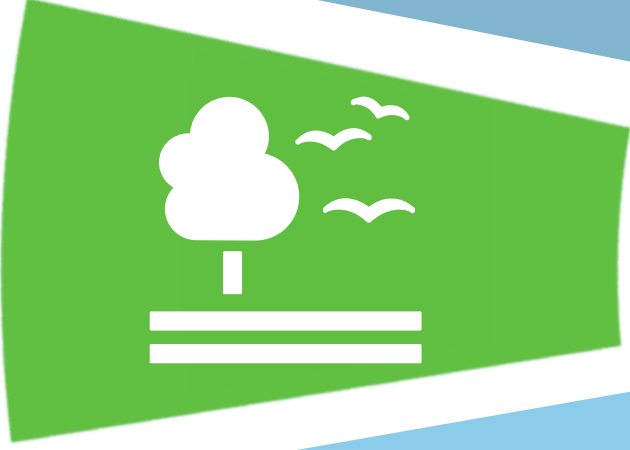


SDG PROGRESS REPORT

on **SDG-15 LIFE ON LAND**

**20
21**



SDG PROGRESS REPORT

ISTANBUL MEDENIYET
UNIVERSITY

**Istanbul Medeniyet University
Sustainability Office**

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<https://www.un.org/sustainabledevelopment/news/communications-material/>

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<https://dashboards.sdgindex.org/profiles/turkey>

SDG Statics

<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

https://www1.undp.org/content/seoul_policy_center/en/home/sustainable-development-goals.html

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.

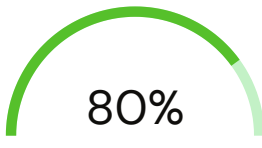
The SDGs aim to conserve and restore the use of terrestrial ecosystems such as forests, wetlands, drylands and mountains by 2020. Halting deforestation is also vital to mitigating the impact of climate change. Urgent action must be taken to reduce the loss of natural habitats and biodiversity which are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

1.6
BILLION

people depend on forests for their livelihoods

41,000
SPECIES

are threatened with extinction



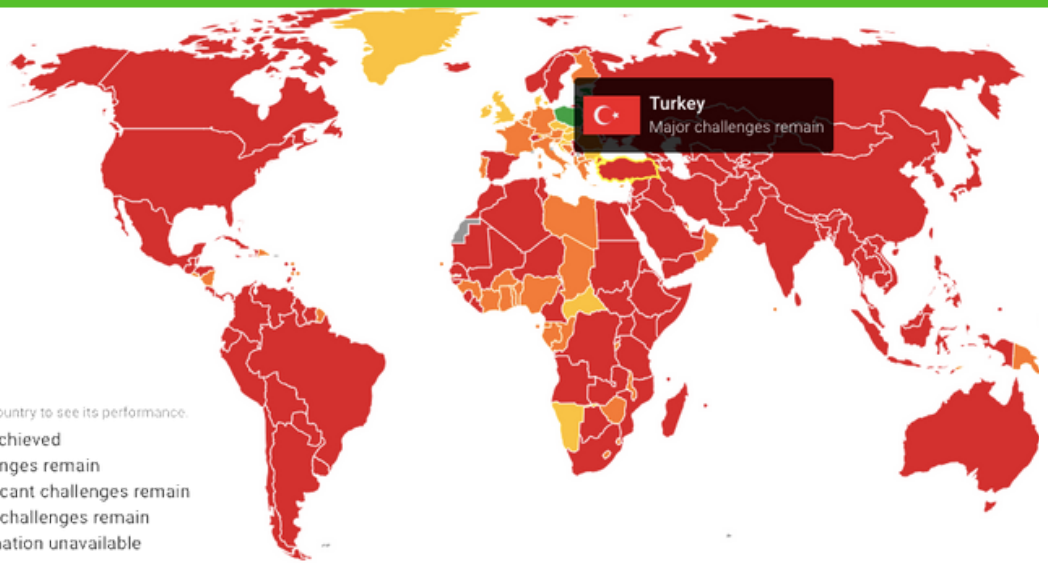
of all terrestrial animal, plant and insect species live in forests

125
TRILLION\$

the value of ecosystems to human livelihoods and well-being, per year

2.6
BILLION

people depend directly on agriculture to earn a living



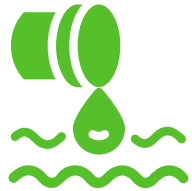
educational programmes on ecosystems and biodiversity



policy and licence on hazardous waste disposal

160+
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 2021, over 160 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.



05 March 2021

Planting 101 Saplings In the Orhanlı Campus

“ **160+**
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.

The project goal for 2022 is to start implementing the system in all the restrooms in our campus area.

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.



Recyclable Waste Boxes

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 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 will be held in 4 different seasons 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.

The first workshop of **BioBlitz events**, which was held on 19 December 2021 as a winter observation, was held with the participation of 7 observers. A total of 428 photographic observations were made during the workshop and supplementary observations made by the workshop coordinators afterwards and 147 species were identified. 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 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 87 people from different countries and fields of expertise, and a total of 670 identification support was provided. As a result of all these identification studies, 147 species were identified in the study area. 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.



KIŞIN VALİDEBAĞ'DA

KUŞLAR

Kış atölyesinde gözlemlenen 17 kuş türü fotoğraf ile kayıt altına alındı.

1. Büyük baştankara (*Parus major*)
2. Ekin kargası (*Corvus frugilegus*)
3. Gümüş martı (*Larus michahellis*)
4. Güvercin (*Columba livia*)
5. İskender papağanı (*Psittacula eupatria*)
6. İspinoz (*Fringilla coelebs*)
7. Karatavuk (*Turdus merula*)
8. Kızıl gerdan (*Erithacus rubecula*)
9. Küçük karga (*Coloeus monedula*)
10. Küçük kumru (*Spilopelia senegalensis*)
11. Leş kargası (*Corvus cornix*)
12. Mavi baştankara (*Cyanistes caeruleus*)
13. Saksığan (*Pica pica*)
14. Serçe (*Passer domesticus*)
15. Sığırık (*Turnus vulgaris*)
16. Uzunkuyruklu baştankara
17. Yeşil papağan (*Psittacula krameri*)

Mavi baştankara



Fotoğraf

Ayça ÇELİKBİLEK

İskender papağanı



Fotoğraf

Ayça ÇELİKBİLEK

Kızılgerdan



Fotoğraf

Ayça ÇELİKBİLEK

BIOBLITZ

BioBlitz IMU Winter Observation Workshop Report

December 2021



Sustainable Management of Land for Agriculture and Tourism

Dr. Cem KINAY gave a seminar on sustainable tourism. The seminar, **"Tourism in the Future"** held online on November 11, 2021 by the Department of Tourism Management, Istanbul Medeniyet University Faculty of Tourism. In his speech, in which future tourism trends were the main theme, KINAY shared information about experiences, sustainable living criteria and tourism of the future, as implemented in line with the United Nations' Sustainable Development Goals. Among the interesting concepts discussed the seminar were climate and environmental responsibility, cherishing and protecting the nature, sustainable agriculture and rural tourism, minimum carbon footprint, responsible consumption, innovation in tourism, local rural life and respecting, protecting and cherishing historical legacies, space tourism, holistic tourism, metaverse, virtual reality experiences, a new generation of life, technology, and digital funds, and new-generation hotel concepts. In his presentation, KINAY also emphasized the interest and curiosity of people in what is local, local food and intangible cultural heritage in the digitalized and universalizing world. His presentation featured topics such as eco-life, environmentally friendly living spaces, experiences respectful to nature and nature, responsibility and sustainable environmental awareness as well as tourism trends for gaining many experiences, healthy life, wellness and sports-oriented travels, and economy focused on sharing.



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.

The third-year students in the Turkish Language Teaching Department of Faculty of Educational Sciences collected donations by reaching to their immediate circles via social media in order to **donate saplings to TEMA Foundation** under the guidance of their instructor Prof. Dr. Özlem Fedai as part of the Social Service Practices course. Since they took this lesson during the pandemic period, they chose such an activity in order to do the greatest service to nature without contacting people.



On the 101th anniversary of the Turkish Green Crescent Society (Yeşilay), which as one of the pioneering institutions in fighting addictions in Turkey, we **planted 101 saplings** in our Orhanlı Campus, contributing to a greener and healthier future. We believe that forests are the key factor to prepare for the future. The event was organized by Istanbul Medeniyet University Young Yeşilay Club and the Department of Health, Culture, and Sports on March 5, 2021.



The Information Club of our university started a social responsibility project called '**Patisever**' in April 2021 for the feeding of stray animals. Within the framework of the event, which is one of the social responsibility projects of the club, it was aimed to feed stray animals whose natural habitats are decreasing due to rapid urbanization and which have difficulty in finding food and water in urban areas due to the effect of climate change. This event, which aims 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.



The seventh edition of Istanbul Medeniyet University English Language Teaching Department's '**Ecospiracy**' themed ELT Monthly magazine has been issued with the personal hard work of our students. This issue included topics such as ecology and its history, secrets of the meat industry, eco-friendly buildings, and urban planning, art representing ecological culture and cruelty-free products. Issue pointed out that the frequently mentioned concept of ecology should be intertwined with our daily lives. Articles also emphasized that the meat industry caused deforestation and it is one of the causes of climate change as well with an 18% effect. It was pointed out that there is a need to increase the awareness of consumers on this issue.



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 fully aware of our critical role and thus aim to empower and motivate for SDGs not only our students through course contents, co-curricular activities, and student club activities, but also the community at large at a much wider scale. Therefore, we organize university-wide life-long learning activities, online courses, certificate programs, seminars, workshops, congresses, symposia, and panels that are open to all segments of society for participation. In 2021, we held a wide range of learning activities 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.

IMU Sociology Club held an online interview on '**Look to Explore: Nature Photography**' with wildlife photographer Alper TÜYDEŞ on April 01, 2021. Firstly, TÜYDEŞ made a short presentation about the bird species we can observe in the city and talked about how we can observe them. Then, he stated that these observations enable us to connect with the environment as people living in the city and he also gave information about the "Don't Press the Trigger, Press the Shutter" campaign, which was launched recently to protect the wildlife and natural habitat of species in our country. He underlined the human-wildlife conflict issues. In addition, he talked about the problems caused by leaving stray animals into the forests.



The Psychology Club of our university held an online event called "**2nd Psychology Days**" on May 29-30, 2021. In the last session of the event, Postgraduate Student İpek DEĞİRMENCI delivered a speech on "**Environment and Border Awareness: Ecological Life Practices**". She stated that global climate change has devastating effects on ecosystems and living things and suggested that these effects, created by nature and human beings, can be resolved on a social basis with ecological reasons. She further stated that the solution should start from the person himself/herself and his/her own environment and touched on the conflict between human life and wildlife. She emphasized that people should approach the living space they share with other living things, plants, and nature with a respectful attitude.

The seminar titled "**İstanbul'daki Büyük Ölçekli Projelerin Ekonomik ve Mekansal Coğrafyası**"

(Economic and Spatial Geography of Large-Scale Projects in Istanbul) was presented by Res.Asst. Ayça ÇELİKBİLEK, of our Urban and Regional Planning Department on May 31, 2021 in "**Istanbul Urban Studies**" seminar series. In the seminar, ÇELİKBİLEK described the intended use of large-scale projects in the process of urban renewal and economic development by referring to the economic and political circumstances leading to large-scale urban projects. ÇELİKBİLEK stated that although mega projects are mostly handled with their physical and spatial dimensions, their definitions are basically based on cost, and are defined as million-dollar projects and projects with much higher costs. She pointed out that the features of the projects such as the use of technological product innovations increase these costs even more. ÇELİKBİLEK, also stated that, these projects should be considered in a broader context. Urban development spreading especially towards the forest areas and protected areas to the north of the Istanbul is seen as a conflict between human settlements and wildlife, and that many projects in this regard face public opposition.



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.

One of the faculty members of IMU Basic Education Department, Assoc.Prof.Dr. Kevser KOÇ made a presentation at the seminar titled "**We Meet at Twinning Projects: Science and Nature Education in Montessori System**" held on March 13, 2021.

The seminar was conducted by 27 teachers working in different cities of Turkey. Within the scope of the e-Twinning projects called 'Teaching Box', 'I am Exploring Nature with STEaM' and 'The Adventure of the Core-Filled Eco Activities from the Core' carried out by the relevant coordinators, teachers and parents were informed about the Science and Nature Education in the Montessori System. KOÇ underlined certain goals such as ensuring that children internalize and embrace the nature we are a part of, enabling them to recognize the problems related to the natural environment and gain the ability to generate solutions, and encouraging children to be respectful to the universe and their own self-values.



Assoc.Prof.Dr. Kevser KOÇ, the head of the Basic Education Department, was a speaker at the seminar titled "e-Twinning Meetings: Cosmic Education and Nature Awareness in the Montessori Approach" held on April 24, 2021. In her speech, KOÇ emphasized what teachers and parents can do for children within the framework of cosmic education, which has been developed in the Montessori approach to help children gain a more holistic outlook toward humans' place in the nature. She also introduced the activities that teachers can do in classrooms and parents at home, the environments they can offer, and the questions they can ask in order to raise a nature-friendly generation.



Doç. Dr. Kevser KOÇ
İstanbul Medeniyet
Üniversitesi Öğretim Üyesi

eTWINNING
BULUŞMALARI
"Montessori
Yaklaşımında
Kozmik Eğitim ve
Doğa
Farkındalığı"

24 Nisan 2021
14:00
Eğitim zoom üzerinden yapılacaktır.

Seminar on Nature Awareness

The project titled "Low-Cost Fixed-Wing UAV Design and Implementation to Support the Creation of Forest Inventory" and developed by Ahmet Buğra BÜYÜKARSLAN and Umut DUMANDAĞ, aims to support the creation of a forest inventory by taking aerial photographs of the determined regions.



"Low-cost Fixed-Wing UAV Design and Implementation to Support the Creation of Forest Inventory"

"Risk-Aware Autonomous Landing of Unmanned Aerial Vehicles in the Forest" project developed by Derya KARA, aims to develop an approach that will plan the movement/landing of the UAV by taking into account the risk factors in the environment.



"Risk-Aware Autonomous Landing of Unmanned Aerial Vehicles in the Forest" Project Design

Three different projects developed by the students of our Electrical and Electronics Engineering Department have been accepted by the "TÜBİTAK 2209-A - University Students Research Projects Support Program". The projects are carried out in the Field Robotics Laboratory and support innovation in technology. Project titled "In-Forest Autonomous Flight and Automatic Forest Inventory Creation" developed by Ferdi DUMANDAĞ and Ebrar ŞAHİN aims to implement a low-cost, real-time, detect-and-avoid multi-rotor UAV capable of autonomous navigation in the forest and collecting useful information for inventory.



"In-Forest Autonomous Flight and Automatic Forest Inventory Creation" Project Design

