

Drink Roof Water

Water is not easy to get all year round for home use. There is a lot of water during the rains which goes to waste. Use your roof to collect and store this water for for your use.

WHAT IS WATER HARVESTING?

- collection of rainwater from the roof, fields and roads.



WHY HARVEST ROOF WATER?

- Plenty during rains and free.
- Clean and safe for human drinking after boiling
- Easy collect
- Save time in fetching water.
- More water for livestock.

WHAT DO YOU NEED TO HARVEST RAIN WATER?

- Mabati roof; the bigger the roof the more water.
- Gutters to direct water.
- A tank to store the water.

HOW BIG SHOULD YOUR TANK BE?

The tank should store water to last the whole year. Therefore if there are 200 days in a year with no rain, then the amount of water needed to be stored = $300 \times 200 = 60,000$ litres or 300 drums.

HOW MUCH WATER CAN YOU CATCH FROM THE ROOF?

This depends on:

- Rainfall
- Area of the roof
- Losses (splashed water)

Example:

Rainfall for Lare Division is 800 mm (= 0.8 m) a year.



If area of roof is 100m² then water harvested: 0.8m x 100 m² = 80 m³ or 400 drums. If you remove losses 20% of total = 16 m³ then:

TOTAL FROM THE ROOF: 64m³ or 320 drums.

WHAT DO YOU NEED FOR MAKING A TANK?

For a 6 ft-diameter concrete storage tank (5,000 litres), you need the following: -

- * 1 lorry sand
- * 240 r. ft. stones
- * 12 bags cement
- * 2 pkts waterproof cement (6 kg)
- * 3 fundis for 3 days
- * 6 labourers for 3 days "
- * 6 mabatis
- * Timber and nails
- * Tap
- * Bondex
- * Water

A plastic water tank (5,000 litres) can replace a concrete tank but is more expensive (about 1 1/2 times)

HOW DO YOU MAKE A GOOD TANK?

- Make a good foundation.
- Mix your sand, cement and water well.
- Use good hard stones.
- Use good fundis.
- Avoid breaking the jointing mortar prior to plastering.
- Use waterproof cement.
- Pour enough water on floor and walls for at least one month to make the walls strong.
- If the tank is bigger than 5,000 litres, the foundation should include iron bars.

HOW DO YOU CONSERVE WATER?

- Put a roof over the tank.
- Repair tank if leaking.

HOW DO YOU MAINTAIN THE ROOF, GUTTER AND TANK?

- Clean and repair roof regularly.
- Clean the gutters regularly.

- Repair cracks and leakages.· Remove silt and other objects from the tank before the onset of rains.

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