

322 93 80

Water
and Sanitary
Tel. 31 70 30 689 80
Fax 31 70 85 899 84

DO IT YOURSELF
Soakage Pit

322 - 9350 - 14023

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INTRODUCTION

Disposal of Waste Water or Kitchen Waste is major problem in rural areas. There are no adequate facilities available in rural areas for disposal of waste water with the result the water gets collected nearby houses which give rise to flies and mosquitoes. This gives adverse effect on health.

This problem may be solved by constructing Soakage Pit, which is easy to construct at low cost and can be made with locally available materials.

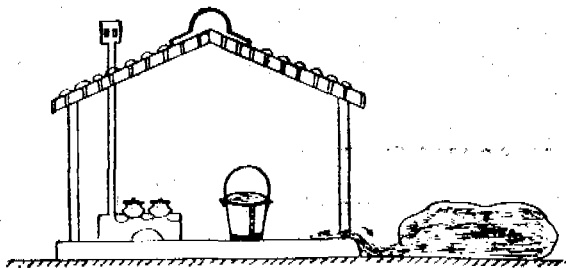


Fig. 1

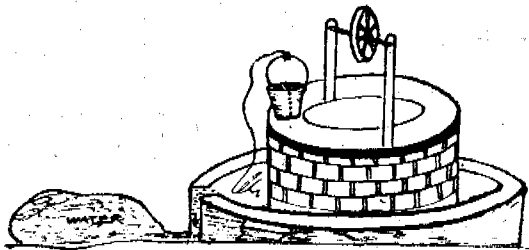


Fig. 2

WHAT IS SOAKAGE PIT ?

Soakage Pit is a rectangular pit in which brick ballast of required size and soil is filled up in pit Kitchen waste water being absorbed in the soil of soakage pit. The soakage pit does not allow to collect water nearby and also helps us to make space clean.

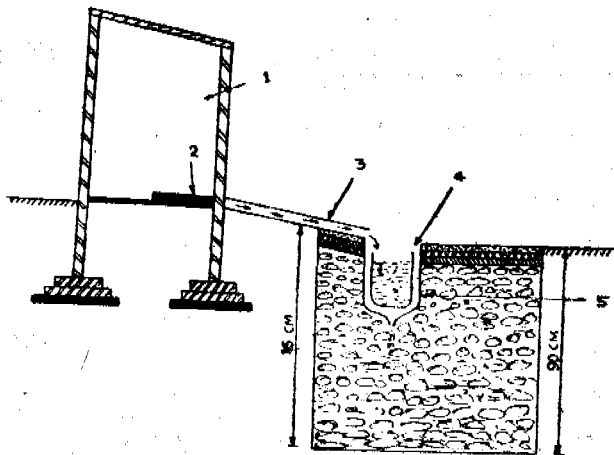


Fig. 3

- 1. Super structure.**
- 2. Foot rest.**
- 3. Brick channel.**
- 4. Small pot (1 lit.)**
- 5. Big pot (2 lit.)**

SITE SELECTION

It must be ascertained before final selection of site that soakage pit should be constructed nearby kitchen. It must not be far away from kitchen. It may be in vicinity of kitchen garden or orchard.

CONSTRUCTIONAL MATERIALS

Following materials are required for construction of Soakage Pit.

- | | |
|---|------------------|
| 1. Brick ballast of 5 cm size | 23 cft. |
| 2. Gunny Bag or Jute | 2 meters. |
| 3. Bamboo thatch 1 m long or Arhar stem | 20 nos. |
| 4. Cowdung | |
| 5. Straw | |
| 6. Tin container or earthen pot | 2 litre capacity |
| 7. Tin container or earthen pot | 1 litre capacity |
| 8. Pipe of 5 cm dia × 30 cm length | One. |

If open drainage is to be constructed following materials will be required.

- | | |
|--------|---------|
| Brick | 20 nos. |
| Sand | 2 cft |
| Cement | 5 kg. |

TOOLS REQUIRED FOR CONSTRUCTION OF SOAKAGE PIT

1. Spade
2. Hammer

METHOD OF CONSTRUCTION

1. Mark the dimensions 75 cm length \times 75 cm width on the ground (Fig.—4).

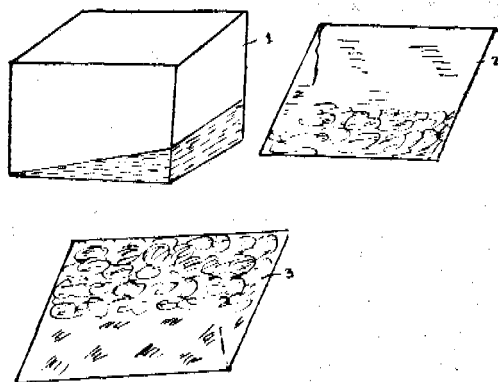
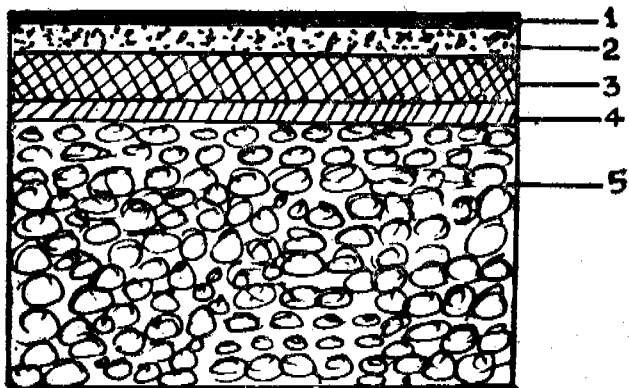


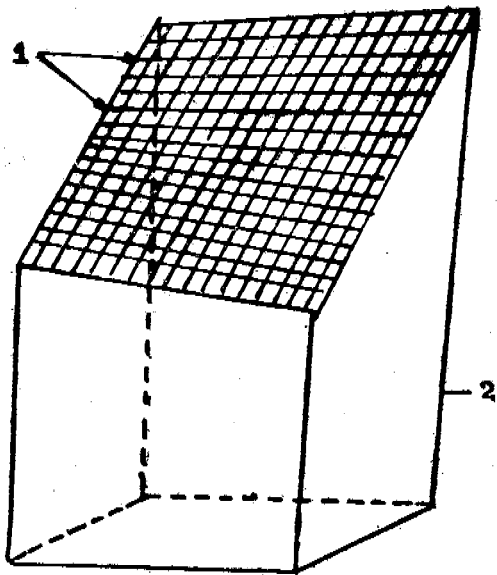
Fig.—4

1. Pit.
 2. Bottom plan.
 3. Upper plan.
2. Dig a pit along marked dimensions. The depth of pit should be 75 cm at one end and 90 cm at other end. Water should be collected on one side of pit and is being absorbed in earth [Fig.—5 (A & B)].



1. Mud Plaster.
2. Morang.
3. Wedge.
4. Jute or gunny bag.
5. Brick balast.

Fig.—5 (A)



1. Roof made of wedge.
2. Side view.

Fig.—5 (B)

3. When pit is ready fill the pit with the brick ballast of 5 cm upto surface [Fig.—5 (A & B) and 6 (A & B)].

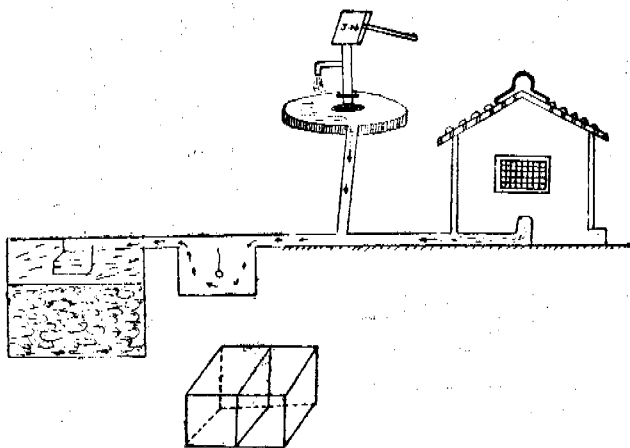


Fig.—6 (A)

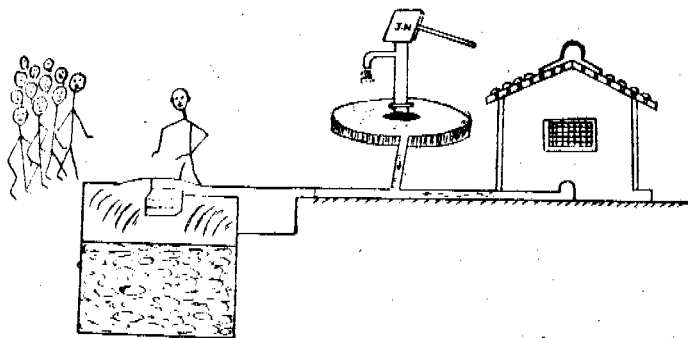


Fig.—6 (B)

4. Place tin container or earthen container to the side from water where is entering. Container should be placed 5 cm above the ground.
5. Drill a hole 12 mm ($\frac{1}{2}$ ") in a tin container so that water can flow down from hole.

6. Spread bamboo thatch on brick ballast.
7. Spread the jute cloth on bamboo thatch.
8. Apply a solution of cow dung and straw on jute cloth, this may be done after 2-3 days so that cracks may not develop.
9. Place 1 litre container with 5-6 holes in a two litre container.
10. Fix the asbestos pipe or cement pipe in such way, so that water may fall in container. Link the open channel with this.
11. Apply a solution of cow dung and soil on soakage pit on every fifteen days.

PRECAUTIONS

1. Only kitchen waste water or hand pump or water nearby well should be allowed to fall in soakage pit.
2. Do not allow sand or foreign matter to fall in pit.

MAINTENANCE

1. Clean the 1 litre container daily.
3. Clean pit periodically.
3. Clean the pit by removing brick ballast in choked condition.
4. Do not allow water to accumulate in the vicinity of 4 metre dia of soakage pit.

ADVANTAGES

1. Dirtiness can be avoided.
2. Stop mosquitoes breeding.
3. Stops water pollution.
4. No adverse effect on health.
5. Papaya can be grown near the pit effectively if desired, and one can earn money.

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5. Keeping Centrifugal Pump Trouble Free & Energy Saving Tips.
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RURAL TECHNOLOGY MANNUALS (In English)

1. Selected Technologies—I.
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4. Manual on Sanitation (In Hindi).
5. Cycle Trailor.
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