

Water Conservation Facilities Available in the Institutions

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

7.1.4.1 Rain water harvesting

Distributed systems for roofs water harvesting at hostel campus: Saves the pumping energy and ensure the water availability.



Figure: Integrated rain water tanks for rain water Harvesting.

The distributed ponds in the campus for rain water collection.

STAGE 1: Rainwater that collects on the terrace makes its way down a pipe

STAGE 2: The suction tank filters the water and then sends it to the collection tank for storage

STAGE 3: From the collection tank, the water is pumped to the rooftop tank

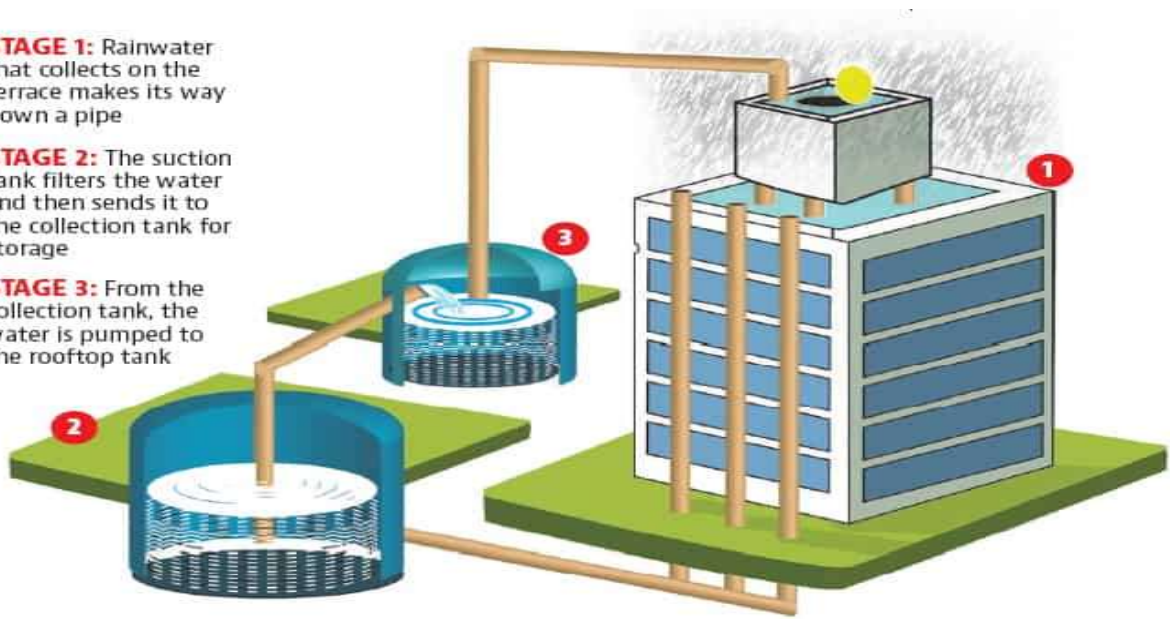
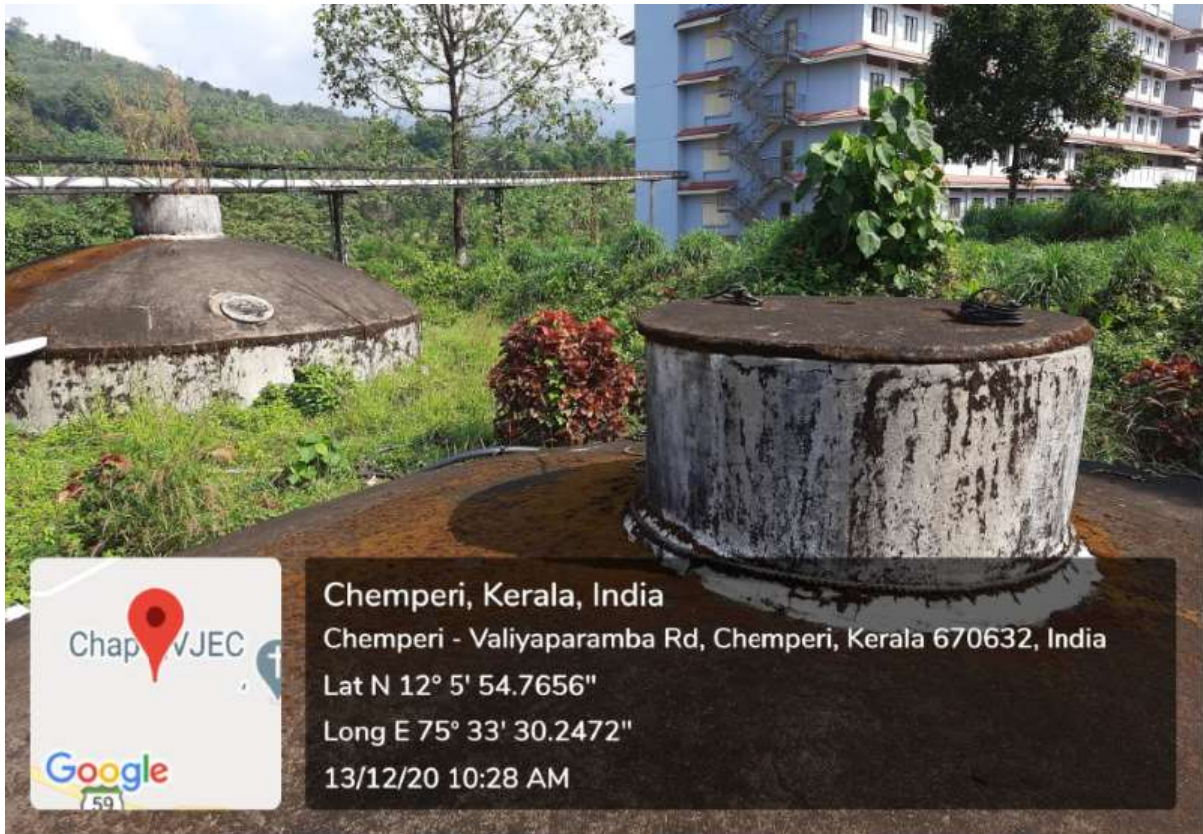


Figure: Well recharging for maintaining the ground water levels:



7.1.4.4 Waste water recycling

Waste water management system for treating the water for agricultural process.

Waste water treatment centre

The wastewater and sewage water treatment plant at Vimal Jyothi Campus is of aerobic sewage treatment model. It is located to the rear side of the PG hostel with in a space of 0.40 acres. The capacity of the sewage treatment plant is between 50000 litres to 150000 litres per day. The major waste reaching the plant is in the form of sullage from the hostels and the mess and canteen as well. The type of treatment practised is aerobic treatment. The aerobic treatment helps in the reduction of foul smell being emitted at least to a certain level.

The aerobic oxidation process is adopted for the treatment. The treated waste water is used for the cultivation and gardening process.



Figure: Technical details of the Waste water management system for treating the water for agricultural process.

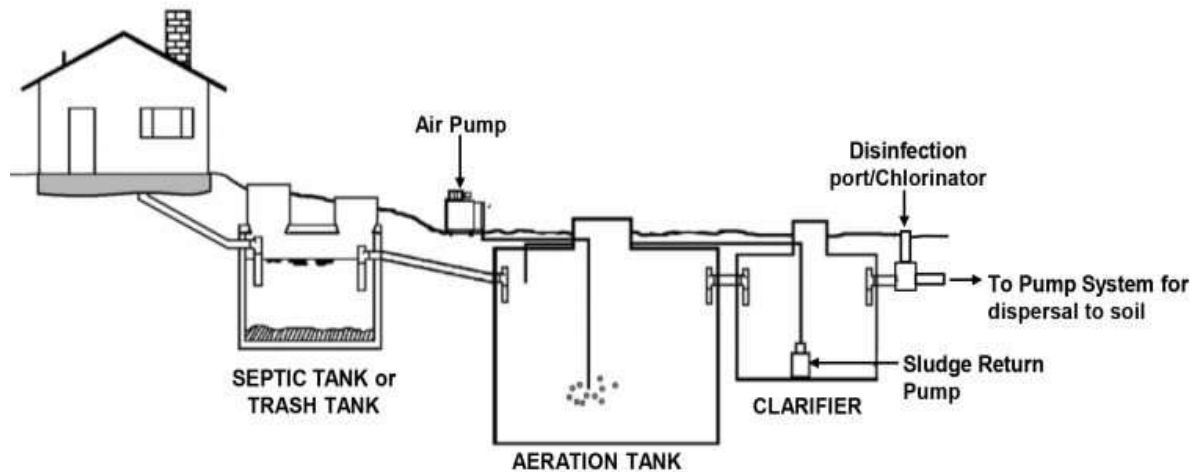


Figure: Aerobic Water treatment system- Specimen diagram



Figure: Aerobic Water treatment system- Pumping Unit area



Figure: Aerobic Water treatment system- Aeration and filtering unit area



Figure: Aerobic Water treatment system- Technical Display

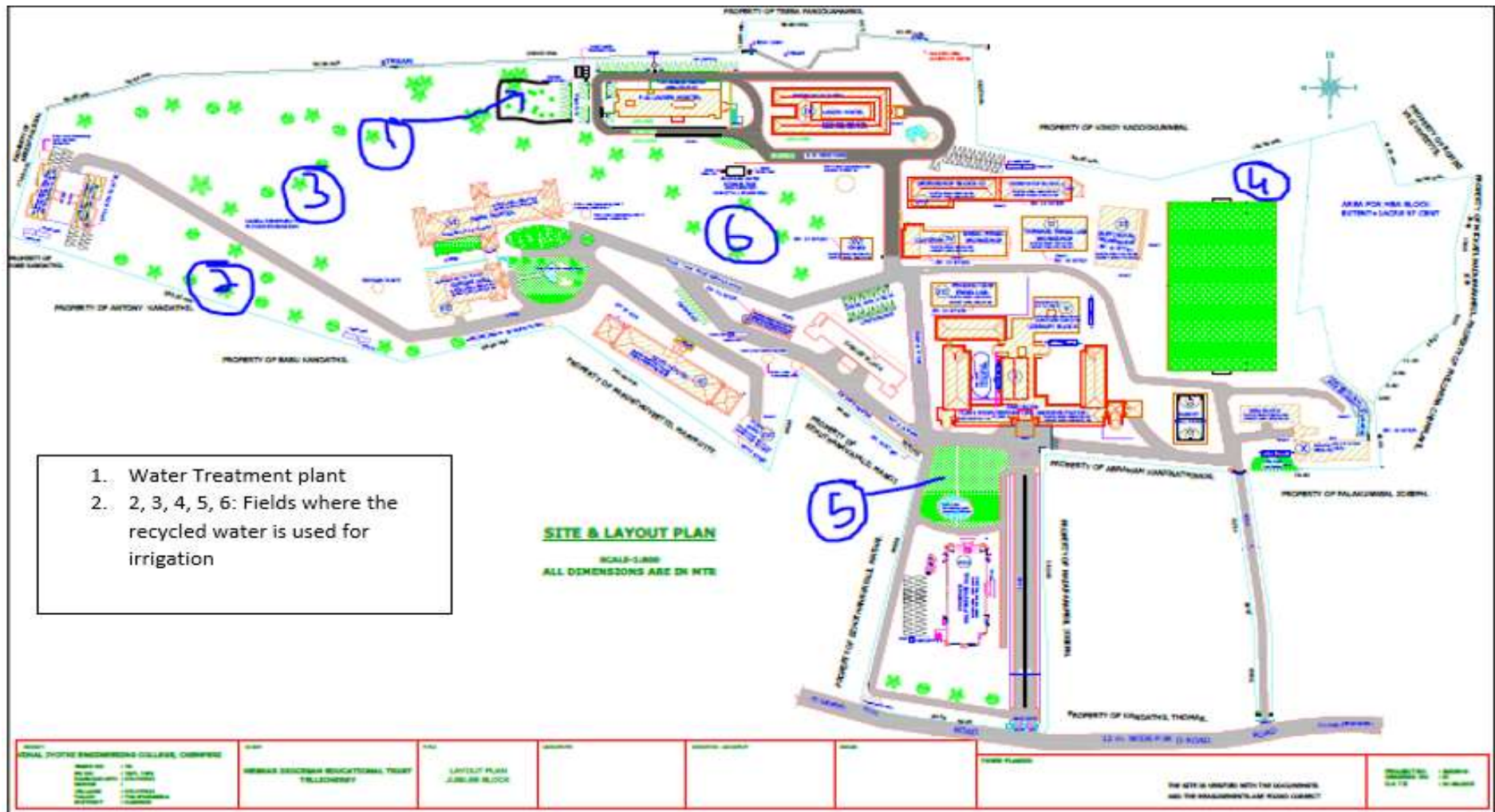


Figure: Water recycling plant and the field where the recycled water is used for irrigation with in the campus



7.1.4.5 Maintenance of water bodies and distribution system in the campus

We have taken utmost care to maintain and boost the water bodies that nearby and assessible to our campus. The

- a) Centralized water distribution system**
- b) Stream with Check Dam and protected surroundings**
- c) Small river and its protection**

a) Centralized water distribution system

At the Vimal Jyothi campus we follow a centralized water management system for the two campuses- VJIM and VJEC for the better efficiency. The rainwater harvesting tanks are physically distributed near the Sanjose, PG and Aplhonsa hostels, the 26 Lakhs under building rainwater harvesting tank is situated at VJEC campus. The 4 tanks are acting as the rainwater collecting tanks at the monsoon and act as the ground storage tanks for the summer season. The 4 tanks are inter-connected to pump water to any of the overhead tanks of the campus. The water sources are mainly the check dam, small river outside the campus and the borewells. These are connected through well networked pumping systems.

b) Stream with Check Dam and bamboo protected surroundings



Figure: Stream within the campus protected and boosted with bamboos

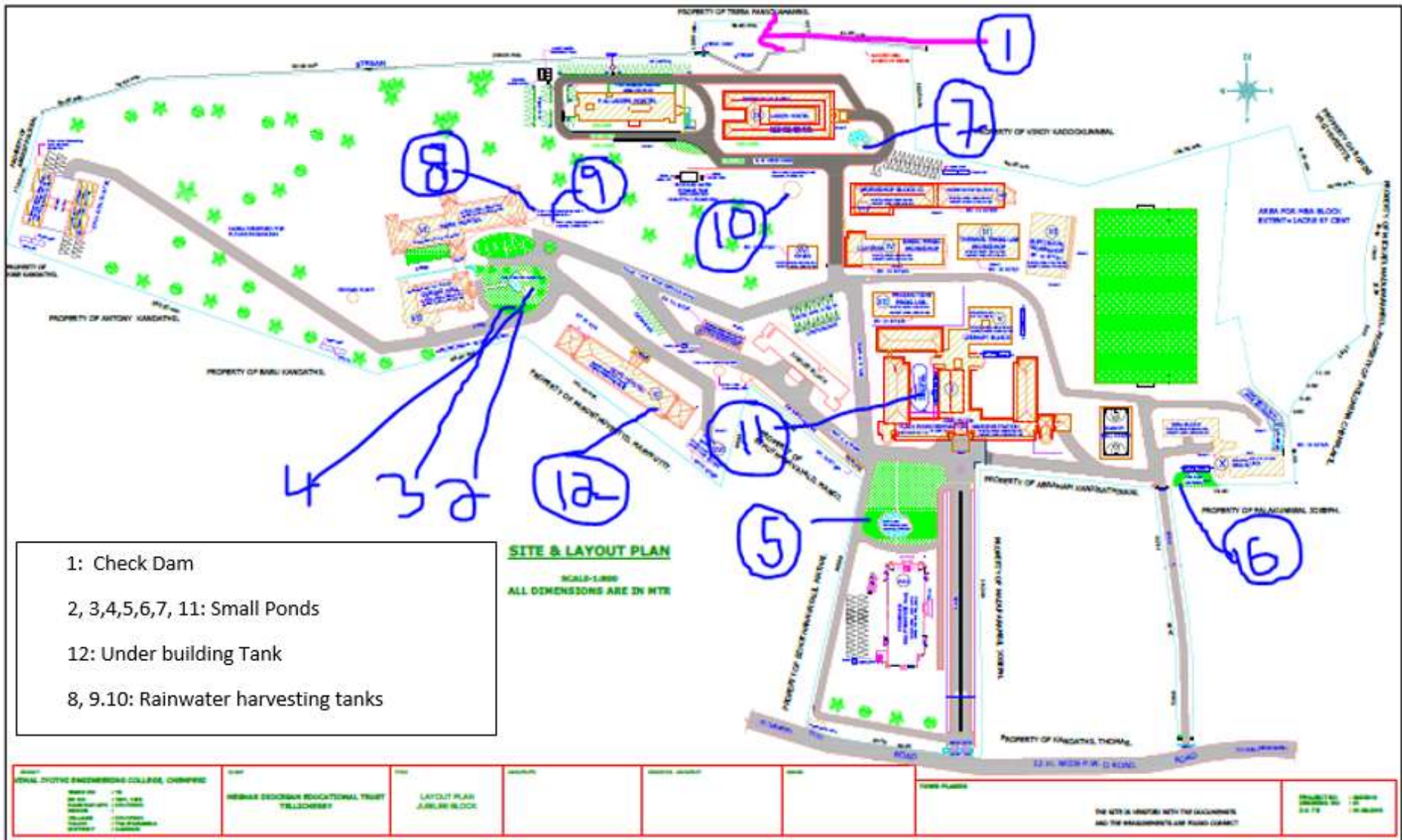


Figure: Distribution of the in campus water bodies and tanks

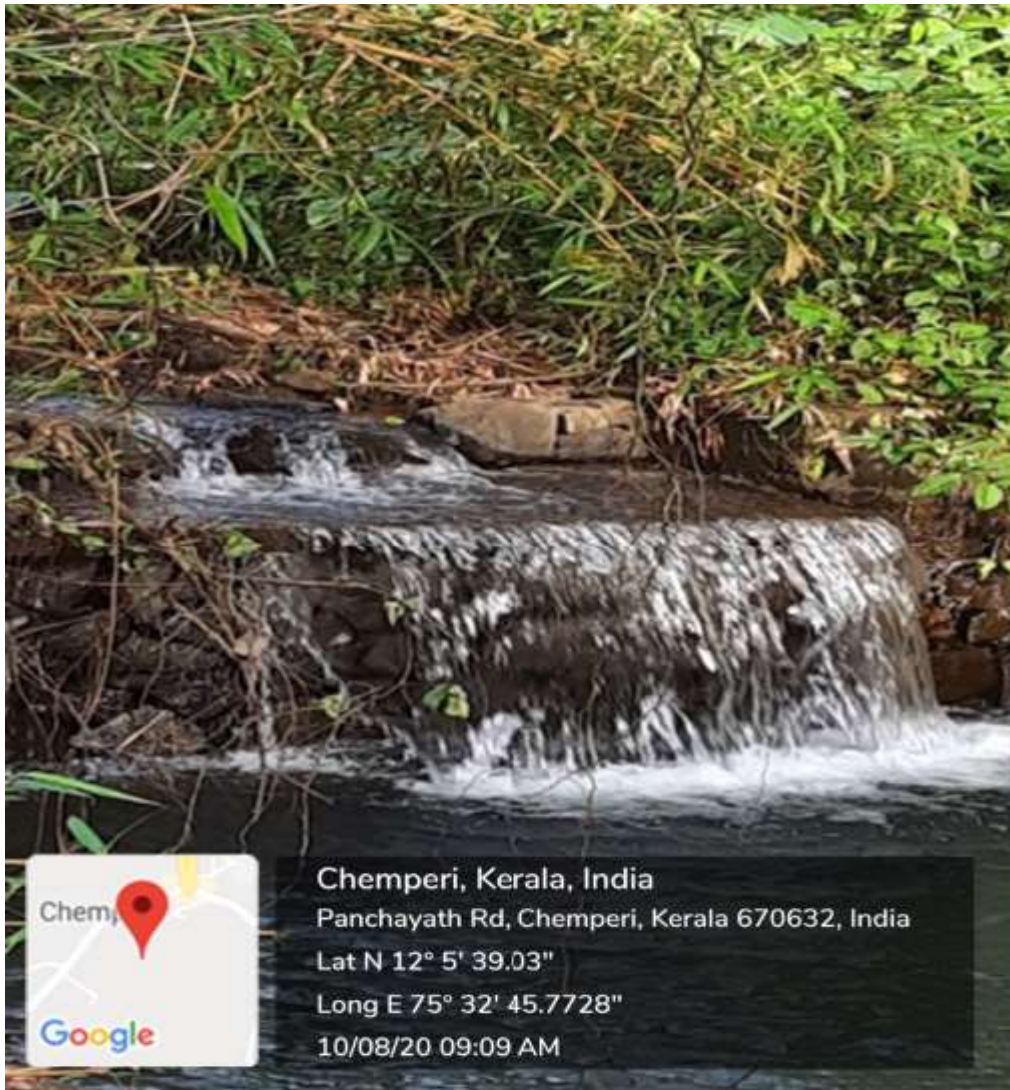


Figure: Stream within the campus active during the monsoon season



Figure: Stream within the campus protected and boosted with bamboos



Figure: Bamboos at the campus to enhance the streams and water absorption during the monsoon season

c) **Small river and its protection**

We are blessed with a small river assessible through a small plot owned by the TRUST. The river is very active from June-January every year. From month of every February-January beginning the river is protected with small temporary bunds of 50cm to maintain the water level for the nearby.