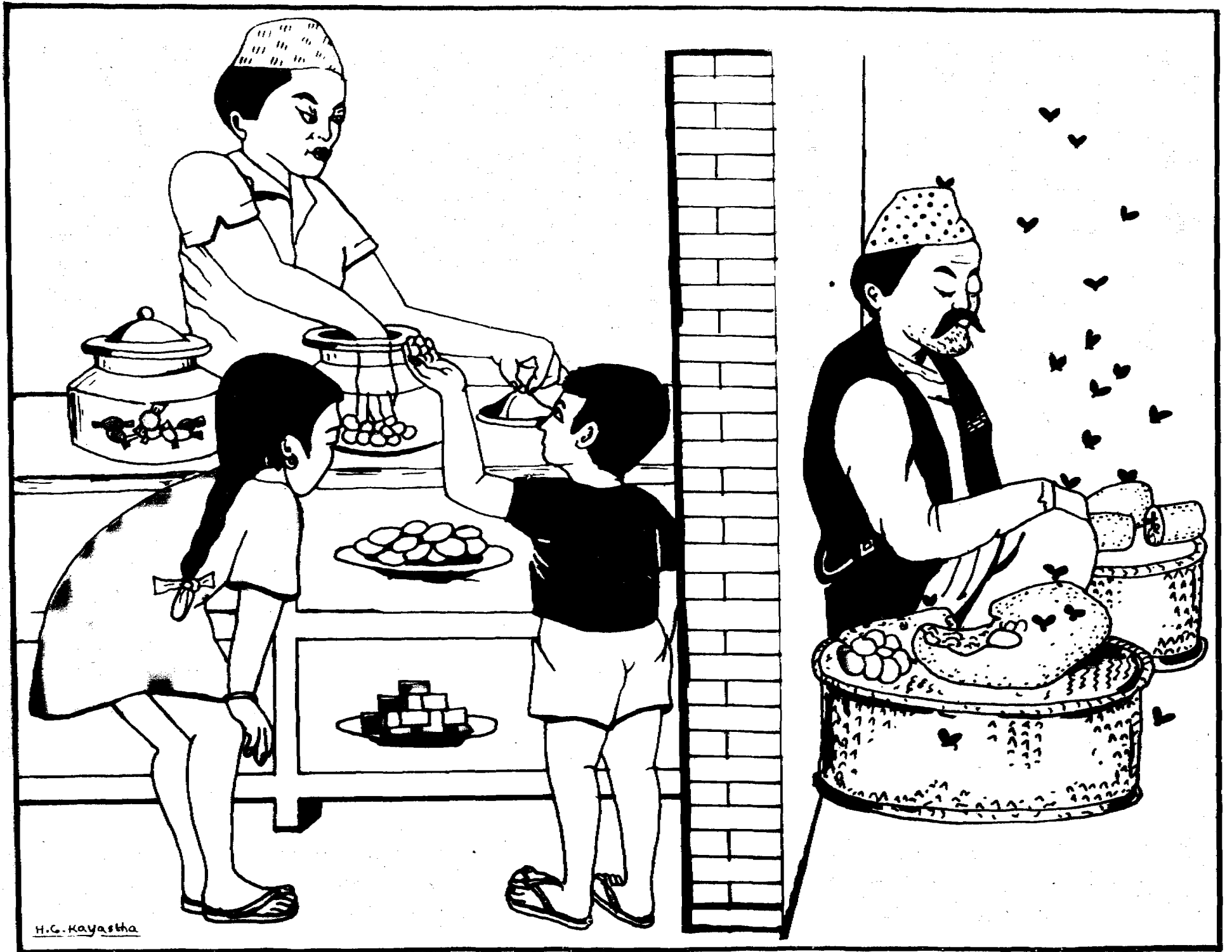
कार्ड ६

घेरें जसो मानिसहरूलाई थाहा छैनकी पानीको संवय गर्ने बेला पानी दूषित हुन सक्छ । विभिन्न किसिमबाट यस्तो हुन सक्छ :-

१. यदि पानी राख्ने भाँडोमा ढकनी भएन भने भाँडोमा धुलो पर्न सक्छ । धुलोमा किटाणुहरू हुन्छन् र त्यस्तो पानी पियो भने मानिस बिरामी हुन्छ । त्यसैले पानी राख्ने भाँडोलाई एउटा ढकनीले छोपेर सुरक्षित राखीएको हुनुपर्छ ।
२. साथै खाना पकाउँदा खेरी पानी राख्ने भाँडामा उघार्दा भुइमं राखीएको कचौराले उघार्ने गरीन्छ । भुइमा राखेको कचौराबाट पानी उघार्दा खेरी पानी दूषित हुन्छ । भुइमा थुप्रै किटाणुहरू हुन्छन् र भुइमा भएको किटाणुहरू पानीमा सर्छन् । यस्तो हुनबाट रोक्ने सबभन्दा फसल उपाए एउटा सफा पानी सिक्ने भाँडोको प्रयोग गर्नु हो । भुइको सम्पर्कमा घ्राउन नदिन सो भाँडोलाई ढक्कन माथि पल्टाएर राख्न सकिन्छ ।

CARD 9. MOST OF THE PEOPLE DO NOT KNOW THAT THEIR CLEAN WATER GETS CONTAMINATED DURING STORING. THIS CAN HAPPEN IN DIFFERENT WAYS:

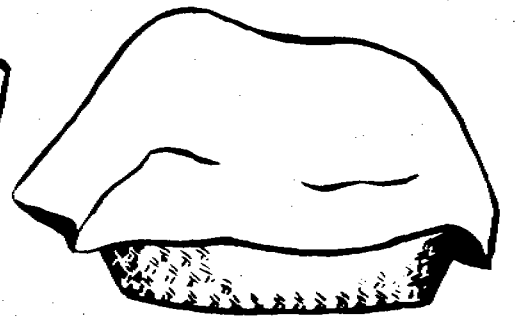
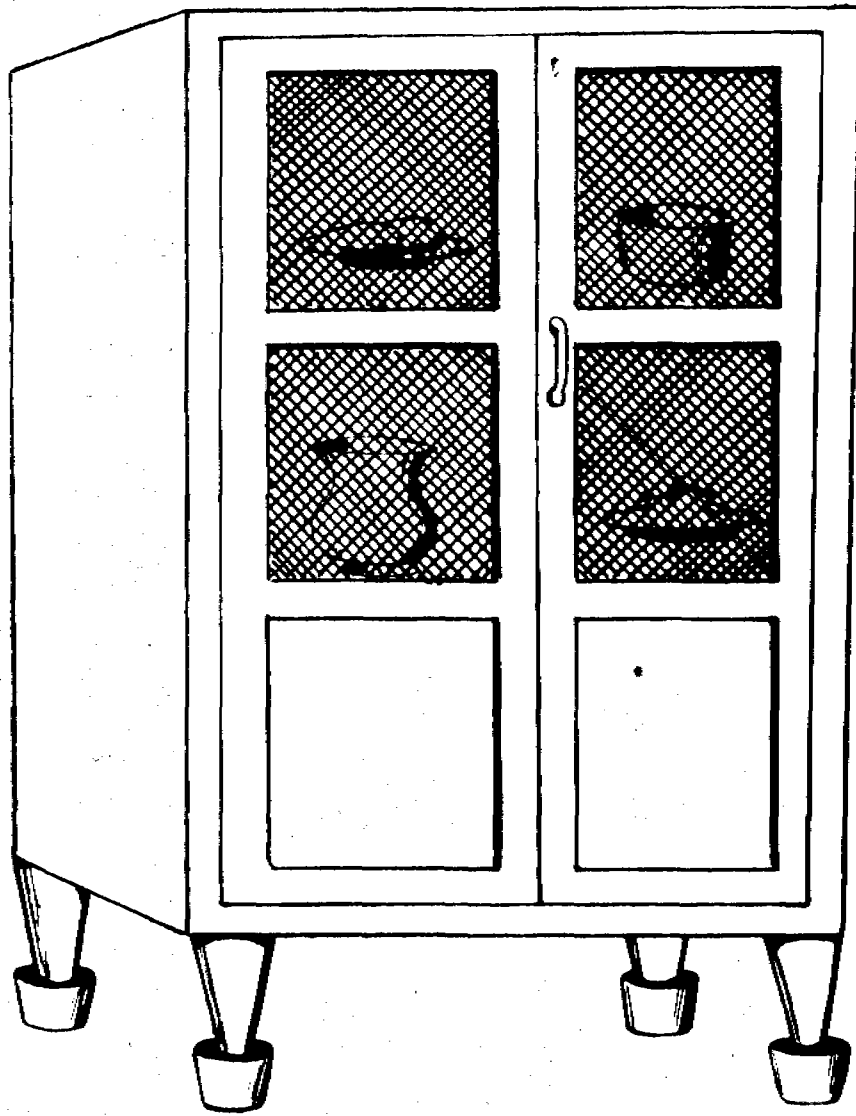
1. SOME DUST CAN FALL IN IF THERE IS NO COVER ON THE WATER CONTAINER. THAT DUST CONTAINS GERMS AND PEOPLE GET SICK DRINKING THAT WATER. SO WATER CONTAINERS SHOULD BE PROTECTED WITH A COVER.
2. ALSO, WHEN YOU PREPARE YOUR FOOD, ON THE FLOOR YOU MIGHT TAKE A CUP AND DIP IT INTO THE WATER CONTAINER TO TAKE SOME WATER OUT. IF THE CUP WAS ON THE FLOOR, THE WATER CAN GET CONTAMINATED. THE FLOOR HOLDS A LOT OF GERMS, AND THE GERMS FROM THE FLOOR ARE ON THE BOTTOM OF THE CUP AND GET INTO THE WATER WHEN YOU DIP YOUR CUP IN. THE BEST WAY TO AVOID THIS IS TO USE A DIPPER WHICH YOU KEEP ON THE COVER.



कार्ड १०

खास गरीकन ग्रन्थ ठाँउबाट घ्राउने सिगालाई नियन्त्रण गर्न सकिदैन । खाने कुरा छोपी सिगाबाट बचाई राख्ने पसलहरुबाट मात्र खाने कुरा किन्ने गर्नु पर्दछ । हामीले फलफूल सिँग किन्ने गर्नुपर्छ र विशेषगरी केटाकेटी हरुलाई बजारमा काटी राखेको फलफूल खान दिन हुँदैन ।

CARD 10. FINALLY, IT IS NOT POSSIBLE TO CONTROL ALL THE FLIES WHICH COME FROM OTHER PLACES. WE MUST BE CAREFUL TO BUY ONLY FROM SHOPS WHERE THE FOOD IS KEPT COVERED AND PROTECTED FROM FLIES. WE SHOULD BUY ONLY WHOLE FRUITS, AND SPECIALLY OUR CHILDREN SHOULD NOT EAT CUT FRUITS IN THE MARKETPLACE.



H.C. Kayastha

कार्ड ११

घरमा हामीहरू सिगा पस्न नसक्ने बरात्र बनाएर, ढक्कन भएको भाँडा प्रयोग गरेर र पुरानो सफा कपडाले छोपेर हाँचो खाने कुराहरू सुरक्षित राख्न सकिन्छ। यसरी सिगाबाट टाइफाईड, पखाला, हंजा जस्ता अन्य धेरै रोगहरूबाट रोकथाम गर्न सकिन्छ।

CARD 11. AT HOME WE CAN PROTECT OUR FOOD BY MAKING FLY-PROOF CUPBOARDS, BY USING VESSELS WITH LIDS OR COVERS, AND BY COVERING OUR FOOD WITH OLD PIECES OF FINE CLEAN CLOTH. IN THIS WAY WE CAN PREVENT DIARRHOEA AND MANY OTHER DISEASES, SUCH AS TYPHOID AND CHOLERA, WHICH ARE SPREAD BY FLIES.



H.C. Kayastha

कार्ड १२

फोहर कसिगर तथा पानी पयाबने कुरामा पनि हामी सतर्क हुनु पर्दछ। पहिला कुरा बचेका खानेकुरा र फोहर कसिगर जथाभावी पयाबता त्यस्तो फोहरले सिंगालाई आकषित गर्दछ। र त्यहाँ असंख्य सिंगाहरु उत्पन्न हुने हुन्छ। त्यसैले फोहोर कसिगरलाई एउटा खाल्डोमा राखेर माटोले छोप्नु पर्दछ। पछियसलाई निकाली मलको रूपमा प्रयोग गर्न सकिन्छ।

बोश्रो कुरा फोहर पानीलाई निकास बनाएर पठाउनु पर्दछ र जथाभावी राख्नु हुने फोहर पानीमा लामखुट्टे उत्पन्न हुन्छ त्यसैले पानीको निकासको लागि एउटा ढल बनाउनु पर्दछ। यो चित्रमा देखाएको जस्तो गरी फोहर पानी राख्यो भने त्यसले तपाईंको केटाकेटी र आपनो स्वास्थ्यको सुरक्षाको लागि एउटा ढल खनेर फोहर पानी त्यसैमा मात्र पठाउने गर्नु पर्दछ।

CARD 12.

WE ALSO NEED TO BE CAREFUL IN THE DISPOSAL OF GARBAGE AND WATER. FIRST, WHEN WE THROW FOOD REMAINDERS OR GARBAGE CARELESSLY ON THE GROUND, THIS GARBAGE ATTRACTS FLIES AND BECOME ANOTHER BREEDING PLACE FOR FLIES. GARBAGE CAN BE THROWN INTO A COMPOST PIT AND COVERED WITH EARTH. LATER THIS CAN BE REMOVED AND USED AS FERTILIZER IN THE GARDEN.

SECOND, WASTE WATER SHOULD BE DRAINED AWAY AND NOT BE KEPT STANDING ANYWHERE. IT WILL BECOME A BREEDING PLACE FOR MOSQUITOES. DIG A TRENCH SO THAT THE WATER CAN SOAK AWAY. WHAT YOU SEE IN THIS PICTURE IS NOT GOOD FOR YOUR HEALTH. TO PROTECT YOUR HEALTH AND THE HEALTH OF YOUR CHILDREN, YOU SHOULD DIG A TRENCH AND PUT THE WASTE WATER ONLY IN THE TRENCH.

HEALTH EDUCATION MADE EASY

YOU can do effective health education! TRY by following the steps described below:

STEP 1 Take this photo and ask your students, "WHAT IS THIS?". If they know what it is, then INVOLVE them in a DISCUSSION about worms. If they do not understand what the photo is, explain it. Then, involve them in a discussion about worms. Look inside for an example of such a discussion. Practice it.

STEP 2 After that, ask your students the following question, "HOW DO THEY GET SICK? Is it because of:
- bad handling of water - bad handling of food
- bad personal hygiene - other reasons?"
Ask them to think about this question and to discuss it with other family members at home, before your next meeting.

STEP 3 At your next meeting, list all the ways your students think they can get sick. Compare their suggestions with the list inside "HOW ONE CAN GET SICK IN DAILY LIFE". Discuss points which are in your list and they had not thought of.

STEP 4 Now, you all know that there are many ways to fall sick, if you do not care about cleanliness. Then, let your students choose 3 ways which they have found out they get sick and against which they want to do something at home. They should think about it, find a solution for each of the 3 causes of sickness, discuss this with their families and bring the 3 solutions to your next meeting.

STEP 5 When you next meet, list which solutions they have found for the 3 causes of sickness they had selected earlier. Let them discuss among each other. Encourage them to practice their solutions at home. Then, let them select 3 more causes of sickness. Again, they should find solutions at home and discuss them at your next meeting. Continue until your students have covered all those causes of sickness against which they themselves can do something.

STEP 6 When you discuss bad toilet habits you and your students might try to build a latrine.

STEP 7 Meet with others who are using your approach to health education. Discuss and share what students have found and are now practicing in their own homes. Discuss latrine building. Share your problems in doing this type of health education. We learn a lot by sharing our experiences with others.

Health education CAN NOT BE DONE by lecturing people. People can be made aware of HOW they get sick and HOW they can prevent sickness. This only works if they are involved in the learning process:

- we make our health education topics SIMPLE
- we relate the topics to their DAILY LIVES
- we INVOLVE people, also children, through discussion

AND SOLUTIONS ARE DEVELOPED BY THE PEOPLE THEMSELVES.

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EXAMPLE FOR A DISCUSSION ABOUT THE PHOTO

GET A SMALL GROUP OF BOYS AND GIRLS TOGETHER EITHER AT SCHOOL OR IN YOUR NEIGHBOURHOOD. SHOW THEM THE WORM PHOTO. THOSE ARE ROUND WORMS.

Question: "Do you know what this photo is?" (to a boy)

Answer: "No, I don't know."

Question: "Have you seen things like in this photo before?" (to a girl)

Answer: "Yes, I have."

Question: "What do you think they are?"

Answer: "I think they are worms."

Question: "Where have you seen them?"

Answer: "I saw them when my little sister was relieving herself. They were in the stool."

Question: "How do you think they got there?"

Answer: "My mother said from eating too many sweets. She gave my sister some medicine and the worms came out."

Question: "Do you know how the worms got into your sister?"

Answer: "No, I don't know how they got into her stomach."

EXPLANATION:

"Worms lay eggs just like chickens do only they are SO SMALL we can not see them. Why? They are as small as the dust on our cloths. If these eggs get inside of us they get bigger and bigger. They grow from small eggs to worms. These worms then start to lay eggs. THOUSANDS OF EGGS! They make our stomachs big and fat. They make us real sick. When we relieve ourselves many of these small eggs and sometimes the worms come out in our stool. The worms we can see. The eggs we CAN NOT SEE. Soon the eggs in the stool dry and become like dust. Flies carry this dust on their feet. They leave it on food that is not covered. People eat this food and the dried eggs. Remember, they can not see those small eggs on the food. Worm eggs could have been on your sisters food. Maybe they were on the sweets she likes so much.

Question: "Can you think of how else your sister could have gotten the worm eggs into her stomach?"

Answer: "Maybe the dust containing the dried eggs got on her hands and under her finger nails. Maybe her own DIRTY HANDS put the worms eggs on the food she was eating!"

Question: "Can anyone tell me how else her sister could have gotten the dried eggs into her stomach?" (to whole group)

Answer: "You have said that dust can contain dried worm eggs. And dust often is in the air. It might have gotten into the water which her little sister has drunk.

Question: "Right those small worm eggs might also get into our water. How do you think her sister can stop getting worms?" (to all)

Answer: "Her mother could cover the food so that flies can not put the dust with worm eggs on her food." (a boy)

Question: "Yes, that is one way to stop getting worms. Can you think of more ways?" (to a girl)

Answer: "yes, my sister could wash her hands before she touches her food."

Question: "Right. Now, let us all look at our own hands. Are they clean? Are we also touching food or our mouths with dirty hands?"

Through group discussion children can identify many ways they can get worms. They also can identify many ways to prevent getting worms.

THE FUTURE HEALTH OF NEPAL DEPENDS ON THE CHILDREN OF TODAY!

LIST OF "HOW ONE CAN GET SICK IN DAILY LIFE"

THROUGH BAD HANDLING OF WATER

- drinking water without boiling it
- leaving drinking water outside the house so that dust can get into it
- using dirty pots for fetching drinking water
- cleaning the water pots with sand before fetching drinking water
- allowing flies and dust getting into water pots when drying
-
-

THROUGH BAD HANDLING OF FOOD

- eating with dirty hands
- allowing flies to sit on food
- keeping food left-overs unprotected for the next meal
- allowing flies and dust getting on to dishes and pots when drying
-
-

THROUGH BAD PERSONAL HYGIENE

- not bathing regularly
- not washing hands after toilet properly (washing left hand only or not using soap)
- not cleaning underwear regularly
- not cleaning cloths regularly
-
-

THROUGH BAD TOILET HABITS

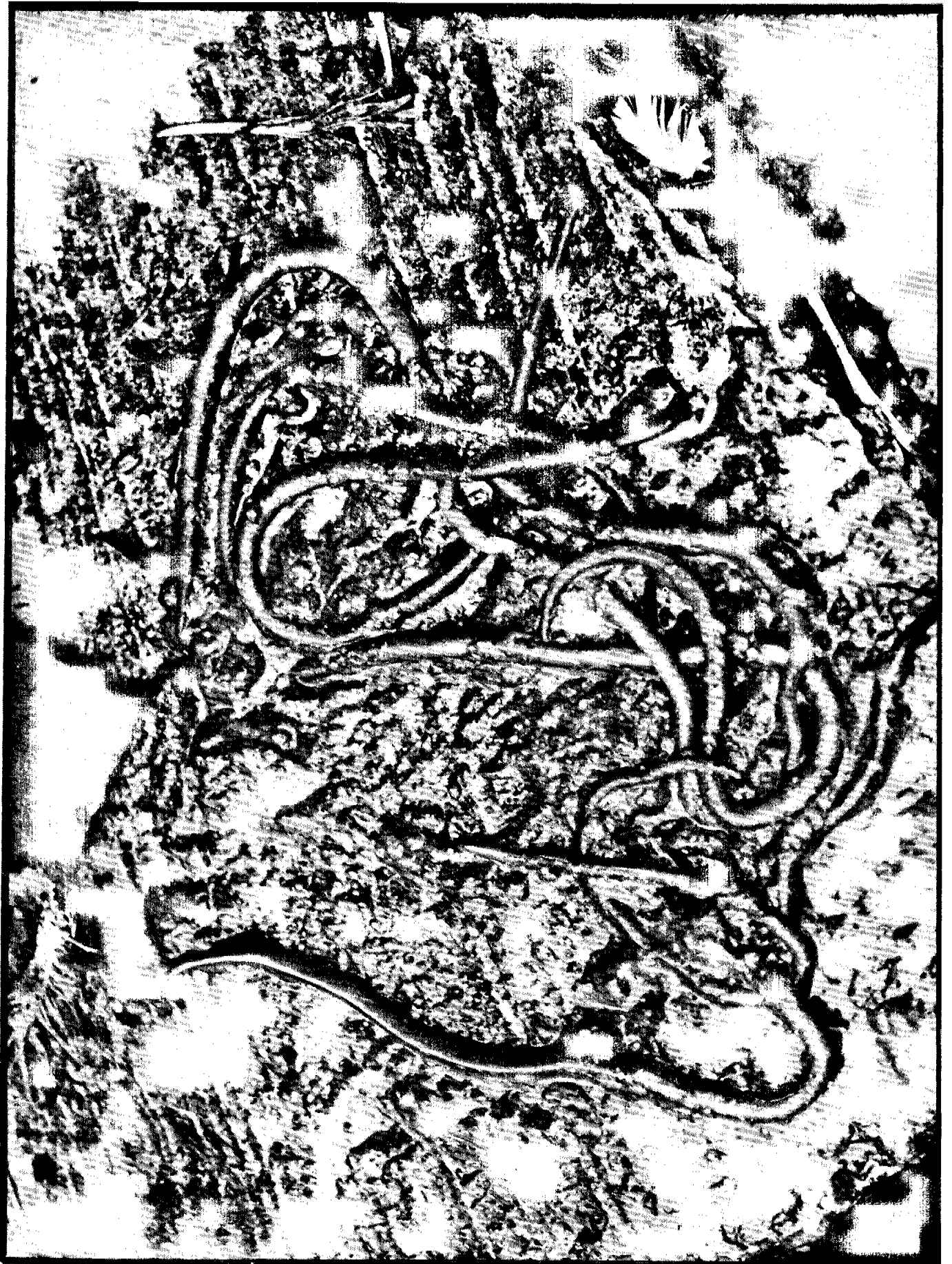
- relieving ourselves at places where other people can get contaminated (this is everywhere around the house, inside the courtyard and on the street side)
- allowing children to relieve themselves wherever they want
- relieving ourselves near the water and polluting it
- not cleaning the toilet regularly
- using the toilet barefoot
- using the same broom for toilet, hosue and kitchen
-
-

The only way not to endanger the health of other people is to relieve ourselves in clean toilets.

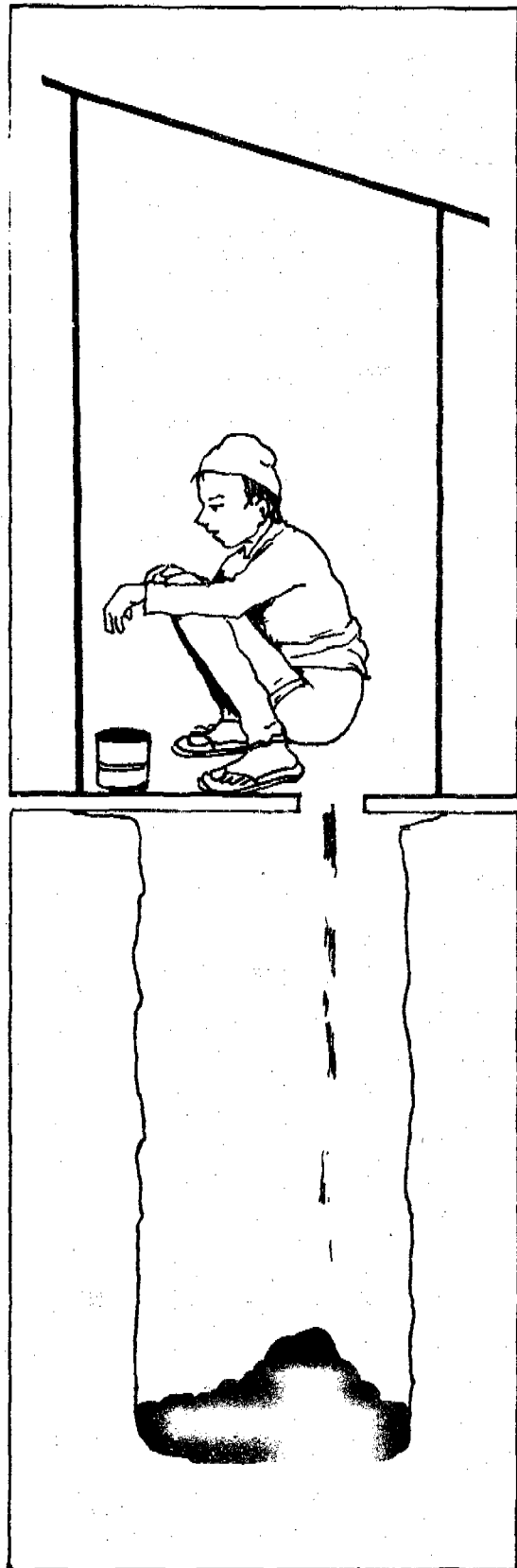
THROUGH OTHER BAD HABITS

- throwing garbage everywhere
- not draining waste water
-
-

Your students will find many more unhygienic practices in their daily life. Let them develop solutions how they can avoid getting sick.



TOILET TYPES



EXCRETA DISPOSAL SYSTEMS

Second Edition, July 1984, developed by :

EAST CONSULT (P) LTD.
P.O. BOX 1192
KATHMANDU

COMMUNITY DEVELOPMENT UNIT
BHAKTAPUR DEVELOPMENT PROJECT
P.O. BOX 730

THIS SET OF LEAFLETS HAS BEEN PRODUCED FOR ALLOWING AN INFORMED CHOICE IN TOILET CONSTRUCTION. THE LEAFLETS HAVE BEEN TESTED DURING THE "HEALTH IMPROVEMENT SCHEME" IN THE BHELUKHEL AREA OF BHAKTAPUR WHERE MOST OF THE SWEEPERS ARE LIVING. THE AWARENESS RAISING SCHEME - FOR ABOUT 90 FAMILIES - STARTED WITH A CLEANING CAMPAIGN AND A DEWORMING CAMPAIGN. THEN PEOPLE SELECTED AND BUILT THOSE TYPES OF LOW-COST TOILETS WHICH THEY FOUND MOST SUITABLE TO THEIR NEEDS AND THEIR BUDGET.

THESE LEAFLETS ARE MEANT FOR THE TRAINING OF COMMUNITY WORKERS. AFTER THE TRAINING, THE COMMUNITY WORKERS INFORM THE PEOPLE ON DIFFERENT TYPES OF TOILETS WHICH CAN BE BUILT AND ON CONDITIONS AND COSTS. TOGETHER WITH THESE LEAFLETS, A SET OF POSTERS HAS BEEN PRODUCED, SHOWING THE SAME TOILET TYPES AS IN THE LEAFLETS. HOWEVER, NO DETAILS ARE GIVEN. DETAILS ARE EXPLAINED BY THE COMMUNITY WORKERS. THESE POSTERS, EACH IN A DIFFERENT COLOUR, ARE THEN LEFT WITH THE PEOPLE FOR FURTHER DISCUSSION AND FOR SELECTING THAT TOILET TYPE WHICH THEY WANT.

OUT OF THE TOTAL NUMBER OF TOILET TYPES INCLUDED, ONLY TWO TYPES WERE PROMOTED IN THE "HEALTH IMPROVEMENT SCHEME" IN THE BHELUKHEL AREA. ADDITIONAL TYPES ARE DESCRIBED HERE SO THAT A SIMILAR PROCESS CAN BE REPEATED UNDER DIFFERENT CONDITIONS AND FOR DIFFERENT NEEDS IN OTHER URBAN AREAS OF NEPAL.

THESE LEAFLETS ARE AVAILABLE FROM:

COMMUNITY DEVELOPMENT UNIT
BHAKTAPUR DEVELOPMENT PROJECT
P.O. BOX 730, KATHMANDU
TEL: 2-13235 (BHAKTAPUR).

HEALTH EDUCATION SECTION
DEPARTMENT OF HEALTH SERVICES
TEKU, PACHALI, KATHMANDU
TEL: 2-12413, 2-14696

TOILET TYPE :

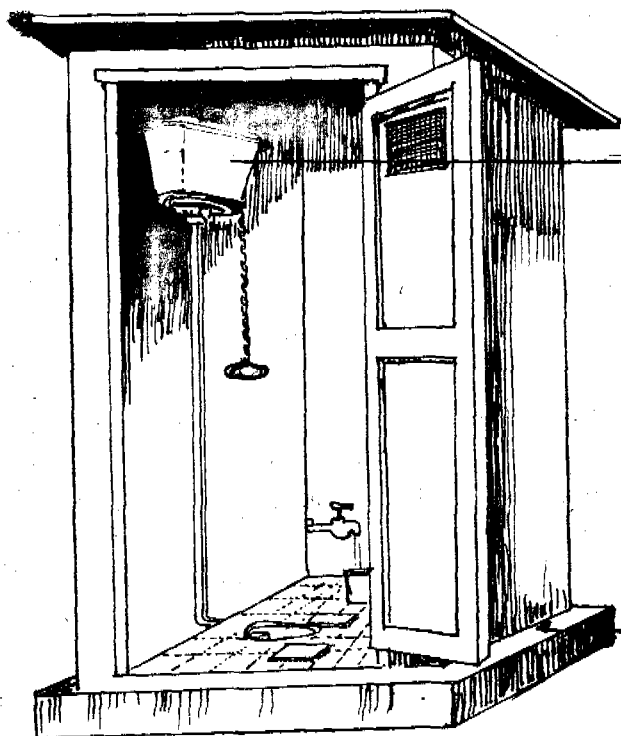
CISTERN FLUSH TOILET

	<u>YES</u>	<u>NO</u>
● IS SUFFICIENT WATER AVAILABLE INSIDE THE HOUSE THROUGH PRIVATE CONNECTION ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS ACCESS TO PUBLIC SEWER OR SUFFICIENT SPACE AVAILABLE FOR A SEPTIC TANK AND A SOAK PIT ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS ENOUGH MONEY AVAILABLE ?	<input type="checkbox"/>	<input type="checkbox"/>

NOTE : IF ALL 'YES', THEN SELECT THIS TOILET TYPE.

What is a CISTERN FLUSH TOILET ?

A Cistern Flush Toilet is a water seal toilet connected to a cistern for flushing the water closet after defecation. It uses 8-10 litres of water per flush. The outlet is connected either to a septic tank or to a sewer system.



CISTERN (8-10 lit. capacity metal or china clay container)

SQUATTING PAN, FOOT RESTS
WATER SEAL (not shown)

ADVANTAGES

- Permanent and durable toilet.
- Easy to clean.
- No bad smell.
- No health hazard.
- Most convenient.
- Can be built inside the house on any floor.

DISADVANTAGES

- Expensive to build.
- Requires a lot of water for flushing.
- High maintenance cost.
- Frequent breakdown of flushing device.
- Requires skilled labour to build and maintain.
- Creates difficulty in case of blockage.

COST

Cistern or flush valve (china clay or cast iron)	-- Rs. 1,150.00
Squatting pan with foot rests (china clay)	-- Rs. 300.00
Water seal (S or P trap) (china clay)	-- Rs. 104.00
Connecting pipes (6 m) (cast iron)	-- Rs. 630.00
Squatting platform (1 m x 1.5 m) (concrete)	-- Rs. 290.00
TOTAL COST (without toilet house):	Rs. 2,474.00

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The above cost will vary depending on the type and quality of fixtures used.

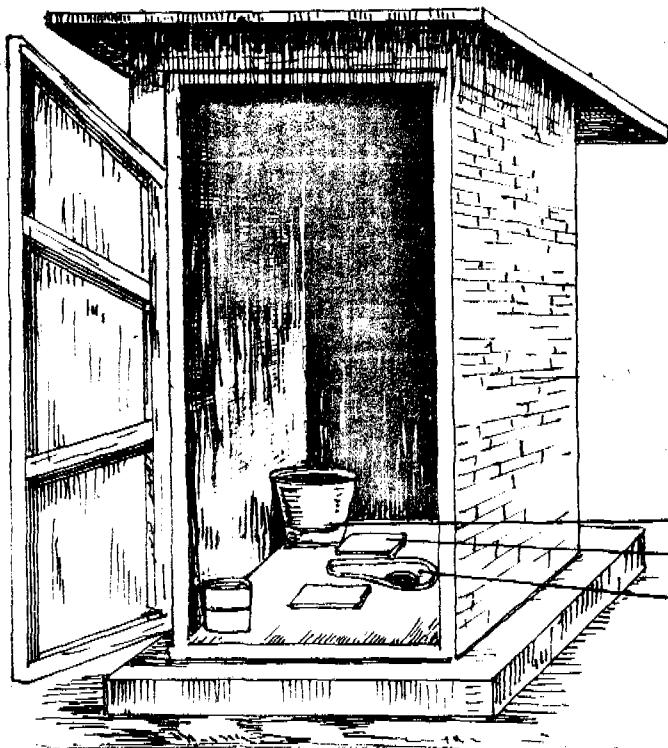
TOILET TYPE: POUR FLUSH TOILET

	<u>YES</u>	<u>NO</u>
● ARE 3-4 LITERS OF WATER PER PERSON PER DAY AVAILABLE TO FLUSH THE TOILET ? IS A MEDIUM SIZE BUCKET OF WATER AVAILABLE (FOR AN AVERAGE FAMILY OF 6-8 PERSONS) PER DAY ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS NECESSARY SPACE AVAILABLE FOR TWO COMPOSTING PITS ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS SUFFICIENT MONEY AVAILABLE ?	<input type="checkbox"/>	<input type="checkbox"/>

NOTE : IF ALL 'YES', THEN SELECT THIS TOILET TYPE.

What is a POUR FLUSH TOILET ?

Instead of a cistern, the toilet is pour-flushed with 3-4 liters of water by hand. If people use water for anal cleansing, this type of toilet is most suitable as the water left after cleansing can be used to flush the toilet. The outlet can be connected either to two alternating composting pits or to a septic tank.



BUCKET FOR WATER
FOOT REST
MOSAIC PAN

ADVANTAGES

- Can be built inside the house on any floor. Can also be built outside the house.
- Easy to clean.
- No bad smell.
- No health hazard.
- Convenient for use.
- Permanent and durable toilet.
- Small quantity of water is sufficient for flushing.
- Maintenance is virtually nil.
- House connections for water supply not required.
- The construction being very simple lends itself to local enterprise.

DISADVANTAGES

- Dependent on water availability.
- Very poor people may not afford to build it.
- Pour flush toilets, as they use very little water, should not be generally connected to water borne sewer. Blockage of sewer may occur because of the low volume of water going into the sewer. However, it can be connected to the sewer through a septic tank.

COST (For 10 users)

Mosaic pan with foot rest (concrete)	-- Rs.	75.00
Water seal (concrete)	-- Rs.	35.00
Squatting Platform (concrete)	-- Rs.	287.00
Connecting channel (3 m) (brick + cement mortar)	-- Rs.	103.00
Bucket + tumbler (plastic)	-- Rs.	70.00
		<hr/>
TOTAL COST (<u>without</u> toilet house):	Rs.	570.00
TOTAL COST (<u>with</u> toilet house):	Rs.	1,570.00

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If china clay pan and mosaic floor for platform are desired, the cost will be around Rs. 800.00 as against Rs. 570.00.

Note: These figures do not yet include the cost for either composting pits or septic tank.

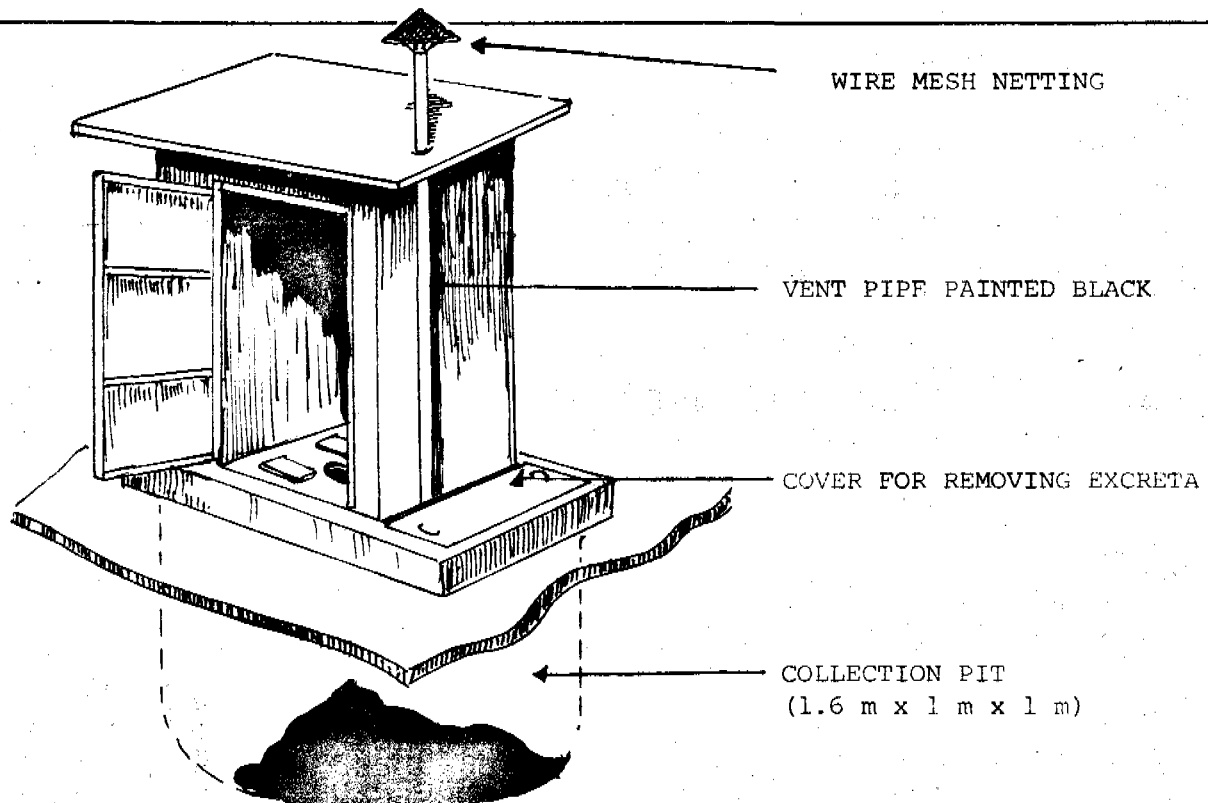
TOILET TYPE: VENTILATED IMPROVED PIT

	<u>YES</u>	<u>NO</u>
● IS VERY LITTLE OR NO WATER AVAILABLE FOR TOILET USE ?	<input type="checkbox"/>	<input type="checkbox"/>
● ARE THE FUNDS VERY LIMITED ?	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: IF ALL 'YES', THEN SELECT THIS TOILET.

What is a VENTILATED IMPROVED PIT LATRINE ?

It is a simple pit latrine with a black painted vent pipe located on the sunny side as shown in the sketch below. This arrangement keeps foul smell as well as flies out. The outlet of the pipe is to be covered with wire mesh. There should be a lid to cover the squatting hole.



ADVANTAGES

- Water is not needed.
- Usually no bad smell.
- Low cost.
- Minimum of users' care & outside assistance required.
- All types of material can be used for anal cleansing.
- Does not have to be replaced since there is provision for taking out the excreta.
- Excreta can be utilised for composting.
- Minimum of disturbance by flies.

DISADVANTAGES

- Not possible to build inside the house.
- Danger of contaminating underground water, especially where the underground water is high. (Should be at least 20 m away from a well or a ground water source.)
- Health hazard due to handling of raw excreta from the pit.
- Difficult to construct on rocky or sandy ground.
- If the squatting hole is not covered, which is usually the case, flies and insects become a health risk.

COST (For 10 users)

Pit (1.6 m x 1.0 m x 1.0 m)	-- Rs.	104.00
Squatting platform with concrete cover slab for taking out the excreta	-- Rs.	402.00
Ventilation pipe with fly screen	-- Rs.	120.00
		<hr/>
TOTAL COST (<u>without</u> toilet house):	Rs.	625.00
TOTAL COST (<u>with</u> toilet house):	Rs.	1,625.00
		<hr/>

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(Here the pit is included)

TOILET TYPE:

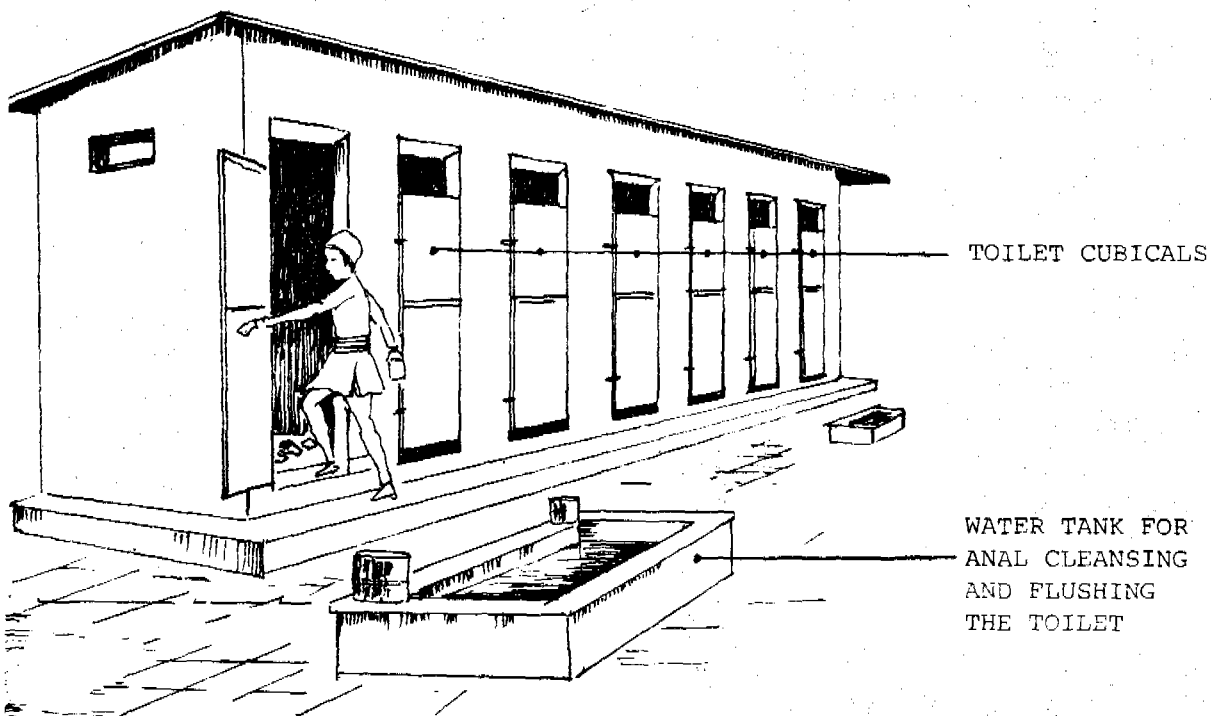
PUBLIC TOILET (Cubical)

	YES	NO
● IS THERE NO POSSIBILITY TO BUILD HOUSEHOLD TOILETS ?	<input type="checkbox"/>	<input type="checkbox"/>
● ARE MANY FAMILIES TO BE SERVED WITH LIMITED FUNDS ?	<input type="checkbox"/>	<input type="checkbox"/>
IS ACCESS TO SEWERAGE OR ENOUGH SPACE FOR A SEPTIC TANK AND SOAK PIT AVAILABLE ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS IT POSSIBLE TO ENTRUST THE REGULAR CLEANING & MAINTENANCE OF THE TOILET TO A RESPONSIBLE BODY & ARE THERE SUFFICIENT FUNDS FOR MAINTENANCE ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS IT POSSIBLE TO PROVIDE SUFFICIENT NUMBER OF INDIVIDUAL UNITS FOR PEAK DEMAND ?	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: IF ALL 'YES' THEN SELECT THIS TYPE, BUT DO SO ONLY IF ALL OTHER ALTERNATIVES ARE NOT FEASIBLE.

What is a PUBLIC TOILET ?

It consists of a number of individual cubicals with cistern flush or pour flush toilet units. The toilet is connected to a sewer or a septic tank and a soak pit.



ADVANTAGES

- Can be combined with public baths and washing places.
- Useful in crowded localities or public institutions.
- Per capita cost is low.

DISADVANTAGES

- Requires a lot of maintenance and daily cleaning.
- Requires a lot of space to build.
- Can become very unhygienic and filthy if not well maintained.
- Cannot be upgraded.

COST (For a 20-seat pour flush public toilet)

squatting pan with foot rests (mosaic)	-- Rs. 1,500.00
Water seals (concrete)	-- Rs. 700.00
Connecting drain approx. 60 meters	-- Rs. 2,070.00
Foundation, toilet house L.S. (brick work and tile roof)	-- Rs. 46,000.00
Disposal to septic tank + soak pit (brick work, concrete)	-- Rs. 40,250.00
Plumbing, installation + reservoir, etc. (brick work, iron pipe + pump)	-- Rs. 23,000.00
	<hr/>
TOTAL COST:	Rs. 113,520.00
	<hr/>
COST PER SEAT:	Rs. 5,680.00
	<hr/>

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The per unit cost will vary depending on the quality, materials + architectural finish.

TOILET TYPE :

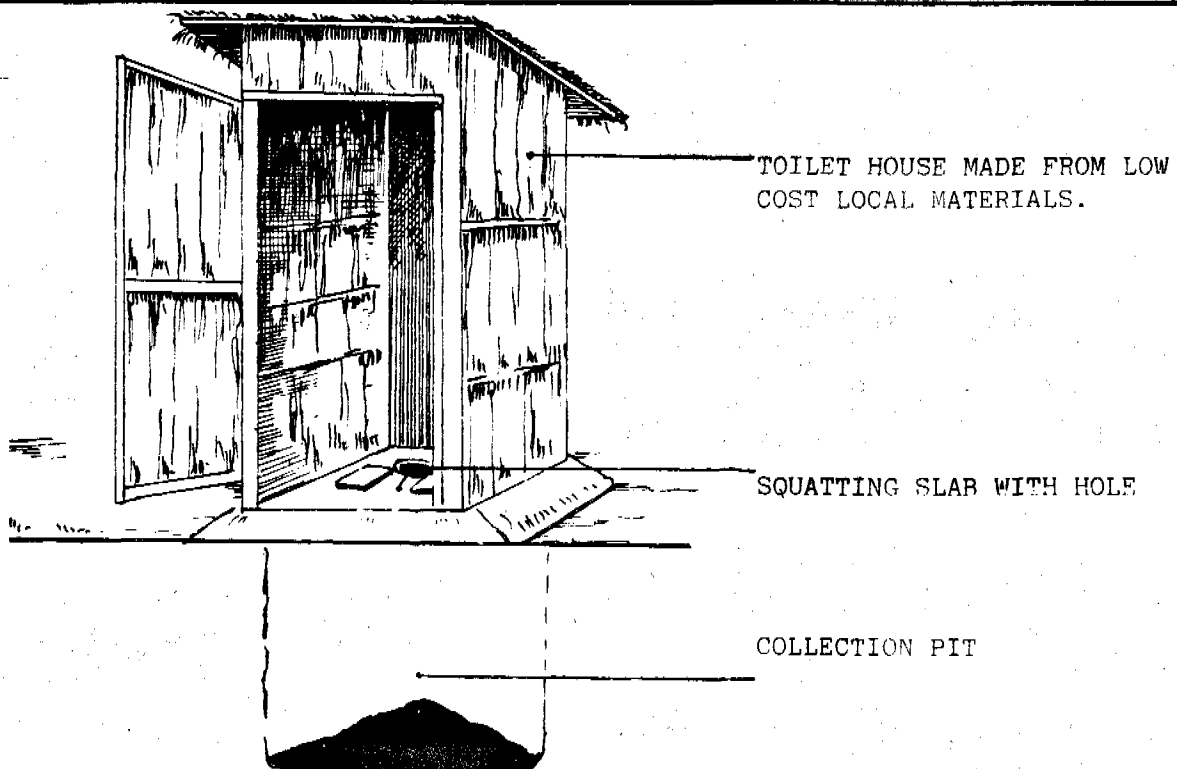
PIT LATRINE

- | | YES | NO |
|--|--------------------------|--------------------------|
| ● IS VERY LITTLE OR NO WATER AVAILABLE FOR TOILET USE ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ● IS NOT ENOUGH MONEY AVAILABLE FOR ANY OTHER TYPE OF TOILET ? | <input type="checkbox"/> | <input type="checkbox"/> |

NOTE : IF ALL 'YES' SELECT THIS TOILET TYPE BUT ONLY WHEN ALL OTHER DOMESTIC TOILET TYPES ARE NOT FEASIBLE. IT IS ADVISABLE TO BUILD A BETTER TYPE OF TOILET IN THE LONG RUN.

What is a PIT LATRINE ?

It has a squatting slab with a hole and a collection pit with a toilet house usually made of local materials. When the pit is filled, a new pit has to be dug and the squatting slab and toilet house has to be shifted to the new pit. This is a temporary toilet.



ADVANTAGES

- Water is not needed.
- Can be built with local materials.
- Cheapest type of latrine.
- Some organic waste and ash can be added to make a good compost manure.
- All types of materials used for anal cleansing can be thrown into the pit.
- Easy to build and maintain.
- Local skills are sufficient to build this toilet.

DISADVANTAGES

- Cannot be built inside the house.
- It is a temporary latrine.
- Should be at least 6 m away from the house mainly because of the bad smell.
- A new latrine will have to be built once the pit is filled up to 1 m below the surface.
- Fly and mosquito breeding causes transmission of diseases and nuisance.
- Danger of contaminating the underground water if the underground water is high. (Should be at least 20 m away from a well or a ground water source.)

COST (For 10 users)

Pit (1 m circular x 2 m deep)	-- Rs.	70.00
Squatting Platform (bamboo + earth)	-- Rs.	104.00
Superstructure made from local materials (bamboo, thatch, straw, etc.)	-- Rs.	210.00
		<hr/>
	TOTAL COST:	Rs. 384.00
		<hr/>

Kathmandu : 1984

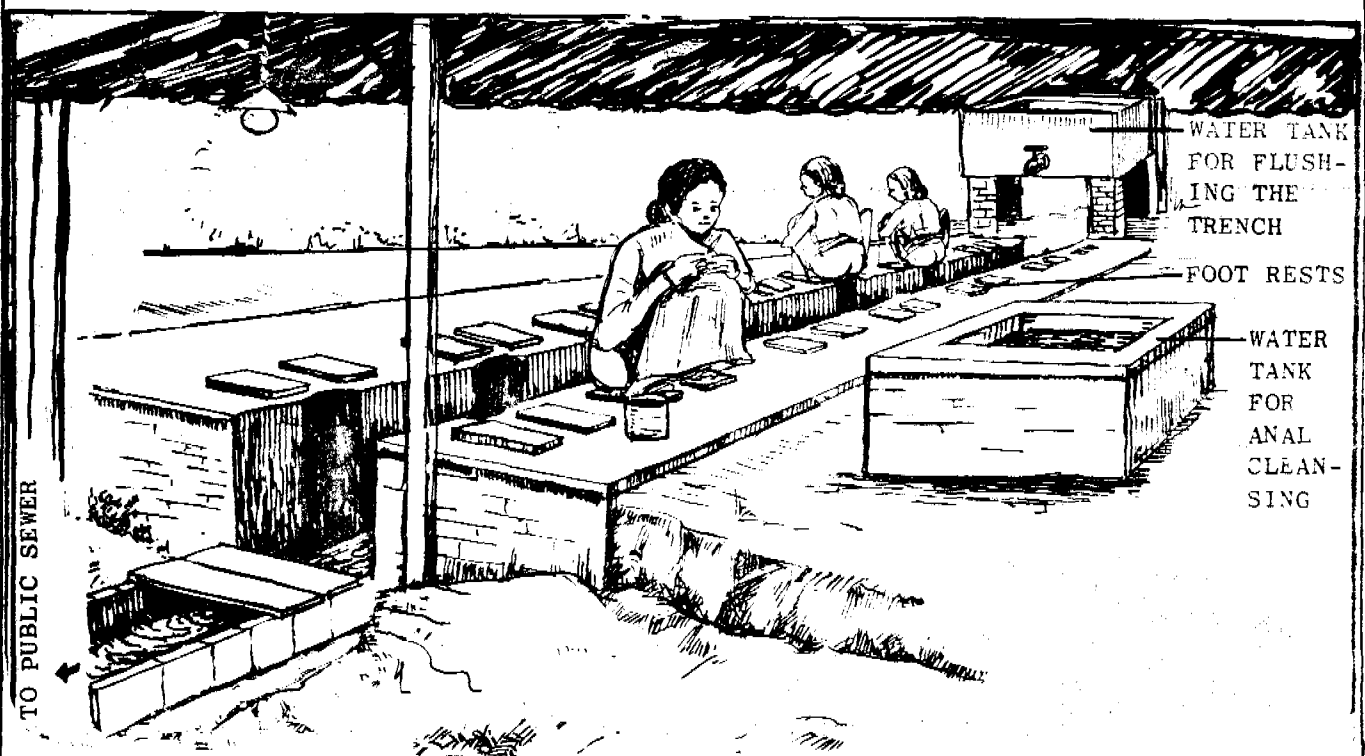
TOILET TYPE : PUBLIC TRENCH TOILET

- | | YES | NO |
|---|--------------------------|--------------------------|
| ● IS THIS LATRINE SOCIALLY ACCEPTABLE TO THE COMMUNITY ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ● IS THERE NO POSSIBILITY TO BUILD PRIVATE HOUSEHOLD TOILETS ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ● ARE MANY FAMILIES TO BE SERVED WITH LIMITED FUNDS ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ● IS ACCESS TO SEWER OR ENOUGH SPACE AVAILABLE FOR A SEPTIC TANK + SOAK PIT ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ● IS IT POSSIBLE TO ENTRUST THE REGULAR CLEANING AND MAINTENANCE OF THE TOILET TO A RESPONSIBLE BODY AND ARE THERE SUFFICIENT FUNDS FOR MAINTENANCE ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ● IS IT POSSIBLE TO PROVIDE A SUFFICIENT NUMBER OF SEATS FOR PEAK DEMAND ? | <input type="checkbox"/> | <input type="checkbox"/> |

NOTE : IF ALL 'YES', SELECT THIS TYPE: HOWEVER, DO SO ONLY IF ALL OTHER ALTERNATIVES ARE NOT FEASIBLE.

What is a PUBLIC TRENCH TOILET ?

It consists of an open trench with squatting seats at both sides of the trench. The toilet complex can be covered with a roof and short walls for privacy and protection from rain. The trench bottom should have enough slope to carry the concentrated excreta to a sewer or a septic tank and soak pit. There will be a large water tank for flushing the trench twice daily and a small water tank for personal use.



ADVANTAGES

- Per capita cost will be very low.
- Less maintenance than with the cubical type of public toilet.
- More seats can be accommodated in a small space.

DISADVANTAGES

- Difficult to use at night, especially by the old, the sick and children.
- Cleaning and maintenance required.
- Generally requires a narrow but long strip of land to build.
- Very unhygienic because of the open trench. Diseases might be spread by flies and insects.
- Connection can only be done to a sewer or a large septic tank.
- If connected to a large septic tank, the cost will be high.

COST (For 100-seat open trench latrine)

Foundation and toilet house (brick work, concrete and water tanks)	-- Rs. 110,400.00
Roofing (wood work and tiles)	-- Rs. 27,600.00
	<hr/>
TOTAL COST:	Rs. 138,000.00
	<hr/>
COST PER SEAT:	Rs. 1,380.00
	<hr/>

Kathmandu : 1984

The per seat cost will vary depending on the site conditions.

EXCRETA DISPOSAL

SEWERAGE SYSTEM

	<u>YES</u>	<u>NO</u>
● IS ENOUGH MONEY AVAILABLE FOR CONSTRUCTION ?	<input type="checkbox"/>	<input type="checkbox"/>
● ARE SUFFICIENT RECURRENT FUNDS AVAILABLE FOR MAINTENANCE ?	<input type="checkbox"/>	<input type="checkbox"/>
● ARE WATER CONNECTIONS AVAILABLE TO THE PRIVATE HOUSEHOLDS ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS NO COMPOSTING OF EXCRETA REQUIRED BY THE COMMUNITY ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS TRAINED MANPOWER AVAILABLE ?	<input type="checkbox"/>	<input type="checkbox"/>

NOTE : IF ALL 'YES', THEN SELECT THIS SYSTEM.

What is a SEWERAGE SYSTEM ?

It is a network of pipes for collecting the sewage from households in large communities. The sewage is carried through the pipes into a treatment plant before discharging into the 'kholas', or rivers. The treatment plant consists of a series of oxidation ponds and other mechanical systems difficult to maintain in care of breakdown, etc.



SEWER PIPE

TREATMENT POND

Source: Ross Bulletin (1978): Small Excreta Disposal Systems.

ADVANTAGES

- Long term solution.
- Safe and clean environment.
- Both surface drain + sewage can be carried together. Thus this system solves both excreta disposal and surface drain problems.
- Manure from sludge drying beds available for use.
- Best suited for very compact settlements.
- No health hazards.

DISADVANTAGES

- Requires a lot of time and experts for planning and design.
- Construction + equipment is very costly and requires skilled people for both construction and maintenance.
- Mud water is needed for the proper flow of excreta in the pipes.
- No composting can be done on individual basis.
- Huge recurrent fund for maintenance required.
- Complete municipal involvement required for operation and maintenance.

COST (Source : Bhaktapur sewerage construction)

Pipe network per household with manholes	-- Rs. 3,700.00
Treatment pond cost per household	-- Rs. 3,700.00
PER HOUSEHOLD TOTAL COST :	<u>Rs. 7,400.00</u>

Bhaktapur : 1984

EXCRETA DISPOSAL

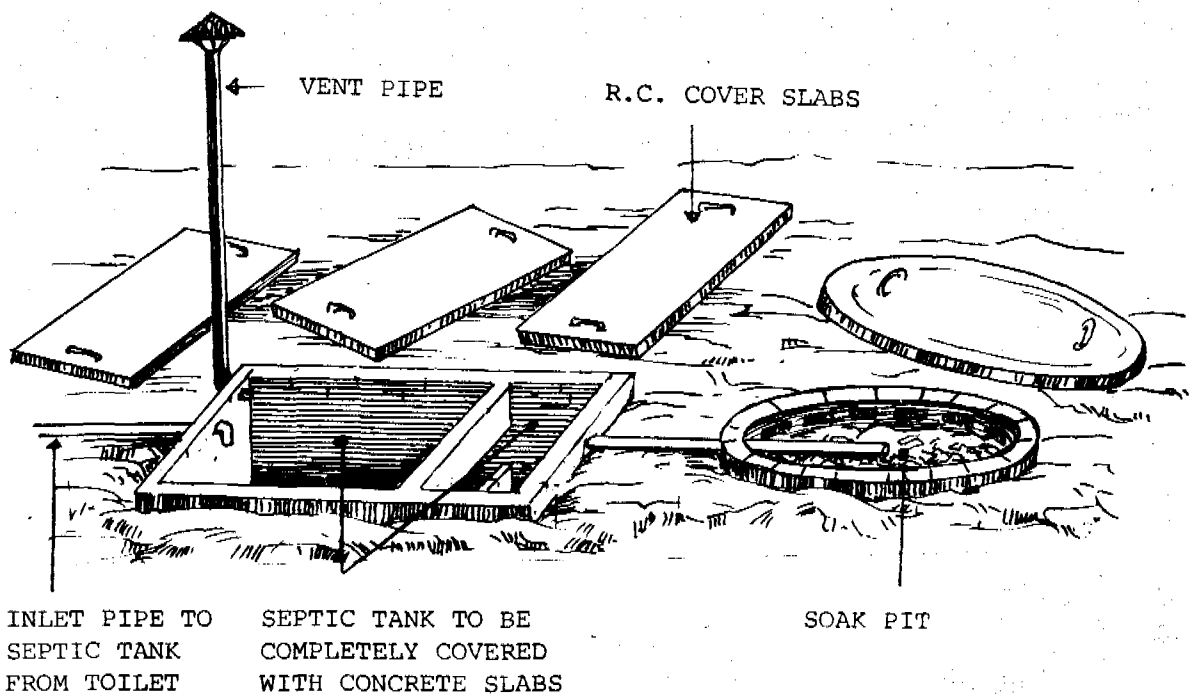
SEPTIC TANK + SOAK PIT

	<u>YES</u>	<u>NO</u>
● ARE SUFFICIENT FUNDS AVAILABLE ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS NO COMPOSTING OF EXCRETA WANTED ?	<input type="checkbox"/>	<input type="checkbox"/>
● IS SUFFICIENT SPACE AVAILABLE FOR SEPTIC TANK AND SOAK PIT ?	<input type="checkbox"/>	<input type="checkbox"/>
● DOES SOIL AROUND THE SOAK PIT ABSORB THE EFFLUENT ? (BEWARE OF STICKY CLAY OR BLACK COTTON SOIL.)	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: IF ALL 'YES', THEN SELECT THIS SYSTEM.

What is a SEPTIC TANK + a SOAK PIT ?

By this disposal system the excreta are disposed into an underground water tight tank for digestion in water and the effluent (liquid without any solids) is taken away to a soak pit for soaking into the surrounding ground. The septic tank should be full of water before using it.



ADVANTAGES

- Can be built fast.
- Because of individual unit no municipal involvement for operation and maintenance required.
- Safe and clean environment.
- Best suited for scattered communities.
- Little maintenance cost.
- Can be connected to pour flush toilets.

DISADVANTAGES

- Experts required for good design.
- For perfect construction, highly skilled manpower is required.
- Construction of tank should be water tight for proper digestion of excreta.
- No composting of excreta can be done.
- Emptying of tank is costly and creates nuisance and health hazards.
- Requires sufficient space for soak pits.
- Costlier than the two alternating composting pits.

COST (For 10 users)

Inlet pipe from toilet (approx. 3 m)	-- Rs. 630.00
Septic tank (brick work with concrete floor + slab cover)	-- Rs. 6,900.00
Connecting pipe to soak pit (approx. 10 m)	-- Rs. 115.00
Vent pipe (cast iron)	-- Rs. 220.00
Soak pit	-- Rs. 1,725.00

TOTAL COST (say): Rs. 9,600.00

Kathmandu : 1984

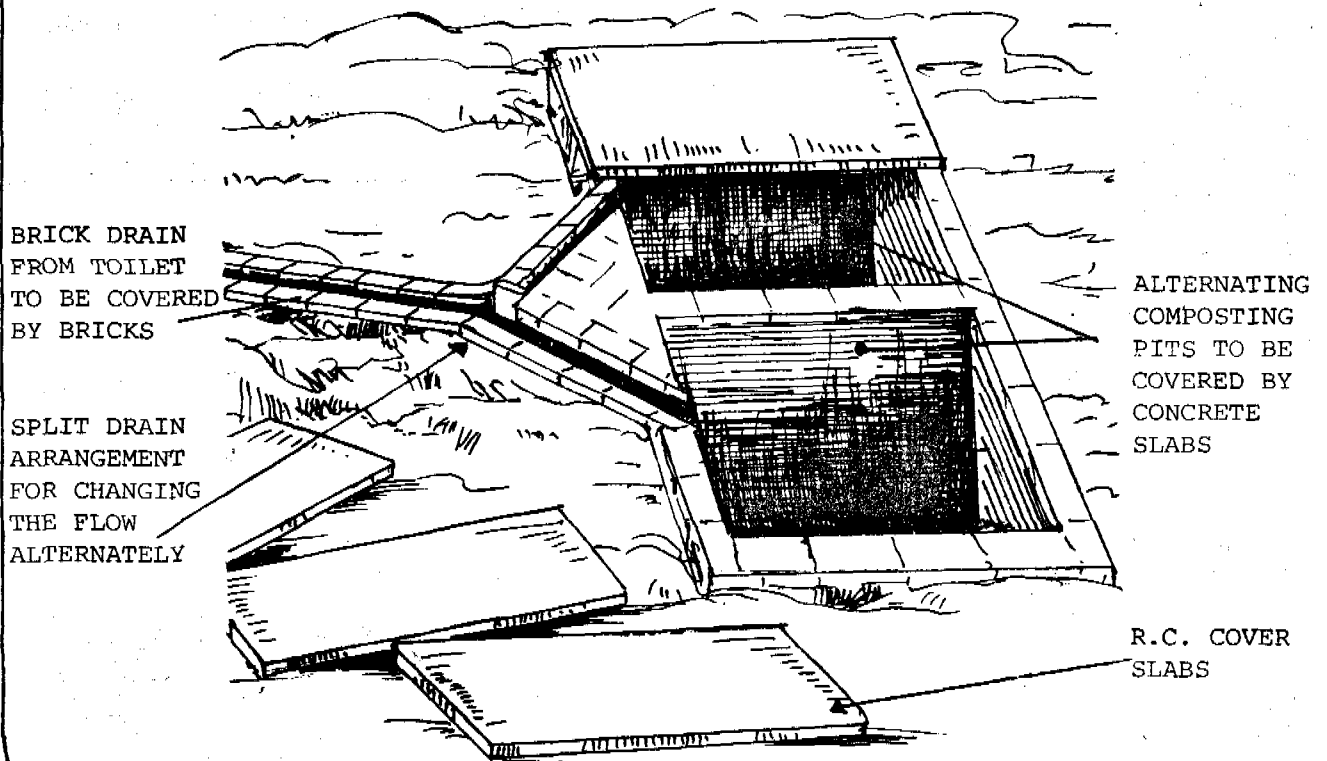
EXCRETA DISPOSAL : ALTERNATING COMPOSTING PITS

	<u>YES</u>	<u>NO</u>
● IS MANURE FROM EXCRETA NEEDED IN THE COMMUNITY ?	<input type="checkbox"/>	<input type="checkbox"/>
● HAS A POUR FLUSH TOILET BEEN CHOSEN ?	<input type="checkbox"/>	<input type="checkbox"/>
● ARE THE FUNDS LIMITED ?	<input type="checkbox"/>	<input type="checkbox"/>

NOTE : IF ALL 'YES', THEN SELECT THIS SYSTEM.

What are ALTERNATING COMPOSTING PITS ?

Excreta from the toilet are discharged first into one pit and then into the other one. Only one pit is used while the other is closed. When the first one is full, it is sealed and the second pit opened for use. While the second pit is being used the excreta in the first pit turn into a highly effective compost manure in about a year. The compost has no foul smell and contains no harmful germs. In this system, excreta are not disposed of but reused as manure.



ADVANTAGES

- Can be built fast (3 to 4 days)
- Much cheaper than a septic tank.
- No municipal involvement in operation and maintenance.
- Creates safe and clean environment.
- Minimum water requirement.
- No foul smell from the pits, as they are tightly covered with concrete slabs.
- Permanent installation.
- Composted excreta can be directly used in the field without any danger to health.
- Maintenance is virtually nil.
- Can be built by an ordinary mason under the supervision of a trained supervisor.

DISADVANTAGES

- Preferably, the soil should absorb all the water in the pits.
- Danger of contamination at places with very high underground water. (Should be at least 20 m away from a well or a ground water source)
- Extra precautionary measures are required in case of hard rock or clay which does not absorb the water.

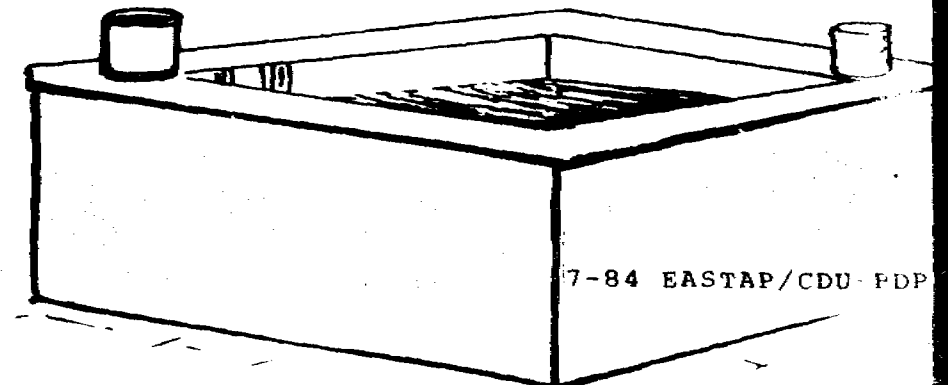
COST (for 10 users)

Connecting channel, about 2 m long (brick work)	-- Rs.	70.00
Alternating pits with removable cover slabs (concrete)	-- Rs.	970.00
		<hr/>
TOTAL COST :	Rs.	1,040.00
		<hr/>

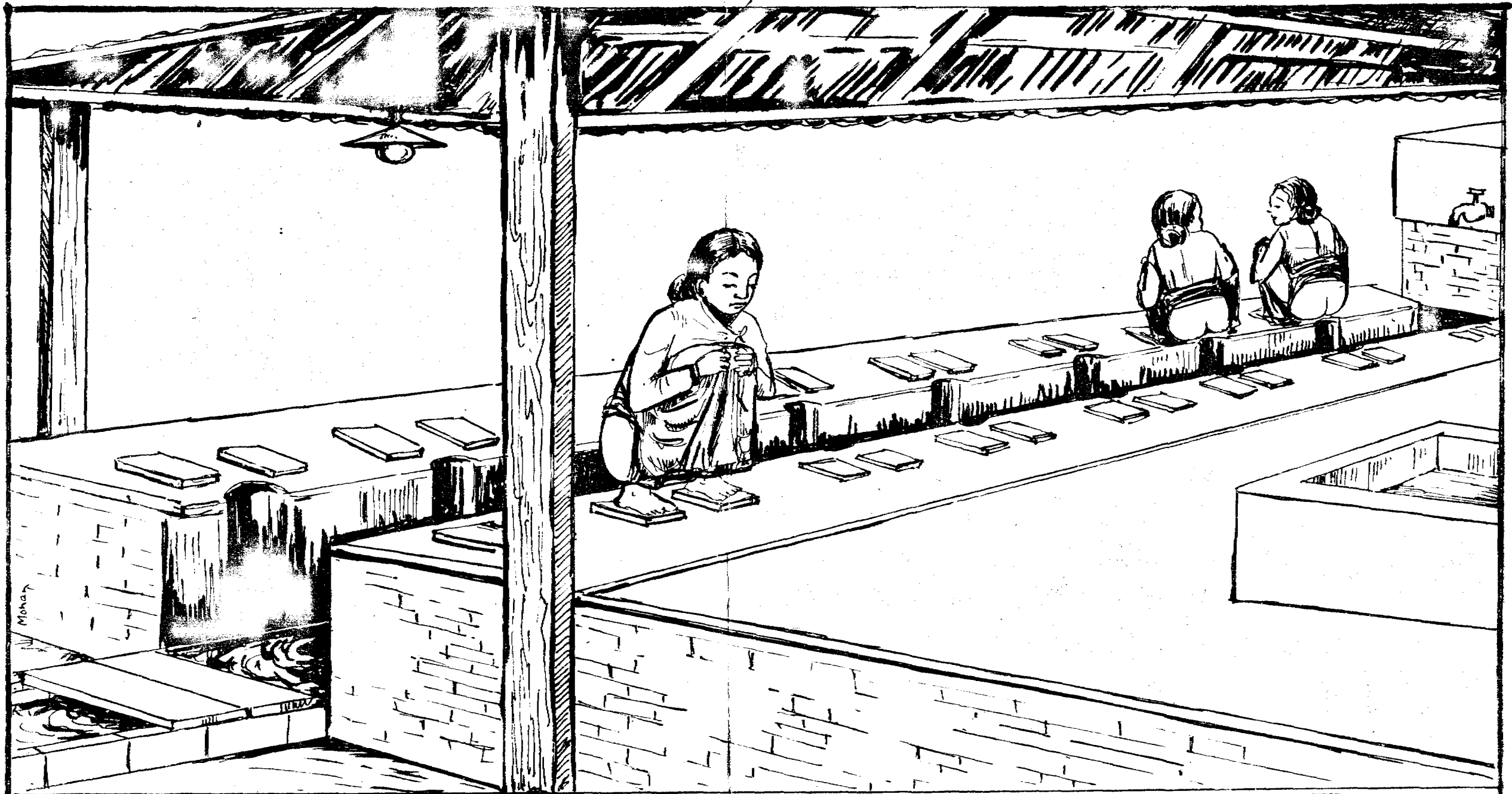
Kathmandu : 1984



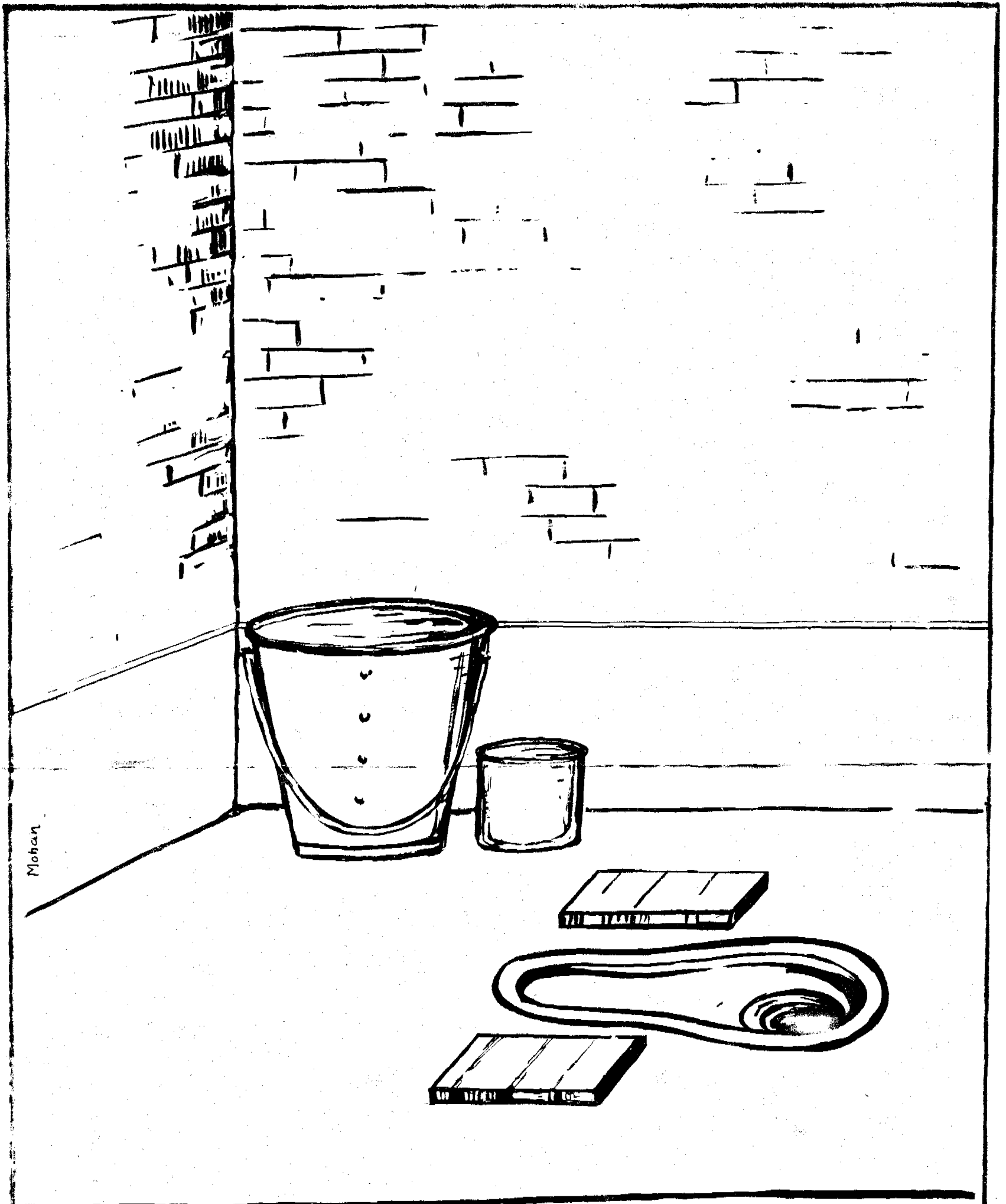
सार्वजनिक वर्षी



7-84 EASTAP/CDU-PDP

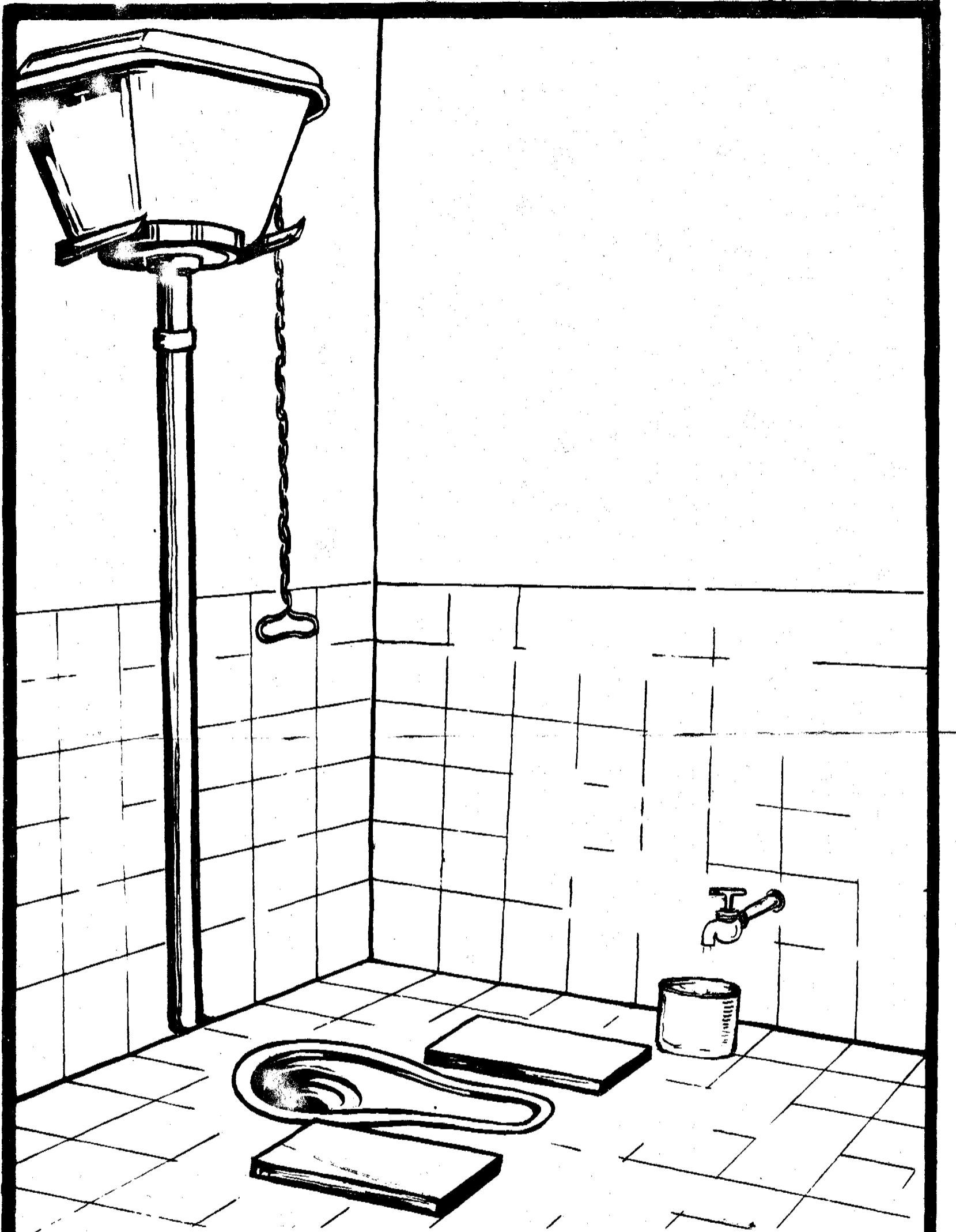


स्वच्छता सार्वजनिक वर्षी

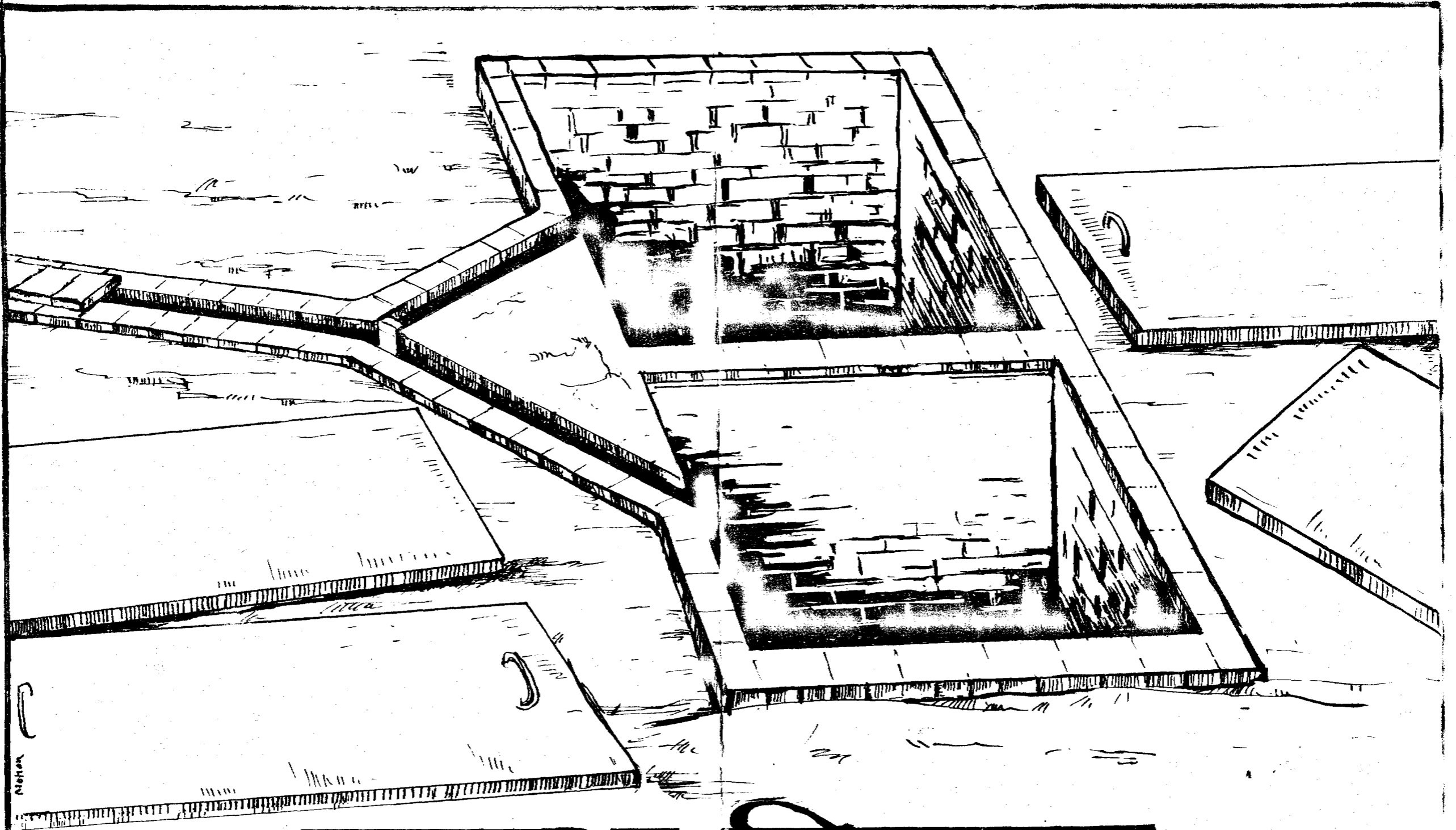


सलम वाटरभिल चर्पी

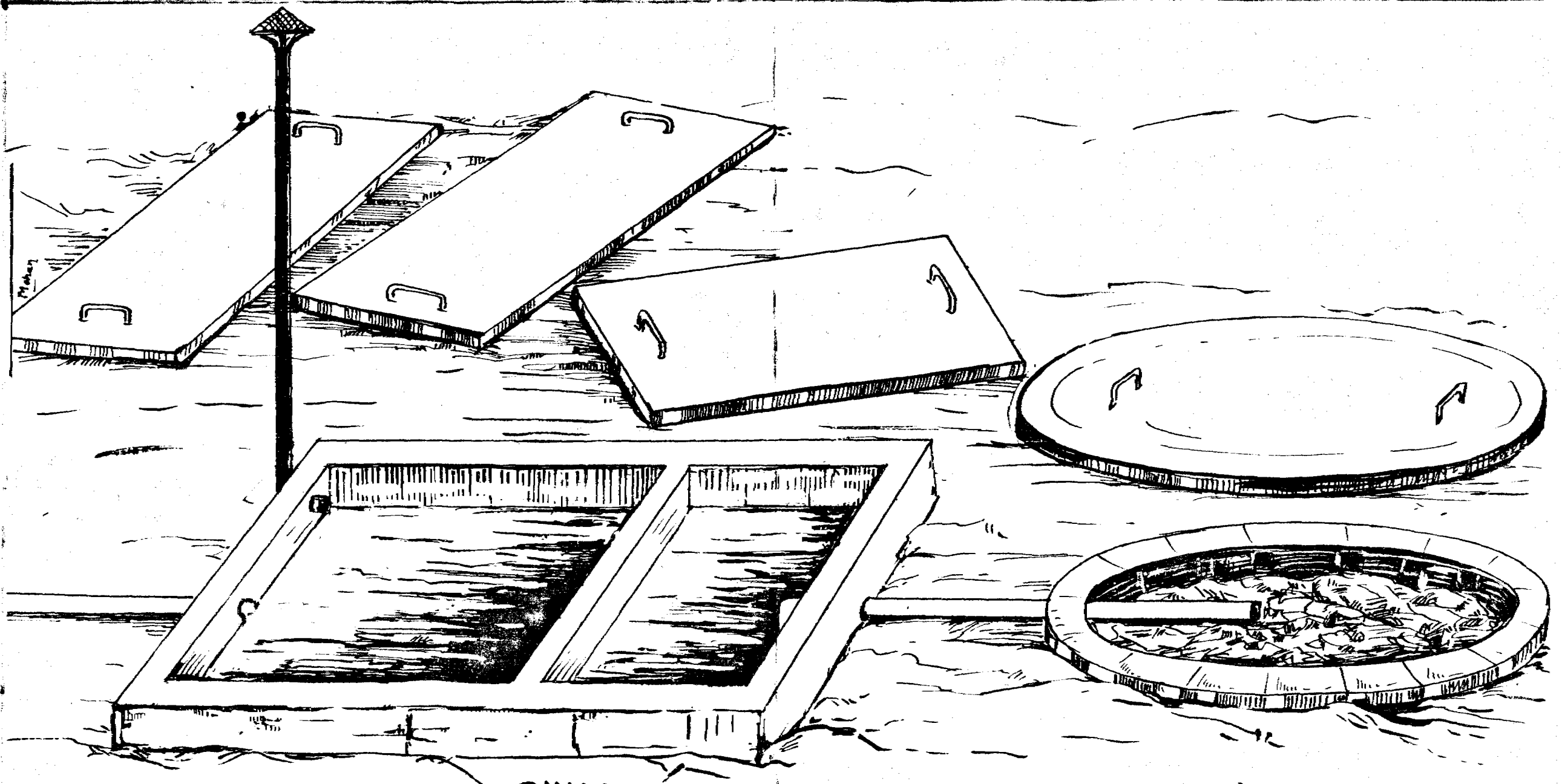
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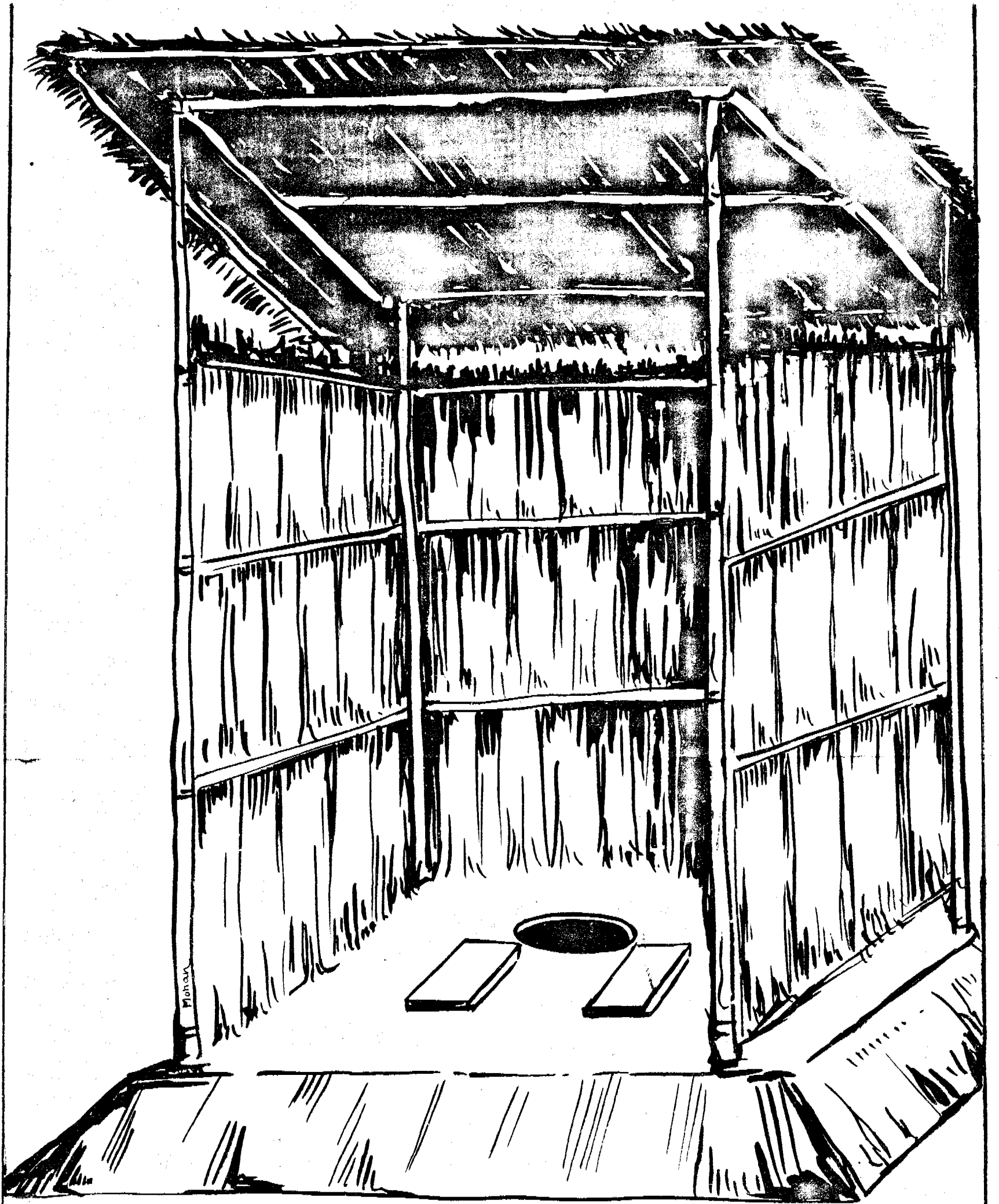
आधुनिक वाटर सिल चर्पी



सुलभ विकास



सोप्टि द्वाङ्क विकास

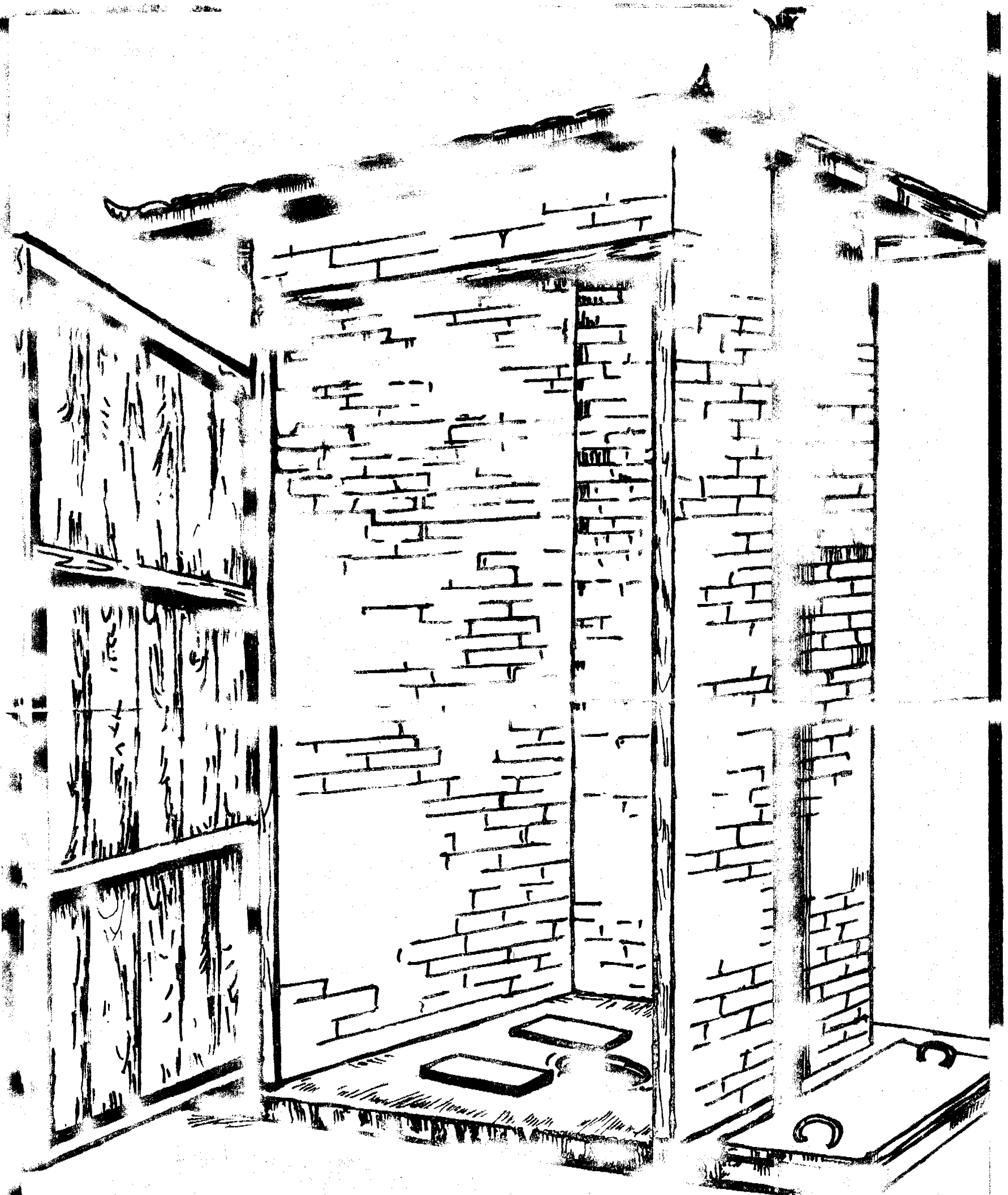


एवाले वर्षी



ढल नलकलल

7-84 EASTAP/CDU-BDP



अधार्मिकों खाते चर्पी

SORE EYES

The original set of flash cards SORE EYES has been prepared by the Audio-Visual Unit of C.M.C. Hospital, Vellore - 632004, India

This set of flash cards has been jointly prepared by:

UNICEF
P.O. BOX 1187
KATHMANDU
NEPAL
Tel.: 214581, 215124

AND

COMMUNITY DEVELOPMENT UNIT /
BHAKTAPUR DEVELOPMENT PROJECT
P.O. BOX 730
KATHMANDU
Tel.: 213235

HOW TO USE FLASH CARDS EFFECTIVELY

1. Stack these cards - picture side face up - No. 1 on top, No. 2 below it, No. 3 below No. 2, etc.
2. Hold the cards chest high so that your audience can see No. 1 first Explain No. 1.
3. Then slip No. 1 behind the stack, exposing No. 2. Explain No. 2.
4. Then slip No. 2 behind the stack, exposing No. 3 Explain No. 3. Repeat until the whole series is finished.
5. Rehearse the PRESENTATION several times before trying it on an audience.
6. Flash cards are good for an audience of about 20-30 people. Do not let any one sit more than 20 feet away from you, and do not let any one be too far off to the side. As you tell the story, turn slightly to the left and slowly around to the right so that people sitting at the sides may see the cards. Be very careful not to cover the pictures on the cards with your hands.
7. After everyone has seen the cards hold a question and answer period. Make sure you know the answers - prepare yourself thoroughly for this presentation.
8. Remember: REHEARSE, EXPLAIN THE CARDS AND HOLD A QUESTION AND ANSWER PERIOD.

क्र. २४५२८, २४५२९

क्र. ११२७

क्र. ११२७

क्र. ११२७

क्र. ११२७

क्र. २४५२८, २४५२९

क्र. ११२७

क्र. ११२७

क्र. ११२७

क्र. ११२७

यदि फलदायक कारिका सेट की तब मरका संस्था के लेखक के नाम से कर लेना है :

यदि आवाजकारिता के लेखकों को प्रकाशित करने के लिए प्रस्तावित किया जा रहा है - प्रकाशक
यदि प्रकाशक के नाम से प्रकाशित किया जा रहा है - प्रकाशक

आवाजकारिता

PREVENTION OF DIARRHOEA

The original set of flash cards 'Prevention of Diarrhoea' has been produced by the Audio-Visual Unit of C.M.C. Hospital
Vellore 632004
India

This set of flash cards has been produced by:

**COMMUNITY DEVELOPMENT UNIT/
BHAKTAPUR DEVELOPMENT PROJECT
P.O. BOX 730
KATHMANDU
Tel.: 213235**

and printed by:

**UNICEF
P.O. BOX 1187
KATHMANDU
NEPAL
Tel.: 521988**

HOW TO USE FLASH CARDS EFFECTIVELY

1. STACK THESE CARDS - PICTURE SIDE FACE UP - NO. 1 ON TOP, NO. 2 BELOW IT, NO. 3 BELOW NO. 2, ETC.
2. HOLD THE CARDS CHEST HIGH SO THAT YOUR AUDIENCE CAN SEE NO. 1 FIRST. EXPLAIN NO. 1.
3. THEN SLIP NO. 1 BEHIND THE STACK, EXPOSING NO. 2. EXPLAIN NO. 2.
4. THEN SLIP NO. 2 BEHIND THE STACK, EXPOSING NO. 3. EXPLAIN NO. 3. REPEAT UNTIL THE WHOLE SERIES IS FINISHED.
5. CHOOSE FROM THE 2 CARDS WITH NO. 5 AND ALSO WITH NO. 7 THE ONE WHICH IS APPLICABLE.
6. REHEARSE THE PRESENTATION SEVERAL TIMES BEFORE TRYING IT ON AN AUDIENCE.
7. FLASH CARDS ARE GOOD FOR AN AUDIENCE OF ABOUT 20-30 PEOPLE. DO NOT LET ANY ONE SIT MORE THAN 20 FEET AWAY FROM YOU, AND DO NOT LET ANY ONE BE TOO FAR OFF TO THE SIDE. AS YOU TELL THE STORY, TURN SLIGHTLY TO THE LEFT AND SLOWLY AROUND TO THE RIGHT SO THAT PEOPLE SITTING AT THE SIDES MAY SEE THE CARDS. BE VERY CAREFUL NOT TO COVER THE PICTURES ON THE CARDS WITH YOUR HANDS.
8. AFTER EVERYONE HAS SEEN THE CARDS HOLD A QUESTION AND ANSWER PERIOD. MAKE SURE YOU KNOW THE ANSWER - PREPARE YOURSELF THOROUGHLY FOR THIS PRESENTATION.
9. REMEMBER : REHEARSE, EXPLAIN THE CARDS AND HOLD A QUESTION AND ANSWER PERIOD.

टिप्पणी पत्रिका रोकथाम

यह टिप्पणी पत्रिका रोकथाम की शुरुआत के लिए है।
शुभचिन्तक, दिल्ली-११००८६, भारत में प्रकाशित है।

यह पत्रिका का रोकथाम के लिए है।

सामाजिक विकास
भारत परियोजना
पृ. ७३०
काठमाडौं
फोन. २१३३३६

संस्थापक
पृ. ११८७
काठमाडौं
नेपाल
फोन. ७२१९८८

फलास काडहेरु प्रभावकारी ढंगवार कसरी प्रयोग गर्नु ?

१. विज अणुको भोग माथि फर्काएर यी काडहेरु कमसंख्या मिनाएर (१, २, ३) बागि पार्नु होस ।
२. बर्षाकरु सवैले देवने गरी काडहेरु मापना छाती अन्दा माथि लागि समाउ र पहिलो काडि बारे व्याख्या गर्नु होस ।
३. देखाइ सकको एक नं.को काडि बागको मुतीर राखने बालिक बोधो देखाइ व्याख्या गर्नु होस ।
४. दोशो पनि व्याख्या गरी सकेपछि पहिलो अरुने बागको मुतीर राखुस र दोशो बारे व्याख्या गर्नु होस । सबै काडहेरु नसकिउजालसम्म यही क्रममा दोहोयाउ ।
५. काडि नं. ५ ए र बी दुई मध्ये सुहेजवा एउटा मात्र काडि छाडि होस । काडि नं. ७ ए र ७ बी को पनि यस्तै गर्नु होस ।
६. बर्षाकरु समय प्रदर्शन गर्नु माथि धरे पटक पुर्बामास गर्नु होस ।
७. करोड २० देखि ३० जना सम्म बर्षाकरुको समूह अणुको ठाउमा यि फलास काडहेरु प्रयोग गरी देखाउनु ज्यादै उपयुक्त छ । आर्क बसेको २० फिट अन्दा टाढा कुनै पनि व्यक्तिमाई रहने बर्षा र ज्यादै कुनामा पनि बस्न दिनु हुदैन । फलास काडिमा अणुको विज बारे व्याख्या गर्दा विस्तारै टापा र बापा निर डलेर हिडने र देखाउने गरेमा छुटमा बसेका व्यक्तिहरुले पनि राखी देखेछन । यि काडहेरु आर्कले समाउदा आफ्नै होतले छान्न सक्ने आर्कले यस्तो हुन नदिन सक्नु पर्छ ।
८. सबैजनाले काडहेरु हेरी सके पछि यसबारे प्रश्न उत्तरको कार्यक्रम चलाउने । यस क्रिसमको प्रवृत्तिकरणमा पहिले आफ्नै यसका साथ उत्तरहरु बारेको जानकारी हुनुपर्छ ।
९. पाठ राखुसं: पूर्व अन्दास, काडहेरुबारे व्याख्या गर्नुसं र यस सर्वाभामा प्रश्न उत्तरको कार्यक्रम संचालन गर्नुसं ।



१ लक्ष्मी र तिनको परिवार एउटा गाउँमा बस्दै छन् । तिनीको लग्ने कृष्ण बहादुर एक किसान भएकोले उ आफ्नो धेरै जसो समय खेतमा काम गरि बिताउँछ । तिनीको जेठो छोरा श्याम पाठशालामा अहिले छैठौँ कक्षामा पढ्दै छ । एक दिन, लक्ष्मी घर धन्दा सिध्याएर आराम गरिरहेको बेलामा आफ्नो छोरा श्याम देख्छ तिनी अचम्ममा पर्छिन् । स्कूल छुट्टी भन्दा अघि नै श्यामलाई देख्दा तिनी अचम्म मान्छिन् । के भयो हं ? यसो हेर्दा त उ रोएर आइरहेको जस्तो देखिन्थ्यो । उस्ले आंखा बेसरी मिची रहेको थियो र आंखाबाट आसु बगिरहेको थियो । श्यामको आंखा दुख्यो । उस्ले पढ्न सकेन । उस्को कक्षाका अन्य केटाकेटीहरूको पनि आंखा दुखेको थियो । शिक्षकले सबै केटाकेटीहरूलाई घर पठाई आमा बाबु छेउ डाक्टरकहाँ जचाउन जान सल्लाह दिई पठाएको थियो । तर श्यामको बज्यैले पटककै मानेन, र भनिन् “पढेन पढेन, जचाउन गयो भने पैसा खर्च हुन्छ, पहेंलो टालोले पुछेर सफा गरेपछि ठिक भै हाल्छ नि” ।

1. Laxmi and her family live in a village, Her husband Krishna Bahadur is a farmer and spends most of his time working in the fields. Her eldest son Shyam is attending school and is now in the sixth grade. One day when Laxmi was relaxing just after finishing her household works she suddenly looked up and saw her son Shyam. She was surprised to see him as it was too early for him to come from school. What was wrong? He looked as though he were crying. He was rubbing his eyes and the tears were running down his face. Shyam had sore eyes. He could not study. Many other children in his class also had sore eyes. Their teacher had send them home and had advised them to ask their parents to take them to the doctor. But Shyam's grandmother said: "No, no! That will cost money. We use saffron cloth and wipe the eyes and they will be alright."



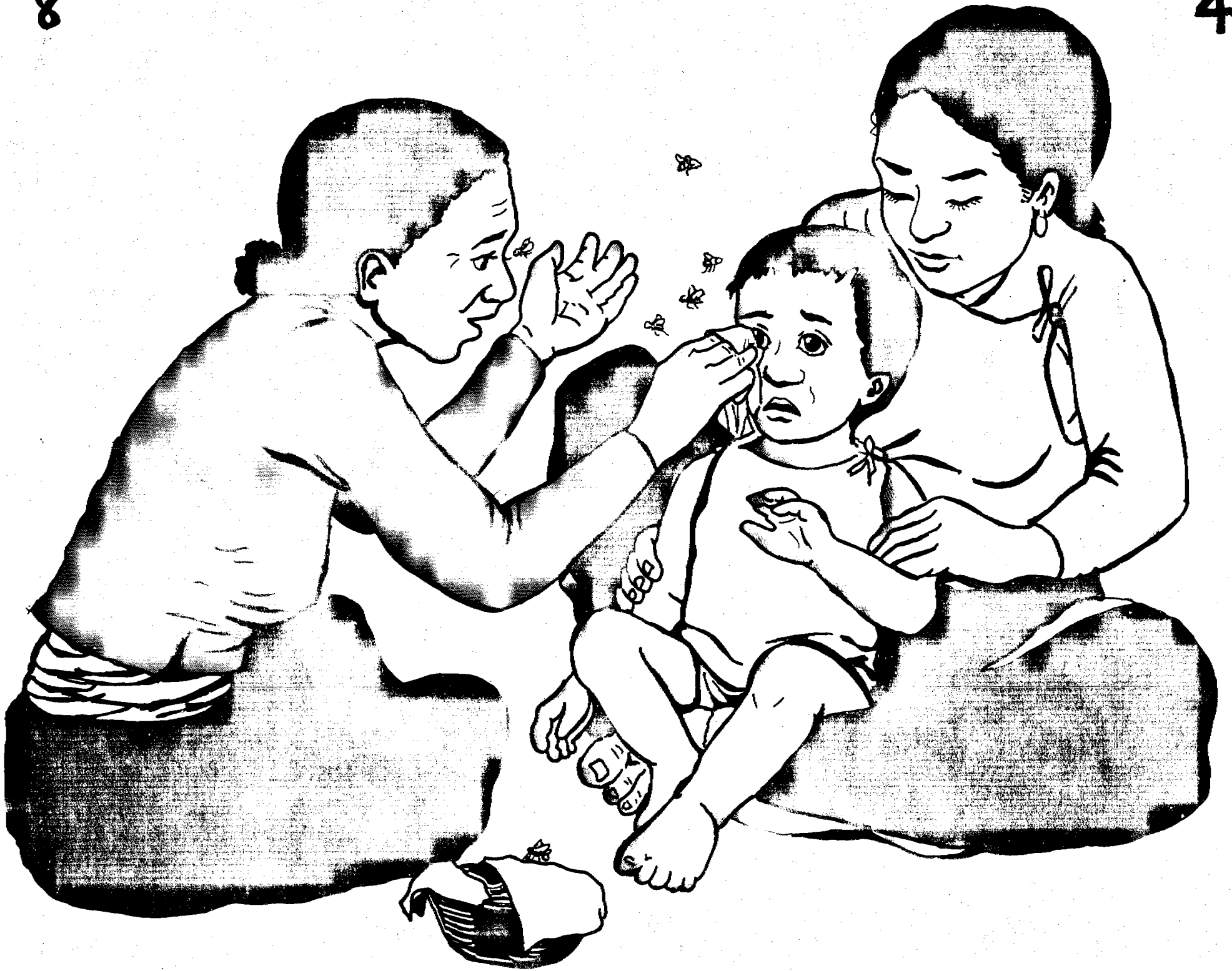
२ श्याम घरमा नै भएकोले उस्ले आफ्ना सा-साना भाई बहिनीहरूलाई खेलार्ई आमालार्ई मदत गर्‍यो । बच्चा चिच्चाएर रोइरहेको थियो । श्यामले आफूले आंसु र चिप्रा पुछ्न राखेको टालोले नै बच्चाको आंसु पुछ्छिदियो । आफ्नो दुःखेको आंखाबाट आएको आंसु र चिप्रा आंखा दुखाउने रोगका किटाणुहरू छन् भन्ने बारे श्यामलाई थाह थिएन । उस्ले आफ्नो आंखा पुछ्ने गरि आएको त्यहि मैलो र फोहर टालोले बच्चाको आंखा पुछ्छि दिनाले बच्चाको आंखामा पनि रोगका किटाणुहरू पसे ।

2. While Shyam was at home he helped his mother to take care of his younger brothers and sisters. The baby was crying. So Shyam wiped the tears of the baby with a cloth which he had kept to wipe the water and pus from his own sore eyes. He did not know that the germs which cause sore eyes were in the water and in the pus from his own eyes. Thus the germs got into the baby's eyes from the same dirty cloth which Shyam used to wipe his own eyes.



३ भोली पल्ट बच्चाको आंखा पनि रातो भई आंखाबाट आंसु बग्नु थाल्यो । आमाले सारीको छेउबाट बच्चाको आंसु पुछि दियो । त्यसपछि तिनी आफ्नो काममा लागिन् । एकछिनमा बतास चलेकोले तिनीको आंखामा पनि धुलो पस्यो । तिनीले आंखामा पसेको धूलो निकाल्न बच्चाको आंखा पुछेको त्यहि सारीको छेउ नै प्रयोग गरिन । भोलि पल्टको दिन देखि आमाको पनि आंखा दुःख्न सुरुभयो ।

3. The next day the baby's eyes were also red and watery. Mother wiped the baby's eyes with the end of her saree. Then she went on with her work. Later the wind was blowing and some dirt got into her eyes. She wiped them with the same end of her saree which she had used to wipe the baby's sore eyes. The next day mother too had sore eyes.



४ बज्यैले दुखेको आंखामा पहेंलो टालोले उपचार गर्न सुरु गरिन । तर निको हुनुको सट्टा फन खराब हुन थाल्यो । आमालाई दुखेर असह्य भयो, काम पनि गर्न सकिनन् । बच्चा लगातार रून थाल्यो । दुखेको आंखा फिंगाहरूले खुब मनपराएर आंखा र बच्चाको जिउ भरी भन्किन थाल्यो । बच्चाले फिंगा धपाउन नजानेकोले फन बढी चिच्याइ रून थाल्यो ।

बच्चाको दुखेको आंखामा बसेर यी फिंगाहरूले आफ्नो मसिनो भुल्ला भएको खुट्टामा आंसु र चिप्रा बटुले । यिनीहरू उडेर गई भाई र बहिनीको स्वस्थ्य आंखामा बसे । फिंगाहरू उडेर गई बज्यैको आंखामा समेत चिप्रा पुन्याई दियो ।

4. Grandmother continued to treat the eyes with saffron powder. But the eyes only seemed to get worse. Mother felt miserable and could not do her work. The baby cried continuously. The flies liked the sore eyes and swarmed over the baby. The baby could not shoo them away and cried all the more. The flies got water and pus on their hairy legs from the sore eyes of the baby. They flew over and sat on the healthy eyes of little brother and sister. The flies even carried the pus to grandma's eyes.



५ भोली पल्ट विहान श्यामले उसको आंखा ऊन बढी दुख्न थालेकोले डाक्टर कहाँ गएर जचाउनको लागि बाबुलाई भन्यो । आमा पनि बच्चा बोकेर गइन । तिनीले डाक्टरलाई पहेंलो टालोले आंखा सफा गरेको कुरा बताइन । तिनीहरूले यसबाट निको हुन्छ भनी विचार गरेका थिए । तर ऊन बढी खराब भयो ।

यस प्रकारको आंखा दुखाई सुरक्षित औषधी र बराबर आंखा सफा गरेमामात्र निको हुने कुरा डाक्टरले व्याख्या गरे । यदि दुखेको आंखा राम्ररी सफा गरिएन र औषधी हालेन भने आंखा भित्र गहिरो घाउ भई राम्ररी देख्न नै सक्दैन ।

5. The next morning Shyam asked his father to take him to the doctor since his eyes were getting worse. Mother came also with the baby. She explained to the doctor that grandmother had wiped their eyes with saffron. They thought it would cure the eyes. but instead they only became worse.

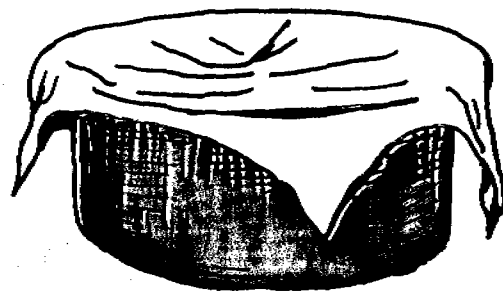
The doctor explained that this type of eye sickness only can be cured with safe medicine and with cleaning the eyes regularly. If sore eyes are not washed and medicine put in, a very deep sore may form in the eye which may destroy the sight.



६

आंखा दुखेमा कसरी सफा गर्ने भन्ने बारे डाक्टरले व्याख्या गर्दछ । सबभन्दा पहिले आमाले साबुन पानीले राम्ररी हात धुनु पर्छ ।

6. Then the doctor explained how to wash out the eyes when they are sore. First mother must wash her hands with plenty of soap and water.



७ आंखामा धूलो पस्दा आउने नूनीलो आंसु जस्तै गरी आमाले नून पानी तयार गर्नु पर्नेछ । ठूलो एक ग्लास पानीमा पांच पैसाको ढ्याकमा जति नून अटाउँछ त्यति नून पानीमा हाल्नु पर्छ ।

7. Then mother must prepare salty water which is like the tears which clean our eyes when some dust has come in. She must take as much salt as will fit on a five paisa coin and put it into a large glass of water. Then she must strain the salt water through a cloth into a small pot and boil it for two or three minutes. After boiling it has to cool for some time.



८ यसपछि अर्को भाँडामा एउटा चम्चा र स-साना कपडाको टुक्राहरू राम्ररी सफा गर्नको लागि उमाल्नु पर्छ ।

8. Next mother would take another pot and boil a spoon with a few small pieces of cloth in order to clean them thoroughly.



९ यी सबै चीजहरू तयार भइसकेपछि डाक्टरले श्यामको आमालाई आफ्नो बच्चा काखमा बसाली राख्न अनुरोध गर्नु भयो । डाक्टरले दुखेको आंखा तिर टाउको ढल्काउँछ ।

आंखामा नथिचिकन राम्ररी आंखालाई फटाउने छ । यदि आंखा चिप्राले बन्द भइरहेको छ भने ज्वरजस्ती खोल्नुको सट्टा भिजेको कपडाले बिस्तार पुछेमा कक्रक्क परिरहेको चिप्रा नरम भई निकाल्न सजिलो हुने कुरा डाक्टरले व्याख्या गरि दिनु भयो ।

अब आंखाको भित्रिभाग सफा गर्न सकिन्छ । चम्चामा नून पानी लिई नाकको छेउ तिरबाट बिस्तारै आंखामा खन्याउने । यसो गर्दा बग्नेपानी थाप्नको लागि कान तिर एउटा सानो भांडा थाप्न सकिन्छ । यो भांडा लाई पछि राम्ररी सफा गर्नु पर्छ ।

9. After all the things were made ready the doctor asked Shyam's mother to sit and hold the baby on her lap. He turned the baby's head on the side of that sore eye which he was preparing to wash. Then he opened the eyelid wide being careful not to press the eye. He explained that if the eyelids are stuck together with pus, do not force, instead first wet the eyes on the outside with the salt water and gradually the pus will become loose and can be easily removed.

Now the inner part of the eye can be washed. Hold the spoon above the eye and pour the salt water slowly into the corner next to the nose. You can keep a small pan near the ear to catch the water running down from the eye. This pan afterwards has to be cleaned carefully.



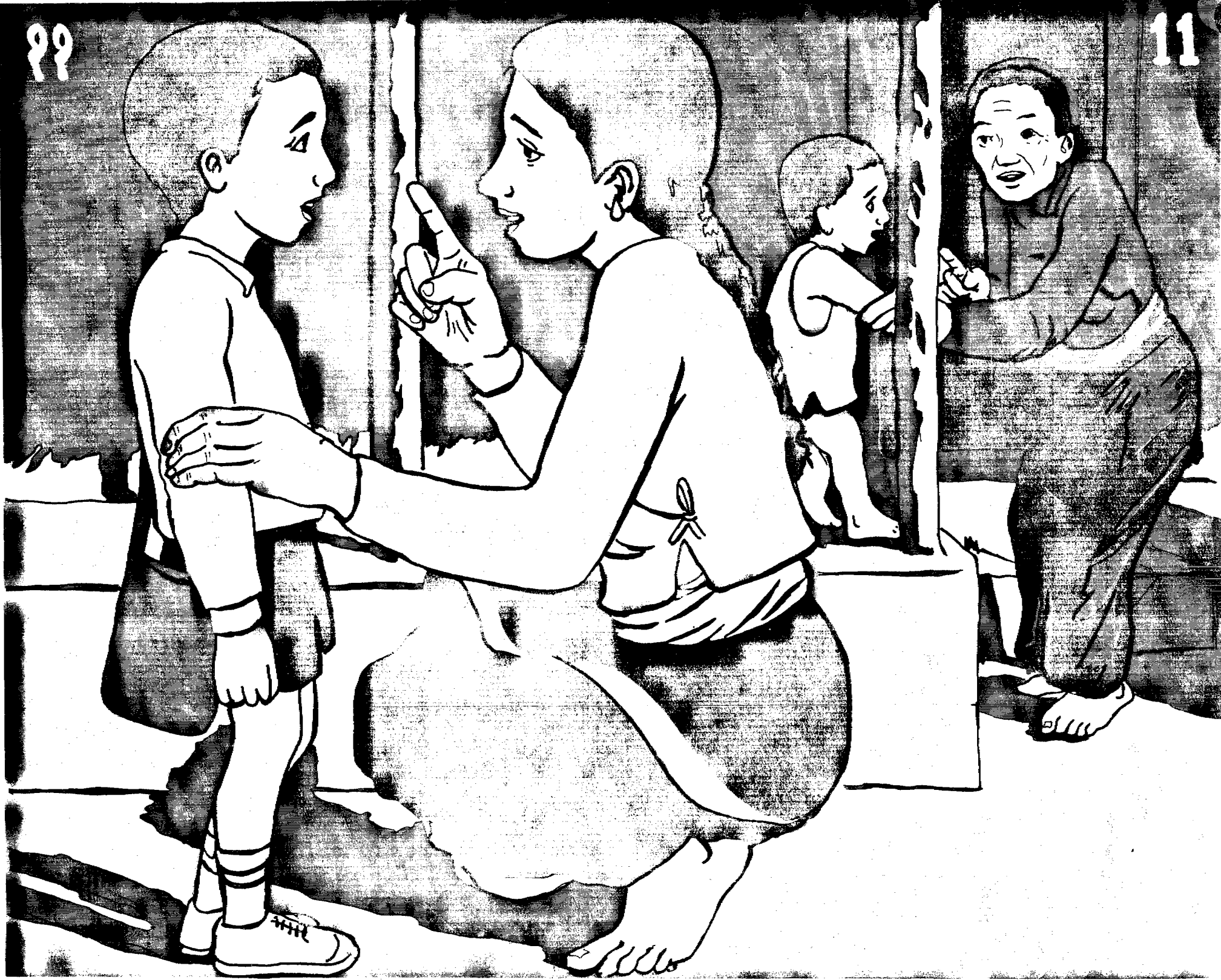
१०

त्यसपछि आमाले आंखा बन्द गराई उमालेको कपडाको एक टुक्रा लिनु पर्छ । यस कपडालाई चार कुनामा समाई आंखालाई नाक देखि कान छेउ सम्म बिस्तारै पुछ्दै लैजानु पर्छ । प्रत्येक पटक यसो गर्दा अर्को कपडाको टुक्रा लिन पर्छ र उहि कपडाले दोश्रो आंखा पुछ्न हुँदैन । यस पछि डाक्टरले एक प्रकारको बिशेष मलम आंखामा लगाइ दियो । बच्चाको उपचार गरिसकेपछि परिवारको अन्य सबै सदस्यहरूको आंखाको उपचार गर्नु पर्छ ।

यदि श्यामलाई समयमा नै उपचार गराएको भए परिवारको अन्य सदस्यहरूलाई आंखा दुख्ने नै थिएन । त्यसैले डाक्टरले अर्को पटक यसो भएमा रोग फैलन नदिन समयमा नै आउन सल्लाह दियो । दुखाई र दुख हटाउनको लागि रोगको रोकथाम गर्नु नै असल हुन्छ ।

10. Then mother must close the eye and take one of the boil pieces of cloth, Holding it at the four corners she must wipe the eye gently from the nose towards the ear, For each stroke she must use a different piece of cloth and she should not use the same cloth for the other eye. Then the doctor treated the eye with a special ointment. After the treatment of the baby was completed, all the other sore eyes of the members of the family had to be cleaned and treated as well.

If Shyam had been treated earlier, the rest of the family would not have gotten sore eyes. So the doctor advised them to come early the next time before the sore eyes have a chance to spread. It is better to prevent illness and to avoid a lot of pain and misery.



११ औषधीले खुब छिटो काम गन्यो । केहि दिन भित्रै दुखेको घेरै फाइदा भयो । बज्यै र श्यामको आमा काम गर्न सक्ने भए । बच्चा पनि खुसि साथ खेलन थाल्यो र श्याम फेरि स्कूलमा जान थाल्यो ।

11. The medicine worked very quickly. After a few days the eyes were very much better. Grandma and Shyam's mother were able to work. The baby was happy too and Shyam was again able to study and to go back to school.