

15 LIFE ON LAND



# SDG 15 Progress Report 2023

## University of Dhaka



## SDG 15: Life on Land

The mandate of the sustainable development goal 15, Life on Land, revolves around “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”. The University of Dhaka has multiple departments that are dedicated to research and academic activities that are directly related to protecting the ecological diversity of Bangladesh, especially the ecology over the water. In 2023 there have been some notable developments regarding this SDG.

- The Faculty of Earth and Environmental Sciences at the University of Dhaka is a dedicated institution for advancing research and education in earth and environmental sciences. Established in 2008, the faculty plays a pivotal role in fostering knowledge through its five academic departments: Geography and Environment, Geology, Oceanography, Disaster Science and Climate Resilience, and Meteorology. Supporting these departments are four specialized research centers: the Delta Study Center, Disaster Research Training and Management Center, International Centre for Ocean Governance, and Centre for Urban Resilience Studies. The faculty also published The Dhaka University Journal of Earth & Environmental Sciences, a peer-reviewed journal that promotes the dissemination of scholarly research and contributes to global academic discourse in these fields.
- The Department of Sociology at the University of Dhaka has made significant contributions to research on pressing social and environmental issues. Notable among its initiatives is the Centennial Research Dissemination on Understanding the Narratives Around Land Grabbing: A Study on the Indigenous Peoples in Madhupur Sal Forest, Tangail, conducted in December 2022. Additionally, the department has engaged in consultancy and funded research, such as the Landscape Modeling and Planning in Selected Landscapes in the Chittagong Hill Tracts project, supported by the World Bank’s Progreen funds through Arannayk Foundation. This project, conducted from October to December 2021, focused on sustainable landscape management and planning, showcasing the department’s commitment to integrating social science perspectives in environmental research.
- The Department of Development Studies has contributed to interdisciplinary research at the intersection of human well-being, biodiversity, and sustainability. One of its notable works includes the study Human-Nature Cooperation for Well-Being: Community Understanding on One Health Approach in the COVID-19 Era in the Sundarbans. This research, published as a book chapter in

Biodiversity-Health-Sustainability Nexus in Socio-Ecological Production Landscapes and Seascapes (SEPLS) (Springer, 2022), highlights the role of community-based approaches in addressing health and environmental challenges, particularly during the pandemic era.

- The Department of Soil, Water, and Environment focuses on critical environmental challenges, including soil and water management. Key contributions include a study on Soil Organic Carbon Dynamics in the Agricultural Soils of Bangladesh Following More Than 20 Years of Land Use Intensification, published in the Journal of Environmental Management (Impact Factor: 8.910). Another notable work, Evaluation of Seasonal Changes in Physicochemical and Bacteriological Parameters of Gomti River, highlights the department's role in monitoring water quality for ecological sustainability. These research efforts contribute to understanding land and water resource management in Bangladesh.
- The Department of Geography and Environment contributes to understanding land use, environmental degradation, and disaster management in Bangladesh. Recent research includes a study on Land Use Change and Degradation of Belai Beel at Gazipur, published in a Springer book chapter (2023), and an analysis of Temporal Changes in Land Cover, Land Surface Temperature, and Evapotranspiration Using Remote Sensing Techniques: A Case Study of Kutupalong Rohingya Refugee Camp, published in Springer Nature (2023). Other works explore topics such as urban heat islands, groundwater sustainability, and water quality in disaster-prone regions, emphasizing the department's focus on geospatial technologies and environmental planning.
- The Zoology Department of Dhaka University has a club named Dhaka University Nature Conservation Club (DUNCC) which is actively engaged in several community outreach programs that align with the Sustainable Development Goals (SDGs). Dhaka University Nature Conservation Club (DUNCC) as well as faculty members, through their research projects regularly conducts biodiversity conservation workshops in rural and urban communities. These workshops focus on educating people about the importance of conserving local wildlife and the role they play in maintaining healthy ecosystems. Faculty members of the department organize wildlife awareness campaigns in local schools to raise awareness among students about the importance of protecting endangered species. These campaigns often involve interactive sessions, games, and field trips that encourage students to become actively engaged in conservation efforts. The department, in partnership with the DUNCC and other organizations, leads conservation projects in important ecological zones like Tanguar Haor, where local communities are involved in sustainable wetland management. These projects aim to balance human livelihood needs with the conservation of

critical habitats and species. The department organizes plastic pollution awareness during each academic year field trips. These drives include beach clean-ups, riverbank restoration efforts, and educational campaigns about the negative impacts of plastic waste on marine and freshwater biodiversity.

- The three-day international conference titled “Molecules of Life for Sustainability” began on February 3, 2023, at the Nabab Nawab Ali Chowdhury Senate Bhaban, Dhaka University. Organized by the Bangladesh Society for Biochemistry and Molecular Biology, Dhaka University’s Department of Biochemistry and Molecular Biology, and South Asian University, New Delhi, the event was inaugurated by Dhaka University Vice-Chancellor Professor Dr. Md. Akhtaruzzaman. The conference, chaired by Professor Dr. Hasina Khan, brought together scholars, researchers, and students from various institutions to exchange ideas and experiences in the field of molecular biology and sustainability.
- On January 28, 2023, Dhaka University hosted a National Conference on “Biodiversity Conservation: Bangladesh Perspective” at its Senate . The event highlighted the critical role of animal habitat conservation in achieving the SDGs, urging researchers to contribute to policy formulation for biodiversity conservation. Participants from both domestic and international institutions attended the conference, which underscored the importance of protecting biodiversity for the nation’s sustainable development.