

# SDG PROGRESS REPORT

on **SDG-15 LIFE ON LAND**





# SDG PROGRESS REPORT

ISTANBUL MEDENİYET  
UNIVERSITY

**Istanbul Medeniyet University  
Sustainability Office**

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Human life depends on the earth as much as the ocean for our sustenance and livelihoods. Plant life provides 80 percent of our human diet, and we rely on agriculture as an important economic resource and means of development. Forests account for 30 percent of the Earth’s surface, providing vital habitats for millions of species and important sources for clean air and water; as well as being crucial for combating climate change.

Today we are seeing unprecedented land degradation, and the loss of arable land at 30 to 35 times the historical rate. Drought and desertification is also on the rise each year, amounting to the loss of 12 million hectares and affects poor communities globally. Of the 8,300 animal breeds known, 8 percent are extinct and 22 percent are at risk of extinction.

The SDGs aim to conserve and restore the use of terrestrial ecosystems such as forests, wetlands, drylands and mountains by 2020. Halting deforestation is also vital to mitigating the impact of climate change. Urgent action must be taken to reduce the loss of natural habitats and biodiversity which are part of our common heritage.

1.6 BILLION

people depend on forests for their livelihoods

100 MILLION

hectares of healthy and productive land is degraded every year



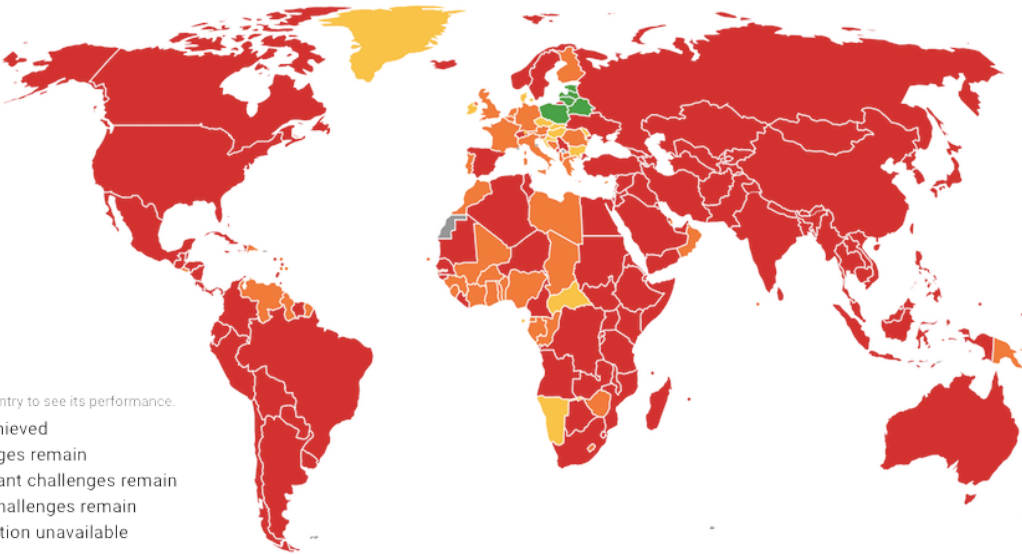
of all terrestrial animal, plant and insect species live in forests

41,000 SPECIES

are threatened with extinction

2.6 BILLION

people depend directly on agriculture to earn a living



- Legend
- Click on a country to see its performance.
- SDG achieved
  - Challenges remain
  - Significant challenges remain
  - Major challenges remain
  - Information unavailable



educational programmes on ecosystems and biodiversity



policy and licence on hazardous waste disposal

145+ TREES

planted for conservation and restoration of land and neutralize released carbon



water discharge standards



policy and actions on plastic waste reduction



## Supporting Land Ecosystems through Actions

### *Sustainable Use, Conservation and Restoration of Land*

Istanbul Medeniyet University is a young university with ongoing development works in its campuses. During all its land arrangements and construction work carried out as part of its development process, IMU attaches particular importance to the sustainable use of land. Furthermore, for completed construction works, restoration and vegetation applications are performed in the land to ensure the sustainability of life on land.

In this context, in 2022, over 145 trees were planted in IMU campuses both to achieve sustainability of the life on land and biodiversity in the land associated with the university and to neutralize carbon emissions.



“  
**145+**  
**TREES**  
planted in IMU campuses  
”

## Land Sensitive Waste Disposal

### *Water Discharge Guidelines and Standards*

In our university, we have **oil filters** installed in the dishwashing sites in our campus kitchen and other facilities to prevent the oily wastewater from polluting the discharged water and the service provider is also responsible for regularly cleaning these filters and delivering the oil waste collected to ISTAC Inc., an affiliation of Istanbul Metropolitan Municipality that is in charge of waste management. ISTAC Inc. then converts the collected waste oil into renewable energy sources such as biodiesel and biogas in its recovery facilities.

Wastewater from campus use is collected by the wastewater network and dispatched to the treatment facilities of Istanbul Water and Sewerage Administration (İSKİ), which is in charge of **treating wastewater** using various systems from preliminary treatment to advanced biological treatment so that wastewater is eliminated without environmental damage and water resources, Istanbul Strait, and the Marmara Sea are protected from the threat of wastewater.

As Istanbul Medeniyet University, we are developing projects for waters within our campus area that we can reuse after treatment. In 2021, the **“Greywater Recovery Project”** was initiated under the leadership of Prof.Dr. Erkan ŞAHİNKAYA and Asst.Prof.Dr. Yasin KARAGÖZ from IMU Faculty of Engineering and Natural Sciences. With this project, a system was designed that allows reusing the sink water in the restrooms for toilet flushing to reduce water consumption in our campuses.

Designed system was implemented in the toilets in the North campus Block B Classroom Building in 2022.

### *Policy on Plastic Waste Reduction*

As an institution, we adhere to the provisions of the **Zero Waste Regulation** for minimization of plastic use and disposable items and reduction of waste in general in line with the sustainable development goals.

Thus, issues such as reducing the generation of waste and chiefly of plastic, which greatly damages aquatic, terrestrial, and aerial ecosystems, and recycling plastic waste form an integral part of our university's vision. In this context, we removed the waste bins from the university's indoor areas and started to collect and sort recyclable waste and chiefly plastic waste in six categories. Plastics that are thus saved from becoming garbage are delivered to the relevant municipal authorities for recycling.





# OPERATIONS

IMI

Istanbul Medeniyet University primarily follows a policy of reducing consumption to reduce waste. Therefore, certain strategies have been implemented to gradually **reduce single-use plastics** in the campus areas. For instance, our contract with the catering service provider for our lunch services contains a clause on serving meals in chinaware and using metal cutlery. Thanks to such practices, we prevent the use of single-use plastics in eating utensils and thereby reduce plastic waste generation in all our campus areas.



Lunch-related Waste Minimisation Policies

Istanbul Medeniyet University carries out practices that will contribute to the plastic reduction targets throughout Turkey. For example, in order to contribute to the goal of the **Packaging Waste Control Regulation** of 2017, which aims to reduce the annual use of plastic bags per capita to no more than 40, cloth bags are distributed to our staff members every year to be used as an alternative to plastic bags.



IMU Cloth Bags that are Distributed to Staff

“**1342**  
CLOTH BAGS  
distributed to staff members to  
reduce the use plastic bags”

Istanbul Medeniyet University Sustainability Office organized a social responsibility project that lasted throughout July to lead people to reduce the amount of plastic waste they produce and live a plastic-free life. Various events organized throughout the month aimed to help people gain habits that will reduce the amount of plastic waste in their daily lives.

Within the scope of these events, IMU Sustainability Office invited people to a month-long **Plastic Free July Challenge** to eliminate single-use plastic products from their lives by making them aware of the amount of plastic waste they produce. In the challenge, information was given every day about the recycling status of a single-use plastic product in our daily lives, and the amount of waste it creates globally. Following each post sharing on the office's social media account, people were offered alternatives that they could use instead of that particular product, with natural ingredients and packaging that do not produce plastic waste. On certain days of the challenge, the Office encouraged people to take the first step towards a plastic-free life by various events such as offering people who brought their own reusable cups free coffee and tea and handing out waxed fabrics by collaborating with Mumowrap. With this project, the Sustainability Office challenged our campus community to remove single-use plastics from their lives and challenged the entire public through social media by saying “Are you up for a plastic-free life?” and invited everyone to a plastic-free life starting from this month. Thus, via the events organized, both awareness was raised on waste management and a social change was initiated through changes in consumer habits.



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IMU “Plastic Free July” Challenge



# OPERATIONS

IMU

In addition to posts shared on social media, the Sustainability Office hosted Prof.Dr. Murat KAZANCI, who is a faculty member of IMU Biomedical Engineering Department and working on producing different alternatives to plastic, as the speaker in the online seminar “Manufacturing and Development of Ecofriendly Bioplastics as an Alternative to Petrochemical Products”, which was open to public participation.

In the seminar participants were informed about various bioplastic materials manufactured from organic substances which can prevent plastic waste generation to reduce ecological footprint and be used as alternatives to plastics. The potential contribution of bioplastic use to waste management process and ecological cycle by reducing pollution was also discussed.

Also, the current situation in global plastic pollution was pointed out by giving statistics such as an average of one trillion plastic bags are manufactured around the world each year and 79% of the plastics are non-recyclable. The consequences of unrecycled plastics were also underlined by mentioning that they find their way to the seas and oceans, creating gigantic waste islands. The projects conducted in IMU in bioplastic manufacturing were introduced at the last part of the seminar.

The “Plastic-Free July” events organized by the Sustainability Office was ended by sharing informative content that evaluated the effects of habit changes for a plastic-free life for a month on global warming, oceans and seas and landfill and invited people to maintain these habits throughout their lives.

# LEADERSHIP

IMU

In addition to our operational efforts, we, as a university, also see our students as leaders of the future. Therefore, we aim for each and every one of our students to become leaders in the society in implementing sustainable development goals through their research and social responsibility projects and thus, support them in their efforts to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.

Young Green Crescent Student Club of our university organized the “Let’s Have a Planted Tree” event and planted 102 fruit trees in our campus on March 22, 2022. At the event, the contribution of green areas in the city to social life, their effects on people and health, and their gradual decline were emphasized. Also emphasis was placed on how to use land better.

Art History Student Club of our university had the opportunity to learn about the flora and fauna in the area through their field trip in Abant Lake National Park. During the trip, the students were given information about the endemic species of the area such as “Abant çiğdemi (Crocus abantensis)”, “Abant yıldızı (Ornithogalum pascheanum)”, Abant tarlakuşu (Corydalis caucasica subsp. abantensis)” and “Abant trout (Salmo trutta abanticus)”, some of which they had the chance to observe.

The Young Educators Student Club of our university organized a social responsibility project for stray animals called “A Bowl of Love”. The first stage of the project was held on 04 October, 2022 at the North Campus of our University. Cat houses provided in line with the agreement between the Club and Üsküdar Municipality and food containers purchased with the support of club members were placed. In the second part of the activity, “A Bowl of Love Project Charity Sale” was held on 14 December 2022. The income of the charity sale was allocated to be used to meet the food and necessary needs of stray animals. This event aimed for the community-based protection of the stray animals living on land, has also brought to life the idea that ‘streets are the habitat of stray animals’ in accordance with the Animal Protection Law No. 5199 by raising awareness and inclusion of the society on this issue.



31 July 2022

IMU “Plastic Free July” Impact Assessment List



## Supporting Land Ecosystems Through Education

### Educational Programmes on Ecosystems

Turkey became a party to the Convention on Biological Diversity in 1996. As located on 3 different climatic zones, 3 biogeographical areas and 2 bird migration routes, Turkey is home to over 12.000 plant species, around 19.000 invertebrates and over 1.500 vertebrate species, and with its 5.9 million hectares of protected areas, it has great importance for the protection of ecosystems and biodiversity it carries.

Istanbul Medeniyet University Urban and Regional Planning Department has planned the BioBlitz series to introduce the flora and fauna they share in the urban area, and to convey the importance of biodiversity to the citizens who are increasingly estranged from natural life. Our Urban and Regional Planning department Res.Asst. Ayça ÇELİKBİLEK, wildlife biologist/ ornithologist Nuh KUBİLAY and geological engineer Gökhan SAPMAZ are the coordinators of the workshops, which has been held in 4 different seasons since 2021 in Validebağ Grove, one of the most important examples of community-based conservation against urban development, which has been declared a protected area as a 1st degree natural site. The workshops provide information about ecosystems to the local community and about each part of the ecosystem within the workshop area. It was aimed to record and map the biodiversity of the land by determining the living species in the area through the workshop.

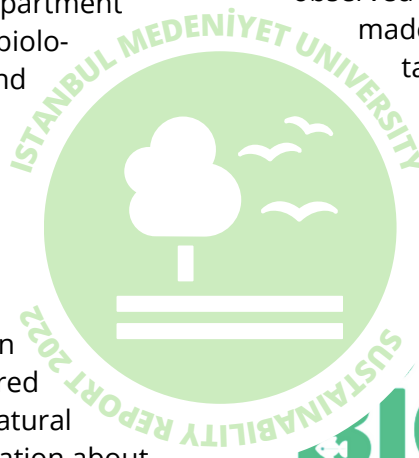
In 2022, two observations were made within the scope of BioBlitz IMU events: **Spring Observation** and **Summer Observation**. A total of 499 photographic observations were made during the workshop and supplementary observations made by the workshop coordinators afterwards and 172 species were identified in 2022. After the identification study, the identified species were explained to the participants and the citizens were provided with information on how to recognize and protect these species. In addition, detailed information was provided on Turkey's focus species such as Jerusalem artichoke, stone pine and invasive species such as green parrot and red-cheeked turtle observed in the area.

### Maintain and Extend Current Ecosystems' Biodiversity

BioBlitz IMU workshops are planned as a tool for recording and protecting the biodiversity of terrestrial ecosystems, far beyond an education programme on ecosystems. Within the workshop, after the observations made in the field, species identification studies were carried out with the support of 244 people from different countries and fields of expertise for the 927 photographed observations. As a result of all these identification studies, 319 species were identified in the study area since December 2021. The biodiversity map of the area was drawn by marking the visible locations and an observation report was prepared including the characteristics of the species seen. In the report, detailed information was given about the invasive species and endangered species observed in the area, and suggestions were

made regarding the measures that can be taken to maintain and extend the biodiversity of the ecosystem in the area.

In addition, all these studies were shared openly with other researchers, decision makers and the public for the recognition and protection of biodiversity in the area.





# LEARNING

Learning processes are key in achieving SDGs. Thus, universities play a critical role both by training professionals who will prioritize SDGs in their future practices and by increasing local, national, and global capacity to successfully achieve SDGs. As Istanbul Medeniyet University, we are aware of our critical role and therefore, we primarily inform our students, the leaders and decision-makers of the future, about the Sustainable Development Goals through course contents, co-curricular activities and student club activities and strengthen their awareness. For this purpose, each of our faculties and departments prepares SDG-related course contents, including courses that address the Sustainable Development Goals holistically, as well as specific contributions that can be made by the expertise of the relevant professional field in which they provide training. In 2022, 9 bachelor degree courses related to SDG-15 were given at IMU. Some of these are listed below.

**9**  
**COURSES**  
given related to  
SDG-15 at  
bachelor level



Faculty	Course
Arts and Humanities	FEL458 - Bioethics and Environmental Philosophies
Education Sciences	ECE007 - Environmental Education and Sustainability in Early Childhood
	SNE009 - Environmental Education
Engineering and Natural Sciences	MBG362 - Evolution and Biodiversity
Law	HUK342 - Environmental Law
Political Sciences	ULİ462 - Environmental Problems and the World
Tourism	TİŞ224 - Sustainable Tourism
	TİŞ326 - Alternative Tourism

# LEARNING

**Parliamentary Simulation event**, which was organized for the first time within our university in cooperation with the Justice, Democracy and Legal Studies Association and Aydın Medeniyetliler Akademisi Law Student Club, was held on March 8, 2022 at 09.00 at Göztepe Campus Aşık Paşa Conference Hall. In the event, predetermined commissions discussed the legislative proposals prepared by the students. Among the aforementioned bills, the titles were such as "Identification of Stray Animals" aiming at the protection of land animals, "Ensuring Equality of Women and Men in Political Life" aiming to focus on women's political participation and gender equality, and "Prohibition of Nuclear Activities" aiming at the protection of natural heritage and ecosystem.



08 March 2022

Parliamentary Simulation Event

Within the scope of the 2022-2023 Spring Semester Community Service Practices course, various actions were taken by course lecturer Prof.Dr.Yeşim GÜLEÇ ASLAN and her students from the Faculty of Educational Sciences Department of Special Education Teaching for 12 weeks. During this process, students volunteered to work with various NGOs. In this process, in order to protect biodiversity and natural habitats students worked on issues such as making a food point for stray animals and feeding them regularly, feeding stray cats, taking a stray cat with eye discomfort to the relevant Animal Vaccination and Treatment Unit for treatment, meeting the needs of stray cats such as food, water and shelter, and taking mother cats and kittens to a safe environment.





Throughout the year, our faculty members inform the public about conservation and sustainable use of biodiversity and ecosystems by delivering seminars in various public and private institutions and also by sharing their scientific expert opinions and experiences by appearing on national media outlets.

For instance, Prof.Dr. Fulya ÖZDİL of the Bioengineering Department at IMU Faculty of Engineering and Natural Sciences gave an [interview about beekeeping](#) to Anadolu Agency reporter on the occasion of 20 May World Bee Day. ÖZDİL said in her interview that bees should be protected and support for beekeeping activities should be increased. In her speech, ÖZDİL said, "For fruit formation in plant production, the flower must first be fertilized either with its own pollen or with the pollen of other plants. After that, fruit formation takes place. This is a process performed by bees. Under normal conditions, it may be by wind, but pollen is the same as they collect nectar from every flower they visit. Bees have a very important effect on pollination, as they can also bring pollen and transfer it to other flowers at the same time. At this point, bees are more prominent than all other insects." Mentioning that without bees, first of all, there would be no fertilization or foreign pollination process in the ecosystem, ÖZDİL pointed out that our efficiency in plant production would decrease. In other words, she said that if bees lose their terrestrial existence, the earth system will change and human beings will have great difficulties in supplying raw materials and finding nutrients. Expressing that one of the factors that increase the risk of extinction of bees is the pesticides used, ÖZDİL underlined that pesticide use should be kept to a minimum in order to protect biodiversity and ecosystems and to use them in a sustainable way.

The academic staff members of our university carry out research on the conservation and restoration of terrestrial and inland freshwater ecosystems; halting deforestation and restoration of degraded forests; halting desertification and restoration of degraded land and soil; ensuring the conservation of mountain ecosystems; protection of natural habitats and biodiversity; promoting access to and the equitable sharing of the benefits arising from the utilization of genetic resources; ending poaching and trafficking of protected species of flora and fauna; prevention of invasive alien species on land and water ecosystems; integrating ecosystem and biodiversity into administrative planning processes; increasing financial resources to conserve and sustainably use biodiversity and ecosystems; financing and promotion of sustainable forest management; and globally combating poaching and trafficking of protected species, publish the results of their research and share them with other researchers, decision-makers, stakeholders, and the public as a foundation for policies toward achieving SDGs.

Our university's Faculty of Engineering and Natural Sciences Electrical and Electronics Engineering graduate student M. Koray YILMAZ's master thesis titled ["Tracking of Moving Targets with an Air Robot"](#)

supervised by our faculty member Dr. Haluk BAYRAM was awarded the support of the 2210/C Domestic Priority Areas Graduate Scholarship Program by TUBITAK. The project aims to detect and track the instantaneous location of a moving target, which has a radio transmitter on it and does not follow any predetermined trajectory and speed. The product developed within the scope of industrial innovation was aimed to be used in the defense industry for location detection and tracking of signal jammers or other targets. It also aims to detect living ecosystem on land by tracking the location of an animal on a collar with a radio transmitter without the possibility of encountering dangerous animals in difficult terrain conditions, and to detect the whereabouts of missing people from phone signals in search and rescue efforts.

## Gıda güvenliğinin bekçileri:

## ARILAR

Arılar, insanların sağlıklı beslenmeleri açısından önemli gıda maddeleri üretmenin yanı sıra bitkilerde sağladığı tozlaşma ile de ekolojik dengenin korunması

Prof.Dr. Fulya ÖZDİL's Interview about Beekeeping on World Bee Day

