Water conservation program

Rain Water Harvesting Project

Specifications:

Catchment area	:	1800 sqm
Holding capacity of reservoir	:	2000 L
Distilled water holding capacity	:	1000 L
Total water harvested in monsoon season	:	1,62,000 L(approx.)

Rainwater harvesting is the accumulation and deposition of rainwater for reuse on-site, rather than allowing it to run off. It is a potential alternative source for scarce safe drinking water to meet increasing day-to-day demand of water among fast growing human population and to combat arsenic disaster which is an emerging issue of the Ganges Delta (e.g. West Bengal).

Additionally, the CO_2 ;one of the greenhouse gases, excessively generated from fossil fuel based thermal power plant, main cause of Global warming and climate change can be reduced by rainwater harvesting as the gravitational system doesn't require any energy consumption for the pumping. The non-gravity rainwater harvesting systems also require electricity to drive pumps and, in some cases, disinfect water using UV light, still the energy consumption is negligible compared to it requires for ground water.

In stepwise aim the Rainwater is collected from the rooftop (approx. 1300 $m^2$of campus building (JIS College of Engineering, Kalyani) to a storage tank with an initial flushing device attached at the inlet of the tank. Then the water will be filtered by sand filter and carbon filter to remove large amount of pollutant which comes mainly from the air and Disinfectants may be used in case of biological contamination.