

7.1.4 Additional Information:

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7.1.4. Water conservation facilities available in the institution:

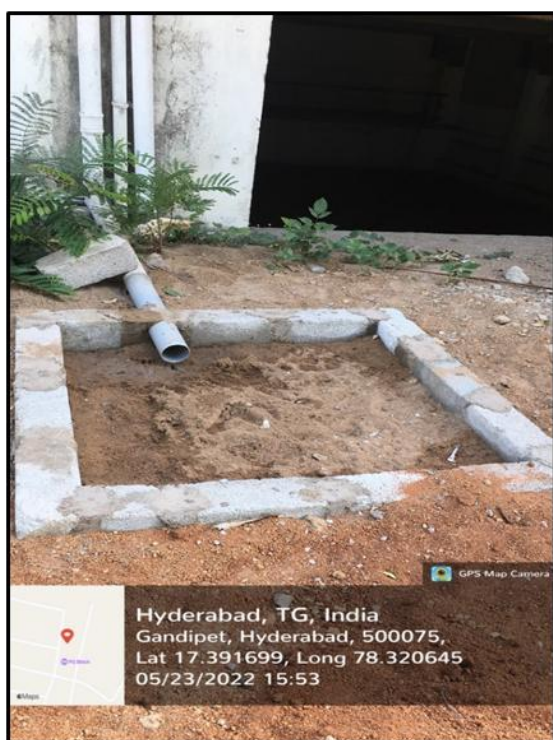
1. Rainwater harvesting

The institute has arranged harvesting pits for rainwater to percolate in various locations according to their elevations. A total of 9 harvesting pits each of size 1.2 x 1.2 m near almost each building are under operation in the campus and are well maintained. Graded material of size 80mm, 40mm, 20mm and sand were laid in the pits with each layer of one foot.

The existing rooftops of different building blocks that receive direct rainfall are used as the catchment for collecting rainwater. To maintain maximum purity of water, the rooftops are maintained regularly.

The collected water is carried/transported through the gutters and PVC pipes to channelize the water into the collection/harvesting pits.

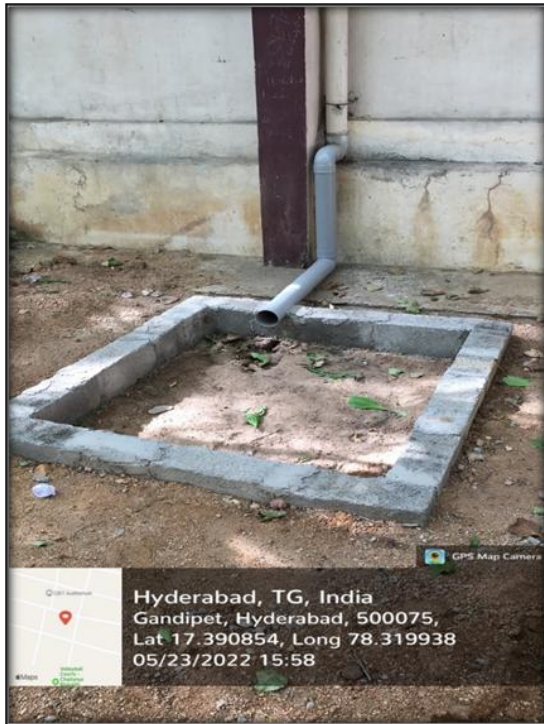
Recharge pits are constructed for recharging the collected water from rooftop into the ground. These pits are 1 to 1.5 m wide, having a depth of up to 4.5 m, which are backfilled with boulders, gravels, and coarse sand. A pit is excavated into a permeable formation and partially filled with boulders and gravels, and then topped with river sand for better percolation, which serves as an ideal facility for groundwater recharge.



PG block (North)



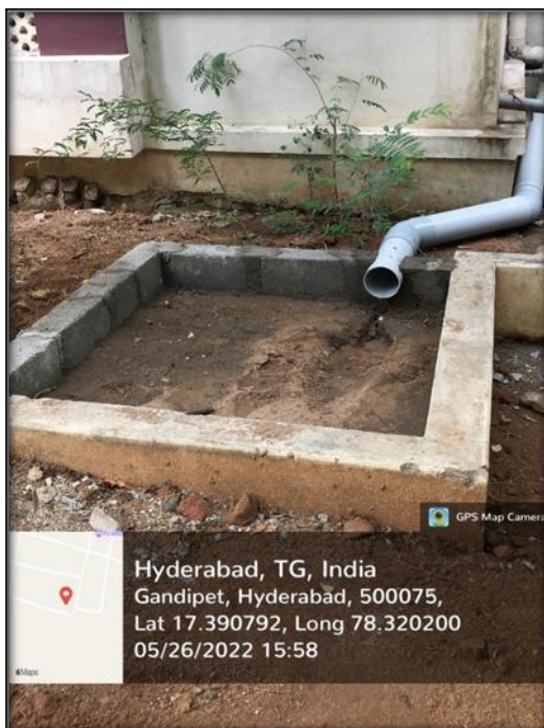
K block (North)



K block (South)



K block (South-West)



M block (North-East)



M block (North-West)



N block (North-West)



Library (North)



L block (South-East)

Fig. : Geotagged photos of Harvesting Pits

2. Borewell /Open well recharge

One out of two borewells is in use which are located in CBES land and are provided with rainwater recharge pit. All the water requirement to the institute is being met by this borewell. The second borewell although not in use is also recharged by the recharge pit.

The rainwater recharge is being practiced directly to the bore well which is located at CBES campus opposite to CBIT campus. This water potentially recharges the bore well through simple infiltration.

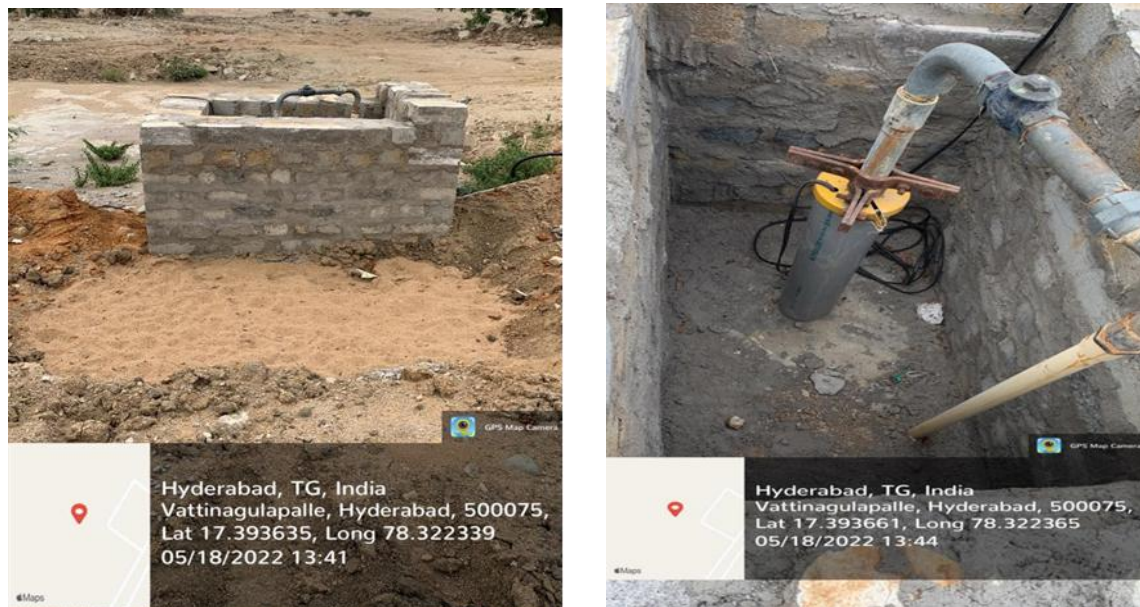


Fig. : Geotagged photos of Borewell in CBES land and of the recharge pit

3. Construction of tanks and bunds :

Bunds are constructed in CBES land near one of the borewell which supply water to both CBIT and MGIT in order to store rainwater which allows recharge of borewells. As the remaining borewells are sufficient for the present use, the borewell near the bund is not in use. Fig. 3.3 shows the borewell not in use near this bund.



[17.393458, 78.321250](#)

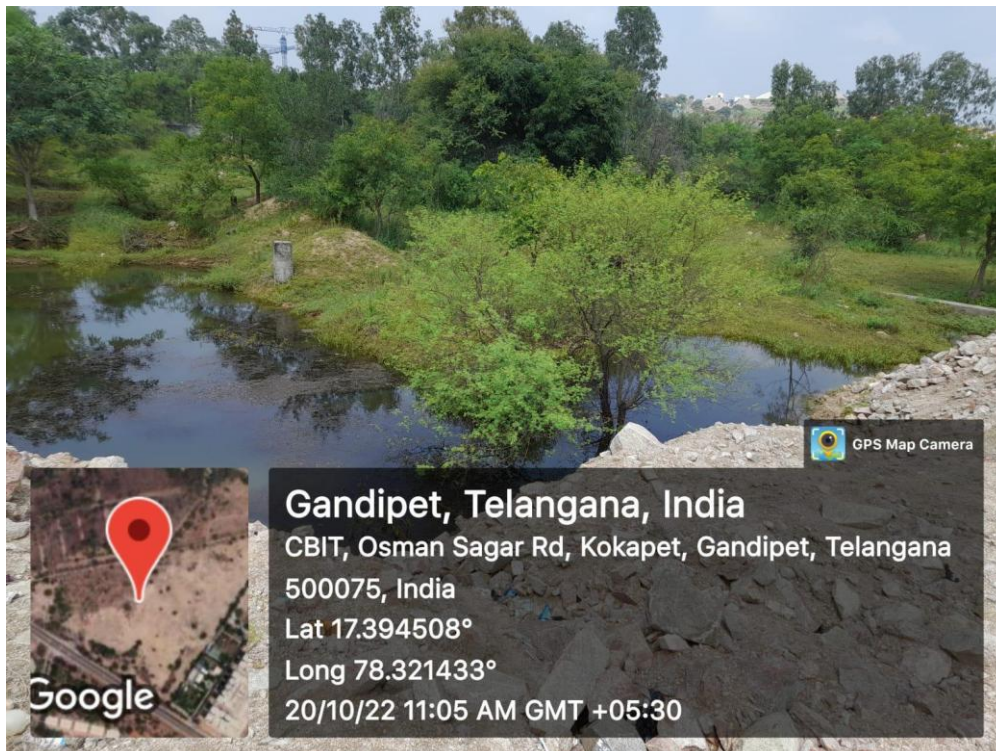


Fig. : Bund in CBES land to store rain water in order to recharge borewell

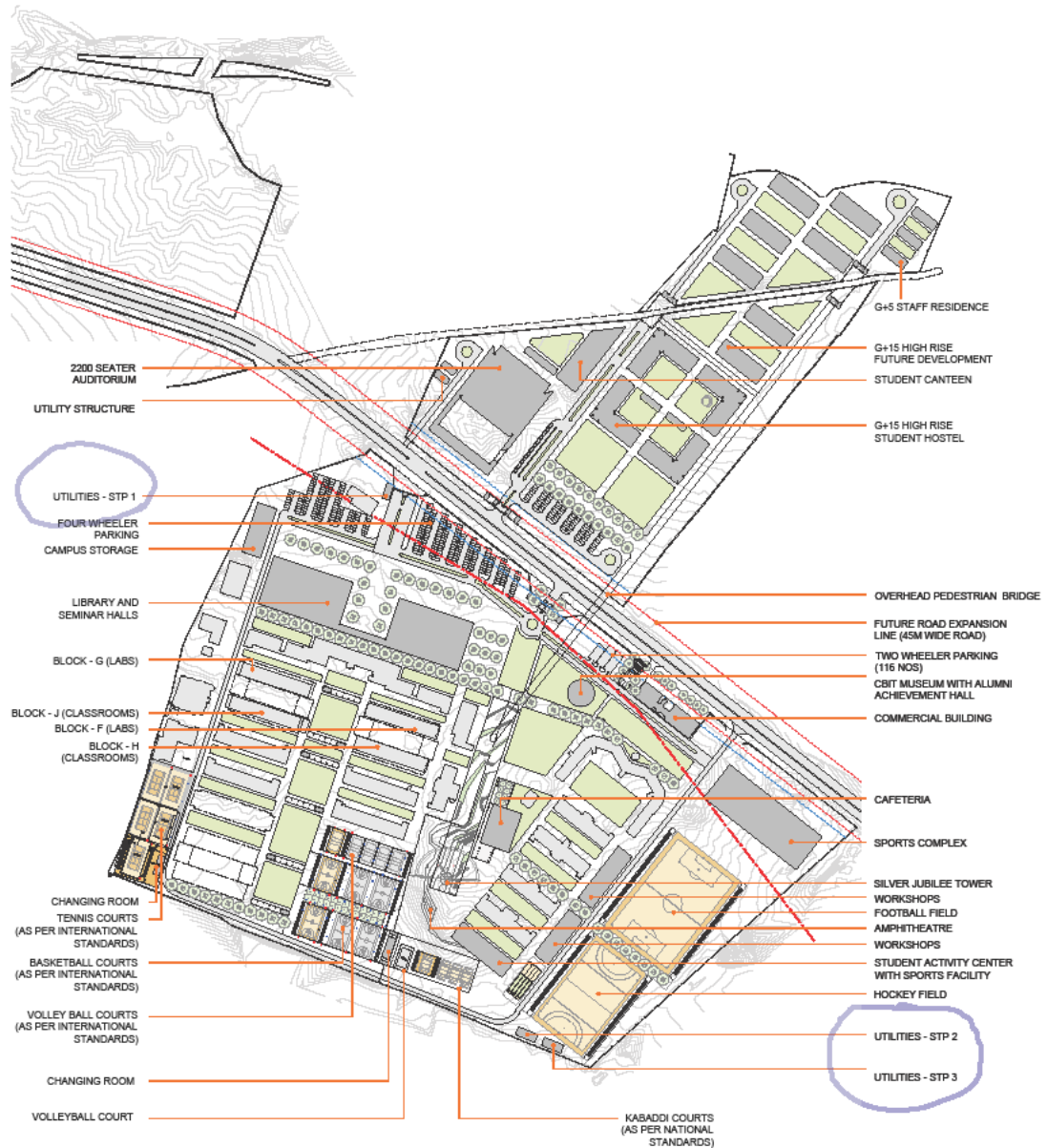


[17.393458, 78.321250](#)

Fig. : Water stored due to construction of the above bund in CBES land

4. Waste Water Recycling

A Sewage Treatment Plant (STP) is in the planning stage for the Institute and site plan is attached for the reference.



5. Maintenance of water bodies and distribution system in the campus:

The following map shows the distribution system of water from borewells to sumps located at various buildings in the campus and in turn pumped to the overhead water tanks located in the same buildings.

