

SDG 14 Progress Report 2023

University of Dhaka



SDG 14: Life Below Water

As the leading University of Bangladesh, Dhaka University has always been working for the sustainability of the community it serves. Bangladesh is a riverine land, The vast lowlands blessed with hundreds of rivers, lakes, and shallow water lands demand a comprehensive study for the specific kinds of water bodies and climate disasters. As the nation is prone to cyclones in the coastal areas, and the inlands are flooded with water from the upstream rivers, water management and safeguarding aquatic biodiversity is a crucial issue for the sustainability of our communities. Here's what Dhaka University does for life below water:

- The Faculty of Biological Sciences accommodates eleven Departments. Of which, Departments of Soil, Water and Environment, Botany, Zoology, Biochemistry and Molecular Biology, Microbiology and fisheries, and Genetic Engineering and Biotechnology works specifically for aquatic life research and education.
- The Center of Advanced Studies and Research on Biological Sciences conducts advanced research on aquatic plants and animals, finding local solutions for ensuring Biodiversity in Bangladesh. for instance, Professor Alifa Bintha Haque has significant contribution on the challenging intersection of endangered species conservation and fisheries as the mean of livelihood generation for the coastal community of Bangladesh. Dr Kaniz Fatema has significant contribution om Spatial and temporal distribution Temporal distribution of of macro benthic invertebrates and their correlation with water quality parameters in a tropical river in Bangladesh. Md. Hasan Faruque has conducted research on Fisheries Stock Prioritization for Monitoring and Management: Insights from the Industrial Fin Fish Trawling in the Bay of Bengal, Bangladesh
- The department of Oceanography arranges different seminar and workshops that come with certification, such as "The Coastal and Regional Ocean Community Model (CROCO) 2023" Workshop, a collaborative venture between the International Centre for Ocean Governance (ICOG) and the Department of Oceanography at the University of Dhaka, took place on 18 and 19 October 2023.
- The Department of Botany at the University of Dhaka has been at the forefront of plant science research, particularly in genome editing and biodiversity conservation. Faculty members have actively participated in international workshops, such as the Genome Editing in Plants: Harnessing the Benefits for Bangladesh event in 2022. Research projects include studies on Phytoplankton Diversity of Wetlands in Tanguar Haor and Hakaluki Haor, focusing on biodiversity assessment

and conservation. Such endeavors underscore the department's dedication to ecological preservation and sustainable development through cutting-edge research.

• The department of zoology has many ongoing projects on assessment and conservation of aquatic biodiversity. Such projects include Present Status, Habitat Preference, Threat Assessment and Conservation Issues of Threatened Wildlife in the Transboundary Area of Ganges River, Bangladesh, in collaboration with the Ministry of science and technology, Government of Bangladesh, Investigation of antimicrobial resistance in amphibians in Dhaka megacity Bangladesh, Right and Science based Marine Protected Areas, Species blue print for sawfish protection in Bangladesh in collaboration with Bangladesh Forest department, Microplastics of the rivers and wetlands of Dhaka city in collaboration with World Bank , Scaling up the genomic resources of fish to support monitoring and conservation of small indigenous species of Bangladesh in collaboration with United States department of agriculture , Evaluation of the toxicological impact of microplastic-contaminated water and food on animal health using fish and mice model in collaboration with Bangladesh Food safety authority.