




# REPORT ON SDG-6 CLEAN WATER AND SANITATION



A brief description of activities on United Nations SDG-6 undertaken by Tezpur University

### **Water Consumption Per Person**

Tezpur University, with a campus population of approximately 6,000, ensures a sustainable water supply through its dedicated water treatment plant. The university carefully monitors and treats the extracted water before distributing it to residential areas, hostels, and other facilities, supporting efficient water consumption per person across the campus community.

### **Water Usage And Care**

Tezpur University operates two wastewater treatment plants (WWTPs) designed to handle and treat the campus's wastewater. These plants play a critical role in managing water quality and environmental sustainability on the university premises. Each WWTP typically includes processes such as screening, sedimentation, biological treatment (like activated sludge or biofilters), and disinfection.

Tezpur University has established processes to prevent polluted water from entering its water system, especially from departments like Chemical Science, Environmental Science, and MBBT. These include effluent treatment plants (ETPs) to treat wastewater, spill containment systems for chemical accidents, regular monitoring of effluent quality, and strict waste disposal protocols. Additionally, staff and students are trained in safe chemical handling and emergency response to minimize risks. These measures ensure that any potential pollutants are controlled, protecting the campus water system and promoting environmental sustainability.

Tezpur University has a robust drinking water system that provides safe and clean water across the campus. This system ensures accessible, purified water for students, staff, and visitors, with distribution points strategically located in all hostels, administrative offices, and the guest house. Regular maintenance, filtration, and quality checks are conducted to uphold high safety standards, making clean drinking water available to everyone on campus.

Link: [https://www.tezu.ernet.in/news/Fluoride\\_Nilogon\\_Removal\\_Drinking\\_Water.pdf](https://www.tezu.ernet.in/news/Fluoride_Nilogon_Removal_Drinking_Water.pdf)

### **Rain Water Harvesting**

Water is essential to all forms of life and 70 % of the world is covered with water while only 3 % is fresh and the rest is saline. Only about 0.4 % of the freshwater is easily accessible, while the rest 2.6 % is inaccessible. As water is becoming scarce, there is need to attain self-sufficiency as well as replenish the depleted and polluted ground water sources and water harvesting is one of the innovative and low cost technologies to achieve the same. 'Rain Water Harvesting' involves the direct collection of rainwater which can be stored for direct use or can be used to replenish the ground water sources. Rain water harvesting is an ideal method to supply fresh water for augmenting the existing infrastructure and is capable of meeting future needs in a sustainable way. The water collected from rain water harvesting system shall be used as a secondary source of water and will be used for all other purposes like gardening, cleaning, car washing which does not require drinking water quality.

### **Low Cost Drinking Water Treatment.**

The groundwater of the University does not contain any other pollutants of concern like fluoride or arsenic. The major concern in the groundwater of the University is the presence of iron in the range of 5-8 mg/L. However, no special treatment unit is required in the water treatment plant and water from the treatment plant can be directly used to meet the domestic needs. However, groundwater in few places in Assam has a problem of dissolved fluoride and arsenic. University has developed efficient & economic solution towards the removal of arsenic & fluoride from water.



Fig: Rain Water Harvesting plant

### Waste Water Recycling

The cleaning process of the waste water and making it fit for direct or indirect usage is known as waste water recycling. Grey water contributes to 90% of the waste water from a house and is easier to treat while it is harder to recycle black water as it contains more pathogens. The present infrastructure in the University to treat waste water consist of separate standalone R.C.C septic tanks at each of the establishment like, hostel, academic building, administrative building etc. to treat the black water coming out of the toilets while the greywater is recycled partially before discharged into drains.

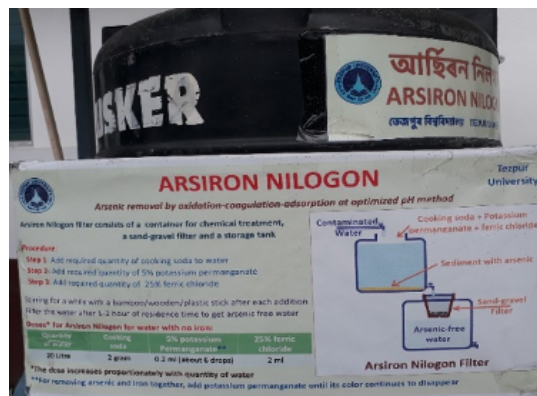


Fig: Arsiron nidogon plant