



SDG 15- LIFE ON LAND

Sustainable Development Goal (SDG) 15, 'Life on Land,' targets the conservation, restoration and sustainable use of terrestrial ecosystems, including forests, wetlands and biodiversity. This target highlights the urgency of combating deforestation, desertification and habitat degradation, which threaten the ecological balance of the planet and the livelihoods of millions of people. By promoting sustainable land management practices, protecting endangered species and restoring degraded ecosystems, SDG 15 aims to ensure the health and resilience of terrestrial environments. This goal is critical not only for conserving biodiversity, but also for combating climate change, ensuring food security and supporting sustainable economic growth. Through education, research and community engagement, institutions such as Üsküdar University play a vital role in advancing the goals of SDG 15, promoting a harmonious relationship between humanity and the natural world.

- Does your university support and/or organise activities aimed at promoting the conservation and sustainable use of land, including forests and wildlife habitats?

Üsküdar University carries out various activities and projects that promote the conservation and sustainable use of forests and wildlife within the scope of the '15th Life on Land' objective. Within the scope of Forensic Sciences programmes, students gain awareness in this field by taking part in international projects for the protection of wildlife. For example, Kardelen Karamahmutoğlu, a graduate student of Forensic Genetics, gained experience in this field by attending the 'Forensic Sciences and Wildlife' course in South Africa. The University organises events led by experts such as Prof. Dr. İbrahim Özdemir to raise awareness about the climate crisis and environmental problems, and supports the reduction of greenhouse gas emissions and the transition to sustainable energy sources. In addition, multidisciplinary projects are carried out for the protection and reproduction of endemic plant species in danger of extinction, and the potential effects of these plants in cancer treatment are investigated. In events such as the 'Green Transformation in the World of Science, Animal Rights and Veganism' summit organised by the Molecular Biology and Genetics Club, animal rights and the environmental benefits of plant-based nutrition are emphasised. The Faculty of Engineering and Natural Sciences trains students in this field by organising trainings and workshops for the development of environmentally friendly technologies. Social awareness is raised by organising informative seminars and afforestation activities on issues such as forest fires and climate change. The students of the Medicinal and Aromatic Plants Programme gained practical knowledge on plant cultivation and soil analysis during a technical trip to Istanbul Ağaç ve Peyzaj A.Ş. With these activities, Üsküdar University plays an important role for the protection of terrestrial ecosystems and a sustainable future.



- Does your university have policies to ensure that food on campus is grown sustainably?

Üsküdar University develops various policies and practices that promote sustainable food production on campus. The Agroecology course offered in the Laboratory Technology programme teaches students sustainable farming methods by providing a comprehensive education on topics such as ecosystem concepts, agroecosystems, soil fertility and the impact of environmental factors on agricultural practices. In addition, the university supports recycling processes and contributes to the protection of natural resources by signing a three-year agreement with KOLZA for the environmentally friendly management of vegetable waste oil generated in the cafeteria. Projects such as growing strawberries in pots made of recyclable materials on campus raise students' awareness of sustainable agriculture. The 'Environment and Organic Agriculture' course offered within the scope of the Medicinal and Aromatic Plants Programme prepares students for sustainable agriculture practices by providing theoretical and practical information about organic agriculture, ecological balance and environmentally friendly production models. The GTE234 Organic Agriculture and Bakery Products Technology course in the Food Technology Programme develops students' knowledge and skills in sustainable food production by addressing topics such as the principles of organic agriculture, good agricultural practices and ecological farming models. The University collaborates with sustainable suppliers such as GOLDA Gıda and Tukaş Gıda to ensure that the products used in the campus cafeteria are supplied from environmentally friendly sources. These studies show Üsküdar University's commitment to sustainable food production and environmental awareness.

- Does your university make direct efforts to conserve and expand the existing ecosystems and biodiversity of especially threatened ecosystems, both plant and animal ecosystems?

Üsküdar University supports its direct efforts to protect plant and animal ecosystems and increase biodiversity through education, research and activities. Students of the Medicinal and Aromatic Plants Programme contribute to the sustainability of plant ecosystems by gaining hands-on experience such as seed planting, soil preparation and getting to know tropical plant species during a technical trip to Istanbul Ağaç ve Peyzaj A.Ş. The university develops projects for the protection of ecosystems by using genetic editing approaches such as Crispr technology in agriculture and animal husbandry. In addition, within the scope of TÜBİTAK 1001 project, studies such as in vitro reproduction of endemic plant species under the threat of extinction and determination of secondary metabolite profiles are carried out. The Molecular Biology and Genetics Club organised the 'Green Transformation in the World of Science: Animal Rights and Veganism Summit', raising awareness on animal rights and ecosystem protection issues. The Ecology course in the Environmental Health Programme and the Agricultural Ecology course in the Laboratory Technology Programme provide students with a comprehensive education on ecosystem dynamics, environmental pollution, climate change and biodiversity,



allowing them to develop sustainable solutions. With these studies, Üsküdar University takes important steps towards protecting threatened ecosystems and increasing biodiversity.

- Does your university offer educational programmes on ecosystems (overview of wild plant and animal species) for local or national communities?

Üsküdar University offers comprehensive educational programmes on conservation and management of ecosystems for local and national communities. The Medicinal and Aromatic Plants Programme contributes to the conservation of local ecosystems by providing students with theoretical and practical knowledge on sustainable collection, cultivation and processing of plants in nature. The Environmental Health Programme provides students with a multidisciplinary education on the protection of natural resources and sustainable management of ecosystems, while the Laboratory Technology Programme raises awareness on the protection of biodiversity by training technical personnel on the analysis of natural resources such as plants, soil and water. In addition, GZT451 - Environmental Journalism course aims to raise social awareness on environmental issues and provides students with knowledge and skills in ethical journalism, climate justice and documentary film making. MBG445: Environmental Sustainability course educates students as environmentally friendly individuals by addressing basic issues such as biodiversity, natural resource management and ecosystem protection. These programmes and courses make significant contributions to the university's efforts to raise public awareness about ecosystems and to protect biodiversity.

Üsküdar University carries out various studies for the protection of common land ecosystems in cooperation with local communities. For example, the study on the Kahramanmaraş earthquakes titled 'Improving disaster response with comprehensive transport models' aims to develop strategies to increase the resilience of local communities by emphasising the participation of local communities in disaster management processes. In addition, technical trips organised by the Vocational School of Health Services Medicinal and Aromatic Plants Programme provide students with information about local plant resources and their sustainable use, while strengthening cooperation with local communities. In particular, the field trip to Istanbul University Faculty of Forestry Herbarium raised students' awareness on plant diversity and biological conservation. Similarly, a technical visit to Karaca Medicinal Plants Garden encouraged local knowledge sharing on the conservation and sustainable use of medicinal plants. Such activities concretise the university's efforts to conserve local ecosystems and raise public awareness.

- Does your university offer training programmes/promotional activities for local or national communities on sustainable management of agricultural lands?

Üsküdar University offers educational programmes and awareness raising activities on sustainable management of agricultural lands. The Environment and Organic Agriculture course was added to the first semester curriculum in the 2023-2024 academic year within the



scope of the Medicinal and Aromatic Plants Programme and addresses topics such as the basic principles of organic agriculture, types of environmental pollution, plant nutrition and protection methods, and aims to raise awareness of sustainable agriculture through ecological farming models

(<https://sis.uskudar.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=31&curSunit=127#>). Similarly, the Soil and Water Pollution course is offered in the second semester of the Laboratory Technology Programme and covers the sources, effects and prevention methods of soil and water pollution and provides information on biological treatment techniques and water quality control regulations. This course creates environmental awareness that supports agricultural sustainability (<https://sis.uskudar.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=31&curSunit=1070#>). The Pesticides and Analyses course teaches the effects of pesticides on the ecosystem and their conscious use, while contributing to the awareness of the society by promoting sustainable practices in agriculture (<https://sis.uskudar.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=31&curSunit=1070#>). In addition, Dr Muhammet Enis Bulak's sustainability-focused research on the food sector in Qatar aims to raise public awareness on sustainable agriculture by providing strategies to strengthen food security and agricultural value chains (<https://uskudar.edu.tr/tr/icerik/42333/dr-muhammet-enis-bulak-saglikli-ve-surdurulebilir-gida-sistemleri-amaclanmali>). Similarly, Dr. Ahmet Adiller's studies on water crisis and sustainable water management emphasise the importance of individual water saving, and the university aims to raise awareness on the efficient use of water resources by organising trainings for the community (<https://uskudar.edu.tr/tr/icerik/42005/kuresel-su-kriziyle-mucadelede-bireysel-onlemler-kurtarici-olabilir>). Üsküdar University makes academic contributions to agricultural sustainability and raises awareness in this field through its educational programmes and research.

- Does your university offer training programmes/promotional activities for local or national communities on sustainable management of land for tourism?

Üsküdar University carries out training and awareness-raising activities for local and national communities on health tourism and sustainable management of agricultural lands. Through the Health Tourism Application and Research Centre, the knowledge and skills of the communities are increased by organising training programmes, seminars and workshops on the sustainable management of health tourism (Centre and Regulation). In addition, the university participated in the Aromatherapy Festival held in Balıkesir on 6-9 July 2023 with its faculty members and students, and took part in seminars and workshops raising awareness on sustainable agricultural practices. Such events contribute to the dissemination of sustainable management practices (Festival Details).



- Does your university have a policy to ensure the conservation, restoration and sustainable use of terrestrial ecosystems connected to the university, especially forests, mountains and drylands?

Üsküdar University carries out various academic and applied projects for environmental sustainability and ecosystem protection. Environmental Analysis Reports document sustainability studies covering land use, ecological balance, waste management, energy consumption and biodiversity, and provide an assessment of ecological impacts. Within the scope of the Social Responsibility Project course, students contribute to the protection and improvement of local ecosystems by gaining environmental awareness through nature-friendly projects such as tree planting. In addition, OHS365 - Sustainability in Environmental and Business Management course aims to provide students with knowledge on topics such as ecosystem management, environmental impact assessment and green building certification systems (Course Content). With these studies, the University complies with sustainable development goals and educates students with an awareness of environmental responsibility.

- Does your university have a policy to identify, monitor and protect IUCN Red Listed species and species on the national protection list in the habitats in areas affected by your university's activities?

Üsküdar University carries out various academic and strategic studies on environmental sustainability and biodiversity conservation. Environmental Toxicology and Ecology courses aim to provide students with the knowledge and skills to contribute to the conservation of species on the IUCN Red List and national protection lists through topics such as environmental pollutants, ecosystem health and climate change. TAB216 course enables students to develop strategies for the conservation of biodiversity while teaching methods of disease and pest control of medicinal and aromatic plants. The university's strategic plans and environmental analysis reports support the formulation of ecosystem management and conservation policies, while research provides scientific contributions on sustainable agriculture and adaptation of plants to environmental stress conditions. In particular, research on bean genotypes exposed to salt stress provides scientific infrastructure for the development of plant protection strategies. All these academic and research activities demonstrate Üsküdar University's commitment to the conservation of biodiversity and the development of sustainable environmental policies.

- Does your university take into account local biodiversity in any planning and development processes (e.g. construction of new buildings)?

Üsküdar University integrates local biodiversity conservation and environmental sustainability into its planning and development processes. The course contents in the Occupational Health and Safety undergraduate programme show that environmental factors are taken into account in the construction of new buildings by analysing Environmental Impact Assessment (EIA) and



international certification systems such as LEED, BREEAM. In addition, a consultancy agreement with AR TU Environmental Consultancy Company, valid until 2024, ensures that sustainable design principles and EIA processes are implemented with professional support. In new building projects, the University prioritises the protection of biodiversity, the increase of green areas, the use of sustainable materials, smart building systems and the use of renewable energy sources. Sustainability awareness is promoted by raising awareness through environmental analysis reports and training programmes. In addition, energy efficiency is increased and environmental impact is minimised by using heat insulated materials in new buildings. All these efforts demonstrate Üsküdar University's commitment to sustainable development goals and its determination to protect local ecosystems.

- Does your university have water quality standards and guidelines for water discharges for the protection of water quality to protect ecosystems, wildlife, human health and welfare?

Üsküdar University ensures the protection of ecosystems, wildlife, human health and well-being by implementing the necessary standards for the protection of water quality. Domestic wastewater generated at the Çarşı Campus is managed by Istanbul Water and Sewerage Administration (İSKİ) and treated at the Üsküdar Wastewater Treatment Plant in accordance with the relevant regulations. This process was approved by İSKİ General Directorate Wastewater Treatment Department in 2021 and is ongoing. In addition, the university's 2024-2028 Strategic Plan prioritises sustainability principles with a focus on recycling water resources and renewable energy sources. The 'Water Quality and Treatment' course offered within the scope of the Environmental Health Programme provides a comprehensive education on the protection of water resources, pollution parameters and treatment methods and raises awareness of students in this field. These studies demonstrate the university's commitment to the protection of water quality and wastewater management in accordance with legal regulations.

- Does your university have a policy to reduce plastic waste on campus?

Üsküdar University implements comprehensive strategies and policies to reduce plastic waste on its campuses. The University's Waste Management Plan has been prepared to promote environmental sustainability and ensure effective waste management. In this context, metal water canteens were distributed to administrative staff to reduce the use of disposable plastic cups, and packaging waste was sorted at source and sent to licensed recycling companies. Plastic, packaging and electronic wastes are collected separately and properly sorted throughout the campus. In line with the zero waste policy of the university, environmental awareness is raised by providing training to staff and students on waste management, pollution prevention and zero waste practices. In addition, waste management presentations are regularly made on campuses and plastic waste collection boxes are placed at strategic points. The Waste Management Plan, which was discussed in the Environmental Analysis



Report, was renewed in 2022-2023 and its effectiveness was increased. Zero waste certification has been obtained for all campuses, ensuring full implementation of this policy and continuous improvement of waste minimisation efforts.

Üsküdar University supports the Zero Waste Project initiated by the Ministry of Environment, Urbanisation and Climate Change in 2017 and implements the Zero Waste Management System in this context. On 8 June 2021, the university, which was entitled to receive a Zero Waste Certificate, continues its efforts with the aim of leaving a clean and livable world in line with the principles of sustainable development. Prof. Dr. Hasan Çiçek's statements on recycling are in line with the university's environmentally friendly policies and emphasise the need to raise social awareness. Prof. Dr. Nilgün Tekkeşin's warnings about the widespread presence of microplastics in drinking water and food make the university's efforts to combat plastic pollution and clean water resources even more important. Accordingly, the university continues to work towards an environmentally conscious future by promoting alternatives to single-use plastics and expanding recycling programmes.

- Does your university have a policy, process or practice regarding waste disposal including hazardous materials?

Üsküdar University implements comprehensive waste management plans for the management of hazardous waste and reviews and updates these plans annually. Hazardous materials such as medical wastes, biological wastes and chemical organic wastes are tracked separately at each campus (including dental clinics, medical faculty and laboratories) and disposed of in accordance with established procedures.

Waste management guidelines include procedures for the collection and disposal of biohazardous materials, sharps and pathological waste. Medical waste is collected three times a day and waste quantities and codes are reported annually. Environmental engineers inspect all campuses monthly and provide training on waste management.

According to the University's environmental analysis report, temporary storage areas for hazardous and medical waste have been established in accordance with the legislation. The types of hazardous wastes are as follows:

- Medical waste
- Laboratory chemicals
- Absorbents contaminated with hazardous substances
- Oils from generator maintenance
- Toners containing hazardous substances



- Packages contaminated with dangerous goods
- Oil filters
- Antifreeze fluids containing hazardous substances
- Fluorescent lamps
- Electrical and electronic wastes

These hazardous wastes are separated at source and temporarily stored in accordance with the legislation. The wastes in the temporary storage area are sent to licensed companies authorised by the Ministry of Environment, Urbanisation and Climate Change. Medical waste is collected for disposal within 48 hours and collected weekly by a licensed company. There is a cooling unit to keep the temperature of the temporary storage area of medical waste at +4 degrees. In addition, a regularly renewed waste collection contract has been signed with İstaç.

These practices demonstrate the university's commitment to managing hazardous waste in a safe and environmentally sound manner. Waste quantities and management processes are regularly reported and monitored transparently.