



Clean Water and Sanitation

13

Research Projects

365

Publications

21

Patents

Waste Water Treatment Plant

With water shortages plaguing the world, water scarcity has become one of the largest threats facing society today, making it one of the UN's main sustainable development goals. Therefore, NUST is aiming to focus on developing new projects and technologies to reduce its water consumption. Our researchers developed and installed the Wastewater Treatment plant which is a low-cost technology requiring minimal energy and operational attention for the treatment of wastewater. A joint project of UNESCO and NUST, it is able to produce 75,000 gallons of recycled water per day for the entire horticulture of NUST. Unlike the rest, wastewater treatment presents a sustainable short-term and long-term solution to water scarcity. Currently, around 20,000 liters of water is being recycled per day which is used for horticulture, thus significantly reducing water usage of the campus.



Sanitation Festival

The WASH (Water, Sanitation and Hygiene) coalition of Pakistan arranged a mega-scale event on sanitation and labeled it as the 'Sanitation Festival' parallel to the World Toilet Day, to raise awareness on Sanitation and Hygiene in Pakistan. This was one of its kind event where students participated as volunteers to create awareness on sanitation, hygiene and water conservation.

Water Conservation Awareness Walk

In order to create awareness regarding water conservation, NUST Environment Club organized an Awareness Walk in Islamabad in which university students and faculty participated in the event.



NUST installs Solar-Powered Water Pump at Thar

Solar surface and bore pumps are ideal for use in many areas in Sindh – they get plenty of sunshine throughout the year. Solar pumps are a popular choice for watering livestock, crop irrigation, industrial water supply, and even domestic use. Keeping in view the importance of these pumps for the place, NUST has set a unique example of collaboration with other private groups to ensure the availability of drinking water to far-flung areas. In collaboration with the Association of Water, Applied Education & Renewable Energy (AWARE), NUST successfully completed the installation of a solar-powered water pump at Revi-Ji-Dhani, UC Faqeer Abdullah District Umerkot, Thar. The pumps are low-maintenance and get their energy directly from the sun, reducing costs to a great extent. The water pump now provides clean water to many households in the district, thus alleviating the water-related shortages for the local people.

