## CHENNAI METROWATER'S APPEAL TO HARVEST RAIN WATER COLLECTED AROUND THE BUILDINGS

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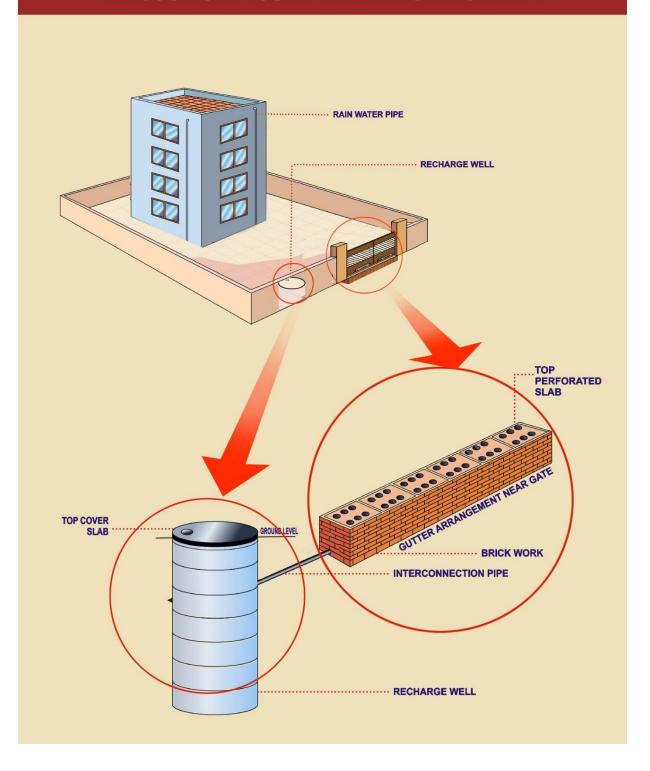
Chennai Metro water appeals to the public to harvest rain water collected around the buildings similar to the harvesting of rain water from the roof top of the buildings.

Due to the great effort made by the Hon'ble Chief Minister, importance has been given to Rain Water Harvesting scheme and Tamil Nadu became the pioneer in the installation of Rain Water Harvesting structures.

At present the public are harvesting rain water from the roof top of the building by collecting it in sump through a filter chamber for direct usage and diverting the over flow from the sump to the existing Rain Water Harvesting structures. But they are not harvesting the rain water collected around the buildings. Due to this reason the rain water is flowing out of the building and stagnating on the streets and causing hardship to the passers. In order to prevent this situation, the rain water collected around the building has to be diverted to a recharge well through a channel. This will lead further improvement in the recharge of ground water.

In Chennai City aquifers generally depends on North-East Monsoon i.e. during October, November and December months. Moreover the aquifers are recharged during North-East Monsoon. This recharge helps to improve the ground water level and it is sustainable upto summer months.

## RAIN WATER HARVESTING THROUGH GATE GUTTER AND RECHARGE WELL



The amount of rainwater available in a building depends on the rainfall and total area of the building including roof top and space around the building. A rough estimate of rain water available for recharge can be calculated as follows.

Average annual rainfall of Chennai = 1200 mm (1.2 m) or 4 ft.

Rain fall in 1 sq.ft = 1 sq.ft x 4 ft = 4 cubic ft.

One Cubic ft is 28.3 litres. The Amount of rain water collected in 1 sq.ft per year

= 113 litres

Therefore the total rainfall in 2400 sq.ft plot

 $= 2,400 \times 113 = 2,71,200$  litres/year

Volume of water recharged into the ground (considering 60% effective recharge)

= 1,62,720 litres/year

In 2,400 sq.ft area, the amount of ground water withdrawn may be replenished by 1,62,720 litres which helps to prevent depletion of ground water and in turn prevent the water crisis.

Hence Chennai Metro water appeals to the public to harvest the rain water available during the forthcoming NE monsoon without allowing it to the streets in all the above said ways.

The public are requested to contact the Chennai Metro water to get further technical details about harvesting rain water collected around the building through the telephone no. 28454080 and 45674567.

PUBLIC RELATIONS MANAGER Chennai Metrowater