SDG 9 Progress Report 2023

University of Dhaka

SDG 9: Industry, Innovation, and Infrastructure

Sustainable Development Goal 9 is “Build resilient infrastructure, promote sustainable industrialization and foster innovation” which articulates a comprehensive framework for developing resilient infrastructure, promoting sustainable industrialization, and cultivating innovation within contemporary societies. The University of Dhaka (DU) demonstrates strategic alignment with these objectives through its sophisticated integration of technological education, research initiatives, and sustainable industry practices. The institution's multifaceted approach encompasses advanced technological training, innovative research programs, and strategic industry collaborations, establishing a robust foundation for sustainable development and technological advancement.

DU’s contributions to industry, innovation, and infrastructure include:

- A seminar titled 'Sustainable Green Business' was held on 4th March 2023, under the initiative of Dhaka University Energy Institute on the occasion of 'Bangladesh Sustainable Energy Week' to promote sustainable and eco-friendly innovation and industry.
- Advanced postgraduate diploma programs incorporating cutting-edge technological curricula at the Institute of Information Technology (IIT). There are specialized short-term courses at the Institute of Information Technology (IIT) focusing on advanced data analytics and visualization, enterprise-level office application systems, contemporary database management methodologies and emerging technological paradigms in 2023.
- The Center for Bioinformatics Learning Advancement and Systematics Training (cBLAST) administers sophisticated internship programs in 2023 where seven university students were hired through a competitive selection process. The interns received learning resources, and participated in bi-weekly discussions on their progress, and in the following months, one intern contributed to teaching content development, while two analyzed research data and co-authored a publication and integration of SDG-9 aligned project initiatives for the development of transferable professional competencies.
- Center for Bioinformatics Learning Advancement and Systematics Training published their innovative research projects “Comparative metabolite profiling of salt sensitive Oryza sativa and the halophytic wild rice Oryza coarctata under salt stress”, “Deciphering the genome of Aspergillus welwitschiae AwOcstreb1: An interface between pathogen and mutualist”, “Novel QTLs for salinity tolerance revealed by genome-wide association studies of biomass, chlorophyll and tissue ion content in 176 rice landraces from Bangladesh” and “DNA marker-assisted breeding for producing highly stress tolerant elite rice varieties for coastal Bangladesh by introgression of

multiple salt tolerance loci (QTLs) into commercial cultivars" in the year 2023. In this year, cBLAST computational facilities were used to develop DNA markers close to heterologous DNA loci between recipient and donor cultivars collaboratively with Bangladesh Rice Research Institute funded by the World Bank.

- Innovation, Creativity, and Entrepreneurship (ICE) Centre, collaborating with the Entrepreneurship Development Program (EDP) has worked to enable an effective innovation and entrepreneurship ecosystem through advocacy and awareness Programs from March 2023 to December 2023 at the University of Dhaka. Through a robust multilevel advocacy chain, the Entrepreneurship Support Cell (ESC) provided continuous support to EDP graduates. By reaching over 700 graduates through focused group discussions, facility visits and problem-specific expert solutions and advocacy, the ESC addressed their challenges and problems effectively. This advocacy was structured to provide real-time solutions and ongoing support, ensuring that entrepreneurs felt supported throughout their business journey. Detailed tracking of the results revealed improvements in business operations and problem-solving capabilities among the graduates.