



7.1.4 Water Conservation Facilities Available in the Institution:

Water conservation is the practice of using water efficiently to reduce unnecessary water usage. Water conservation refers to the preservation, control and development of water resources, both surface and groundwater, and prevention of pollution. It is the system introduced to manage freshwater, reduce the wastage and protect the water and its resources in order to reduce and to avoid the scarcity.

1. Rain water harvesting:

Rainwater harvesting is a technology used to collect, convey and store rain for later usage. It involves direct collection and storage of the run-off rain water for direct use in future. The rainwater harvesting system is one of the best methods practiced and followed to support the conservation of water. Today, scarcity of good quality water has become a significant cause of concern. However, Rainwater, which is pure and of good quality, can be used for various purposes in the college like gardening, laboratory, cleaning etc.

The primary objective of Rain Water Harvesting at Govt. T. C. L. PG College, Janjgir(C.G.) is groundwater recharge. Almost 95% of the water harvested every year is used for recharging groundwater aquifers and reserves beneath the surface area. The management of ground water through artificial recharge of rain water by following roof top harvesting as a cost-effective method to boost ground water in the campus has been initiated. Implementing rain water harvesting is beneficial because it reduces demand on existing water supply, and reduces run-off, erosion, and contamination of surface water.

Utilization of Harvested water:

- Harvested rainwater will be stored and used during times of water crisis.
- Harvested water stored in the overhead tank is used by the science department for the practical purpose.
- Harvested water is used for the purpose of planting and gardening to keep green the college premises.
- The major portion of the water collected through rain harvest is used for non-drinking purposes like gardening, flushing toilet, washing clothes by the students in the college hostel. It is used for washing the floors of the College building.



Space for Rain water harvesting

Advantages of Rainwater Harvesting

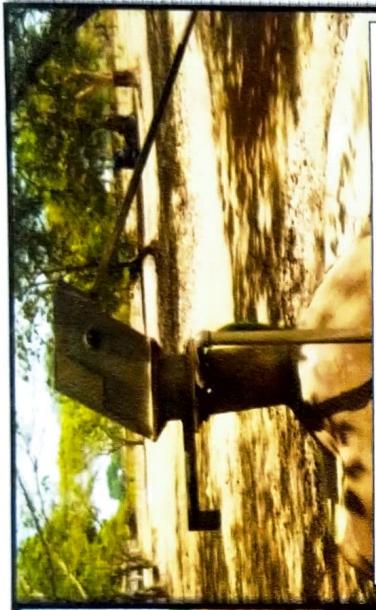
The benefits of rainwater harvesting system are as follows:

- It is less cost.
- It helps in reducing the water bill.
- Decreases the demand for water and utilized at the time of water crises.
- Promotes both water and energy conservation.
- Improves the quality and quantity of groundwater.
- Does not require a filtration system for landscape irrigation.
- This technology is relatively simple, easy to install and operate.

2. Bore well/Open well recharge:

Water is a very scarce and crucial natural resource. Sometimes, in summer season our college is facing a acute shortage of water not only due to uneven and erratic rainfall but also due to improper management of rainwater. The college campus depends on ground water for all its needs and to compensate the daily needs we had constructed two number of hand pumps and two number of bore wells with different depths as per the sub soil water position. One of the bore well is situated in front of garden, another is situated opposite to the garden, one of the bore well is at girls' hostel another bore well is at the main building of the college. These two bore wells are recharge with the help of harvesting pond, which is situated near the playground.





Hand pump in front of garden



Bore well of main building of college



Hand pump opposite to the garden



Girls Hostel Bore's Starter

4. Waste water recycling:

Waste water treatment is a process used to remove contaminants from waste water or sewage and convert it into an effluent that can be returned to the water cycle with acceptable impact on the environment, or reused for various purposes (called water reclamation). Reuse may include irrigation of gardens and agricultural fields or replenishing surface water and groundwater (i.e., groundwater recharge).

These waste water is reused by our institution for variety of purposes and supplied all over the college campus for maintaining its green cover of plants and trees, groundwater replenishment, and environmental restoration. Water reuse can provide alternatives to existing water supplies and be used to enhance water security, sustainability, and resilience. In this way, by waste water recycling we always try to keep our college campus "Clean and Green".



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

A water body (Pond) is available in the college campus it is full of water during most part of the year. It is situated at the south-west part of the college campus and near the sports ground. It is used for various purposes of the college. Since there is scarcity of water in the summer season therefore it gets dry during this season.

