

7.1.4 Water conservation facilities available in the Institution:

Geo Tagged Photographs with Caption of the Facilities

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1. Rainwater harvesting

The college campus depends on ground water for all its needs and the daily need of water in the campus. The institute has rainwater harvesting system in all six engineering department buildings, administrative block, and hostels.

The rainwater from roof tops and run off within the campus are collected in harvesting pits to recharge the ground water. Sand filters are used in these rainwater harvesting pits. The rainwater is channelized properly to recharge the ground water level thereby reducing the dependence on water supplied by bore well. These pits are cleaned once in every six months.



Figure 1: Rainwater harvesting Pit in Department of ECE



Figure 2: Rainwater harvesting Pit in Department of Mechanical Engineering



Figure 3: Rainwater harvesting Pit in Department of Civil Engineering



Figure 4: Rainwater harvesting Pit in Department of EEE



Figure 5: Rainwater harvesting Pit in Department of Metallurgical Engineering

2. Bore well /Open well recharge.

The institute has Borewell /Open well at required places in the campus. PWD department of the institution, takes the responsibility for maintenance of those recharge systems regularly. It also ensures no water scarcity inside the campus.

Building to open space area is almost 1:10, that make a natural ecosystem supporting ground water recharge. In addition, rainwater harvesting aids the same.

S.No.	Details of Area	Total area (in sq.m)
1.	Total Campus area	7,75,945.00
2.	Total Built up area	65,361.00
3.	Total Car Parking area	717.29



Figure 6: Bore well.

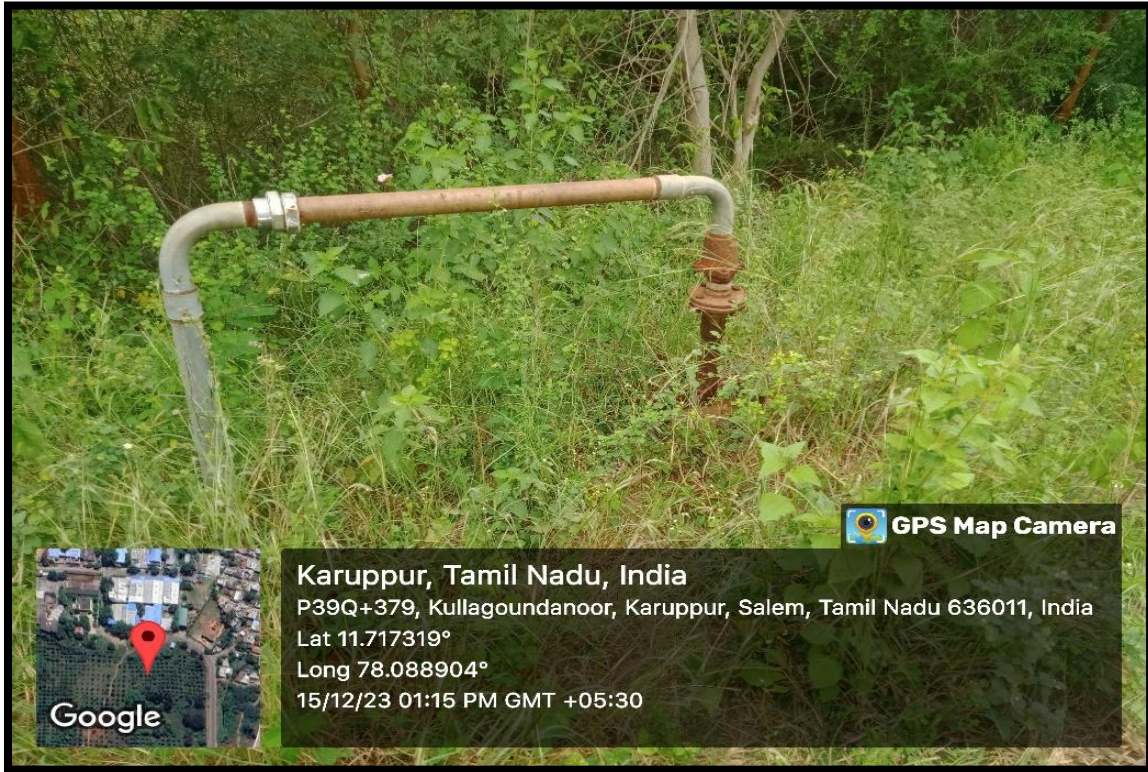


Figure 7: Bore well.



Figure 8: Bore Well

Location of Borewells

S.No.	Location	Count	Utilization
1.	Girls Hostel	2	For Girls hostel usage.
2.	Boys Hostel	2	For Boys hostel usage.
3.	Quarters	1	For Quarters utility purpose.
4.	Near Indoor Stadium	1	For Stadium usage.
5.	Near Metallurgical Department	1	For usage by all department.
6.	Auditorium	1	For Auditorium usage
Total			8

3. Construction of tanks and bunds

In our campus the storage tanks are constructed in all buildings. We have a separate tank system for drinking as well as bore water for the convenient usage. PWD department of the institution, takes the responsibility for tank maintenance. The proper Bunds are constructed in the campus and used for retaining the water, creating obstruction and thus to control erosion. Bunds can be used to hold rainwater in lightly sloping plains and to ensure that bunds continue to provide the necessary protection against leaks and spills etc.

College receives Cauvery water from pumping station located at Reddipatti. From there water is received at sump located in college near Metallurgical Department, then water is pumped to Over Head Tank available in the college.

Cauvery Water inlet details

Capacity of Sump at Reddipatti	1,50,000 liters
Capacity of sump at college	1,50,000 liters
Capacity of Over Head Tank in College	1,65,000 liters
Average amount of water received everyday	1,25,000 liters

4. Wastewater recycling.

Liquid Waste Management Overview:

The institute collects and treats wastewater in two oxidation ponds. This process efficiently manages liquid waste.

Treatment with Oxidation Ponds:

Two oxidation ponds are used for wastewater treatment, enhancing the cleaning process through biological means. These ponds naturally facilitate the biological breakdown of pollutants.

Evaporation and Sludge Management:

Water evaporates from ponds, concentrating sludge, which is removed as needed to maintain treatment efficiency.

Eco-friendly Wastewater Strategy:

This method is environmentally friendly, using natural processes for wastewater treatment and emphasizing sustainability.



Figure 9: Wastewater collection area

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

The institute has excellent Water distribution system all six engineering department buildings, administrative block, and hostels. PWD department of the institution, takes the responsibility for maintenance of those systems regularly. It also ensures no water logging inside the campus.



Figure 10: Water Distribution System

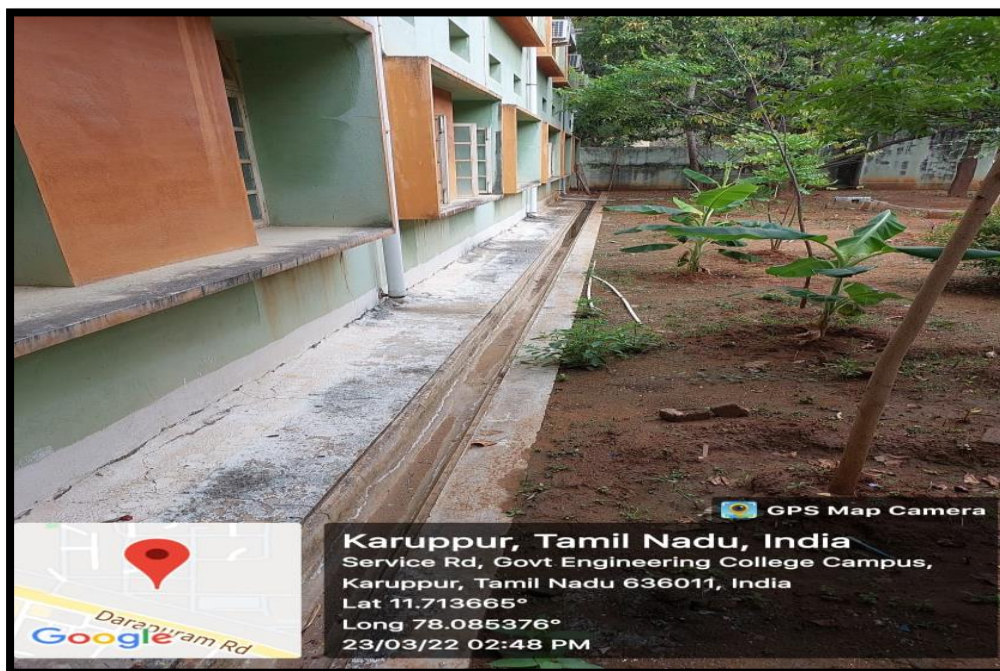


Figure 11: Water Distribution System

6. Maintenance of water bodies

The institute has sufficient water purifying systems, water doctor units with reverse osmosis system in all engineering department buildings, administrative block, and hostels.

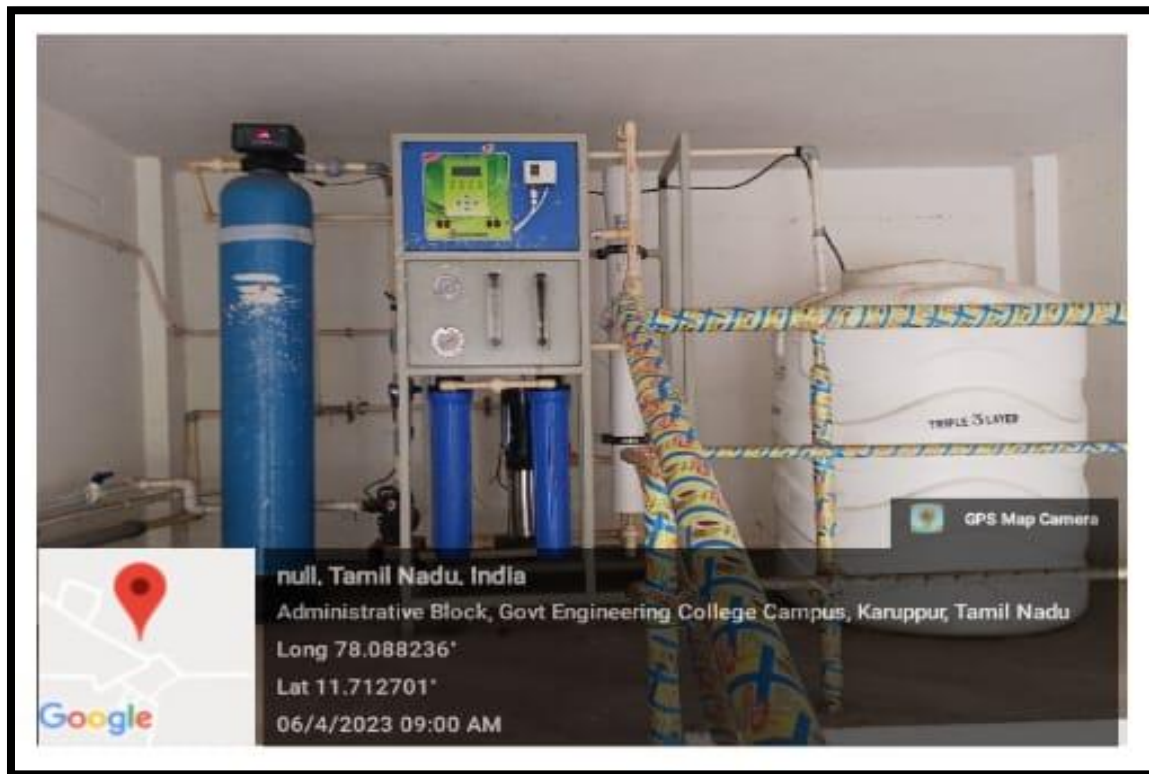


Figure 12: Dedicated Water Purifying System