

# 15 LIFE ON LAND



# 15.LIFE ON LAND



NUMBER OF  
PUBLICATIONS & THESES

15



NUMBER OF  
PROJECTS

40



NUMBER OF  
EVENTS

7



NUMBER OF  
COURSES OFFERED

10



NUMBER OF  
COLLABORATION

1



NUMBER OF  
AWARDS

0

## SDG 15 LIFE ON LAND

Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

### Targets and Indicators

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products

15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

15.9 By 2020, integrate ecosystem and biodiversity values into national and local



planning, development processes, poverty reduction strategies and accounts

15.A Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

15.B Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation

15.C Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

### Courses, Theses, Publications

On October 14, 2021, TEDU's Senate made a commitment to pursue the Sustainable Development Goals (SDGs) to enhance awareness of these issues both at the university and in the local community.

Fires not only harm the environment, but they also kill people and destroy property. The fire's rapid expansion makes it almost impossible to control. As a solution, fire robots were developed, and an attempt was made to solve the problem by giving early diagnosis. In 2023, the thesis entitled as “**Fire detecting robot system with GSM technology**”, the aim was to design a firefighting robot equipped with fire sensors, humidity and temperature sensors, and a motion sensor. The robot designed to detect and intervene in fire incidents in various environments. The system incorporates a fire sensor for detection, together with a NO6M GPS module and a SIM800L module for communication. The dramatic increase in forest fires in recent years has highlighted the issue of late detection.

### Events - Activities

In October 2023, the student activity “**100 Saplings in the 100<sup>th</sup> year of the Republic (100. Yılda 100 Fidan)**” is organized. In this activity the students planted Saplings at a

defrosted are near Gölbaşı, Ankara. This activity is in line with:

15.1 By 2020, ensure the conservation, **restoration** and sustainable use of terrestrial and inland freshwater ecosystems and their services, **in particular forests**, wetlands, mountains and drylands, in line with obligations under international agreements

15.2 By 2020, promote the implementation of sustainable management of all types of forests, **halt deforestation**, restore degraded forests and substantially increase afforestation and reforestation globally

15.3 By 2030, **combat desertification**, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

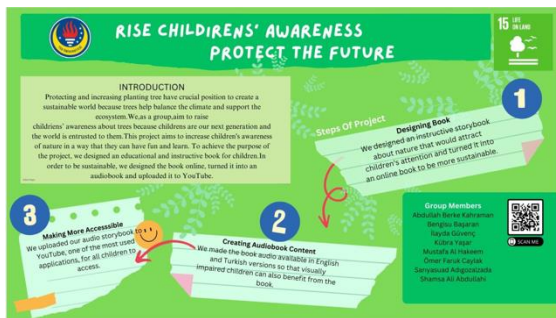


### Collaboration, Projects, Awards

TEDU students carried out a number of projects about life on land.

In project “**Rise Children’s Awareness, Protect the Future**”, the aim was to raise children’s awareness about trees. To achieve the purpose of project, the students designed an educational and instructive online book for children, converted it into an audiobook and uploaded it on YouTube.





In project “AfforesTED”, the students collaborated with TEMA, which is a leading NGO in the combat against deforestation in Turkey. They donated trees to TEMA and to encourage people to donate trees, they prepared a poster featuring a QR code that directs individuals to TEMA's donation page, facilitating a quicker and easier donation process.



In another project “Green Nourish” the students aimed to reduce carbon footprint by encouraging people to consume vegan food. They also targeted to break prejudices against vegan food. It is known that the value of ecosystems is immense. Biodiversity represents the most complex and essential feature of our planet. The U.N. 2022 Land Report highlights that food systems are responsible for 80% of deforestation, 29% of greenhouse gas emissions, and are the leading cause of biodiversity loss on land. **Livestock occupies 77% of global agricultural land dedicated to feed crops and animal husbandry. This often leads to the deforestation and decay in wildlife habitats, resulting in significant opportunity costs.**

Industrial farming practices undermine land health and food security in developing nations. Forests, which harbor over three-quarters of the world's terrestrial biodiversity, play a crucial role in climate change mitigation. **The primary**

**driver of wildlife decline worldwide is the conversion of natural forests and grasslands into intensive agricultural and livestock operations.** Consequently, the project “Green Nourish” points out a simple solution by encouraging people to consume vegan food.



## Campus

Four of the 9 buildings on our campus have cultural heritage value and are registered as monumental buildings. Therefore, this issue is taken into consideration in all activities to be carried out on the campus. Event arrangements, technical maintenance and repair activities, building and construction projects are prepared in accordance with the issue of being a monumental building. In addition, large-scale change projects to be carried out in our university buildings are approved by the relevant authorities of the Ankara Metropolitan Municipality and the General Directorate of Cultural Assets and Museums of the Ministry of Culture and Tourism of the Republic of Turkey. This approval process is carried out, including single trees and pruning activities on the campus.

Although there are very limited areas of landscaping within our campus, the areas are used at an optimum level. During the campus



life cycle, great attention is paid to our open social areas, which are used especially by our staff, students and guests, and our landscaping arrangements. These areas are supported with sustainable products. Wooden materials that are no longer in use are recycled and positioned in our landscaping areas with their new forms. In addition, surplus gravel and stones are used in the botanical gardens. Long-lasting plants such as sassafras, lavender, thyme, berberis, etc. are grown in the botanical garden.



Within the scope of our efforts to combat pests that disrupt public health and peace, pesticides are applied to all physical areas within the campus at certain periods. In addition, pesticides are applied to protect all trees and plants within our campus from insects and pests, to increase their resistance and to make them healthier. Before and after the pesticide application, an information message is sent to all relevant persons.

A mutual agreement was signed with Mertoğulları Recycling Company for the disposal of hazardous waste within the campus and activities for the process are continuing.

