Criterion VII– Institutional Values and Best Practices

7.1.4 (A) *Geo tagged photographs of the facilities*

Water Conservation Facilities available in the Institution

1. Rainwater Harvesting

Rainwater collection from roof top

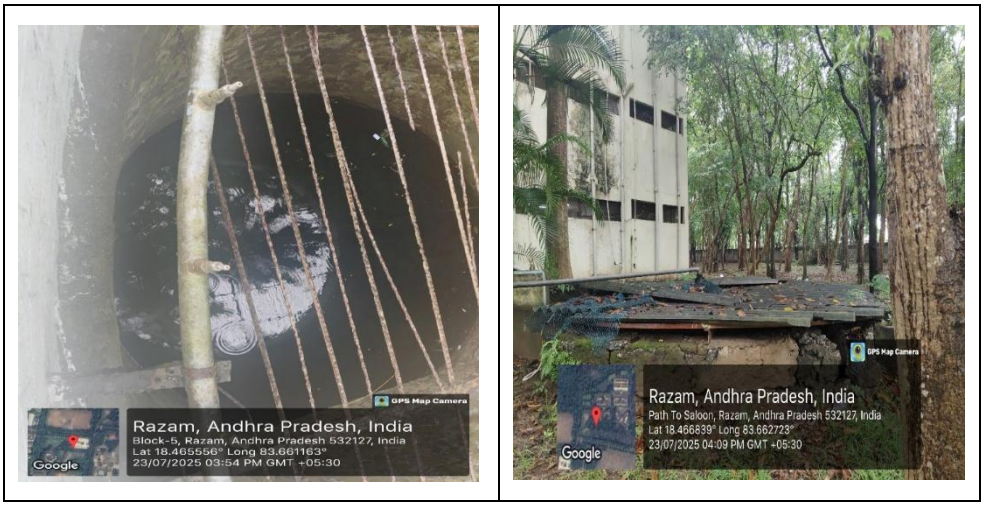
Rainwater harvesting structures are installed across the campus such as to efficiently collect and store rainwater. These systems help in replenishing groundwater levels and reducing dependence on external water sources.

Rainwater Harvesting (Ground Surface)

The ground surface rainwater harvesting structures ensure effective collection and utilization of runoff water. Rainwater from open grounds, pathways, and paved areas is directed into specially designed recharge pits, This helps in replenishing the groundwater table and prevents waterlogging and soil erosion on campus.

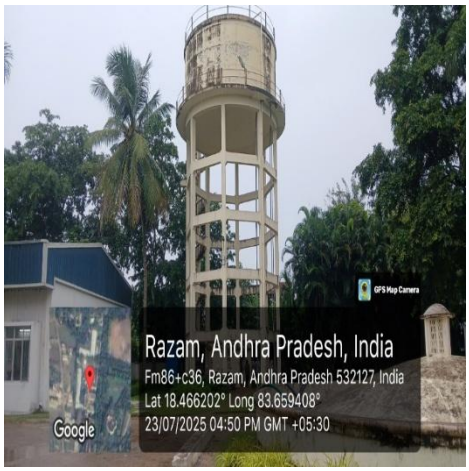
2. Open Well Recharge

Open well recharge systems on campus enhance groundwater levels. These initiatives help conserve water by replenishing aquifers and reducing dependency on external water sources. This sustainable practice supports the institute's commitment to effective water management.



3. Construction of Tanks and Bunds

Water tanks of sizes 200m^3 and 500m^3 are constructed to preserve water by preventing evaporation and contamination. A Bund is constructed at the boundary of the campus to conserve water by harvesting and channeling surface runoff of total campus into the soil, recharging local groundwater.



Water metering has been implemented to create consumer awareness and encourage responsible consumption. Through this system, data on water usage is being provided to residents, enabling them to identify leaks more efficiently and monitor their consumption habits. In this way, awareness of actual water usage is being increased, which ultimately helps reduce water waste and lower overall costs.

4. Wastewater treatment facilities and recycling systems

GMRIT has an on-campus Sewage Treatment Plant (STP) with capacity of 300 KLD using Fixed Bed Bioreactor (FBBR) technology. The process includes collection, screening, aeration, sedimentation, and storage, with additional filters (Zeolite and Activated Carbon) to improve water quality and remove odor. Treated water is reused for horticulture and cleaning, reducing raw water demand, while sludge is applied as organic fertilizer. The institution is committed to achieving zero liquid discharge.

5. Maintenance of Water Bodies and Distribution Measures for Reuse of Water in the Campus

The institution maintains campus water bodies through regular cleaning, desilting, and water quality monitoring to prevent stagnation and pollution. Rainwater harvesting structures and recharge pits are actively maintained to conserve groundwater. Wastewater from hostels, canteens, and laboratories is treated using STPs and greywater recycling systems.

Treated water is reused for gardening, landscaping, flushing, and other non-potable purposes through a separate pipeline network. The campus follows the Uniform Plumbing Code of India by adopting water-efficient measures such as drip and sprinkler irrigation, dual-flush toilets, self-closing taps, and auto-cut systems. “Save Water” signage and continuous monitoring help reduce potable water consumption and promote sustainable water management.

The following measures were taken to reduce the water wastage in the campus

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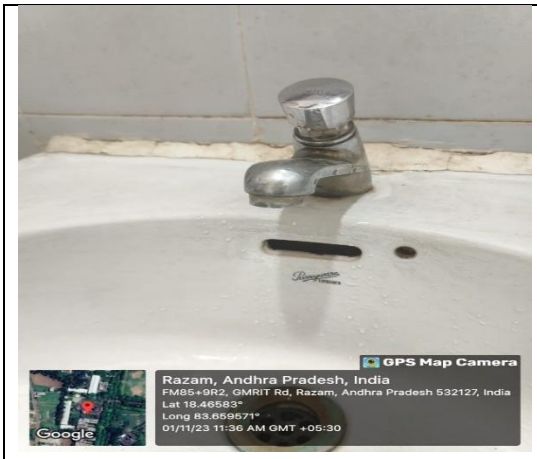
<td> 

Self-closing taps and Auto Cut Taps</td>
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Dual Flush Toilets and Use of Hand Faucets</td>
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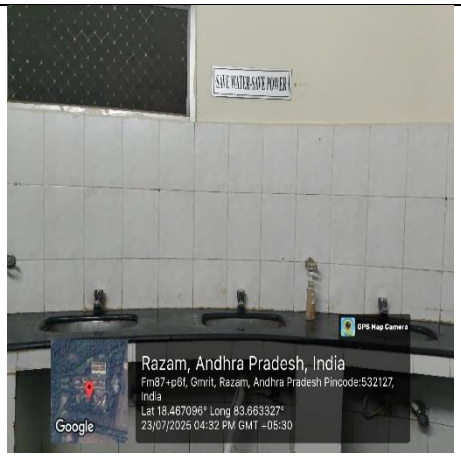
<td> 

“Save Water” signages across the campus</td>
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Water Sprinkling System</td>
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