ANNUAL REPORT







UNIVERSITY OF CHITTAGONG

Chittagong-4331, Bangladesh

SDG 6: CLEAN WATER AND SANITATION

Chittagong University's Endeavors in Advancing SDG 6: A Commitment to Clean Water and Sanitation

Nestled in the hilly terrain and an upland watershed of Bangladesh, Chittagong University stands as a steward of Sustainable Development Goal 6: Clean Water and Sanitation in the region and nationally. This report highlights the university's diverse strategies and actions in water resource management, water conservation and sanitation highlighting its role in bolstering environmental sustainability and aiding regional water conservation.

At Chittagong University, the reliance on groundwater is pivotal for fulfilling the water needs of academic, research, and residential activities. The ingenious placement of overhead tanks on hilltops mirrors the university's commitment to efficient and low-energy water distribution, ensuring a consistent supply across the campus while keeping the energy footprint minimal.

Understanding the criticality of water quality, the university has embarked on significant initiatives to treat iron-laden groundwater. The work in progress of the Central iron removal unit is a testament to this effort. In a forward-looking move in 2022, a committee was established, laying the groundwork for a comprehensive water treatment plant and sewage treatment facilities. This marks a significant step in enhancing the quality of water on campus.

The university's environmental consciousness extends to the conservation of two hilly streams that meander through the campus. The concerted efforts to preserve these water bodies underline the university's recognition of their ecological and hydrological significance. A noteworthy aspect of Chittagong University's water strategy is the establishment of decentralized water treatment plants. Spearheaded by the university and its departmental alumni associations, such as the IFESCU Alumni Association, these plants address the challenge of iron-rich groundwater, ensuring a clean water supply for the university community.

The university's research and monitoring endeavors are equally commendable. Faculty and researchers from diverse departments, including the Halda River Research Laboratory (HRRL), IFES, Department of Geography, Department of Chemistry, Department of Applied Chemistry and Chemical Engineering, etc. routinely assess surface and groundwater levels and qualities. Innovations like the development of ultra-modular biological wastewater treatment and reuse plants for restaurants and portable and modular biological effluent treatment plants (ETPs) for small industries and healthcare facilities by IFES faculty showcase the university's commitment to practical environmental solutions. These ETPs are not only aiding small-scale industries but have also been scaled up for use in UNHCR projects in Rohingya refugee camps.

In the realm of regional water conservation, HRRL, IFES, Department of Geography, along with other departments, play a vital role. The university has played role in the conservation of Halda river which is the primary source of water for about 6 million people of Chattogram city. Dr. Manzoorul Kibria – professor from the Department of Zoology and the founder of HRRL has won prestigious awards locally and internationally for his works on the conservation of Halda river. The researchers and graduate students from the university are routinely working the Chittagong Water Supply and Sewerage Authority (WASA) on water quality of the city. The experts from the University are routinely consulted by the Department of Environment on water related issues. IFES graduates are working in high positions of the Water Resources Planning Organization (WARPO) and water development board. Different organizations working inside the refugee camps are collaborating with the CU faculty members on the restoration of streams and improvement of water quality in the Rohingya camps and related host communities. Researchers from the Faculty of Marine Science, IFES and other related departments are working on the microplastic issue.

The university campus, adorned with two lakes and several ponds, not only serves as a place of natural beauty but also contributes to environmental wellness. The forest cover restoration led by the Institute of Forestry and Environmental Sciences and the Department of Botany has been pivotal in recharging the groundwater, benefiting both the university and the local community.

CU is in the process of formulation of a water policy and detailed guideline for water use and water saving, wastewater treatment and water recycling, rainwater harvesting, prevention of water pollution. Five faculty members have been trained by WaterAid Bangladesh on rainwater harvesting technology.

Chittagong University's multifaceted approach in managing water resources illustrates an unwavering dedication to SDG 6. From effective groundwater utilization and innovative research to impactful community engagement, the university not only safeguards the welfare of its community but also significantly contributes to environmental sustainability and water conservation at a regional level.