

ANNUAL REPORT

SDG

11

SUSTAINABLE CITIES AND COMMUNITIES



UNIVERSITY OF CHITTAGONG
Chittagong-4331, Bangladesh

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Near the port city of Chittagong – the second largest city of Bangladesh, the University of Chittagong is trying to thrive as a hub of innovation and collaboration in sustainable urban development, aligning its efforts with Sustainable Development Goal 11. The university's advisory and research involvement in enhancing the urban landscape of Chittagong indicates its commitment to creating sustainable cities and communities.

A vital area of the university's involvement lies in its partnership with the Chittagong City Corporation, particularly in assessing and improving the city's solid waste management. Researchers and students from various University departments are engaged in solid waste management research, including life cycle assessment to evaluate the environmental footprint of solid waste management, healthcare waste management, recycling pathways, and household behavioral aspects for exploring different alternatives to enhance efficiency and sustainability. These works not only contribute to the improvement of living conditions in the city but also provide valuable insights for environmental management.

The university's interdisciplinary approach is evident in the collaborative efforts of departments like the Institute of Forestry and Environmental Science (IFES), the Department of Geography, and various departments of social science and arts faculties. They have been diligently studying the climate refugee issue, urban slums, urban pollution, etc., to improve living conditions for slum dwellers in the city. Their research is instrumental in aiding policymakers toward inclusive urban development.

Research on resource efficiency and space utilization in industrial areas is another domain where the university's contributions are noteworthy. These studies are guiding the management in crafting better urban infrastructure, aligning with the goal of sustainable and efficient urban environments.

On the university campus, the focus on sustainable architecture is prominent. Adhering to the Bangladesh National Building Code, the university's buildings are designed with high energy efficiency. The architectural design prioritizes natural lighting and ventilation, reducing the need for artificial resources during the daytime. This approach aligns with sustainability goals and creates a healthier living and learning environment for students and faculty members.

The university's greening and plantation efforts have established it as a model of a green campus in Bangladesh. This initiative helped in biodiversity conservation and climate change impact mitigation and enhanced the living conditions for community members residing on campus. Another significant aspect of the university's contributions to SDG 11 is its research on urban forestry and the study of the role of trees in mitigating urban heat island effects and reducing air pollution. Utilizing modern tools like iTree and with training from the USDA Forest Service's Compass program, students and faculty members are at the forefront of exploring nature-based solutions to urban environmental challenges. The dormitories, designed to be spacious and energy-efficient, reflect a commitment to sustainable living spaces.

Addressing the prevalent issues of landslides and hill slope failures in Chittagong City, researchers from the university are deeply involved in studying landslide risks and urban drainage congestion. These studies are crucial for disaster risk reduction and enhancing urban resilience. Moreover, the sustainability of Chittagong's urban water supply is closely tied to the health of local rivers and their ecosystems. The university's Halda River Research Laboratory plays a pivotal role in conservation efforts, reflecting the interdependence of urban well-being and environmental health. The University of Chittagong's comprehensive approach to tackling various facets of urban sustainability exemplifies its dedication to contributing meaningfully to SDG 11. Through research, education, and collaborative initiatives, the university is enhancing Chittagong's urban landscape and setting a benchmark for sustainable urban development globally.