

RAIN WATER HARVESTING

Ground water is a very valuable economic commodity. It is recovered from wells for domestic, industrial and agricultural use. The conservation of ground water is very important because it moves from soil and many years may be required to replace hastily pumped water. Therefore, in areas where ground water is used extensively, care must be taken that no extra water is withdrawn in a year than the quantity replenished by natural process.

To avoid depletion of ground water level, the aquifers (ground water bodies) must be recharged in whichever way possible. There is an urgent need for harvesting every drop of rain water, since that is the only source of ground water.

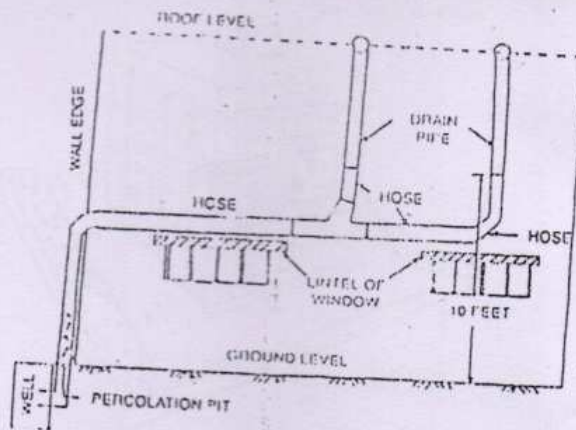
RAIN WATER HARVESTING STRUCTURES

Rain water harvesting can be done through different methods as given below :

1. Rain water harvesting through wells (individual houses)
2. Rain water harvesting through percolation pits
3. Rain water harvesting through pebble bed (Multistoreyed buildings)
4. Rain water harvesting through ponds
5. Rain water harvesting through ditch and furrows method
6. Rain water harvesting through recharge wells

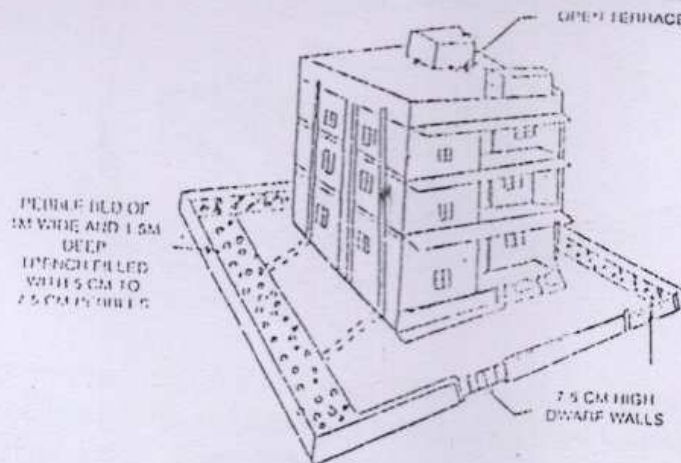
The above said methods are described with figures in the following pages.

1. RAIN WATER HARVESTING (INDIVIDUAL HOUSE)



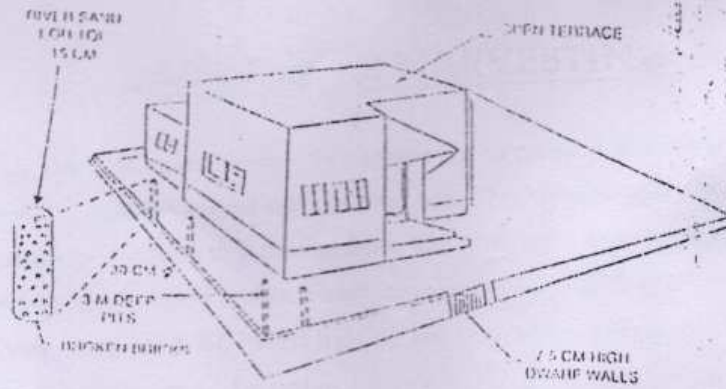
Lead the rain water falling on the terrace, into the house well through a drain pipe, making it pass through a 60cm x 60cm x 60cm broken brick filter under the ground level before reaching the well.

3. RAIN WATER HARVESTING THROUGH PEBBLE BED (BUILDING COMPLEXES)



On the three sides along the inner periphery adjoining the compound wall, dig 1m wide pit to a depth of 1.5m and fill it with 5 to 7.5cm sized pebbles. Let the rain water falling on the terrace flow into this pebble bed.

RAIN WATER HARVESTING THROUGH PERCOLATION PITS (INDIVIDUAL HOUSE)



Dig a number of 3m deep and 30cm dia percolation pits at 3m intervals around the plinth. Fill them up with broken bricks and pack the top 15cm with river sand. Erect 7.5 cm high dwarf walls at entrance to facilitate recharge.