IQAC- SATYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT <u>Qualitative Metrics</u> <u>Criterion 7-Institutional Values and Best Practices</u> <u>Key Indicator 7.1 Institutional Values and Social Responsibilities</u>

7.1.4	Water conservation facilities available in the Institution:
	1. Rain water harvesting structures and utilization in the
	campus.
	2.Bore well /Open well recharge
	3. Construction of tanks and bunds
	4. Waste water recycling
	5. Maintenance of water bodies and distribution system in
	the campus
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One of the features listed under this heading are available in SITAM ,Viziangaram 1.Rain water harvesting structures and utilization in the campus.(option D).

Institute has successfully implemented a rainwater harvesting model for maximum recharging of groundwater level. Rainwater is captured, channelized & directed for enhancing groundwater level. As well the advantage of sloping topography is taken by arranging the entire campus in three levels to ensure maximum seepage of surface run off in to recharging of ground water. Runoff from terrace is taken to bore wells through pipe structure and filtration. The surface rain water is collected and filled in dug well through sand filter. At the backside of Boys hostel, large pit was taken to recharge entire bore wells in Boys hostel. In our college and hostel campus there is zero discharge of rain water.

The rain water harvesting model is implemented for entire campus and it involves following steps:

a) Rooftop Rainwater Harvesting: This involves catching of rainwater from rooftop of

- College buildings. The system implemented is as follows:
- Catchment of rainwater from rooftop;
- Transportation of rainwater through water pipes or drains or downtake pipes;
- First flush and filter with mesh to restrict floating material, silt, leaves,
- other organic matter etc.,
- Filtration through brick masonry filled with pebbles, gravel and sand;
- Storage;

b) *Open Space Rainwater Harvesting*: Rainwater is recharged through various kinds of structures to ensure percolation of rainwater into ground instead of draining away from surface. The college has employed following methods.

Recharging of Borewells

Percolation through College Ground

Water storage tank for harvesting surface water run-off. This also enhances percolation of rainwater into nearby borewell. We achieved following results

- Groundwater quality improved
- Groundwater level stabilized
- Aquifer conditions on campus is improved
- Tree plantations in Trenches is a major path for Green Campus
- Water requirement of college is reduced



