

## **Progress Report on Clean Water and Sanitation**

Pure and clean drinking water is the basic requirement for the survival of life. The University has introduced different equipment for treatment of water and RO Water plant is installed in each building to treat the water and make it accessible for utilization and the water can be served in hot or cold. For the purpose of drinking, approximately 90000 liters of Reverse Osmosis +UV treated water is used in the campus per day. The total capacity of the RO and +Uv plants is 14750 litres per hour.

### **WATER RESOURCES**

All the buildings are provided with the sufficient supply of required water for the use in Quarters, Men's hostel and Ladies Hostel and office buildings, academic blocks. The water usage in the campus is 3335000 litres per day. There is a well-chartered water balance mechanism where the requirement is met by recycling treatment and used for all the necessary purposes. The water required for gardening is fully met by treated water. The total water consumption per day in litres is 8,57,775 for gardening.

### **RECYCLED WASTE WATER**

Very effectively planned wastage sewage system arranged in the University campus. This guarantees zero discharge. Three sewage water treatment plants are provided in the campus of capacity 500KLD each. Sewage and sullage are being treated ensuring that the effluent water meets the criteria specified by the Pollution Control Board and Ministry of Environment & Forests. The solid by product is used as manure and most of the liquid water is being used for horticulture. A revolutionary sewerage treatment system, called Decentralised Waste Water TreatmentSystem (DEWATS), has been implemented in all the campuses, whereby natural biological treatment of sewage and sullage is being achieved for the entire quantity generated there, with zero electricity requirement and without input of any chemicals or usage of any mechanical devices.

### **EFFICIENT WATER USE CAMPUS**

The University installed various components of the water handling systems like sensors for automated flushing and automatic water level controllers with good

standards with a focus on reducing water wastage and conserve water resources. All the components like Taps, Toilet Flush etc., are installed with sensors.

## **RAIN WATER HARVESTING**

The University adopted significant measures to harvest rainwater and to enhance the groundwater table. Every building has a rain water harvesting pit. Contour bunds have been constructed on the campus, within the premises. These are holding part of the storm runoffs and substantially contribute towards maintaining the groundwater table. A string of soak pits across the campus is facilitating the percolation of surface water. Every bore well is attached with borewell recharge pit. Some of the parks are kept at low topography, bound by roads at a higher level, enabling macro-percolation during the rainy season. These fairly wet zones are bird-friendly, also acting as habitats for minor animals, lending a helping hand in maintaining the flora & fauna; one can spot an abundance of Gruidae (cranes), Passeridae (sparrows) as well as Sciuridae (squirrels).

## **SANITATION**

### **Toilet**

Clean and neat toilets that are appropriately tiled and fitted with modern equipment are provided in the campus, hostel, and other departments. Water closets, taps, urinals, washbasins, showers and drinking water tap are provided. Day to day cleaning of the toilet is ensured by outsourcing (Golden star )300 cleaning staff who attend to the cleaning round the clock. Every block is provided with an adequate number of toilets for both male and female members.

*{Non Residential Male :5132 ; Female : 2977 ; Residential : Male: 2113 ; Female : 1101}*. Urinals are provided in the ratio of 1:20 and toilets are 1:25 within the Institute wherein men's hostel is in the ratio of 1:10 and 1:6 and in a ladies hostel, the ratio is 1:3. Sensors guided automated flushing and water taps are used. Automatic level controllers are used for controlling overflow in overhead tanks to conserve water.

Toilet facilities are provided for differently-abled persons taking into account their special needs. Eco-friendly signages are provided for the purpose of hygiene and sanitation throughout the campus.

## **WASTE MANAGEMENT**

The garden waste is treated for vermicompost to maintain the sanitation and reduce threat to the environment and to conserve the environment in all its pristinely. Effective waste management techniques are employed for the effective disposal of waste. Composting unit and organic waste converter are used, and a separate SWM team (Solid Waste Management Team) is employed for this purpose. A well executed system of collection, segregation of Bio Medical Waste (BMW) from GITAM Institute of Medical Science and Research is in place. GIMSR has tieup with Third Parties to manage the BMW which ensures its safe disposal.

## **SIKSHA :**

The University has initiated a program “SIKSHA” to recycle the garbage. Team Vivaann along with ITC organized this event. The goal is to collect old papers, books and other paper waste which can be recycled to produce fresh stationery. The collected waste paper was given to ITC Company for recycling.

## **Organic Waste Treatment**

This biogas plant can process biodegradable waste such as kitchen waste, paper, grass and plant leaves. It gives zero garbage and zero effluent and provides high-quality manure and methane gas. This technology is sponsored by Baba Atomic Research Centre(BARC), Mumbai.