

Report on SDG 6

Progress Towards Sustainable Water & Sanitation



**Ensure availability
and sustainable
management of water
and sanitation for all**

Daffodil International University

September 2023

Progress Towards Sustainable Water & Sanitation

SDG6:

Sustainable Development Goal 6 is about "clean water and sanitation for all". It is one of the 17 Sustainable Development Goals established by the United Nations General Assembly in 2015. According to the United Nations, the goal is to: "Ensure availability and sustainable management of water and sanitation for all."

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DIU's Contributions and Progress:

Total volume of water consumed	3,00,000+ cubic meters
Volume of treated water consumed	80,000+ cubic meters
Per person water consumption	15+ cubic meters
Number of free drinking water purification device	30+
Transformation of Polluted water lake	1
Free drinking water provided to number of persons	20,000+
Setting up waste water treatment	1
Water Treatment Plant	1

Water treatment:



Free pure drinking water on campus:

DIU has set up a good number of water purification devices in all the floors of all the buildings on campus to ensure availability of pure drinking water for all free of cost.



Water Pollution Reduction Policy implemented:

DIU implemented water pollution reduction policy guidelines on campus to ensure sustainable use of water.

Link: <https://sustainability4d.daffodilvarsity.edu.bd/general-guidelines-on-water-pollution-reduction>



Water Conservation

Renovating the polluted water lake to vivid lake

A research team of Department of Environmental Science & Disaster Management (ESDM) and other experts undertook a project to renovate and revive an old and polluted water lake surrounding the university campus. The water of the lake was polluted and the surrounding environment was not suitable for students and the local community. The research team with their expertise and experience and financial and other support from the University, was successful to transform that polluted lake into a revived and user-friendly lake. The

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University has a plan to establish an aquaculture students and local community can have a free ride on the handy water vehicles in the lake and use the fresh and pollution-free water of the lake for various purposes.

Current view of the lake:



Previous view of lake:





Contributions to Knowledge:

The researchers of Daffodil International University conducted research and subsequently published the research results in reputed journals that contributed to the knowledge domain of SDG-6. Below is a highlight of such contribution:

SL	Research Title
1.	Assessment of Ecosystem Services, Plant Diversity Pattern, and Water Quality of an Urban Water Body in Dhaka, Bangladesh
2.	Analysis of Water Quality of Hatirjheel Lake, Dhaka, Bangladesh
3.	Improvement of wastewater quality of Dhaleswari river, Bangladesh using submerged macrophyte <i>Egeria densa</i>
4.	Impact of River Water Quality on Public Health in Perspective of Asian Rivers: A Case Study of Buriganga River, Bangladesh
5.	Erratum: Can guava (<i>Psidium guajava</i>) leaf extracts develop an indigenous, simplified tool for a semi-quantitative assessment of iron in groundwater?
6.	Green capsule phase microextraction employing hydrophobic monolithic sol-gel octadecyl siloxane platforms for the monitoring of organophosphorus pesticides in environmental water samples
7.	A Machine Vision Approach for Recognizing Coastal Fish
8.	Can guava (<i>Psidium guajava</i>) leaf extracts develop an indigenous, simplified tool for a semi-quantitative assessment of iron in groundwater?
9.	Efficient Arsenate Decontamination from Water Using MgO-Itsit Biochar Composite: An Equilibrium, Kinetics and Thermodynamic Study
10.	Metal-Tolerant Bacteria of Wastewater Treatment Plant in a Large City
11.	Synthesis of One-Dimensional Titanium Oxide Nanowires for Polyvinylidene Fluoride Membrane Optimization
12.	Groundwater quality and human health risk assessment in selected coastal and floodplain areas of Bangladesh
13.	Flowery In_2MnSe_4 Novel Electrocatalyst Developed via Anion Exchange Strategy for Efficient Water Splitting
14.	Amelioration of salinity induced damage in plants by selenium application: A review

15.	Textural characteristics of surficial sediments along the Noakhali coast, Bangladesh: An implication for mineral placer deposits exploration
16.	Household drinking water E. coli contamination and its associated risk with childhood diarrhea in Bangladesh
17.	A cleaner goatskin preservation with leaf paste and powder; an approach for salinity remediation in tannery wastewater
18.	Assessment of gross alpha/beta activity in tap water of Dhaka city using ZnS (Ag) scintillation detector and concomitant health hazard
19.	Non return to zero line coding with suppressed carrier in FSO transceiver systems under light rain conditions
20.	Effect of Cu Doping on ZnO Nanoparticles as a Photocatalyst for the Removal of Organic Wastewater
21.	Effect of Graphene Fillers on the Water Absorption and Mechanical Properties of NaOH-Treated Kenaf Fiber-Reinforced Epoxy Composites
22.	Groundwater Contamination and Health Risk Evaluation of Naturally Occurring Potential Toxic Metals of Hatiya Island, Bangladesh
23.	Assessment of Ecosystem Services, Plant Diversity Pattern, and Water Quality of an Urban Water Body in Dhaka, Bangladesh

Activities and Events:



Webinar on Effluent Treatment Plant and Environmental Principles

DIU's Department of Environmental Science and Disaster Management conducted an online seminar focusing on effluent treatment plant principles and environmental significance. This event contributes to SDGs related to clean water and sanitation, providing students with crucial knowledge for the 21st century's environmental challenges.

Webinar on Waterways: Nurturing Our Rivers for a Sustainable Future

The Department of Journalism, Media, and Communication (JMC) at DIU hosted a webinar on 'Waterways in our communities' to commemorate World Rivers Day 2022. Eminent river experts, academics, and activists highlighted the significance of waterways in the modern world, aligning with SDGs related to clean water and life below water. The webinar aims to raise awareness and inspire students to engage with river usage, utilization, and conservation.



Sustainable Environment Colloquium: Focus on Bangladesh

HRDI
HUMAN RESOURCES DEVELOPMENT INSTITUTE

Daffodil University

Colloquium on Sustainable Environment:
**Energy and Groundwater
in the Context of Bangladesh**

Speakers -

 DR. FAJRUL AMIN Dr. Fajrul Amin is an Associate Professor at the Bangladesh Agricultural University, Moulvibazar, Bangladesh.	 DR. FAJRUL AMIN SARKER Professor, School of Engineering and IT, University of New South Wales, Kensington Campus, Australia.	 DR. MOMWAR HOSSAIN PhD in Chemical Engineering, Monash University of Victoria, Australia.	 DR. SHARADUZZAMAN FAROOQ Professor, Department of Chemical and Biomolecular Engineering, National Institute of Education, Singapore.
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16 January 2023

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Daffodil International University (DIU) hosted a colloquium on January 16, 2023, to address sustainable environmental concerns in Bangladesh. This event featured experts discussing energy and groundwater sustainability, aligning with Sustainable Development Goals 6 and 7. Renowned speakers from international institutions shared insights, contributing to environmental awareness and collaboration in Bangladesh.