

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY

(An Autonomous Institute)



Approved by A.I.C.T.E & Permanently affiliated to JNTU GV
Accredited by NAAC with 'A' Grade and Inclusion u/s 2(f) & 12(B) of UGC Act
An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Institute.
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CRITERIA- 7

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water

Water Conservation facilities available in the Institution:

1. Rain Water Harvesting

The college has implemented a rainwater harvesting system to effectively conserve rainwater. This initiative has contributed to an increase in the groundwater level, which has facilitated access to water for the college bore. Additionally, it enhances the natural storage of waste and assists the college in obtaining water for various applications. From the college campus, the total volume of harvested water collected from the rooftops amounts to 5,984.97 cubic meters, while the calculated surface land area is 10,733.66 cubic meters. The overall harvesting potential for the college campus is 16,718.63 cubic meters, equivalent to 16,718,630 liters. This substantial volume of water can be utilized to recharge the groundwater levels of the bore wells located within the campus.



Rain water harvesting pit

a) Location of Rain water Harvesting pits:

Rain Water Harvesting Pits location Details

DIET		
S. No	Location of pits	Qty
1	DIET Main block, near to the open Dias	1 No
2	Near to the Bus parking	1 No
	Total	2 Nos

2. Bore well /Open well recharge

The total area of the college campus measures approximately 46,143 square meters, of which only 6,135 square meters (equivalent to 15% of the total area) has been designated for academic purposes. The remaining area, approximately 40,008 square meters (or 85% of the total area), is allocated for green spaces. The campus relies on groundwater to meet its water requirements, with a daily consumption of around 70,000 liters. To address this daily demand, three bore wells of varying depths have been constructed in accordance with the subsoil water conditions. Additionally, these bore wells are regularly replenished through three rainwater harvesting ponds and two harvesting and soak pits.

Locations of Bore wells:

Bore well Location and respective Depths in the Institute

S. No	Location of the Bore well	Bore well Depth
1	Near car parking	180Feet
2	At M.V Block (Civil Labs)	190Feet
3	Playground	



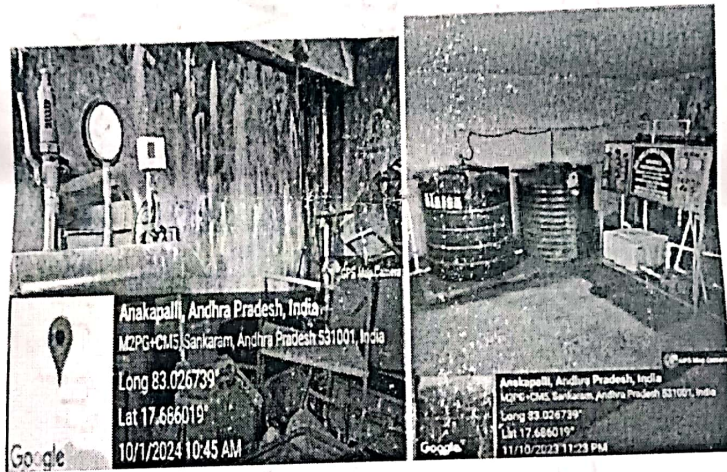
4. Construction of tanks and bunds



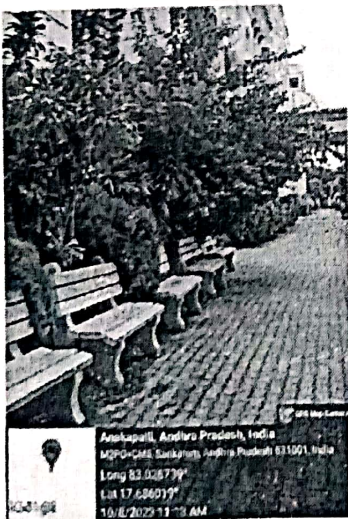
Waste water storage 20,000 liters capacity which is coming from RO Plant System.

5. Waste water recycling

In this institute, wastewater is treated using advanced technologies, specifically Filtration and Reverse Osmosis membranes. The facility has a purification capacity of up to 24,000 liters per day. The incoming raw water, which has an average total dissolved solids (TDS) concentration ranging from 750 to 1,000 ppm, is processed to lower the TDS levels to below 100 ppm, a generally accepted maximum limit. To accommodate the needs of all individuals, including students and staff, a maximum of 2,000 liters per day is provided. The primary process involves RO membrane filters arranged in parallel, followed by post-treatment procedures. The purified drinking water from the RO system is distributed through water filters across the institute, including in Classroom Blocks, Laboratory Blocks, the Administrative Block, the cafeteria, and various other locations on campus. Additionally, the wastewater generated from the RO process is repurposed for gardening and cleaning activities.



Water Treatment Facility



Waste water used for greenery and for landscaping in the campus