BAU BAHÇEŞEHİR UNIVERSITY

SDG 15: LIFE ON LAND



2024-2025

BAU AT A GLANCE

Since its foundation in 1998, the vision of BAU has been to be a global university known for its contribution to scientific, technological, and cultural knowledge through innovative education models and research approaches that reflect international standards as well as service to society. Currently, BAU Global Network comprises of 5 universities (Istanbul, Washington D.C., Berlin, Cyprus, Batumi), 5 liaison offices (BAU Global Azerbaijan Jordan, Uzbekistan, Mongolia, Pakistan) and 5 language schools.

Bahçeşehir University (BAU) is committed to advancing the wellbeing of local and global communities by integrating the United Nations Sustainable Development Goals (SDGs) into its institutional governance, operations, organisational culture, educational programmes, academic research and stakeholder partnerships. Through this integrated approach, BAU seeks to align its academic mission and institutional practices with sustainable development priorities and contribute to positive societal change.

Bringing together staff, students and alumni, BAU promotes a university community guided by ethical conduct, social responsibility and global citizenship. The University encourages its members to recognise their responsibilities towards one another, wider society and the environment, and to apply their knowledge and skills to building a more inclusive, equitable and sustainable future.

BAU IN THE TIMES HIGHER EDUCATION

BAU participates in the Times Higher Education (THE) Impact Rankings since 2019. According to the current rankings, BAU belongs to the 1000-12000 band in the World University Rankings, 59th in the Impact Rankings and the 251-300 in the Asia University Rankings 2026. Also, BAU is ranked as the top university in Türkiye.

The university continuously increases its standing in categories related to the UN Sustainable Development Goals. As of 2026, BAU holds the following standings in the THE Impact Rankings;

- 2nd in Gender Equality
- 6 th in Quality Education
- 77 th in Peace, Justice and Strong Institutions
- 89 th in Partnership for the Goals
- Ranks between 101-200 in Reducing Inequalities
- Ranks between 201-300 in Industry, Innovation and Infrastructure

The University takes the above-mentioned rankings as evaluation criteria for progress regarding its adherence and contribution to the UN Sustainable Development Goals and will continue to report its advancement in the rankings on a yearly basis.

In alignment with Sustainable Development Goal 15, Bahçeşehir University actively promotes the protection, restoration, and sustainable use of terrestrial ecosystems. The University integrates biodiversity conservation and ecosystem awareness into its educational and research agenda, encouraging students and scholars to take an active role in safeguarding the natural environment. Through specialized lectures, workshops, and field-based studies, BAU emphasizes the importance of protecting forests, combating desertification, and halting biodiversity loss.

Throughout the academic year, Bahçeşehir University carries out projects and collaborations that focus on sustainable land management and ecological resilience. These include research on soil and water conservation, awareness campaigns on the value of natural habitats, and partnerships with local authorities and international organizations to promote reforestation and biodiversity protection. Student-led initiatives, particularly those within environmental and sustainability clubs, further contribute by organizing clean-up events, urban greening activities, and campaigns that foster ecological literacy and responsible citizenship.

Through these continuous efforts, Bahçeşehir University reinforces its commitment to a sustainable future where human progress coexists harmoniously with the natural world, ensuring that the planet's terrestrial ecosystems remain rich and resilient for generations to come.

Bahçeşehir University Environmental Management Commission

On 11 July 2024, the Bahçeşehir University Senate approved the establishment of the Environmental Management Commission to reinforce institutional responsibility for sustainable resource management and responsible consumption practices. This initiative aims to integrate sustainability principles into every level of university operations — from procurement and waste management to energy use and awareness programs — fostering a culture of environmental accountability across the campus community.

The Commission operates through three specialized working groups — the Energy Efficiency Executive Board, the Zero Waste Executive Board, and the Water Efficiency Executive Board — which coordinate projects focused on reducing resource consumption, minimizing waste generation, and promoting circular economy principles. These working groups develop strategies to increase energy and water efficiency, improve waste segregation systems, and implement eco-friendly procurement policies. They also organize awareness activities and capacity-building sessions that inspire both staff and students to make conscious, sustainable choices in their daily lives.

By adopting a structured framework for environmental governance, Bahçeşehir University demonstrates its long-term commitment to responsible production and consumption. Through the Environmental Management Commission's initiatives, BAU strengthens institutional sustainability performance while contributing directly to Sustainable Development Goal 12:

Responsible Consumption and Production, creating a model of efficiency, transparency, and environmental responsibility within higher education.

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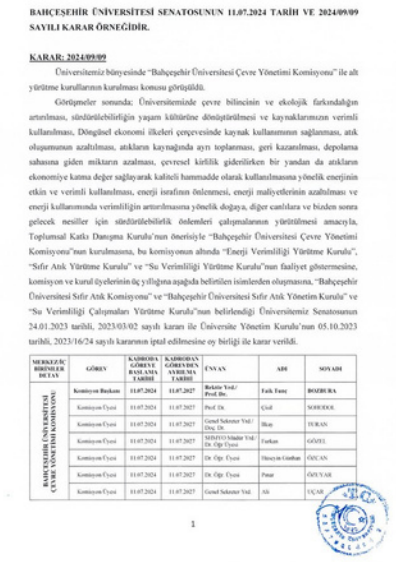

BAHÇEŞEHİR ÜNİVERSİTESİ SENATOSUNUN 11.07.2024 TARİH VE 2024/09/09 SAYILI KARAR ÖRNEĞİDİR.

KARAR: 2024/09/09

Üniversitemiz bünyesinde "Bahçeşehir Üniversitesi Çevre Yönetimi Komisyonu" ile alt yürütme kurullarının kurulması konusu görüşüldü.

Görüşmeler sonunda; Üniversitemizde çevre bilincinin ve ekolojik farkındalığın artırılması, sürdürülebilirliğin yaşam kültürüne dönüştürülmesi ve kaynaklarımızın verimli kullanılması, Döngüsel ekonomi ilkeleri çerçevesinde kaynak kullanımının sağlanması, atık oluşumunun azaltılması, atıkların kaynağında ayrı toplanması, geri kazanılması, depolama sahasına giden miktarın azalması, çevresel kirlilik giderilirken bir yandan da atıkların ekonomiye katma değer sağlayarak kaliteli hammadde olarak kullanılmasına yönelik enerjinin etkin ve verimli kullanılması, enerji israfının önlenmesi, enerji maliyetlerinin azaltılması ve enerji kullanımında verimliliğin artırılmasına yönelik doğaya, diğer canlılara ve bizden sonra gelecek nesiller için sürdürülebilirlik önlemleri çalışmalarının yürütülmesi amacıyla, Toplumsal Katkı Danışma Kurulu'nun önerisiyle "Bahçeşehir Üniversitesi Çevre Yönetimi Komisyonu"nun kurulmasına, bu komisyonun altında "Enerji Verimliliği Yürütme Kurulu", "Sıfır Atık Yürütme Kurulu" ve "Su Verimliliği Yürütme Kurulu"nun faaliyet göstermesine, komisyon ve kurul üyelerinin üç yıllığına aşağıda belirtilen isimlerden oluşmasına, "Bahçeşehir Üniversitesi Sıfır Atık Komisyonu" ve "Bahçeşehir Üniversitesi Sıfır Atık Yönetim Kurulu" ve "Su Verimliliği Çalışmaları Yürütme Kurulu"nun belirlendiği Üniversitemiz Senatosunun 24.01.2023 tarihli, 2023/03/02 sayılı kararı ile Üniversite Yönetim Kurulu'nun 05.10.2023 tarihli, 2023/16/24 sayılı kararının iptal edilmesine oy birliği ile karar verildi.

MERKEZ/ÜC BİRİMLER DIŞI	GÖREV	KADRODA GÖREVE BAŞLAMA TARİHİ	KADRODAN GÖREVDEN AYRILMA TARİHİ	ÜNVAN	ADI	SOYADI
BAHÇEŞEHİR ÜNİVERSİTESİ ÇEVRE YÖNETİMİ KOMİSYONU	Komisyon Başkanı	11.07.2024	11.07.2027	Rektör Yrd./ Prof. Dr.	Faik Tunç	DOZDURA
	Komisyon Üyesi	11.07.2024	11.07.2027	Prof. Dr.	Çisil	SOHODOL
	Komisyon Üyesi	11.07.2024	11.07.2027	Genel Sekreter Yrd./ Doç. Dr.	Ilkay	TURAN
	Komisyon Üyesi	11.07.2024	11.07.2027	MESYO Müdür Yrd./ Dr. Öğr. Üyesi	Furkan	GÖZÜ
	Komisyon Üyesi	11.07.2024	11.07.2027	Dr. Öğr. Üyesi	Hasan Gürhan	ÖZCAN
	Komisyon Üyesi	11.07.2024	11.07.2027	Dr. Öğr. Üyesi	Pınar	ÖZYAR
	Komisyon Üyesi	11.07.2024	11.07.2027	Genel Sekreter Yrd.	Ali	UÇAR

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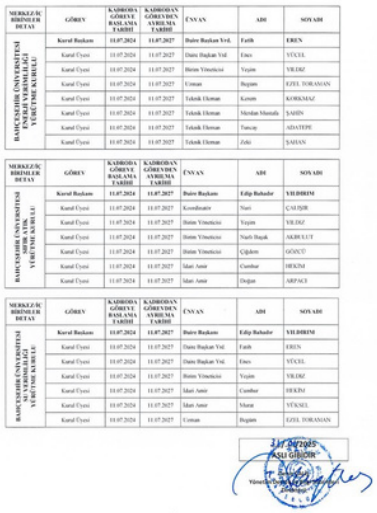

MERKEZ/ÜC BİRİMLER DIŞI	GÖREV	KADRODA GÖREVE BAŞLAMA TARİHİ	KADRODAN GÖREVDEN AYRILMA TARİHİ	ÜNVAN	ADI	SOYADI
BAHÇEŞEHİR ÜNİVERSİTESİ ÇEVRE YÖNETİMİ KURULU	Kurul Başkanı	11.07.2024	11.07.2027	Rektör Başkan Yrd.	Faik	EREN
	Kurul Üyesi	11.07.2024	11.07.2027	Daire Başkan Yrd.	Emre	YÜCEL
	Kurul Üyesi	11.07.2024	11.07.2027	Birim Yöneticisi	Yeşim	YILDIZ
	Kurul Üyesi	11.07.2024	11.07.2027	Uzman	Begüm	EZEL TORAMAN
	Kurul Üyesi	11.07.2024	11.07.2027	Teknik Eleman	Kerem	KORKMAZ
	Kurul Üyesi	11.07.2024	11.07.2027	Teknik Eleman	Meridan Mustafa	ŞAHİN
	Kurul Üyesi	11.07.2024	11.07.2027	Teknik Eleman	Tuncay	ADATEPE
	Kurul Üyesi	11.07.2024	11.07.2027	Teknik Eleman	Zeki	ŞAHAN

MERKEZ/ÜC BİRİMLER DIŞI	GÖREV	KADRODA GÖREVE BAŞLAMA TARİHİ	KADRODAN GÖREVDEN AYRILMA TARİHİ	ÜNVAN	ADI	SOYADI
BAHÇEŞEHİR ÜNİVERSİTESİ ÇEVRE YÖNETİMİ KURULU	Kurul Başkanı	11.07.2024	11.07.2027	Daire Başkanı	Edip Bahadır	YILDIRIM
	Kurul Üyesi	11.07.2024	11.07.2027	Koordinatör	Nuri	ÇALIŞIR
	Kurul Üyesi	11.07.2024	11.07.2027	Birim Yöneticisi	Yeşim	YILDIZ
	Kurul Üyesi	11.07.2024	11.07.2027	Birim Yöneticisi	Nazlı Başak	AKBULUT
	Kurul Üyesi	11.07.2024	11.07.2027	Birim Yöneticisi	Çiğdem	GÖNÜ
	Kurul Üyesi	11.07.2024	11.07.2027	İdari Amir	Cumhur	HEKİM
	Kurul Üyesi	11.07.2024	11.07.2027	İdari Amir	Doğan	ARPACI

MERKEZ/ÜC BİRİMLER DIŞI	GÖREV	KADRODA GÖREVE BAŞLAMA TARİHİ	KADRODAN GÖREVDEN AYRILMA TARİHİ	ÜNVAN	ADI	SOYADI
BAHÇEŞEHİR ÜNİVERSİTESİ ÇEVRE YÖNETİMİ KURULU	Kurul Başkanı	11.07.2024	11.07.2027	Daire Başkanı	Edip Bahadır	YILDIRIM
	Kurul Üyesi	11.07.2024	11.07.2027	Daire Başkan Yrd.	Faik	EREN
	Kurul Üyesi	11.07.2024	11.07.2027	Daire Başkan Yrd.	Emre	YÜCEL
	Kurul Üyesi	11.07.2024	11.07.2027	Birim Yöneticisi	Yeşim	YILDIZ
	Kurul Üyesi	11.07.2024	11.07.2027	İdari Amir	Cumhur	HEKİM
	Kurul Üyesi	11.07.2024	11.07.2027	İdari Amir	Murat	YÜKSEL
	Kurul Üyesi	11.07.2024	11.07.2027	Uzman	Begüm	EZEL TORAMAN

2

Bahçeşehir University Zero Waste Certifications

The Zero Waste Executive Board at Bahçeşehir University successfully coordinated the reporting, inspection, and certification processes required by the Environmental Agency, ensuring compliance with national sustainability standards. Through strong collaboration among campus managers, administrative units, and support services, all university campuses and academic buildings were registered in the Environmental Information System (EÇBS), authorized supervisors were assigned, and zero waste certification applications were completed efficiently.

Comprehensive preparations — including infrastructure adjustments, material supply, and audit-based improvements — were carried out prior to inspections. In addition, academic and administrative personnel received Zero Waste Training, and an instructional video was produced to expand awareness through the university's digital platforms.

As a result, ten Zero Waste Certificates were granted to Bahçeşehir University, covering all campuses where educational activities are conducted. This achievement strengthened institutional capacity for sustainable waste management, promoted responsible consumption across operations, and reinforced a culture of environmental accountability and interdepartmental cooperation.

The initiative contributes to Sustainable Development Goal 12 (Responsible Consumption and Production) by advancing waste reduction, recycling, and circular economy practices, while also supporting related goals such as SDG 13 (Climate Action) and SDG 17 (Partnerships for the Goals) through collaborative and environmentally conscious governance.

The initiative also supports SDG 15 (Life on Land) by addressing the potential environmental impacts of improperly managed waste on terrestrial ecosystems. Effective waste segregation, collection, and management are important preventive measures against littering, soil contamination, and the release of harmful materials into surrounding environments. By strengthening waste management procedures across its campuses, Bahçeşehir University contributes to institutional practices that help reduce pollution pressures on land, vegetation, and biodiversity. These efforts are relevant to the broader objectives of SDG 15, particularly the protection of terrestrial ecosystems under Target 15.1.

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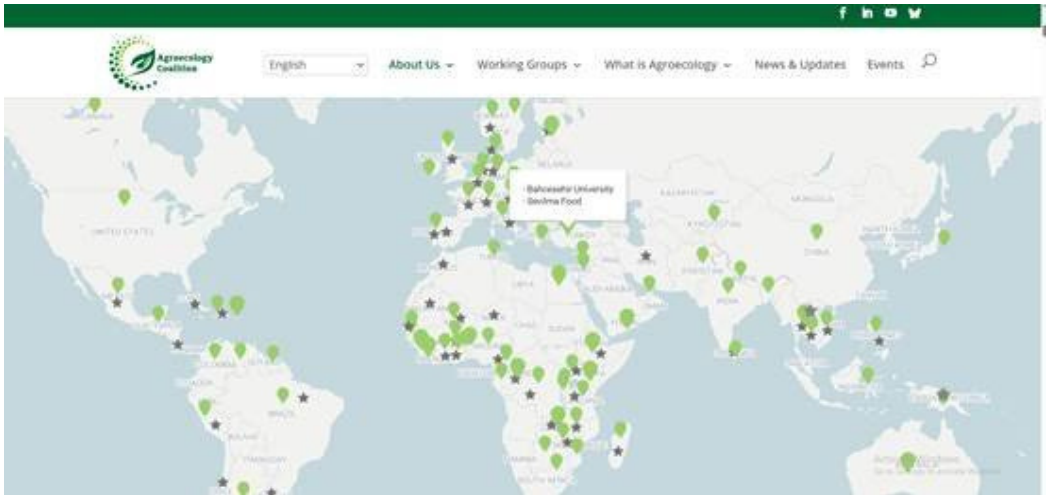
Bahçeşehir University as a Member of the Agroecology Coalition for Transforming Global Food Systems



The interconnected crises in food, climate, and biodiversity have created an urgent need for transformative, cross-sectoral action. Recognizing this global imperative, Bahçeşehir University (BAU) joined the Agroecology Coalition, a United Nations-supported global initiative established in the wake of the 2021 United Nations Food Systems Summit (UNFSS) to advance the transformation of food systems through agroecology.

The Coalition was created to provide a collaborative mechanism for countries, academic institutions, and organizations to address multiple challenges simultaneously—ensuring sustainable food production, ecosystem restoration, and climate resilience. Its work is guided by the 13 Principles of Agroecology defined by the High-Level Panel of Experts for Food Security and Nutrition (HLPE-FSN) under the Committee on World Food Security (CFS), aligned with the 10 Elements of Agroecology adopted by the FAO Council in 2019.

Today, the Agroecology Coalition serves as a key global voice for science-based policy dialogue and the implementation of sustainable food systems, bringing together more than 300 members from governments, academia, NGOs, and international organizations.
Its mission is structured around five workstreams:

. Facilitating co-creation and exchange of knowledge on agroecology,

. Fostering increased investments in agroecological transformation,

. Advocating for and amplifying supportive policies,

. Supporting market pathways for agroecological products, and

. Strengthening member engagement through capacity building and technical collaboration.

Bahçeşehir University is an official member of the Coalition and contributes actively to several working groups, including those on Policies, Research, Innovation and Education, and Implementation.

Within these platforms, BAU provides expert insight, contributes to the formulation of international policy frameworks, and engages in research-driven collaboration aimed at scaling up agroecological practices and integrating sustainability principles into national and regional strategies.

Through this participation, BAU supports the development and dissemination of international best practices for sustainable food systems, bridging academic research with policy action.
Its role within the Agroecology Coalition strengthens the University's contribution to SDG 2 (Zero Hunger) — advancing food security through sustainable agriculture, SDG 13 (Climate Action) and SDG 15 (Life on Land) — promoting ecosystem-based approaches to climate resilience and agriculture; and SDG 17 (Partnerships for the Goals) — fostering international cooperation for systemic transformation.

By working alongside global partners, Bahçeşehir University continues to shape the global discourse on agroecological policy development, supporting the creation of evidence-based, inclusive, and resilient food systems for future generations.

https://agroecology-coalition.org/principles-and-vision/

https://agroecology-coalition.org/members/

Bahçeşehir University's BAU Farm in Giresun

Bahçeşehir University established the BAU Farm in Giresun as a multidisciplinary learning space that bridges agriculture, sustainability, and education to promote environmentally responsible and socially inclusive development. Situated in the fertile lands of Türkiye's Black Sea region, the farm functions as a living laboratory where students and visitors engage in experiential learning on sustainable farming, organic food production, and efficient resource management.

More than a conventional agricultural learning environment, BAU Farm provides a practical setting for exploring the interconnected relationship between food production, soil health, biodiversity, and the sustainable use of land and natural resources. By bringing sustainability principles into an agricultural setting, the initiative demonstrates how food production and environmental stewardship can be considered together rather than as competing priorities.

By offering practical training opportunities beyond the university campus, the initiative underscores Bahçeşehir University's dedication to fostering food security awareness and empowering future generations with the skills necessary to develop resilient food systems. The farm serves as a platform where academic research meets local practice, inspiring innovative approaches to sustainable agriculture and community well-being.

From an SDG 2 (Zero Hunger) perspective, BAU Farm highlights the importance of agricultural practices that support sustainable food production while maintaining the natural resources required for long-term productivity. Its emphasis on organic farming, resource efficiency, and experiential agricultural education contributes to the development of knowledge and practical competencies relevant to resilient and environmentally responsible food systems.

The initiative is particularly aligned with SDG Target 2.4, which calls for sustainable food production systems and resilient agricultural practices that help maintain ecosystems, improve land and soil quality, and strengthen the capacity of agricultural systems to respond to environmental challenges. Through its educational and practical activities, BAU Farm provides a setting in which these principles can be explored in relation to agricultural production and land management.

At the same time, the farm provides an important connection to SDG 15 (Life on Land) by emphasizing the ecological foundations of sustainable agriculture. Agricultural landscapes are not simply spaces for food production; they are also environments in which soil organisms, plants, insects, and other forms of biodiversity interact. Understanding these relationships is essential to promoting land-use practices that support productive agriculture without compromising ecosystem health.

Within this framework, BAU Farm offers opportunities to explore environmentally responsible approaches to soil management, the conservation of agricultural biodiversity, the efficient use of natural resources, and the importance of maintaining healthy terrestrial ecosystems. These areas of learning are relevant to the objectives of SDG 15, particularly the sustainable use of terrestrial ecosystems and the prevention of land degradation.

The farm's living-laboratory approach also creates opportunities to connect academic research with practical observation of agricultural landscapes. By examining how farming practices interact with environmental conditions, students and researchers can develop a more integrated understanding of the relationship between agricultural productivity, ecosystem services, and long-term land sustainability.

Through partnerships with local farmers and organizations, BAU Farm also supports regional agricultural development and women's participation in food production, promoting both environmental balance and equitable economic growth. These collaborations exemplify how universities can play a pivotal role in addressing hunger and advancing sustainable livelihoods through education, innovation, and collective action.

Engagement with local agricultural communities is particularly important for connecting sustainability knowledge with the realities of regional food production. By encouraging cooperation between the University and local producers, BAU Farm provides opportunities for the exchange of agricultural knowledge and experience, supporting approaches that consider both the economic viability of farming and the environmental sustainability of agricultural land.

This community-oriented approach also reinforces the relationship between SDG 2 and SDG 15. Sustainable agricultural livelihoods depend on productive land, healthy soils, functioning ecosystems, and the responsible management of natural resources. Protecting these ecological foundations is therefore essential not only for biodiversity conservation but also for maintaining food production and supporting the long-term resilience of farming communities.

Located in the Black Sea region, where agricultural production forms an important part of local economic and social life, BAU Farm offers a context for examining the relationship between regional agricultural practices and environmental sustainability. Its location enables learning activities to be connected with the agricultural characteristics and resource-management challenges of the surrounding region.

As an educational and applied learning platform, BAU Farm further contributes to sustainability literacy by demonstrating how individual agricultural practices relate to broader environmental challenges, including soil degradation, biodiversity loss, inefficient resource use, and the increasing pressures placed on food production systems.

By aligning scientific expertise with community engagement, Bahçeşehir University demonstrates its ongoing commitment to combating hunger and nurturing sustainable agricultural ecosystems, ensuring that learning, productivity, and social responsibility coexist in harmony.

BAU Farm represents an integrated approach to sustainable development in which agricultural education, food production, responsible land use, and ecological awareness reinforce one another. Rather than treating food security and biodiversity conservation as separate objectives, the initiative highlights their fundamental interdependence: the long-term sustainability of food production depends on the health and resilience of the terrestrial ecosystems that support it.

The initiative contributes directly to SDG 2 (Zero Hunger) through sustainable agricultural education, organic food production, and the promotion of resilient food systems. It also supports SDG 15 (Life on Land) through its focus on responsible land management, soil health, agricultural biodiversity, and awareness of terrestrial ecosystem conservation. In addition, the initiative contributes to SDG 4 (Quality Education) through experiential learning, SDG 5 (Gender Equality) through women's participation in agricultural activities, SDG 12 (Responsible Consumption and Production) through environmentally responsible production practices, and SDG 17 (Partnerships for the Goals) through cooperation with local agricultural stakeholders.

More specifically, BAU Farm aligns with SDG Target 2.4 through its emphasis on sustainable food production and agricultural practices that maintain the ecological foundations of farming. It is also relevant to SDG Target 15.1, concerning the conservation and sustainable use of terrestrial ecosystems, and SDG Target 15.3, which addresses land degradation and the restoration of degraded land. Through its combined focus on agricultural sustainability, ecological awareness, and responsible land use, BAU Farm provides a practical educational platform for advancing the interconnected objectives of SDG 2 and SDG 15.









Bahçeşehir University Courses Supporting SDG 15: Life on Land

In alignment with the United Nations Sustainable Development Goal 15 — Life on Land, Bahçeşehir University (BAU) continues to integrate environmental sustainability and ecosystem awareness into its academic curriculum. During the Fall 2024 and Spring 2024 semesters, several courses across different faculties and departments were designed to strengthen students' understanding of biodiversity conservation, sustainable resource management, and environmental ethics.

These courses encourage students to explore how human activity affects terrestrial ecosystems and to develop solutions that protect nature while promoting social and economic development. Interdisciplinary in nature, they combine scientific research, policy analysis, and community engagement, fostering a generation of environmentally conscious leaders prepared to take active roles in ecological preservation.

Through these and similar courses, Bahçeşehir University ensures that sustainability principles are embedded in academic and professional education. By combining theoretical knowledge with practical awareness, BAU prepares its students to contribute meaningfully to global efforts aimed at protecting terrestrial ecosystems, combating desertification, halting biodiversity loss, and fostering a future where human development and environmental balance coexist.

This academic commitment reflects BAU's holistic approach to sustainability — one that unites research, innovation, and social responsibility under the shared goal of protecting life on land.

Table of SDG 15–related courses offered in the 2024-2025 Academic Year include:

Course Code	Course Title	Academic Term	Language of Instruction	Course Type	Course Level	Mode of Delivery
GEP0634	Exploring the Future of Agriculture	Spring	English	General Elective	Undergraduate	Hybrid
SOC6013	Sociology of Food and Agriculture	Fall	English	Departmental Elective	Graduate	In-person
GMS3409	Urban Agriculture for Chefs	Spring	Turkish	Departmental Elective	Undergraduate	In-person
LAW2006	Animal Rights	Fall	English	Departmental Elective	Undergraduate	Online
GEP1624	Animal Ethics and Speciesism	Fall	Turkish	General Elective	Undergraduate	Online
GEP0806	Philosophy of Life	Spring	English	General Elective	Undergraduate	Hybrid
BES4079	Sustainable Nutrition	Spring	Turkish	Departmental Elective	Undergraduate	Hybrid
EDS1218	Sustainable Development and Education	Spring	English	Departmental Elective	Undergraduate	In-person
GEP0633	Environment and Sustainable Development	Spring	English	General Elective	Undergraduate	Hybrid

https://akts.bau.edu.tr/bilgipaketi/

BAU Activities and Initiatives Supporting SDG 15: Life on Land

Conference Presentation: "The Status of Industrial Symbiosis Across Sectors in Türkiye"



12 Aralık 2024	
12.00 – 13.15	**8. Oturum:** Atık Azaltımı ve Değerlendirilmesi: Döngüsel Ekonomi
Oturum Başkanı: Dr. Öğr. Üyesi Ahsen AKBULUT ULUDAĞ **Mekan Bilgisi:** Sakarya Üniversitesi Turgut Özal Kongre ve Kültür Merkezi, Prof. Dr. Fuat Sezgin Salonu	
12.00 – 12.15	**Damla Nur BİRLİK, Prof. Dr. Aysun ÖZKAN, Doç. Dr. Zerrin GÜNKAYA, Prof. Dr. Müfide BANAR** Lityum İyon Pillerden Kobalt Geri Kazanımı
12.15 – 12.30	**Sermin GÜNASLAN, Dr. Öğr. Üyesi Berrak EROL NALBUR** Yeşil Dönüşümde Lityum İyon Pillerin Etkin Bertarafına ve Geri Dönüşümüne Yönelik Yenilikçi Yaklaşımlar
12.30 – 12.45	**Sermin GÜNASLAN, Dr. Öğr. Üyesi Berrak EROL NALBUR, Dr. Öğr. Üyesi Sevil ÇALIŞKAN ELEREN, Doç. Dr. Arzu TEKSOY, Prof. Dr. Fatma Olcay TOPAÇ** Yeşil Dönüşüm Çerçevesinde Elektronik Atıkların Yönetimi: Yenilikçi Çözüm Önerileri
12.45- 13.00	**Yasemin ÜLKER, Arş. Gör. Elif DURSUN YİĞİT, Prof. Dr. Yavuz GÜNALAY** Türkiye'de Endüstriyel Simbiyozun Sektörlere Göre Durumu
13.00 – 13.15	**Sevhan SAYAR** Türkiye'de Yeşil OSB Çalışmaları: Düzce 2 OSB Örneği
13.15 – 14.00	**Öğle Arası**

12 Aralık 2024	
14.00 - 15.30	**2. Panel – "Özel Sektör ve Sanayi de Atık Yönetimi Paneli"** Moderatör: **Engin KAYRAK** Panelistler: **Dr. Ahmet BAYRAK, Özge AYAN, Süleyman CESUR, Berat İŞCAN, İbrahim ÇOĞAL**
15.30 – 15.45	**Ara**

In 2024-2025 academic year, presented at the 12th National Solid Waste Management Congress, the study titled "The Status of Industrial Symbiosis Across Sectors in Türkiye" by BAU academics Dr.Yasemin Ülker, Research Assistant Elif Dursun Yiğit, and Prof. Yavuz Günalay explores the implementation and effectiveness of industrial symbiosis practices within various industries. The research highlights how by-products and waste materials from one sector can be utilized as valuable inputs for another, promoting a circular economy and reducing environmental impact.

By promoting resource efficiency, waste reduction, and sustainable collaboration among industries, the study supports SDG 12 (Responsible Consumption and Production). Moreover, by lowering environmental degradation and conserving land-based resources, it also contributes to SDG 15 (Life on Land) through its emphasis on protecting terrestrial ecosystems and reducing industrial impact on biodiversity.



BAU Radio Fest: Seminar on Animal Welfare in the Context of Sustainable Development Goals

In 2024-2025 academic year, as part of the BAU Radio Fest, Bahçeşehir University, in collaboration with CIFAL Istanbul, UNITAR and HAÇİKO – Association for the Protection of Animals from Desperation and Indifference, hosted an open-access seminar titled "Animal Welfare in the Context of the Sustainable Development Goals (SDGs)." The event brought together students, academics, civil society representatives, and the general public, offering an inclusive platform for dialogue on ethical responsibility, environmental sustainability, and compassionate coexistence.

The seminar explored the interconnection between animal welfare and sustainable development, emphasizing that the well-being of animals is integral to achieving a balanced and equitable future for all living beings. Speakers underlined how ethical awareness, empathy, and civic engagement can transform societal attitudes toward animals, encouraging policies and behaviors that foster coexistence, respect for life, and environmental harmony.

Discussions focused on the protection of stray animals, urban biodiversity, and the ecological role of companion animals in creating healthier, more livable cities. Participants examined how responsible urban planning, waste management, and environmental education contribute not only to SDG 11 (Sustainable Cities and Communities) but also to SDG 15 (Life on Land) — by protecting ecosystems, reducing human-wildlife conflicts, and strengthening the moral foundations of sustainability.

By hosting this seminar, Bahçeşehir University reaffirmed its commitment to ethical sustainability, environmental education, and social inclusion. Through collaborative efforts with civil society and international partners, the University continues to raise awareness on how protecting animal welfare is inseparable from protecting the planet, reflecting its holistic approach to sustainability where every living being is part of a shared ecological future.





Empowering Change: Higher Education's Role in Advancing Climate Action and the SDGs





In 2024-2025 academic year, held in Bahçeşehir University's Senate Room, the round table meeting titled "Empowering Change: Higher Education's Impact on Driving SDGs Progress" brought together Bahçeşehir University (BAU), CIFAL Istanbul, and UNITAR to explore the transformative potential of higher education in advancing sustainable development. The event was moderated by Asst. Prof. Yasemin Ülker, Deputy Director of CIFAL Istanbul, and featured Dr. Ebru Canan-Sokullu, Associate Director at CIFAL Global Network, UNITAR, as the keynote speaker.

The session convened BAU academics and CIFAL Istanbul representatives from various disciplines conducting sustainability-oriented research to develop a shared vision for integrating the Sustainable Development Goals (SDGs) across education, research, and community engagement. Discussions focused on strengthening academic contributions to climate change mitigation, resilience building, and the transition toward sustainable societies through interdisciplinary collaboration.

In the context of SDG 13 (Climate Action) and SDG 15 (Life on Land), the round table emphasized the pivotal role of universities in generating science-based climate knowledge, shaping public awareness, and training future leaders who can translate academic research into actionable policies. Participants highlighted that higher education institutions not only educate but also serve as laboratories for climate innovation — fostering solutions that address carbon reduction, renewable energy adoption, and sustainable urban transformation. Through academic research, experiential learning, and partnerships with local and international organizations, universities like Bahçeşehir play a critical role in implementing climate adaptation and mitigation strategies at both institutional and societal levels.

Roundtable with Civil Society: "Towards COP29 – Evaluating Challenges, Solutions, and Policy Pathways for Climate Action in Türkiye"



In the 2024-2025 academic year, Bahçeşehir University and CIFAL Istanbul (UNITAR), in collaboration with the Corporate Social Responsibility Association of Türkiye (CSR Turkey) and several leading environmental NGOs, jointly organized a high-level roundtable titled "Towards COP29: Civil Society Evaluates." The meeting brought together several civil society representatives, academics, and policy experts to assess Türkiye's environmental and climate change agenda in the post-COP period and to contribute to the formation of national strategies ahead of COP

The roundtable provided a crucial policy dialogue platform where participants discussed the role of civil society in advancing climate action, the transition to renewable energy, and the integration of sustainability into national development frameworks. Expert contributions by Özlem Katısöz, Climate and Energy Policy Coordinator at CAN Europe, and Barış Doğru, Editor-in-Chief of EkoIQ, offered analytical insights into Türkiye's evolving climate policy landscape, highlighting both progress and challenges in meeting international commitments.

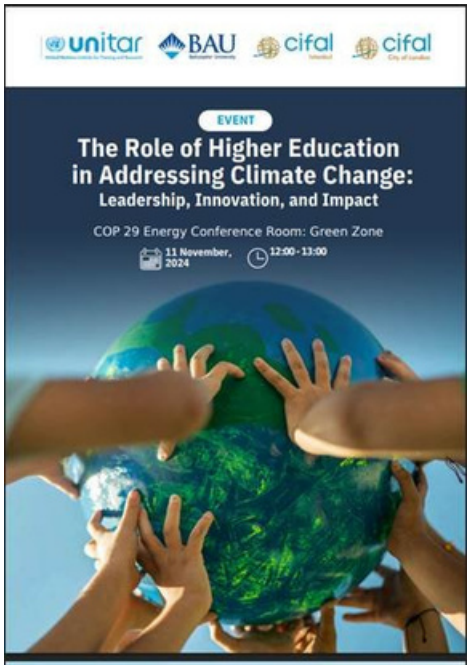
Through this dialogue, participants collectively emphasized the need for a realistic roadmap toward reducing dependence on fossil fuels and expanding renewable energy investments. The event concluded with a shared commitment to strengthen cooperation between academia, civil society, and the private sector—a key step in supporting evidence-based policymaking and inclusive climate governance.

By fostering informed discussion and cross-sector collaboration, the roundtable directly contributes to SDG 13 (Climate Action) by advancing national policy development and raising awareness on climate resilience, while also supporting SDG 17 (Partnerships for the Goals) through its multi-stakeholder approach to sustainable environmental governance.

The roundtable also supports SDG 15 (Life on Land) by highlighting the importance of integrating terrestrial ecosystem protection, biodiversity conservation, and sustainable land management into broader environmental and climate policy discussions. Recognizing the interdependence between climate change and ecosystem degradation, the initiative reinforces the need for policy approaches that address environmental challenges holistically, particularly in relation to SDG Targets 15.1 and 15.5. By fostering dialogue among civil society organizations, academics, and policy experts, the event contributes to greater awareness of the importance of safeguarding natural ecosystems within national sustainability strategies.



Special Session at COP29: Bahçeşehir University and United Nations Institute for Training and Research (UNITAR)- Advancing Climate Policy, Education, and Global Best Practices



In the 2024-2025 academic year, on November 11, 2024, during the United Nations Climate Change Conference (COP29) in Baku, Azerbaijan, a landmark session titled "The Role of Higher Education in Addressing Climate Change: Leadership, Innovation, and Impact" was co-organized by UNITAR, CIFAL Istanbul, Bahçeşehir University, and CIFAL City of London. Marking the first time a Turkish university hosted an independent session at COP, this event positioned Bahçeşehir University as a key contributor to global climate dialogue and higher education's policy impact.

The session convened academic leaders, policymakers, and sustainability experts to explore how universities can shape climate solutions through research, education, and innovation. Discussions focused on embedding climate literacy across curricula, promoting interdisciplinary collaboration, and developing science-based strategies for resilience and adaptation. Participants emphasized that universities play a pivotal role not only in knowledge generation, but also in influencing national and international climate policy through research-driven insights and stakeholder engagement.

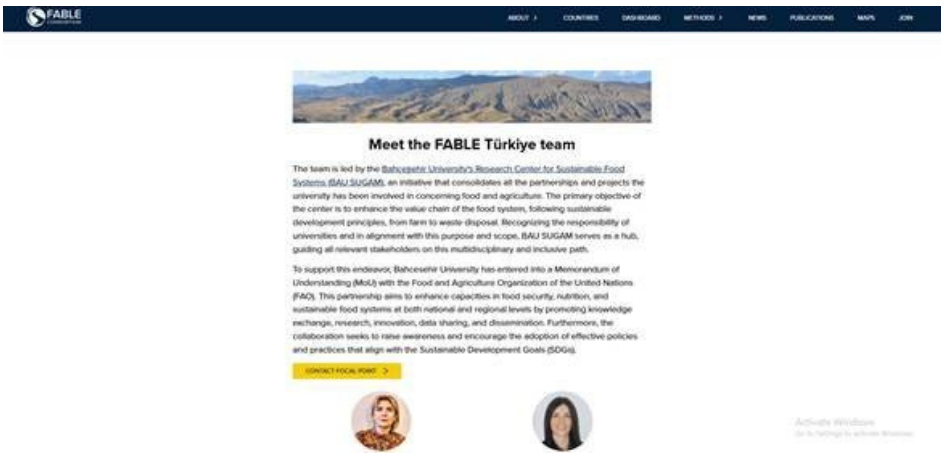
In alignment with UNITAR's global learning objectives, the session highlighted best practices and comparative approaches to integrating climate change education into higher education, fostering capacity-building initiatives for young leaders, educators, and decision-makers. Expected outcomes included the creation of cross-regional networks between universities, NGOs, and government institutions; the sharing of case studies and innovative models; and the development of policy frameworks to accelerate sustainable transformation.

Representing Türkiye's academic leadership on the global stage, Prof. Dr. Esra Hatipoğlu, Rector of Bahçeşehir University, and Prof. Dr. Çisil Sohodol, Director of CIFAL Istanbul, shared the institution's experience in advancing sustainability-centered education and community partnerships. The session was moderated by Dr. Ebru Canan-Sokullu, Associate Director at the CIFAL Global Network (UNITAR), who underscored the importance of university–organization cooperation in shaping effective climate governance frameworks.

By integrating education, research, policy development, and international best practice exchange, this pioneering COP29 special session exemplified Bahçeşehir University's leadership in sustainable transformation. It reinforced the University's commitment to SDG 15 (Life on Land) by emphasizing the interconnection between climate action, land use, and ecosystem conservation, SDG 13 (Climate Action) through policy engagement, SDG 4 (Quality Education) by promoting climate literacy and capacity-building, and SDG 17 (Partnerships for the Goals) through international collaboration, best practice exchange, and global climate resilience.



Advancing Policy Pathways for Sustainable Food and Land Systems: Bahçeşehir University and NGOs within the FABLE Consortium



Bahçeşehir University serves as the Turkish partner of the global FABLE Consortium (Food, Agriculture, Biodiversity, Land-Use, and Energy), a network of research institutions and NGOs dedicated to developing nationally coherent and globally aligned pathways for achieving the Sustainable Development Goals (SDGs) and the Paris Climate Agreement targets.

Within this framework, country teams work to design bottom-up policy pathways for sustainable food and land-use systems and engage directly with national governments to promote data-driven and ambitious sustainability policies. The FABLE Secretariat is jointly led by the Sustainable Development Solutions Network (SDSN), the International Institute for Applied Systems Analysis (IIASA), and the Alliance of Bioversity International and CIAT:

https://fableconsortium.org/about/

In Türkiye, the initiative is led by the BAU Research Center for Sustainable Food Systems (BAU SUGAM), which consolidates all of the University's partnerships and research efforts related to food, agriculture, and sustainability policy. Through research, data modeling, and policy analysis, BAU contributes to defining science-based policy recommendations, supporting national strategies on food security, climate action, and sustainable rural development:

https://fableconsortium.org/turkey/

https://bau.edu.tr/icerik/18313-hakkimizda

By linking academia, civil society, and government, Bahçeşehir University strengthens the national capacity for evidence-based decision-making and contributes directly to global policy dialogues on sustainable development.

Aligned with SDG 2 (Zero Hunger), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals), this initiative also embodies the essence of SDG 15 (Life on Land) by promoting sustainable land management, biodiversity conservation, and ecosystem resilience. Through its active participation in the FABLE Consortium, Bahçeşehir University contributes to global efforts to protect natural habitats, prevent land degradation, and balance food production with environmental integrity — ensuring that human progress and nature coexist in harmony.

National Policy Forum on Artificial Intelligence and Technology in Hazelnut Farming



Held in Giresun during the 2024–2025 academic year, under the coordination of the Ministry of Agriculture and Forestry and the Giresun Governorship, the National Policy Forum on Artificial Intelligence and Technology in Hazelnut Farming brought together Bahçeşehir University (BAU), Giresun University, the Eastern Black Sea Development Agency (DOKA), and representatives from public institutions, academia, and the private sector.

The forum focused on developing a national roadmap for integrating artificial intelligence and digital technologies into agricultural production, particularly hazelnut farming, an important source of income and employment for rural communities in Türkiye. Bahçeşehir University contributed its expertise in AI applications, sustainable food systems, and policy innovation to discussions on improving agricultural productivity, resource efficiency, and long-term resilience.

By bringing together agricultural policymakers, researchers, technology specialists, and industry representatives, the forum provided a platform for examining how emerging technologies can contribute to the transformation of traditional agricultural production systems. Its policy-oriented approach connected technological innovation with broader

priorities concerning food security, sustainable land use, environmental protection, and rural economic development.

From an SDG 2 (Zero Hunger) perspective, the forum addressed the role of technological innovation in strengthening agricultural productivity, improving the efficiency of food production, and supporting more resilient agricultural systems. Artificial intelligence and data-driven agricultural technologies offer opportunities to improve production planning, monitor crop conditions, optimize agricultural inputs, and support more informed decisions throughout the production process.

In the context of hazelnut farming, these approaches are particularly relevant to maintaining agricultural productivity while responding to environmental pressures, resource constraints, and changing climatic conditions. By encouraging discussion of technology-driven agricultural strategies, the forum supported the development of policy approaches relevant to sustainable food production and long-term food system resilience.

The initiative aligns particularly with SDG Target 2.4, which emphasizes sustainable food production systems and resilient agricultural practices capable of maintaining ecosystems, improving land and soil quality, and adapting to environmental challenges.

The forum also contributed to SDG 9 (Industry, Innovation and Infrastructure) by placing artificial intelligence, digital technologies, and research-based innovation at the centre of agricultural modernization. Its emphasis on developing a national roadmap highlighted the importance of connecting scientific expertise, technological capabilities, and institutional cooperation to support innovation in a strategically important agricultural sector.

Through its contribution to discussions on AI applications and digital agricultural solutions, BAU supported the exchange of knowledge relevant to modernizing production processes, strengthening technological capabilities, and encouraging the adoption of innovative approaches within the agricultural value chain.

This engagement is particularly relevant to SDG Target 9.5, which focuses on strengthening scientific research and upgrading technological capabilities, and to broader efforts to promote innovation-driven and sustainable industrial development.

From an SDG 15 (Life on Land) perspective, the forum highlighted the potential relationship between agricultural digitalization and more responsible management of land and natural resources. Data-driven agricultural approaches can support more precise monitoring of environmental conditions, more efficient use of agricultural inputs, and better-informed decisions concerning soil and land management.

For agricultural regions such as Giresun, where farming activities are closely connected to the surrounding natural environment, integrating environmental considerations into agricultural modernization is particularly important. The forum's focus on resource efficiency and sustainable agricultural practices provided a policy-relevant context for considering how technological innovation can help reduce pressures on agricultural ecosystems while maintaining productive land use.

These discussions are relevant to SDG Target 15.3, which addresses land degradation, and to the broader objectives of protecting terrestrial ecosystems and promoting sustainable land management. The forum contributed to these objectives through policy dialogue and knowledge exchange rather than through direct ecosystem restoration or conservation activities.

From an SDG 1 perspective, the initiative addressed the economic vulnerability of agricultural producers and rural households, highlighting the potential of technological innovation to reduce production costs, improve yields, strengthen farmers' competitiveness, and support more stable agricultural incomes. By encouraging evidence-based agricultural policies and wider access to technological solutions, the forum promoted approaches that could help small-scale producers overcome structural economic challenges and strengthen sustainable rural livelihoods.

The relationship between agricultural innovation and rural economic resilience is especially significant in regions where household incomes depend heavily on agricultural production. By considering how digital transformation can improve productivity and resource efficiency, the forum supported policy discussions relevant to the long-term economic sustainability of farming communities.





AI-Integrated System Design for Addressing Water, Soil, and Energy Challenges in Olive Cultivation Across the Mediterranean Region



An international research and best practice development project titled "Designing an Integrated System Using Artificial Intelligence Technology to Address Water, Soil, and Energy Challenges in Olive Cultivation in Rural Areas of the Mediterranean Region" has been launched under the joint leadership of Assoc. Prof. Dr. Zeynep Tacer Caba from Bahçeşehir University (Türkiye) and Barbara Bracone, Director of Malta Wes Trade Ltd. (Malta). The collaboration brings together research expertise and practical experience from two Mediterranean countries to review different approaches to sustainable agriculture and jointly develop solutions to shared environmental and agricultural challenges.

Supported through the Bilateral Cooperation Support Program by the Scientific and Technological Research Council of Türkiye (TÜBİTAK) and the Malta Council for Science and Technology (MCST), the initiative aims to develop an AI-driven sustainable agricultural model that integrates climate-smart practices to optimize water, soil, and energy management in olive cultivation. The project specifically focuses on evaluating and implementing the best practices of both countries in addressing these challenges. By comparing agricultural practices, resource management approaches, and technological applications in Türkiye and Malta, the partners seek to identify effective methods that can inform the development of internationally transferable best practices for sustainable olive cultivation.

The project emphasizes mutual evaluation and transfer of best practices between Türkiye and Malta, drawing on the expertise and local innovations of both countries. Through comparative research, data-driven modeling, and applied field studies, the collaboration seeks to generate scalable solutions for sustainable rural development in the Mediterranean region. This combination of comparative research and applied innovation supports the joint assessment,

adaptation, and development of best practices that respond to common challenges in water efficiency, soil management, and energy use. The resulting research-based approaches are intended to inform sustainable agricultural practices that may be applicable in other Mediterranean contexts facing similar environmental pressures.

This institutional framework is particularly significant because the research addresses areas of direct relevance to public policy, including sustainable agriculture, water resource management, climate adaptation, rural development, and technological innovation. By supporting collaborative research in these fields, TÜBİTAK and MCST facilitate the development of scientific knowledge and technological solutions relevant to national and regional sustainability priorities.

A central dimension of the collaboration is the comparative evaluation, exchange, and application of best practices from Türkiye and Malta. By bringing together expertise, technological approaches, and practical experiences from both countries, the project supports mutual learning and the development of innovative solutions that may be adapted to similar agricultural and environmental conditions across the Mediterranean region.

This cross-border exchange of experience and expertise demonstrates how international research cooperation can contribute to the identification, development, and potential dissemination of SDG-related best practices, strengthening the capacity of participating institutions to address common sustainability challenges.

By combining artificial intelligence, environmental science, and cross-border policy dialogue, the project contributes directly to SDG 2 (Zero Hunger), SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible Consumption and Production), and SDG 17 (Partnerships for the Goals). It also makes a significant contribution to SDG 15 (Life on Land) by promoting research and innovation aimed at improving soil health, preventing land degradation, and supporting the sustainable management of agricultural landscapes. Through AI-driven monitoring, comparative analysis of soil management practices, and the development of resource-efficient cultivation approaches, the project seeks to identify solutions that can reduce environmental pressures on Mediterranean agricultural ecosystems. These objectives are particularly relevant to SDG Target 15.3, which focuses on combating desertification and restoring degraded land and soil, including land affected by drought. Through the systematic comparison of national practices and the collaborative development of an AI-supported agricultural model, the project demonstrates how international research partnerships can review comparative approaches and develop shared best practices for tackling SDG-related challenges in sustainable food production, soil conservation, ecosystem protection, and resource management.



IV. Agriculture and Forestry Council: BAUSÜGAM Presentation on Innovative Technologies in Rural Areas



During the 2024–2025 academic year, as part of the IV Agriculture and Forestry Council organized by the Ministry of Agriculture and Forestry of the Republic of Türkiye, the "Workshop on Sustainable Living in Rural Areas" brought together experts, academics, and policymakers to discuss innovative approaches to sustainable rural development. The session titled "Resilience in Rural Areas" featured Assistant Professor Dr. Müge Kesici Baysoy, Deputy Director of the Bahçeşehir University Sustainable Food Systems Application and Research Center (BAU SÜGAM), who delivered a presentation on "Innovative Technologies in Rural Areas."

In her presentation, Dr. Baysoy highlighted the potential of technological innovation, digital transformation, and data-driven agricultural practices to improve agricultural productivity, strengthen rural livelihoods, and support the sustainable management of natural resources. The discussion emphasized that the future of rural development depends not only on increasing agricultural output but also on ensuring that farming systems remain environmentally sustainable, economically viable, and resilient to changing climatic and ecological conditions.

From an SDG 2 (Zero Hunger) perspective, the workshop addressed the importance of strengthening sustainable food production systems through technological innovation and more efficient agricultural practices. The application of digital technologies and data-driven approaches can support better-informed production decisions, more efficient resource allocation, and improved agricultural resilience. These considerations are particularly relevant to SDG Target 2.4, which emphasizes sustainable food production systems and resilient agricultural practices that maintain ecosystems, improve land and soil quality, and strengthen adaptation to environmental challenges.

The initiative also established a meaningful connection with SDG 15 (Life on Land) by highlighting the relationship between agricultural modernization and the responsible management of terrestrial ecosystems. Sustainable rural development requires protecting the environmental foundations of agricultural production, including healthy soils, productive land, biodiversity, and natural resources. Technological innovation can contribute to these objectives by supporting more precise resource management, monitoring environmental conditions, and informing agricultural decisions that seek to reduce pressure on land and ecosystems.

In particular, the workshop's focus on resource conservation and sustainable agricultural practices aligns with the broader objectives of SDG Target 15.3, which addresses land degradation and the sustainable management of land resources. By connecting technological innovation with environmental responsibility, the discussions reinforced the importance of agricultural development strategies that consider both food production and the long-term health of terrestrial ecosystems.

Through the participation of BAU SÜGAM, Bahçeşehir University contributed academic expertise to a national policy dialogue on the future of rural areas, supporting the integration of scientific knowledge, technological innovation, and sustainability considerations into agricultural development strategies. The University's involvement demonstrated the importance of connecting research institutions with public policymakers to address the interconnected challenges of food security, rural resilience, and environmental sustainability.

The initiative contributes to SDG 2 (Zero Hunger) through its focus on sustainable agricultural production, technological innovation, and food system resilience, and SDG 15 (Life on Land) through its emphasis on responsible land use, natural resource conservation, and

environmentally sustainable agricultural practices. It also supports SDG 9 (Industry, Innovation and Infrastructure) through agricultural technological innovation, SDG 13 (Climate Action) through climate-resilient rural development, and SDG 17 (Partnerships for the Goals) through academic participation in national policy dialogue.

By bringing together agricultural innovation, food security, rural development, and ecosystem sustainability, the workshop highlighted a central principle of sustainable development: the long-term capacity to produce food depends on the responsible management and protection of the land and natural resources that make agricultural production possible.



Bahçeşehir University, CIFAL Istanbul and the Food and Agriculture Organization of the United Nations: Cross-Sector Collaboration through FAO Talks

The image below displays the official promotional poster for the "FAO Talks: Gastronomy and Gastro-Tourism - Engaging Youth in Food and Agriculture" event:



In 2025, Bahçeşehir University, CIFAL Istanbul—a training centre affiliated with the United Nations Institute for Training and Research (UNITAR)—and the Food and Agriculture Organization of the United Nations (FAO) jointly organised "Gastronomy and Gastro-Tourism: Engaging Youth in Food and Agriculture," with the participation of Migros. Held at Bahçeşehir University's North Campus during FAO's 80th anniversary year, the event brought together academics, international development professionals, culinary practitioners, private-sector representatives and young people. The collaboration created a platform for examining food and agriculture through their interconnected educational, cultural, environmental and economic dimensions.

The event was particularly relevant to SDG 2 (Zero Hunger) and SDG 12 (Responsible Consumption and Production), as it connected sustainable agricultural production with the ways food is selected, prepared, consumed and valued. By examining the relationships between producers, culinary professionals, businesses and consumers, the programme encouraged a broader understanding of how food systems can become more sustainable, inclusive and resilient.

Opening remarks were delivered by Prof. Dr. Çisil Sohodol, Director of CIFAL Istanbul; Prof. Dr. Kazım Ozan Özer, Director of the School of Applied Sciences; and Dr. İlâyda Altun Cevahir, Vice Dean of the Faculty of Health Sciences. The panel was moderated by sustainable living advocate and FAO Food Champion Dilara Koçak and featured Dr. Ayşegül Selışık, FAO Türkiye Deputy Representative; food writer Sahrap Soysal; Chef Umut Karakuş; and Migros Corporate Chef Umut Reçber. Their different professional backgrounds connected international food-system priorities with culinary knowledge, academic perspectives and experience from the food sector.

Discussions addressed sustainable gastronomy, local ingredients, small producers and the contribution of young people to the future of food and agriculture. These themes gave participants an opportunity to understand how food choices and professional practices connect with the agricultural landscapes and natural resources that support local communities. By linking production with consumption, the programme extended sustainability learning across agriculture, gastronomy, nutrition and tourism.

From an SDG 2 perspective, the emphasis on local agricultural products and small-scale producers highlighted the importance of strengthening sustainable food production and supporting the communities responsible for supplying food. Small producers play an essential role in local food systems, and greater recognition of their products and production knowledge can contribute to discussions on agricultural sustainability, rural livelihoods and the resilience of regional food supply chains.

The programme also provided an opportunity to consider food security beyond the availability of food alone, drawing attention to the relationships between sustainable production, agricultural livelihoods, food quality and the long-term viability of local food systems. These themes are relevant to SDG Target 2.3, concerning small-scale food producers, and SDG Target 2.4, concerning sustainable food production systems and resilient agricultural practices.

Attention to local products and culinary traditions highlighted how food choices can connect consumers with producers and preserve knowledge passed between generations.

This connection was particularly important for SDG 12, as responsible consumption begins with understanding the resources, labour and production processes behind food. By highlighting the value of local ingredients and sustainable gastronomy, the event encouraged participants to consider how food-related decisions can support more responsible production and consumption patterns.

The discussions also provided a context for raising awareness of resource efficiency, the environmental implications of food choices and the importance of reducing unnecessary food waste. These considerations are closely connected to SDG Target 12.3 on reducing food loss and waste and SDG Target 12.8 on ensuring access to information and awareness for sustainable development and lifestyles in harmony with nature.

The gastro-tourism focus also provided a context for considering how the promotion of local cuisine can support regional economies while encouraging respect for the communities and resources behind food production.

This dimension established a meaningful connection with SDG 8 (Decent Work and Economic Growth), particularly the potential of sustainable gastronomic tourism to create economic opportunities for local producers, culinary businesses and communities. By linking regional food identities with tourism, gastronomy can contribute to the visibility and economic value of local agricultural products, traditional culinary knowledge and regional enterprises.

The event's discussions were especially relevant to SDG Target 8.9, which calls for policies promoting sustainable tourism that creates jobs and promotes local culture and products. While the programme did not itself constitute a tourism development intervention, it provided an educational and professional platform for exploring how gastronomy and local food systems can contribute to more inclusive regional economic development.

The relationship between sustainable gastronomy and SDG 15 (Life on Land) was also reflected in the importance of maintaining the natural resources that support agricultural production. Local food traditions are closely connected to agricultural landscapes, cultivated plant varieties, soil resources and the ecological conditions that make food production possible. Recognising these connections can strengthen awareness of the need to manage agricultural land responsibly and protect the environmental foundations of regional food systems.

In this respect, the programme offered an opportunity to connect food-system sustainability with broader considerations of agricultural biodiversity, responsible land use and terrestrial ecosystem health. This represents an indirect contribution to SDG 15 through education and awareness rather than direct biodiversity conservation or ecosystem restoration.
Youth engagement was central to the event's purpose. By bringing young participants into direct dialogue with specialists and practitioners, the programme encouraged them to consider their potential roles as informed consumers, future professionals and contributors to sustainable food systems.

Food literacy was particularly relevant to this exchange: understanding where food comes from, how it is produced and what social and environmental consequences accompany its consumption can inform decisions across different careers and daily life. Hosting this dialogue within a university connected sustainability learning with professional fields including gastronomy, nutrition, agriculture and tourism.

By engaging young people in discussions with representatives of FAO, academia, the food industry and culinary professions, the event strengthened opportunities for sustainability education across the food value chain. This approach is particularly relevant to SDG 12.8, as it encourages the development of knowledge and awareness needed to make informed choices about sustainable consumption and production.

By connecting food production with consumption, local livelihoods, cultural heritage and environmental responsibility, the initiative demonstrated how sustainable gastronomy can serve as a platform for advancing interconnected food-system priorities. In particular, it reinforced the importance of considering food security and responsible consumption together, while recognising the economic opportunities and ecological resources that underpin sustainable local food systems.





CIFAL Istanbul Visit to the Earthquake Zone: Advancing Sustainable Recovery and Climate Awareness





In the 2024-2025 academic year, the Bahçeşehir University's CIFAL Istanbul, UNITAR team organized a meaningful educational event in Battalgazi, Malatya titled "Heroes of Nature: Raising Awareness on Sustainability,", offering support and inspiration to children and their parents affected by the February 6 earthquakes.

During the seminar, CIFAL Istanbul personnel introduced participants to the mission and values of the United Nations, explaining how individuals can actively contribute to achieving the Sustainable Development Goals (SDGs). The speakers addressed key topics such as clean water conservation, renewable energy, sustainable cities, climate action, and the protection of natural ecosystems. Presentations focused particularly on waste reduction and the long-term benefits of adopting eco-friendly lifestyles within families and communities. At the conclusion of the event, the CIFAL Istanbul team presented books to the participating children and joined them in a tote bag painting workshop, reinforcing messages of creativity, sustainability, and collective responsibility for the environment. The initiative reflected Bahçeşehir University's dedication to providing quality education beyond its own campus, extending academic expertise to external learning environments.

The following day, on 15 December, the BAU CIFAL Istanbul team, held a series of official meetings with local authorities in Malatya, one of the provinces most affected by the earthquakes of February 6, to discuss sustainable reconstruction and long-term recovery strategies that integrate environmental awareness into rebuilding efforts.

While directly contributing to SDG 4 (Quality Education) and SDG 16 (Peace, Justice and Strong Institutions), this initiative also embodies the principles of SDG 15 (Life on Land) by promoting environmental restoration, ecosystem resilience, and sustainability education in disaster-affected regions. Through its outreach efforts, Bahçeşehir University fosters a deeper understanding of the link between human recovery and the healing of natural environments, showing that true reconstruction extends beyond physical structures — it includes rebuilding the harmony between people and the land they live on.

https://cifalistanbul.org/cifal-istanbul-team-visited-earthquake-zone/





Kocaeli Bahçeşehir High School Sustainability Summit

In the 2024-2025 academic year, as part of the Global Schools Program, CIFAL Istanbul, representing Bahçeşehir University (BAU) and UNITAR, participated in the "Sustainability Summit'24" organized by Kocaeli High School, which brought together students, educators, and sustainability experts to discuss innovative approaches to global challenges. Reflecting Bahçeşehir University's dedication to extending quality education beyond its campus, the event provided a meaningful platform for high school students to engage with the principles of the United Nations Sustainable Development Goals (SDGs).

During the summit, Dr. Yasemin Ülker, Deputy Director of BAU CIFAL Istanbul, delivered an engaging presentation on the concept and relevance of sustainability in today's interconnected world. She also shared insights into Bahçeşehir University's initiatives that empower youth to take action toward a more sustainable and equitable future, including CIFAL Istanbul's youth-oriented projects, its role within the UNITAR global network, and the efforts of the CIFAL Istanbul Youth Platform in mobilizing student engagement.

By connecting directly with high school students and educators, Bahçeşehir University, through CIFAL Istanbul, continues to raise sustainability awareness, encourage critical thinking, and foster a culture of environmental responsibility that extends beyond university boundaries.

In addition to supporting SDG 4 (Quality Education), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals), this initiative also reinforces SDG 15 (Life on Land) by inspiring young people to protect terrestrial ecosystems, conserve biodiversity, and advocate for nature-based sustainability practices. Through education and dialogue, students were encouraged to recognize their shared responsibility toward the environment — understanding that the future of the planet depends on collective action to sustain both human well-being and the life of our natural world.





Bahçeşehir University and CIFAL Istanbul Co-Organizes Climate Change Summit in Baku





In the 2024-2025 academic year, on 1 November 2024, Bahçeşehir University, through its CIFAL Istanbul Centre affiliated with the United Nations Institute for Training and Research (UNITAR), co-organized the "Climate Change Summit: The Climate Crisis from a Sustainability Perspective" in collaboration with Azerbaijan Technical University, the Young Researchers Innovation Club, and BilimSenOl. Held at Azerbaijan Technical University in Baku, the summit exemplified Bahçeşehir University's commitment to advancing academic collaboration and sustainability initiatives beyond national borders.

With contributions from Dr. Yasemin Ülker, Prof. Dr. Çisil Sohodol, and Prof. Dr. Nilüfer Geysi of Bahçeşehir University, the summit addressed urgent global challenges posed by climate change, resource depletion, and environmental degradation. Through expert discussions and knowledge exchange, participants explored innovative, interdisciplinary approaches to strengthen climate resilience and promote sustainable development in line with the United Nations Sustainable Development Goals (SDGs).

By facilitating international dialogue, Bahçeşehir University reinforced its role as a bridge between academia and sustainability policy, encouraging collective action toward mitigating the impacts of climate change and protecting ecosystems.

In addition to contributing to SDG 13 (Climate Action), SDG 4 (Quality Education), and SDG 17 (Partnerships for the Goals), the summit also advanced the objectives of SDG 15 (Life on Land) by emphasizing the interdependence between climate stability, land health, and biodiversity conservation. The discussions highlighted how addressing the climate crisis requires protecting terrestrial ecosystems, restoring degraded lands, and fostering a deeper respect for the natural systems that sustain life on Earth — reaffirming Bahçeşehir University's holistic approach to sustainability and global responsibility.

Conference on Sustainability Awareness for High School Students by BAU

In the 2024-2025 academic year, Assoc. Prof. Dr. Burçak Vatansever Durmaz, faculty member at Bahçeşehir University's Faculty of Economics, Administrative and Social Sciences, participated in a conference held at Bakırköy Uğur Anatolian High School to raise sustainability awareness among high school students. The event gathered around 60 students, focusing on themes such as environmental responsibility, conscious consumption, and the importance of sustainable lifestyle habits for the future.

Through interactive discussions and real-life examples, Dr. Durmaz encouraged students to reflect on their individual and collective roles in building a more sustainable and ecologically balanced society. The conference highlighted how daily actions — from consumption choices to waste management — directly influence the health of our planet and the resilience of ecosystems.

By integrating sustainability into education, the initiative not only contributed to SDG 4 (Quality Education), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action), but also advanced SDG 15 (Life on Land). The session underscored the importance of protecting terrestrial ecosystems, preserving biodiversity, and developing respect for all forms of life as key elements of sustainability literacy. Through education and awareness, the event empowered young people to act as guardians of nature, fostering a sense of environmental stewardship essential for a greener, more responsible future.





The Key to Improving Your Business, Planet, and Society: Corporate Sustainability and ESG





As part of the Environmental, Social, and Economic Sustainability Certificate Program organized by BAUGO (Bahçeşehir University School of Professional Studies), Bahçeşehir University continues to empower professionals with the knowledge and competencies needed to integrate sustainability principles into corporate strategies. The training session, titled "The Key to Improving Your Business, Planet, and Society: Corporate Sustainability and ESG," was led by Prof. Çisil Sohodol, Director of CIFAL Istanbul (UNITAR) and Professor at the BAU Faculty of Communication.

The session explored how companies can adopt a holistic ESG approach that balances environmental responsibility, social well-being, and ethical governance. Participants examined the intersections between corporate sustainability, the United Nations Sustainable Development Goals (SDGs), and the growing demand for accountable business practices that safeguard both people and the planet.

Particular attention was given to the environmental dimension of ESG, focusing on resource efficiency, ecosystem protection, and biodiversity conservation. The discussion highlighted how sustainable supply chains, pollution prevention, and effective water and land management are becoming essential pillars of responsible corporate behavior. By recognizing the link between economic growth and ecological integrity, participants were encouraged to adopt strategies that restore balance between business productivity and environmental preservation.

Through its multidisciplinary and applied learning framework, the program contributes to multiple global goals — including SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 15 (Life on Land) — by emphasizing that sustainable business is inseparable from protecting natural habitats and supporting ecosystem resilience.

This initiative reaffirms Bahçeşehir University's commitment to equipping leaders with the vision and tools to transform organizations into agents of sustainable progress, advancing both corporate excellence and environmental stewardship in alignment with the 2030 Agenda for Sustainable Development.

Photosynthesis and Sustainable Energy Research: An Indirect Connection to Terrestrial Ecosystems

In the 2024-2025 academic year, Bahçeşehir University's Faculty of Engineering and Natural Sciences hosted the 12th International Conference on "Photosynthesis and Hydrogen Energy Research for Sustainability-2024" in Istanbul. The conference brought together scholars, researchers and industry professionals from different countries to exchange knowledge on photosynthesis, biological hydrogen production and sustainable energy technologies.

The scientific programme covered photosynthetic electron transfer, water oxidation, biological hydrogen production, hydrogen purification and storage, and developments in the global hydrogen economy. These discussions examined biological energy conversion and its potential applications in cleaner energy systems. Although the programme is focused on energy research, its consideration of lower-emission technologies has broader relevance to reducing environmental pressures on terrestrial ecosystems.

The conference's connection to SDG 15: Life on Land was indirect, through research relevant to mitigating climate change, which places pressure on terrestrial habitats and biodiversity. Its contribution is therefore best understood as scientific exchange on energy technologies with potential benefits for the environmental conditions that sustain terrestrial ecosystems. The event aligned more directly with SDG 7: Affordable and Clean Energy and SDG 13: Climate Action, while supporting SDG 17: Partnerships for the Goals through international academic and industry dialogue.





Green Dialogue Meeting: Climate Governance and Terrestrial Ecosystem Protection

In 2025, The Green Dialogue Meeting examined the role of climate law in translating environmental commitments into binding and enforceable public policy. The discussion addressed how legal frameworks can support Türkiye's 2053 net-zero emissions and green development objectives through greenhouse gas regulation, emission-reduction mechanisms and clearly defined responsibilities for public institutions and economic actors.

From an SDG 15: Life on Land perspective, the meeting's relevance lies in the relationship between climate action and the environmental conditions that sustain terrestrial ecosystems. Climate mitigation can help limit pressures on forests, soils, natural habitats and biodiversity. The discussion of water-resource protection also has relevance to terrestrial ecosystems, which depend on adequate water availability and functioning ecological processes. These connections position effective climate governance as a supporting framework for long-term ecosystem resilience.

The meeting therefore aligned with SDG 15: Life on Land through the broader ecological relevance of climate mitigation and water-resource protection. Its emphasis on clear rules, monitoring and institutional accountability highlighted the governance mechanisms needed to sustain environmental policy implementation. The event also directly supported SDG 13: Climate Action and SDG 16: Peace, Justice and Strong Institutions, while relating to SDG 7: Affordable and Clean Energy through the green-energy transition and SDG 6: Clean Water and Sanitation through water-resource protection.



Sustaining Agricultural Landscapes and Rural Livelihoods: Economic and Social Challenges and Transformations in Türkiye's Hazelnut Production

TÜRKİYE FINDIK ÜRETİMİNDE EKONOMİK VE TOPLUMSAL SORUNLAR, DÖNÜŞÜMLER

BAHÇEŞEHİR ÜNİVERSİTESİ, BEŞİKTAŞ KAMPÜSÜ
Çırağan cad. Osmanpaşa Mektebi sok. No: 4-6

A BLOK KONFERANS SALONU

27 Mayıs 2025

On 27 May 2025, Bahçeşehir University's Center for Economic and Social Research (BETAM) and Department of Sociology jointly organised the conference "Economic and Social Challenges and Transformations in Türkiye's Hazelnut Production" at the BAU Beşiktaş Campus. The programme presented findings from two complementary reports: Türkiye'de Fındık Sektörünün Geleceği ve Sorunları (The Future and Problems of Türkiye's Hazelnut Sector) and Giresun'un Kırsal Hafızasında Fındık Üretiminin Dönüşen Hikâyesi (The Changing Story of Hazelnut Production in Giresun's Rural Memory). Together, these studies connected sectoral economic analysis with producers' lived experiences, providing a basis for stakeholder discussion on the future of hazelnut farming. By bringing together quantitative economic research and qualitative field-based evidence, the initiative offered a multidimensional perspective on the sustainability of agricultural production, the protection of productive land, and the resilience of rural food systems.

The first report, The Future and Problems of Türkiye's Hazelnut Sector, examined Türkiye's position in global hazelnut production and trade, the structural problems affecting the sector and possible future developments. Its analysis addressed comparatively low yields per unit of land and considered alternative scenarios for production and export performance. It also recognised climate change as a source of uncertainty for future cultivation.

From an SDG 2 (Zero Hunger) perspective, the report provided research-based evidence relevant to improving agricultural productivity, strengthening the economic sustainability of food production, and addressing structural challenges affecting producers. Its examination of yields, production capacity, and future sectoral scenarios contributes to understanding the conditions necessary for maintaining productive and resilient agricultural systems. These findings are particularly relevant to SDG Target 2.3, which addresses agricultural productivity and the incomes of small-scale food producers, and SDG Target 2.4, which emphasizes sustainable food production systems and resilient agricultural practices.

From an SDG 15: Life on Land perspective, these findings underline the importance of considering agricultural land productivity alongside environmental pressures and long-term production resilience. The report's consideration of climate-related uncertainty also reinforces the need to examine how changing environmental conditions may affect the long-term productive capacity of agricultural landscapes. This relationship is relevant to sustainable land management because the future of agricultural production depends not only on economic performance but also on maintaining the ecological conditions that support cultivation. Higher yields alone, however, do not establish environmentally sustainable land management; this requires attention to how productivity improvements are achieved.

The second report, The Changing Story of Hazelnut Production in Giresun's Rural Memory, used oral histories, expert interviews and field observations to examine agricultural transformation. It documented producers' experiences of soil degradation, cultivation practices and difficulties accessing trusted advice. Its analysis of socio-ecological memory explored how migration and ageing disrupt the transmission of local knowledge.

These findings establish a particularly important connection with SDG 15 (Life on Land), as they identify soil degradation and the loss of locally accumulated agricultural knowledge as challenges affecting the long-term sustainability of cultivated land. By documenting producers' experiences and the changing relationship between rural communities and their agricultural environments, the research contributes to understanding the social and ecological factors that influence land management practices.

The findings are especially relevant to SDG Target 15.3, which addresses land degradation and the restoration of degraded land and soil. While the research did not itself implement land restoration measures, its documentation of soil-related challenges and agricultural practices provides evidence that can inform discussions on preventing further degradation and improving the sustainability of agricultural land use.

The report also highlights an important relationship between SDG 2 and SDG 15: agricultural productivity and food-system resilience depend on the long-term health of soils and the availability of reliable knowledge about sustainable cultivation practices. The disruption of knowledge transfer between generations, together with limited access to trusted agricultural advice, can create additional challenges for producers seeking to maintain productive and environmentally sustainable farming systems.

The Giresun report also recommended locally appropriate agricultural information, stronger producer–expert exchange, transparent purchasing and producer-supportive pricing. These proposals relate to SDG 1: No Poverty by addressing rural economic vulnerability, and to SDG 2 through producer incomes and the continuity of agricultural production.

In particular, the recommendations concerning accessible agricultural information and stronger producer–expert relationships are relevant to SDG Target 2.3, which recognizes the importance of improving small-scale producers' access to knowledge and markets. They also support the broader objectives of SDG Target 2.4 by identifying conditions that can help producers adopt more informed and sustainable agricultural practices.

From an SDG 15 perspective, the emphasis on locally appropriate knowledge and agricultural advisory support is equally significant. Effective land management requires an understanding of local soil conditions, cultivation practices, and environmental pressures. Strengthening the exchange of knowledge between producers and specialists can therefore contribute to the development of approaches that better integrate agricultural productivity with soil protection and responsible land use.

By presenting the reports together and incorporating stakeholder evaluations, the conference supported dialogue on the interdependence of agricultural landscapes, production systems and rural livelihoods. The combined findings demonstrated that the sustainability of hazelnut production cannot be assessed through economic indicators alone; it also requires consideration of soil conditions, environmental change, agricultural knowledge, and the social structures that sustain farming communities.

The initiative contributes to SDG 2 (Zero Hunger) by generating and disseminating research relevant to agricultural productivity, producer livelihoods, sustainable cultivation, and the long-term resilience of food production systems. It also contributes to SDG 15 (Life on Land) by documenting soil degradation, examining socio-ecological transformations, and identifying knowledge-related challenges relevant to sustainable agricultural land management.

By connecting sectoral economic analysis with field-based evidence of environmental and social change, Bahçeşehir University contributed to a more integrated understanding of agricultural sustainability—one in which productive farming systems, healthy soils, and the continuity of rural knowledge are recognised as interconnected foundations of long-term food security and responsible land stewardship.

9:30–9:45	**Karşılama, çay/kahve ikramı** **Açılış konuşması**
9:45–10:30	**"Fındık Sektöründe Yapısal Sorunlar ve Sektörün Geleceği** **Seyfettin Gürsel, Ozan Bakış** Bahçeşehir Üniversitesi Ekonomik ve Toplumsal Araştırmalar Merkezi (Betam)
10:30–11:15	**"Giresun'un Kırsal Hafızasında Fındık Üretiminin Dönüşümü"** **İlhan Zeynep Karakılıç, Pınar Melis Yelsalı Parmaksız, Ayşe Yılmaz** Bahçeşehir Üniversitesi Sosyoloji Bölümü
11:15–11:30	**Soru & Cevap**
11:30–11:45	**Çay/kahve arası**
11:45–12:30	**Değerlendirme:** **Levent Karlıbel** Ordu Ticaret ve Sanayi Odası Başkanı **Selvinaz Altunbaş Aydın** Üretici **Musa Sabırlı** Üretici

Bahçeşehir University Farm Field Trip with FAO Türkiye: Sustainable Agriculture, Climate Awareness and Land Stewardship

On 17 April 2025, CIFAL Istanbul, UNITAR organised a field trip to the Bahçeşehir University Agricultural Farm with the participation of members of FAO Türkiye. The visit provided an opportunity for on-site evaluations of sustainable agricultural practices and the efficient management of natural resources. Bringing international agricultural expertise into a university setting, the initiative connected academic knowledge with practical farming contexts and supported dialogue on the environmental responsibilities of agricultural production.

The field trip supported SDG 12: Responsible Consumption and Production through its focus on sustainable farming methods and efficient resource management. Evaluating agricultural practices on site offered a practical setting for considering how production depends on the responsible use of land, water and other agricultural inputs. This approach encouraged a broader understanding of resource efficiency throughout food production and highlighted the importance of aligning agricultural productivity with the long-term availability of natural resources.
The visit also supported SDG 13: Climate Action by strengthening awareness of sustainable agriculture as an important component of responding to climate change. The connection lies in the need for farming systems that use resources carefully and remain viable under changing environmental conditions. By linking sustainable farming knowledge with direct observation, the field trip provided an educational foundation for understanding the relationship between agricultural practices, climate pressures and the resilience of food production.

The initiative further supported SDG 15: Life on Land by drawing attention to the stewardship of the natural resources on which agriculture depends. Its emphasis on sustainable farming provided a basis for considering the importance of soil health, land conservation and the ecological functions that sustain productive landscapes. Through on-site learning and exchange with FAO Türkiye representatives, the visit reinforced awareness that maintaining agricultural production over time requires care for terrestrial ecosystems and the prevention of resource degradation.





Who Will Save the World? Planetary Nursing





On 24 February 2025, the event "Who Will Save the World? Planetary Nursing" introduced participants to planetary health and the emerging field of planetary nursing, which recognizes the interdependence between human health and the condition of the natural environment. The programme examined how excessive resource consumption, climate change, pollution, and biodiversity loss generate growing risks for physical and mental health, particularly among environmentally vulnerable communities.

Drawing on the foundational principles of the nursing profession, the event positioned nurses as important advocates for planetary health. It emphasized that healthcare professionals can contribute not only through patient care but also by promoting environmental awareness, sustainable practices within healthcare systems, responsible resource use, and preventive approaches that address the environmental determinants of health.

The initiative contributed directly to SDG 3: Good Health and Well-Being by strengthening understanding of how environmental degradation and climate-related risks affect public health. It also supported SDG 13: Climate Action by encouraging health professionals to participate in climate-conscious practices and advocacy, SDG 15: Life on Land through its emphasis on protecting ecosystems and biodiversity, and SDG 17: Partnerships for the Goals by highlighting the need for multidisciplinary and international cooperation to safeguard both human and planetary well-being.

CIFAL Istanbul Team Participation to Reforestation Efforts in Istanbul

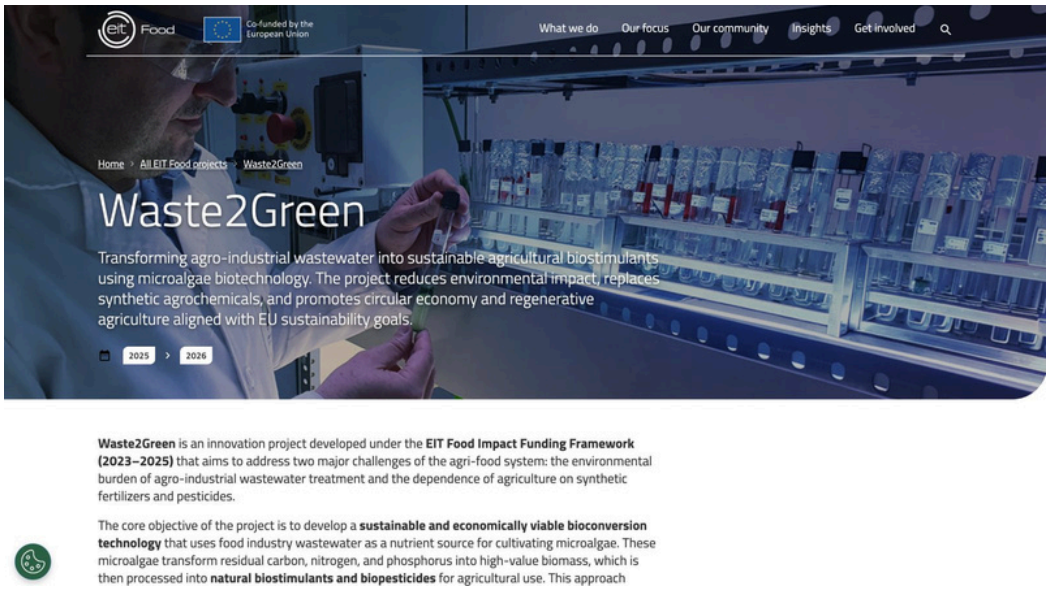
In the 2024-2025 academic year, Bahçeşehir University and CIFAL Istanbul team members Eren Yalınkaya and Aslıcan Açık participated in a reforestation initiative in a forest area of Istanbul that had been severely damaged by wildfires. Their participation contributed to ongoing recovery efforts aimed at restoring forest ecosystems, promoting biodiversity, and reinforcing public awareness on the long-term environmental impact of forest degradation.

This initiative reflects the strong commitment of Bahçeşehir University and CIFAL Istanbul to the United Nations Sustainable Development Goals, particularly SDG 13 (Climate Action), SDG 15 (Life on Land), and SDG 17 (Partnerships for the Goals). By actively engaging in reforestation and environmental rehabilitation projects, the University continues to support collective action toward ecosystem resilience, climate adaptation, and sustainable land management.





Waste2Green: Converting Agricultural and Industrial Waste into Green Solutions through Microalgae Biotechnology



Bahçeşehir University participates in Waste2Green, an international research and innovation project supported through the EIT Food Impact Funding Framework, bringing together expertise in biotechnology, sustainable agriculture, wastewater management and circular resource use. The project aims to transform agro-industrial wastewater from an environmental management challenge into a valuable resource for developing innovative agricultural products, demonstrating the potential of biotechnology to contribute to more sustainable and resource-efficient food systems.

Bahçeşehir University's contribution is led by Dr. Alper Devrim Özkan, from the Department of Pharmaceutical Microbiology, Faculty of Pharmacy. Within the international consortium, BAU is responsible for characterising microalgal biomass and evaluating its potential applications as a biostimulant and biopesticide, including laboratory investigations of plant growth and protection against plant diseases. These activities involve algal characterisation, sequencing and biological activity assessments using model crops, contributing scientific evidence on the potential effectiveness of microalgae-derived agricultural products.

By connecting wastewater nutrient recovery with the development of biological agricultural inputs, Waste2Green addresses two interconnected sustainability challenges: reducing the environmental pressures associated with agro-industrial waste and developing alternatives that could support productive, resilient and environmentally responsible agriculture. BAU's participation brings pharmaceutical microbiology expertise into an interdisciplinary research framework linking environmental biotechnology, agricultural innovation and the circular bioeconomy.

Waste2Green contributes to SDG 2 (Zero Hunger) through research into innovative biological products designed to support sustainable agricultural productivity. Microalgae-derived biostimulants and biopesticides offer potential alternatives or complements to conventional agricultural inputs, with applications in improving plant growth, supporting crop resilience and protecting plants against diseases.

The development of these products is particularly relevant to the long-term sustainability of food production, as agricultural systems face increasing pressure to maintain productivity while reducing their environmental impacts. By investigating the biological properties and potential agricultural applications of microalgal biomass, the project contributes to the scientific development of approaches that may support more efficient and resilient crop production.

BAU's laboratory research plays an important role in this process by assessing whether microalgae-derived materials demonstrate biological activity relevant to plant development and crop protection. These investigations provide an evidence base for determining the potential of the resulting products to contribute to sustainable agricultural practices.

The initiative is particularly aligned with SDG Target 2.4, which promotes sustainable food production systems and resilient agricultural practices that maintain ecosystems and progressively improve land and soil quality. Waste2Green explores how biological innovation and resource recovery can be integrated into agricultural production, supporting research towards food systems that are both productive and environmentally sustainable.

Waste2Green also addresses SDG 6 (Clean Water and Sanitation) by exploring innovative approaches to agro-industrial wastewater treatment and resource recovery.

The project uses wastewater as a cultivation medium for microalgae, which can assimilate residual nutrients, including nitrogen and phosphorus, during biomass production. This process creates an opportunity to recover valuable nutrients from wastewater streams while producing biomass with potential agricultural applications.

By treating wastewater as a resource rather than solely as a waste product, the project contributes to the development of more circular approaches to water management. Its research is relevant to reducing nutrient pollution, improving the efficiency of wastewater treatment processes and exploring opportunities to decrease the demand for additional resources in biomass cultivation.

These objectives are particularly relevant to SDG Target 6.3, which calls for improving water quality by reducing pollution and increasing wastewater treatment, recycling and safe reuse.

The project's contribution lies in developing and validating biological treatment and recovery technologies, with their actual effectiveness in reducing wastewater pollution to be established through technical assessment.

SDG 12 (Responsible Consumption and Production) is one of the project's central sustainability dimensions. Waste2Green applies circular-economy principles by seeking to convert waste streams generated through agro-industrial activities into valuable biological resources that can be reintegrated into agricultural production.

Rather than treating wastewater nutrients as materials to be discarded, the project explores their recovery through microalgal cultivation. The resulting biomass is then investigated for its potential to serve as a source of biostimulants and biopesticides, creating a research pathway through which resources originating in the food production system may be transformed into inputs for future agricultural use.

This approach illustrates the potential of circular bioeconomy models to reduce resource losses, recover value from agricultural and industrial by-products, and support more efficient production systems.

The project's planned modular, mobile processing system is intended to enable wastewater valorisation closer to its source, while the proposed Digital Product Passport aims to strengthen traceability and transparency concerning the resulting products.

These features are relevant to SDG Target 12.2, which promotes sustainable management and efficient use of natural resources, and SDG Target 12.5, which focuses on reducing waste generation through prevention, reduction, recycling and reuse.

By integrating waste recovery, biotechnology, product development and traceability, Waste2Green demonstrates how innovation can help redesign production processes around resource efficiency and circularity.

Waste2Green contributes to research relevant to SDG 13 (Climate Action) by exploring technologies with the potential to reduce the environmental footprint of agricultural inputs and wastewater processing.

Its approach combines biological nutrient recovery with the development of agricultural products that may reduce dependence on certain conventional synthetic inputs. By investigating resource-efficient biological processes and alternative agricultural products, the project supports the development of technologies relevant to climate-responsive and environmentally sustainable agri-food systems.

The proposed modular processing approach may also create opportunities to examine resource use and processing efficiency at the source of wastewater generation.

However, potential reductions in energy consumption or greenhouse gas emissions require comparative lifecycle assessment and technical validation. The project's contribution to SDG 13 therefore lies in advancing research into potentially lower-impact production pathways rather than demonstrating quantified emissions reductions at this stage.

Waste2Green has an indirect but relevant connection to SDG 14 (Life Below Water) through its focus on recovering nutrients from agro-industrial wastewater and developing biological agricultural products.

Excessive nutrient discharge into aquatic environments can contribute to eutrophication and the deterioration of water quality. By investigating microalgal processes capable of recovering nitrogen and phosphorus from wastewater, the project explores a potential pathway for reducing nutrient loads before treated water reaches receiving environments.

Similarly, the development of effective biological alternatives to certain conventional agricultural inputs may offer opportunities to reduce pollution pressures associated with agricultural runoff.

These research directions are relevant to SDG Target 14.1, which addresses marine pollution, including nutrient pollution originating from land-based activities.

The project's relevance to SDG 14 is therefore preventive and indirect, arising from its potential contribution to reducing land-based pollution pressures rather than from direct marine conservation activities.

Waste2Green also establishes a meaningful connection with SDG 15 (Life on Land) through the development of biological agricultural products intended to support crop productivity while reducing environmental pressures associated with conventional agricultural practices.

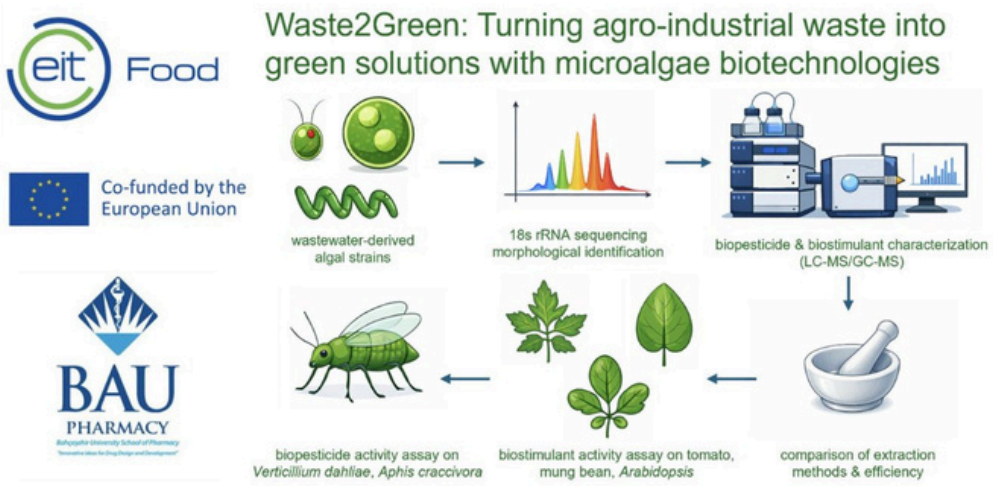
The project's investigation of microalgae-derived biostimulants and biopesticides is particularly relevant to the relationship between agricultural production and the long-term sustainability of terrestrial ecosystems. Developing effective biological inputs could offer opportunities to reduce reliance on certain synthetic agricultural chemicals, support more environmentally responsible crop management and limit some of the pressures agricultural activities place on soils and surrounding ecosystems.

BAU's contribution is particularly significant in this context. Through the characterisation of algal biomass and laboratory evaluation of its potential effects on plant growth and disease protection, the University contributes to establishing the scientific foundations for agricultural technologies that seek to balance crop productivity with environmental sustainability.

The project is relevant to SDG Target 15.3, which addresses land degradation and the sustainable management of land and soil. Its research also supports broader consideration of how agricultural innovation can contribute to maintaining the ecological conditions necessary for long-term food production.

Importantly, the project does not itself demonstrate soil restoration, biodiversity conservation or reduced ecosystem damage. Such outcomes would require subsequent field trials, environmental safety assessments and evidence of the products' performance under agricultural conditions. Its contribution to SDG 15 is therefore best understood as applied research supporting the development of potentially more sustainable agricultural land management practices.

Through its participation in Waste2Green, Bahçeşehir University demonstrates how interdisciplinary scientific research and international collaboration can contribute to addressing interconnected challenges across agriculture, water management and environmental sustainability.



From Trees to Innovation: BAU Podcast on the Future of Forestry and Timber



In 2025, Bahçeşehir University's Timber Structures Application and Research Center contributed to the public discussion on sustainable forestry and timber innovation through the podcast episode "From Trees to Innovation: The Future of Timber." The programme featured Dr. Demet Sürücü, a forest industry engineer and the founder and director of the BAU Center, and explored the technological transformation of forestry and the timber industry. Topics included data-driven forest inventories using satellite imagery, drones and artificial intelligence; innovations in engineered timber products; developments in timber markets; technological responses to climate change and forest fires; and emerging entrepreneurship opportunities within the sector.

The episode contributed to SDG 11: Sustainable Cities and Communities by communicating the potential of engineered timber as a material for safer, lower-impact and more resilient built environments. Through its dedicated research center, Bahçeşehir University connects expertise in forestry, architecture and construction, helping to expand access to scientific and applied knowledge required for the responsible use of timber in urban development. The discussion therefore positioned timber innovation not only as an industrial issue but also as part of the transition towards ecological, disaster-resilient and liveable cities.

The programme also supported SDG 12: Responsible Consumption and Production by examining how digital monitoring, technological innovation and engineered wood products can improve decision-making across the forestry and timber value chain. Its focus on data-informed resource management encouraged a more responsible approach to sourcing, processing and using wood, while the discussion of new technologies and entrepreneurship highlighted opportunities to develop more efficient and sustainability-oriented production models.

Its strongest connection with SDG 15: Life on Land arose from the emphasis on sustainable forest management and technology-assisted ecosystem monitoring. Satellite imagery, drones and artificial intelligence can strengthen forest inventories, improve understanding of changing forest conditions and support earlier, better-informed responses to wildfire and climate-related risks. By sharing this specialist knowledge with a wider audience, Bahçeşehir University demonstrated how research, professional expertise and public communication can contribute to protecting forests while ensuring that timber use remains connected to the long-term health and responsible management of terrestrial ecosystems.

Fire-Resistant Timber Structures for Sustainable Cities



In 2025, Bahçeşehir University's Timber Structures Application and Research Center and Faculty of Architecture and Design organised the seminar "Fire and Fire-Resistant Timber Structures for Living in Sustainable Cities" at BAU's Beşiktaş South Campus. Bringing together architects, engineers, students, manufacturers and representatives of Finland-based Nordtreat, the event examined the future of timber construction, fire-safety standards and sustainable building solutions. It also addressed Türkiye's recently introduced regulation on the design, calculation and construction of timber buildings, highlighting its importance for the sector.

The programme contributed directly to SDG 11: Sustainable Cities and Communities by advancing knowledge of safe, fire-resistant and sustainable timber buildings. Presentations covered fire testing, regulatory compliance and timber-construction practices from Finland, alongside international examples ranging from Australian fire stations to the renovation of the London Underground. Turkish projects such as the Çatalhöyük Visitor Centre and Sille Primary School further demonstrated how successful applications can increase the confidence of local authorities and encourage wider use of timber in the built environment.

The seminar supported SDG 12: Responsible Consumption and Production by focusing on bio-based fire-retardant solutions developed for different timber species. These technologies preserve the natural character of wood while improving its fire performance, demonstrating how material innovation and appropriate technical standards can enable timber to be used more safely, effectively and responsibly.

The event also related to SDG 15: Life on Land by connecting the future of timber construction with responsible use of forest-based resources. Through its specialised research center, Bahçeşehir University promoted an approach in which the expansion of timber construction must remain grounded in informed material selection, efficient use and the long-term sustainability of the forest ecosystems from which wood originates.





"Smart Material: Timber" at the Ecological Intelligence, Smart Materials and Nature's Digital Network Panel



Between 6-19 April 2025, Bahçeşehir University's Timber Structures Application and Research Center participated in the 47th Turkeybuild Istanbul, Türkiye's longest-running building exhibition and a major regional platform for the construction sector. As part of the "Ecological Intelligence, Smart Materials and Nature's Digital Network" panel, Center Director Demet Sürücü delivered a presentation titled "Smart Material: Timber" to architects, engineers and construction-industry representatives. The presentation addressed timber's inherent material intelligence, the measurement and use of its properties in industrial production and building systems, the objectives of the BAU Center, and innovative timber applications from around the world.

The participation contributed to SDG 11: Sustainable Cities and Communities by bringing BAU's research-based knowledge on timber construction into direct dialogue with professionals shaping the built environment. Presenting timber as an advanced construction material encouraged wider consideration of ecological and technically informed solutions for more sustainable urban development.

It supported SDG 12: Responsible Consumption and Production by demonstrating how a natural material can be evaluated, engineered and used more effectively through measurable performance criteria and innovative production methods. The activity is also related to SDG 15: Life on Land by connecting innovation in the built environment with the responsible use of forest-based resources and the long-term sustainability of forest ecosystems.



TÜBİTAK SME R&D Start-up Support Program: Development of Super Absorbent Polymers as Microfertilizer Carriers



The project "Production of Superabsorbent Materials for Soil Conditioning," led by Assist. Prof. Merve Senem Seven from Bahçeşehir University's Faculty of Engineering and Natural Sciences, was selected for support under KOSGEB's SME Technological Product Investment Support Programme (TEKNOYATIRIM). Announced on 3 October 2025, the project has a budget of TRY 14,743,912 and will receive support for 18 months. It focuses on producing superabsorbent materials for soil conditioning, connecting materials development with potential applications in agricultural resource management. By addressing the capacity of agricultural soils to retain moisture, the project explores a technological approach to one of the fundamental challenges of sustainable agriculture: maintaining productive growing conditions while using limited water resources efficiently.

The project supports SDG 12: Responsible Consumption and Production through its focus on materials that could enable more efficient use of water in agricultural production. The water absorption and retention properties of superabsorbent materials provide a basis for exploring how soil moisture can be managed more effectively. Developing these materials for soil conditioning offers a potential pathway towards more resource-efficient agricultural practices, with their performance and resulting benefits to be assessed through the project.

This approach is particularly relevant to SDG Target 12.2, which promotes the sustainable management and efficient use of natural resources. Water is a critical agricultural resource, and technologies designed to improve moisture retention in soil may help reduce unnecessary water losses and support more efficient irrigation practices. By investigating materials that could improve the effectiveness of water use in agricultural soils, the project contributes to research and technological development aimed at reducing resource intensity in food production.

The initiative also reflects the broader principles of responsible production by exploring how material innovation can contribute to agricultural processes that make more effective use of available natural resources. Its potential contribution lies in developing and evaluating a technological solution rather than claiming water savings or environmental improvements before these have been demonstrated.

The project also aligns with SDG 2: Zero Hunger, particularly through its relevance to sustainable agriculture. Soil moisture availability is an important consideration in maintaining agricultural production, and materials designed to retain water could help support favourable growing conditions for crops. By developing superabsorbent materials for this purpose, the project contributes to technological approaches that may support agricultural productivity and more resilient production systems.

From an SDG 2 perspective, the project addresses the relationship between soil moisture management, agricultural productivity, and the resilience of food production systems. Inadequate water availability can limit crop development and create additional challenges for agricultural producers, particularly under conditions of water scarcity and climatic variability. Technologies capable of retaining water within agricultural soils may offer opportunities to maintain more favourable growing conditions and support the continuity of agricultural production.

The research is particularly relevant to SDG Target 2.4, which calls for sustainable food production systems and resilient agricultural practices that strengthen adaptation to drought and other environmental challenges while progressively improving land and soil quality. By developing materials intended to improve soil moisture retention, the project contributes to technological research that could support more resilient and resource-efficient farming practices.

The project also has a meaningful connection with SDG 15: Life on Land through its focus on soil conditioning and the sustainable management of agricultural land. Soil moisture is an important component of soil functioning and agricultural land productivity. Technologies designed to improve water retention may help address certain moisture-related limitations affecting cultivated soils and support approaches to maintaining productive agricultural land under changing environmental conditions.

This connection is particularly relevant to SDG Target 15.3, which addresses land degradation and the restoration of degraded land and soil. Although the project does not constitute a land restoration initiative, its research into soil-conditioning materials is relevant to the development of practices that may support sustainable land management and help maintain the productive capacity of agricultural soils. The actual environmental performance of the materials, including their effects on soil properties and long-term ecological compatibility, will need to be established through testing and evaluation.

Bahçeşehir University's contribution brings academic expertise in materials development into an applied project addressing agricultural needs. By connecting engineering research with soil management, agricultural water efficiency, and sustainable production, the initiative illustrates the potential of interdisciplinary innovation to address interconnected food-system and environmental challenges.

The project contributes to SDG 2 (Zero Hunger) through research relevant to agricultural resilience, soil moisture management, and sustainable food production; SDG 12 (Responsible Consumption and Production) through the development of materials intended to improve the efficiency of water use in agriculture; and SDG 15 (Life on Land) through its relevance to soil conditioning, sustainable agricultural land management, and the long-term maintenance of productive soils.

By exploring how advanced materials can improve the management of water within agricultural soils, the project demonstrates Bahçeşehir University's commitment to developing research-based solutions that bring together food security, responsible resource consumption, and the sustainable use of land.

The Lost Sea: Documenting the Aral Sea's Environmental Collapse and the Future of Water and Ecosystem Sustainability

Initiated in 2025, the Aral Sea Documentary Project is an international documentary production exploring one of the world's most significant environmental transformations: the dramatic shrinkage of the Aral Sea and its consequences for ecosystems, natural resources, and communities across Central Asia. Filmed in Uzbekistan, Kazakhstan, and Turkmenistan, the project examines the historical, environmental, social, and cultural dimensions of the Aral Sea crisis, bringing together perspectives from academics, environmental activists, government representatives, and local communities.

Once one of the world's largest inland lakes, the Aral Sea has undergone extensive environmental degradation, largely resulting from large-scale irrigation policies and the diversion of rivers during the Soviet era. Its transformation represents a striking example of the long-term consequences of unsustainable water resource management, demonstrating how decisions concerning agricultural production and natural resource use can profoundly affect ecosystems, biodiversity, and human livelihoods.

Beyond its environmental significance, the Aral Sea holds an important place in the historical and cultural identity of the peoples of Central Asia and the wider Turkic world. The documentary explores this relationship between people and their environment, examining how ecological transformation has reshaped local communities, cultural memory, and perceptions of the future.

Through interviews, field observations, and documentary storytelling, the project seeks to connect scientific knowledge with lived experiences, encouraging reflection on the environmental consequences of human activity and the importance of sustainable development policies.

The documentary establishes a particularly strong connection with SDG 6 (Clean Water and Sanitation) by examining the consequences of unsustainable water management and large-scale irrigation practices that contributed to the Aral Sea's dramatic decline.

By documenting the historical processes behind the depletion of the lake and their environmental and social consequences, the project highlights the importance of responsible water allocation, long-term resource planning, and integrated approaches to water management.

The Aral Sea crisis demonstrates that water sustainability extends beyond access to drinking water and sanitation. It also requires the protection of freshwater ecosystems, the responsible management of shared water resources, and consideration of the long-term environmental consequences of agricultural and economic development.

The project also makes a significant contribution to environmental awareness relevant to SDG 15 (Life on Land) by documenting the terrestrial consequences of the Aral Sea's desiccation.

The retreat of the lake has exposed extensive areas of former seabed, contributing to the formation of the Aralkum Desert and creating environmental pressures associated with land degradation, saline dust, and the transformation of surrounding landscapes.

These changes illustrate the interconnected nature of water ecosystems and terrestrial environments. The disappearance of a major water body affects not only aquatic habitats but also soil conditions, vegetation, biodiversity, and the ecological stability of surrounding land.

Through its examination of these transformations, the documentary draws attention to the importance of preventing land degradation, protecting biodiversity, and maintaining the ecological functions of vulnerable landscapes.

The project is particularly relevant to SDG Target 15.3, which addresses desertification and land degradation, and to the broader objectives of conserving terrestrial ecosystems and biodiversity.

By presenting the Aral Sea as a case study of large-scale ecological transformation, the documentary encourages greater awareness of the long-term relationship between water management, land sustainability, and ecosystem protection.



Bahçeşehir University Forest: 30,000 Trees Supporting Afforestation in Soma, a Region Facing Environmental Pressures from Coal Mining



Bahçeşehir University (BAU), in collaboration with the Aegean Forest Foundation (Ege Orman Vakfı) and Tazefikir Group, implemented an innovative sustainability initiative connecting education in emerging digital technologies with environmental responsibility and tangible afforestation efforts.

Through the university's Metaverse Certificate Programme, participants were encouraged to contribute to tree planting through sapling donations associated with their programme registration. A distinctive feature of the initiative was the voluntary contribution of Bahçeşehir University's academic staff, who delivered the Metaverse Certificate Programme without receiving any teaching fees. Instead of conventional registration fees, participants enrolled by making sapling donations to the Aegean Forest Foundation, directly linking access to education with environmental action. This innovative model transformed the certificate programme into a collective sustainability initiative, raising awareness of environmental responsibility while demonstrating how academic expertise, volunteerism, and educational participation can be mobilised to generate tangible benefits for terrestrial ecosystems.

The initiative resulted in the establishment of a 30,000-tree forest in Soma, Manisa, with 15,000 trees provided through programme-linked donations and an additional 15,000 trees contributed directly by Bahçeşehir University.

The location of the initiative adds particular environmental significance to the project. Soma is one of Türkiye's established coal-mining and coal-based energy production regions, where decades of industrial activity have placed substantial pressures on the surrounding natural environment. Academic research has documented environmental challenges associated with mining and thermal power generation in the district, including forestland degradation, impacts on agricultural soils, and air, water, and soil pollution. Against this regional background, the establishment of a 30,000-tree forest represents a meaningful contribution to afforestation in an area where environmental protection and the long-term sustainability of natural landscapes are particularly important.

The project was developed around the principle that technological progress and environmental sustainability should advance together. While the Metaverse Certificate Programme introduced participants to emerging digital technologies and their implications for society and business, the associated afforestation initiative encouraged reflection on the environmental responsibilities accompanying digital transformation.

By linking educational participation with sapling donations and matching those contributions through its own institutional support, Bahçeşehir University transformed a technology-focused learning programme into a collective environmental initiative. The project demonstrates how universities can mobilise their educational activities, institutional resources, and external partnerships to support environmental objectives beyond campus boundaries.

The initiative makes a particularly significant contribution to SDG 15 (Life on Land) through its direct support for afforestation in Soma, a district facing longstanding environmental pressures associated with coal extraction and energy production.

The establishment of a 30,000-tree forest represents a measurable contribution to tree planting in a region where the protection of forest cover, soil resources, and terrestrial ecosystems is especially relevant. Afforestation, when accompanied by appropriate ecological planning and long-term maintenance, can support vegetation development, soil protection, and the resilience of terrestrial landscapes.

The initiative is particularly aligned with SDG Target 15.2, which promotes sustainable forest management, the restoration of degraded forests, and increased afforestation and reforestation. It is also relevant to SDG Target 15.3, which addresses desertification, land degradation, and the restoration of degraded land and soil.

The project's significance lies not only in the number of trees planted but also in directing institutional and individual environmental contributions towards a region with documented land-use and ecological challenges. Through this initiative, BAU extended its commitment to terrestrial ecosystem protection beyond academic research and environmental awareness into a concrete afforestation activity.

Representing Bahçeşehir University, Prof. Dr. Çisil Sohodol visited Soma, Manisa, and personally participated in the tree-planting activities alongside representatives of the Aegean Forest Foundation (Ege Orman Vakfı). Her participation reflected the university's direct institutional engagement in the initiative, extending its commitment beyond financial contributions to active involvement in the afforestation process. The visit also reinforced the partnership between BAU and the Foundation, highlighting the importance of collaborative environmental action in a region facing longstanding ecological pressures associated with coal mining and energy production.

Bahçeşehir University's commitment to the forest extends beyond the initial tree-planting activities, with the university continuing to support the long-term care, maintenance, and preservation of the forest in cooperation. This ongoing commitment reflects BAU's approach to environmental sustainability as a long-term institutional responsibility rather than a one-time initiative. By supporting the continued development and protection of the planted trees, the university reinforces its contribution to SDG 15 (Life on Land), particularly Target 15.2, which promotes sustainable forest management and afforestation.





Before It Burns: BAU Young TEMA Student Club Meeting on Forest and Wild Land Conservation

Bahçeşehir University (BAU) Young TEMA Student Club organised its traditional Active Volunteer Meeting, centred on the TEMA Foundation's "Before It Burns" initiative. The event promoted forest and wild land conservation by raising awareness of wildfire risks and encouraging students to take an informed, responsible role in protecting natural environments. Through this student-led meeting, BAU supported environmental education focused on preventing forest degradation and safeguarding terrestrial habitats.

The session examined the causes and impacts of forest fires, alongside strategies to prevent large-scale environmental damage. Participants discussed community-based fire prevention methods and the importance of early intervention, connecting individual awareness with collective responsibility for forest protection. These discussions highlighted the importance of addressing fire risks before they damage trees, vegetation, and wildlife habitats, reinforcing prevention as an essential component of conserving forest ecosystems.

Students also received certificates of appreciation from the TEMA Foundation in recognition of their volunteer efforts and commitment to environmental protection. This recognition reinforced the value of student participation in conservation initiatives and encouraged continued engagement with forest protection. The meeting strengthened awareness of disaster preparedness, environmental responsibility, and collective action to protect natural ecosystems.

Through the activities of its Young TEMA Student Club, BAU supported SDG 15: Life on Land by providing a platform for learning and volunteer engagement centred on forest conservation and the prevention of habitat degradation. The meeting connected knowledge of wildfire risks with community-based approaches to protecting forests and wild land, encouraging students to recognise their role in safeguarding terrestrial ecosystems for future generations.

The images below show moments from the BAU Young TEMA Student Club's "Before It Burns" meeting, promoting wildfire awareness and forest conservation.



Protecting Forests, Safeguarding the Future: BAU Wildfire Volunteer Training Programme for Forest and Wild Land Conservation

Bahçeşehir University (BAU), in collaboration with the Istanbul Regional Directorate of Forestry (OGM), CIFAL Istanbul, and the United Nations Institute for Training and Research (UNITAR), organised the "Wildfire Volunteer Training Programme" to promote forest and wild land conservation through environmental education and community participation. Designed as a community-oriented initiative, the programme brought together forestry expertise and public engagement to strengthen awareness of wildfire threats and empower citizens to contribute responsibly to protecting forests, natural habitats, and terrestrial biodiversity.

Hosted at BAU, the programme strengthened public preparedness, early response capabilities, and collective responsibility in preventing and responding to forest fires. Expert-led sessions on wildfire prevention equipped participants with knowledge for supporting forest protection efforts, emphasising forest and wild land conservation and the importance of reducing fire risks before they cause damage to habitats, vegetation, and wildlife. The training also addressed climate resilience, and community-based environmental protection, connecting practical preparedness with the long-term conservation of forest ecosystems. Discussions highlighted how protecting forests and wild land safeguards biodiversity, soil stability, and ecological resilience, helping maintain the environmental conditions that support terrestrial life. Through these interconnected themes, BAU encouraged informed community participation in forest conservation and the protection of natural landscapes for future generations.

Opening remarks were delivered by Prof. Tunç Bozbura, Vice Rector of Bahçeşehir University, and Prof. Ebru Canan-Sokullu, followed by a technical session led by Mr. İkram Çelik, Head of the Wildfire Department of the Istanbul Regional Directorate of Forestry. Bringing specialist forestry knowledge into a university-hosted training setting enabled BAU to connect professional expertise with community learning on forest and wild land conservation. Participants who completed the programme received official certificates of participation jointly issued by BAU, CIFAL Istanbul, UNITAR, and OGM, recognising their commitment to environmental volunteerism and sustainable development.

The programme directly supported SDG 15: Life on Land through education and capacity-building focused on forest protection, biodiversity conservation, and the prevention of ecosystem degradation. Its emphasis on preventing fire-related damage was relevant to SDG Target 15.1, concerning the conservation and restoration of terrestrial ecosystems, including forests, and SDG Target 15.2, particularly its objectives concerning forest protection and the restoration of degraded forests. By strengthening knowledge of wildfire risks and responsible community participation, the training supported awareness and preparedness relevant to safeguarding forest habitats and reducing threats to life on land.

Through collaboration between academia, public institutions, and civil society, BAU provided a platform for translating conservation awareness into informed community engagement. The programme connected the immediate challenges of wildfire prevention and response with the enduring need to protect forests, wild land, and the biodiversity they sustain. By equipping individuals with knowledge, practical guidance, and ethical awareness, BAU reinforced forest and wild land conservation as a collective responsibility and demonstrated its commitment to protecting terrestrial ecosystems through accessible education and public participation.

The photographs below show moments from BAU's Wildfire Volunteer Training Programme, promoting forest and wild land conservation.





BAU Young TEMA Student Club: Acorn Collection and Awareness of Oak Ecosystem Conservation

During the 2024–2025 academic year, BAU Young TEMA, the Bahçeşehir University student club affiliated with TEMA Foundation—the Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats—organised an Acorn Collection Activity in Yıldız Park. Bringing students together through a practical activity in nature, the initiative promoted participation in practices that support ecosystem sustainability and the conservation of terrestrial habitats. Participants collected acorns for use in future biodiversity-focused workshops and educational projects, connecting the activity with further opportunities for environmental learning.

Alongside collecting acorns, students discussed the importance of protecting oak trees and the habitats they support, particularly their role in providing food and shelter for animals and sustaining biodiversity. These discussions highlighted the ecological significance of oak trees within Türkiye's ecosystems, encouraging participants to understand their value as part of interconnected habitats that support a variety of species. The activity therefore combined hands-on participation with awareness of how conserving trees and their surrounding environments helps maintain ecological balance and protect life on land.

Through direct engagement with nature, participants contributed to preparations for future environmental restoration and educational efforts while learning about sustainable resource use, habitat protection, and collective responsibility for conserving natural areas. By organising the activity through its student community, Bahçeşehir University (BAU) encouraged students to connect environmental knowledge with practical engagement in the conservation and sustainable use of land and forest resources.

The initiative supported SDG 15: Life on Land by raising awareness of oak habitat conservation, biodiversity protection, and the importance of maintaining healthy terrestrial ecosystems. By linking acorn collection with discussions of animal habitats and Türkiye's ecological diversity, BAU promoted an understanding of conservation that recognises the relationships between trees, wildlife, and the wider environment.





Seed Ball Workshop: Promoting Land Conservation through Environmental Education in Malatya

During the 2024-2025 academic year, the CIFAL Istanbul team from Bahçeşehir University (BAU) travelled to Malatya to organise activities encouraging the protection of the local natural environment following the devastating earthquakes. In collaboration with Bright Futures Foundation, the team held a Seed Ball Workshop at Malatya Şehit Aytaç Altunörs Secondary School, engaging primary school children in an activity designed to promote environmental responsibility, biodiversity awareness, and the conservation of land through direct interaction with natural materials.

With guidance and support from the team, students prepared seed balls using recycled newspaper, flower seeds, soil, and cinnamon powder. The children wrapped flower seeds in moistened newspaper before coating them with soil and cinnamon powder. Repurposing waste newspapers introduced participants to environmentally conscious production methods and demonstrated how everyday materials can be incorporated into creative activities that encourage care for nature. The workshop connected responsible resource use with an accessible introduction to seeds, soil, and plant life.

Through this hands-on experience, children were encouraged to recognise soil as a resource that supports plant growth and terrestrial life. Preparing seed balls provided a practical starting point for discussing the importance of protecting natural environments, preserving biodiversity, and living in harmony with nature. In the context of post-disaster recovery, the activity also sought to support hope and resilience by helping children reconnect with nature, while nurturing awareness of a sustainable future from an early age.

Through this workshop, BAU, through CIFAL Istanbul, promoted SDG 15: Life on Land by making land conservation and ecological awareness accessible to young learners. Combining environmental education with participation, the event encouraged children to develop a sense of responsibility for the soil, plants, and natural spaces around them. It reflected the understanding that early experiences of caring for nature can help build a lasting commitment to protecting terrestrial environments.





Sapling Planting Event: Encouraging Children's Participation in Land Conservation in Malatya

During the 2024–2025 academic year, as part of its visit to Malatya following the devastating earthquakes, the CIFAL Istanbul team from Bahçeşehir University (BAU) collaborated with Bright Futures Foundation to organise a Sapling Planting Event at Malatya Şehit Aytaç Altunörs Secondary School. The event formed part of a wider effort to promote the protection of the local natural environment and engage children in caring for the land during the post-disaster recovery process.

Following the Seed Ball Workshop, primary school children planted their own saplings in the school's backyard with support from the team. This practical activity gave participants an opportunity to engage directly with the soil and contribute to greening their school environment. By taking an active role in planting, children strengthened their connection with nature and were encouraged to see the protection of trees and the land that sustains them as a shared responsibility.

The event combined participation in planting with awareness of ecosystem protection, biodiversity, and environmental sustainability. It encouraged children to appreciate the relationship between soil, trees, and other living organisms, while developing a sense of care for the natural spaces in their everyday surroundings. Reconnecting with nature also served as a means of supporting hope, resilience, and collective engagement following the disaster, linking environmental responsibility with a positive, shared experience of caring for their school grounds.

Through this initiative, BAU, through CIFAL Istanbul, supported SDG 15: Life on Land by organising an activity that promoted land conservation through environmental education and direct participation in sapling planting. The event encouraged children to live in harmony with nature and recognise their own role in protecting terrestrial environments. By bringing young learners closer to the soil and involving them in greening a familiar space, the initiative sought to nurture an enduring commitment to a healthier and greener future.

Some selected photographic highlights from the event are presented below.





Clean Steps for a Greener Future: BAU Young TEMA Student Club Environmental Cleanup in Burgazada

Members of the Bahçeşehir University (BAU) Young TEMA Student Club organised an Environmental Cleanup in Burgazada, engaging student volunteers in the protection of the island's natural areas. The activity combined practical waste collection with environmental awareness, encouraging participants to take an active role in land conservation and the protection of terrestrial habitats. Through this student-led initiative, BAU supported community engagement with the care of natural landscapes.

Volunteers collected waste from the island's natural surroundings, helping remove litter and reduce pollution pressures on the areas covered by the cleanup. The activity highlighted the importance of keeping natural habitats free from discarded materials and preventing waste from accumulating in environments that support plant and animal life. By directly participating in the cleanup, students connected environmental responsibility with practical action to protect land and preserve the condition of existing ecosystems.

At the end of the activity, participants sorted the collected waste by type to support recycling and circular economy practices. This step extended the focus from removing litter to considering the responsible management of the materials collected. The event encouraged students to adopt sustainable habits, reduce their environmental impact, and recognise how everyday choices and collective action can contribute to the protection of natural areas.

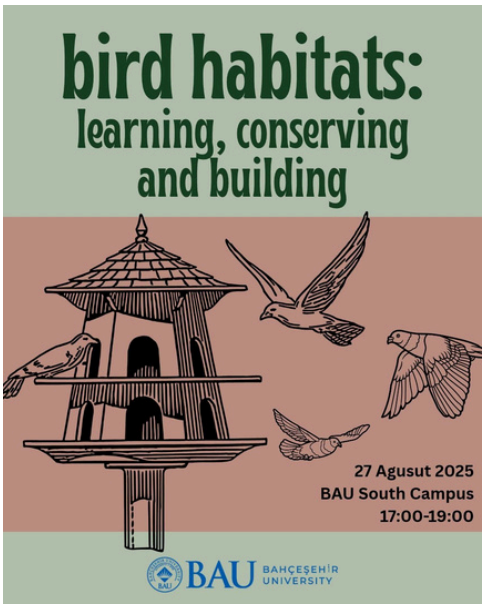
Through this initiative, BAU promoted SDG 15: Life on Land by supporting an organised activity focused on preventing land pollution, conserving natural habitats, and strengthening awareness of terrestrial ecosystem protection. The Burgazada cleanup provided students with an opportunity to contribute directly to caring for the island's environment while reinforcing a shared responsibility for safeguarding natural landscapes and the biodiversity they support.

The images below show the event poster and a photograph from the BAU Young TEMA Student Club's environmental cleanup in Burgazada.





Bird Habitats: Learning, Conserving and Building – Direct Community Action to Create and Install Bird Nesting Habitats within BAU's Campus Ecosystem



In 2025, Bahçeşehir University (BAU), through BAU Bi'soluk Student Club and BAU CIFAL Youth, implemented "Bird Habitats: Learning, Conserving and Building," a community-engaged biodiversity conservation initiative focused on the construction and installation of bird nesting houses to support wild birds within the University's existing campus ecosystem. Bringing together university students and members of local communities interested in wildlife protection and environmental conservation, the initiative transformed ecological awareness into direct, practical action to improve habitat conditions for urban wildlife.

Urbanization, habitat fragmentation, declining green spaces, and increasing human activity can reduce the availability of suitable nesting and shelter sites for wild birds. Recognizing these pressures, BAU undertook a practical intervention to support existing urban habitats by creating additional potential nesting spaces for birds through the construction and installation of purpose-built birdhouses.

A central component of the initiative was the active involvement of local community members alongside BAU students in the birdhouse construction process. Open to individuals from outside the University who shared an interest in biodiversity, wildlife conservation, and environmental sustainability, the programme provided an opportunity for the wider community to participate directly in habitat-support activities. The initiative engaged participants in producing physical structures intended to support wild bird habitats.

The programme began with an educational component addressing wild bird species, their ecological roles, natural habitats, and nesting requirements. Participants explored the relationships between birds, vegetation, and urban ecosystems, as well as the environmental

pressures affecting the availability of suitable nesting sites. This ecological understanding informed the subsequent practical activities, connecting knowledge of wildlife habitat needs with the construction of birdhouses.

During the hands-on workshops, students and local community participants worked together to build birdhouses designed to provide additional shelter and potential nesting opportunities for wild birds. The construction activities constituted a tangible conservation-oriented intervention, enabling participants to contribute directly to improving the availability of habitat-support structures within an existing urban environment.

Importantly, the birdhouses produced during the initiative were subsequently installed at locations across the local area, extending the impact of the workshops beyond the educational setting. Their placement transformed the structures created by participants into practical habitat-support measures intended to provide additional nesting and shelter opportunities for wild birds within the University's existing terrestrial ecosystem.

By integrating community participation, birdhouse construction, and local neighborhood installation, BAU established a direct connection between public engagement and practical biodiversity conservation. The initiative demonstrated how a university campus can serve as a setting for locally implemented habitat-support activities, while enabling interested community members to participate actively in protecting wildlife.

The initiative contributes to SDG 15: Life on Land by implementing physical measures intended to maintain and improve habitat conditions for wild birds within an existing urban ecosystem. Its principal contribution lies in the creation and installation of bird nesting houses, which provide additional potential shelter and nesting sites and support efforts to maintain a more wildlife-friendly campus environment.

Through “Bird Habitats: Learning, Conserving and Building,” Bahçeşehir University demonstrated direct institutional engagement in maintaining existing ecosystems and supporting biodiversity by creating and installing bird nesting structures that provide additional potential shelter and nesting opportunities for wild birds.

The photographs presented below document the birdhouses constructed and installed on the BAU campus in the hands-on workshops, highlighting their collective contribution to supporting wild bird habitats and protecting urban biodiversity.









Supporting Animal Life in Urban Environments: Construction of Protective Shelters for Stray Cats

Bahçeşehir University (BAU), through BAU Bi'soluk Student Club and BAU CIFAL Youth, undertook a practical animal protection initiative focused on constructing protective shelters for stray cats living in urban environments. The activity reflected the University's commitment to responsible coexistence between humans and animals and to improving the conditions of animal life within shared urban spaces.

Urban environments present considerable challenges for free-roaming animals, including exposure to adverse weather conditions, limited access to safe resting areas, and risks associated with human activity. Recognizing these challenges, BAU students engaged in hands-on activities to create purpose-built shelters intended to provide stray cats with safer, more protected spaces for resting and seeking refuge.

The construction of cat shelters formed the central component of the initiative. By producing physical structures designed to address the shelter needs of animals living outdoors, participants translated their concern for animal welfare into tangible action. The activity demonstrated how university-led initiatives can respond to the needs of animals sharing urban environments with local communities.

The initiative also encouraged students to develop a greater awareness of animal welfare, environmental responsibility, and the importance of compassionate and responsible human–animal coexistence. Through direct participation in shelter construction, students contributed to a practical intervention intended to improve the everyday living conditions of stray cats.

By combining student engagement with the creation of protective animal shelters, Bahçeşehir University demonstrated its commitment to supporting animal life within existing urban environments. The initiative complements the University's broader activities under SDG 15: Life on Land, particularly its efforts to promote responsible relationships between human communities and the animals living alongside them.

The initiative represents an example of direct institutional action to support animals within urban environments, complementing BAU's biodiversity and habitat conservation.





Supporting Highland Biodiversity and Bee Habitats through Drone-Assisted Organic Soil Management

Bahçeşehir University (BAU) applies an environmentally responsible approach to soil management in the highland areas of Türkiye's Black Sea region, combining drone technology with the application of organic fertilizers and natural soil-improving materials. The initiative focuses on supporting soil health, improving land conditions, and promoting the long-term ecological resilience of highland landscapes.

The highlands of the Black Sea region are characterized by distinctive mountain ecosystems, natural grasslands, and vegetation adapted to local climatic and geographical conditions.

These landscapes depend on healthy soils, balanced nutrient cycles, and the continued functioning of ecological relationships between soil organisms and vegetation. Soil degradation, erosion, and inappropriate land-management practices can place pressure on these ecosystems, affecting their ability to sustain natural vegetation and biodiversity.

BAU's approach combines environmentally responsible soil inputs with drone-assisted application methods, offering an alternative to conventional land-management practices in mountainous and difficult-to-access areas. Drones enable materials to be distributed without requiring heavy agricultural machinery to travel across sensitive terrain, potentially reducing physical disturbance and soil compaction.

The use of organic fertilizers and natural soil-improving materials is intended to support soil fertility, nutrient availability, and the conditions necessary for vegetation development. When appropriately selected and applied according to local ecological requirements, these materials can contribute to improving degraded soil conditions and supporting the recovery of vegetation.

The ecological significance of this initiative is further strengthened by the presence of beekeeping activities in the surrounding highland areas, where natural vegetation and flowering plant diversity play an essential role in supporting pollinators. Bees contribute to the reproduction of many flowering plant species through pollination, helping sustain plant communities and the wider ecological relationships on which terrestrial biodiversity depends. The protection of healthy soils and diverse vegetation is therefore closely connected to maintaining the environmental conditions that support both local beekeeping and natural pollinator populations.

By promoting soil health and vegetation development through environmentally responsible land-management practices, BAU aims to support the ecological foundations of these interconnected highland ecosystems. The initiative recognizes that soil quality, plant diversity, pollinator activity, and biodiversity are closely linked.

By combining drone technology with soil-conscious management practices, BAU demonstrates how emerging technologies can be applied to environmental challenges in sensitive terrestrial landscapes.

Direct Contribution to Maintaining Terrestrial Ecosystems and Biodiversity

The initiative is relevant to Bahçeşehir University's efforts to maintain existing terrestrial ecosystems by addressing soil conditions that underpin vegetation growth and ecological functioning.

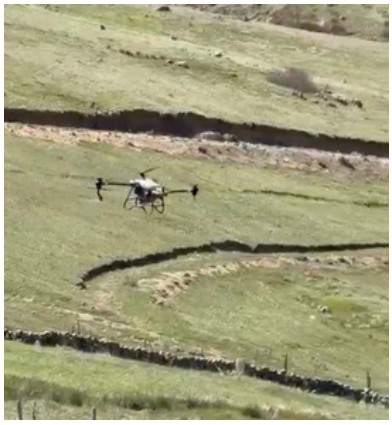
Healthy soils are fundamental to terrestrial biodiversity. They support plant growth, nutrient cycling, and the biological processes necessary for functioning ecosystems. Maintaining these

conditions is particularly important in highland landscapes, where environmental disturbance and land degradation can affect natural vegetation and ecological resilience.

Through its drone-assisted application of organic fertilizers and natural soil-improving materials, BAU supports an approach to land management intended to improve soil conditions while minimizing unnecessary physical disturbance to highland terrain.

The initiative illustrates how universities can combine technological innovation with practical environmental stewardship, extending their sustainability activities beyond education and research into the management and improvement of terrestrial landscapes.

By focusing on soil health, responsible land management, and the protection of ecological conditions necessary for natural vegetation, the project contributes to the objectives of maintaining existing terrestrial ecosystems and supporting their long-term resilience.




Protecting Existing Ecosystems through Sustainable Agricultural Practices at BAU Farm

At Bahçeşehir University's Farm (BAU Farm) in Piraziz, Bahçeşehir University (BAU) adopts an environmentally responsible approach to agricultural management that prioritizes the protection of naturally occurring vegetation, soil ecosystems, and biodiversity. The Farm integrates ecological considerations into its everyday operations.

A distinctive example is the management of stinging nettles (Urtica dioica) that grow naturally beneath the hazelnut trees. Although nettles are part of Türkiye's native flora, they are often regarded as unwanted weeds in agricultural settings. In conventional hazelnut cultivation, herbicides may be applied to eliminate such vegetation, potentially affecting soil organisms, non-target plants, and the ecological balance of agricultural landscapes.

BAU Farm deliberately follows a different approach. Instead of using chemical herbicides to eliminate the naturally growing nettles, the Farm collects and harvests them for use. This practice replaces chemical eradication with a more environmentally responsible form of vegetation management, allowing naturally occurring plants to be recognized as valuable resources.

The significance of this approach extends beyond the management of a single plant species. Agricultural landscapes are living ecosystems in which cultivated trees, native vegetation, soil organisms, and other biological components interact. Removing naturally occurring vegetation through chemical treatments can place unnecessary pressures on these relationships and potentially diminish the ecological diversity of cultivated areas.

By avoiding herbicide-based nettle removal, BAU Farm reduces potential chemical pressures on soil ecosystems and surrounding vegetation while supporting the continued presence of native plant species within its hazelnut orchards. Harvesting the nettles instead of chemically eliminating them demonstrates how agricultural production can coexist with the responsible management of natural vegetation.

Importantly, this practice represents a conscious departure from conventional agricultural approaches that prioritize the systematic removal of unwanted vegetation. BAU Farm demonstrates that effective land management does not necessarily require eliminating naturally occurring plants, but can instead involve recognizing their ecological value and incorporating them into sustainable agricultural practices.

Through this practice, Bahçeşehir University takes direct action to protect the ecological characteristics of an existing agricultural ecosystem. By avoiding chemical eradication and adopting a harvesting-based approach to naturally occurring vegetation, the University contributes to reducing potential environmental pressures and maintaining the natural components of its agricultural landscape.

The initiative reflects an important principle of ecosystem conservation: protecting biodiversity is not only about restoring damaged environments or creating new habitats, but also about preventing the unnecessary destruction of the natural vegetation and ecological relationships that already exist.

BAU Farm therefore provides a practical example of how universities can integrate ecosystem protection into agricultural land management, demonstrating that environmental responsibility can be reflected in everyday farming decisions.





Protecting Forest Ecosystems and Biodiversity through Direct Participation in Wildfire Response Operations

Forest fires represent a significant threat to terrestrial ecosystems and biodiversity in Türkiye, particularly in the Mediterranean and Aegean regions, where extensive forest landscapes are increasingly exposed to wildfire risks. Beyond the immediate destruction of trees and vegetation, severe wildfires can result in the loss and fragmentation of wildlife habitats, threaten native plant and animal species, damage forest soils, and disrupt essential ecological processes. The destruction of vegetation cover can also increase soil erosion, reduce ecosystem resilience, and compromise the capacity of affected landscapes to sustain biodiversity over time.

Protecting existing forest ecosystems from wildfire damage is therefore an essential component of maintaining terrestrial biodiversity and preventing further land degradation. Effective wildfire response contributes not only to limiting the immediate destruction of forest areas but also to safeguarding the ecological conditions necessary for the survival of wildlife, the preservation of vegetation, and the long-term functioning of forest ecosystems.

In 2025, As part of Bahçeşehir University's (BAU) ongoing commitment to forest ecosystem protection, representatives of BAU and CIFAL Istanbul participated in forest firefighting volunteer training organized in cooperation with Türkiye's General Directorate of Forestry (OGM). This training strengthened their preparedness to contribute to wildfire response activities and reflected the University's commitment to translating environmental awareness into practical conservation efforts.

In 2025, Building on this commitment, Bahçeşehir University team representatives voluntarily participated in wildfire response operations in Çanakkale and Muğla Yatağan, working alongside local emergency response and forestry teams. Through direct involvement in firefighting efforts, the representative contributed to operations aimed at containing wildfires, limiting damage to existing forest areas, and protecting terrestrial ecosystems facing immediate environmental threats.

These activities are particularly relevant to the protection of biodiversity in Türkiye, where forest ecosystems provide essential habitats for numerous plant and animal species. By contributing to efforts to prevent the further spread of wildfires, BAU supported practical interventions intended to reduce habitat destruction, protect existing vegetation, and preserve the ecological integrity of threatened forest landscapes.

The significance of this initiative lies in Bahçeşehir University's direct participation in protecting existing ecosystems. BAU, connected volunteer preparedness with active field engagement, demonstrating how institutional commitment can translate into practical action to protect forests and their biodiversity.

This initiative provides evidence of BAU's direct engagement in maintaining and protecting existing terrestrial ecosystems and their biodiversity, particularly in forest areas threatened by wildfires. By supporting wildfire response operations and cooperating with forestry and emergency response teams, the University contributed to collective efforts aimed at preventing further ecosystem degradation and safeguarding natural habitats.





Growing Roots for the Future: BAU Young TEMA Club Tree Planting Initiative

The images below show the official promotional poster of the event as well as a selected highlight.





Bahçeşehir University (BAU), through its Young TEMA Student Club, collaborated with Pendik Municipality to organize a tree planting initiative aimed at supporting the restoration and long-term sustainability of terrestrial ecosystems.

As part of the initiative, BAU students actively participated in planting tree saplings in Pendik, Istanbul, contributing directly to the expansion of local tree cover and the regeneration of green spaces. Through hands-on involvement, students gained practical experience in tree planting, soil care, and the importance of maintaining healthy vegetation within existing terrestrial environments.

Tree planting plays an important role in strengthening terrestrial ecosystems by supporting vegetation growth, improving environmental conditions, and creating opportunities for the development of habitats for birds, insects, and other wildlife. Such activities are particularly relevant in urban and peri-urban areas, where development pressures can affect green spaces and the ecological conditions necessary to sustain biodiversity.

The initiative directly supports SDG 15: Life on Land, reflecting BAU's commitment to maintaining and extending terrestrial ecosystems through practical environmental action. By planting saplings and contributing to local environmental regeneration, students participated in an activity that can support the long-term development of plant cover and associated wildlife habitats.

Beyond its immediate environmental contribution, the initiative demonstrates how Bahçeşehir University engages its student community in tangible ecosystem protection activities, encouraging environmental responsibility and active participation in preserving natural environments.

Through this collaboration with Pendik Municipality, BAU reinforces its commitment to supporting existing terrestrial ecosystems, expanding green spaces, and promoting the protection of plant and animal biodiversity through direct community engagement.

BAU Farm: Community Education on Native Flora, Biodiversity and Hazelnut Orchard Ecosystems

Bahçeşehir University (BAU), through its BAU Farm in Piraziz, provided ecosystem-focused educational activities for local farmers and members of agricultural cooperatives, promoting knowledge of native flora, biodiversity, and the ecological relationships within hazelnut-growing landscapes. These educational initiatives extended the University's environmental expertise directly to local agricultural communities, supporting greater understanding of the natural ecosystems on which rural livelihoods depend.

Located in Türkiye's Black Sea region, BAU Farm provides a practical setting for exploring the relationships between agricultural production and the surrounding natural environment. Hazelnut orchards are not simply areas of cultivation; they form part of broader terrestrial ecosystems in which cultivated trees, naturally occurring vegetation, soil organisms, and other living species interact. Understanding these relationships is essential to recognizing the ecological value of agricultural landscapes and the importance of protecting their biodiversity.

The educational activities were specifically directed towards local farmers and agricultural cooperatives, ensuring that ecosystem knowledge reached community members actively involved in agricultural production and rural land management. By engaging these groups, BAU connected environmental education with the experiences and practices of local communities, creating opportunities to explore how biodiversity conservation can be integrated into everyday agricultural decisions.

A central focus of the training was the natural flora of hazelnut-growing environments and the ecological importance of preserving naturally occurring vegetation. Participants explored the role of wild plants within agricultural ecosystems and the relationships between vegetation, soil conditions, and the wider ecological environment. The educational approach emphasized that plants growing naturally alongside cultivated crops are part of the surrounding ecosystem and should be understood in terms of their ecological functions.

BAU Farm's approach to naturally growing stinging nettles (Urtica dioica) beneath hazelnut trees provided a relevant practical example of this relationship. Instead of eliminating these plants through chemical herbicides, the Farm adopts a harvesting-based approach that recognizes naturally occurring vegetation as a resource. This practice illustrates how agricultural management can take account of native flora, soil ecosystems, and the ecological relationships that support biodiversity.

Through the educational activities, local farmers and agricultural cooperatives were encouraged to consider the importance of maintaining natural vegetation, understanding the interactions between cultivated and wild plant species, and reducing unnecessary pressures on existing ecosystems. By connecting ecosystem knowledge with familiar agricultural landscapes, the programme made biodiversity education directly relevant to the communities responsible for managing these environments.

The participation of agricultural cooperatives was particularly significant in extending ecosystem education through community-based agricultural networks. Their involvement broadened access to knowledge about native flora, biodiversity, and environmentally responsible land management, while recognizing the important role of local agricultural communities and the transmission of practical environmental knowledge.

By combining education on wild flora, the ecological characteristics of hazelnut orchards, and direct engagement with local farmers and agricultural cooperatives, Bahçeşehir University contributed to strengthening community understanding of terrestrial ecosystems and the importance of conserving their natural biological diversity.

These activities support SDG 15: Life on Land by providing local farmers and agricultural cooperatives with ecosystem education focused on native flora, ecological relationships and biodiversity conservation.



Exploring Wild Flora, Fauna and Terrestrial Ecosystems: Community-Based Environmental Education at BAU Farm

Bahçeşehir University (BAU), through its BAU Natural Living Farm, delivered an interactive environmental education programme for visiting school students from the local community, focusing on terrestrial ecosystems, biodiversity, plant and animal life, and the ecological relationships that sustain natural environments. Combining guided field visits, scientific observations, and hands-on workshops, the programme provided young participants with opportunities to explore ecosystems directly and develop a practical understanding of environmental conservation.

By welcoming local school students from outside the University, Bahçeşehir University Farm extended ecosystem education to the wider local community, making its natural surroundings, agricultural facilities, and scientific learning opportunities accessible to younger generations. The programme emphasized experiential learning, allowing participants to observe living organisms, investigate environmental samples, and explore the relationships between natural ecosystems and human activities.

A central component of the programme involved exploring flora and vegetation within BAU Farm's hazelnut-growing landscape. Students were introduced to the Farm's agricultural environment and the broader ecological relationships between plants, soil, and other living organisms. These experiences encouraged participants to recognize that agricultural landscapes are also terrestrial ecosystems whose functioning depends on the interactions of multiple biological and environmental components.

The study of fauna was another important element of the educational activities. Students participated in scientific observation exercises involving mosquitoes, introducing them to the examination of insects and the diversity of animal life found in terrestrial environments. The programme also provided opportunities to encounter and learn about farm animals, helping participants explore the relationships between animals, their environments, and responsible human interaction with living organisms.

Scientific investigations further strengthened the programme's ecosystem education component. Through microscope-based examination of soil samples, students observed microplastics and explored environmental pollution within terrestrial environments. These activities introduced participants to the ways human-generated materials can enter soil systems and encouraged discussion of the environmental conditions necessary to support healthy ecosystems and biodiversity.

The programme also included on-site exploration of soilless agricultural practices and STEM workshops focused on designing innovative tools for hazelnut orchards. These activities complemented the ecological learning experience by demonstrating how scientific knowledge, technological innovation, and environmental responsibility intersect within agricultural landscapes.

Through guided visits, direct encounters with animal life, observations of insects, investigations of soil samples, and exploration of plant-growing environments, students gained a broader understanding of ecosystem functioning, biodiversity, and the interconnected relationships between flora, fauna, soil, and human activities. The programme connected environmental knowledge with practical experiences, helping young learners recognize the importance of maintaining the ecological conditions that support terrestrial life.

The initiative also highlighted BAU Farm's role as a community-accessible environmental learning environment, where university resources and expertise are shared with visiting school groups. By providing educational activities beyond the University's own student population, BAU contributed to strengthening ecological awareness and environmental understanding among local communities.

Through this programme, Bahçeşehir University provided local school students with practical education on terrestrial ecosystems, flora and fauna, biodiversity, and environmental conservation. By combining guided exploration, scientific observation, and hands-on learning, BAU strengthened young participants' understanding of the ecological relationships connecting plants, animals, soil, and human activities, while extending accessible environmental education to the wider community.








The Key to a Green and Circular Future: Cooperatives

"The Key to a Green and Circular Future: Cooperatives" was held at Bahçeşehir University in collaboration with the BAU Science Communication Office. Organised within the framework of the 2025 International Year of Cooperatives, the event featured artist and academic Fırat Neziroğlu, President of Ekodoku Cooperative Esra Üzel, as well as other key figures from local cooperatives as distinguished guests. The programme explored how cooperatives can support environmentally responsible textile production, connecting natural fibres with sustainable management of land for agriculture.

Drawing on cotton, wool and mohair obtained from Angora goats, the speakers discussed the importance of natural fibres and the agricultural resources that support their production. In considering alternatives to polyester and other synthetic fibres, the discussion highlighted the potential of responsibly produced natural materials to support ecological approaches to textiles. Their sustainability was connected to how crops are cultivated, animals are raised and the land supporting these activities is managed.

A central theme was the role of cooperatives in sustaining responsible livestock production and maintaining soil fertility. Discussions explored how cooperative approaches can encourage producers to share knowledge, use agricultural resources efficiently and consider the long-term condition of their land. Cotton cultivation and fibre-producing livestock provided concrete examples of why textile production depends on healthy soils and responsibly managed agricultural landscapes.

The programme emphasised that using land efficiently must also involve protecting its future productive capacity. Maintaining soil fertility, preventing land degradation and balancing production with the availability of natural resources are essential considerations for sustaining natural fibre production. This perspective encouraged participants to understand the relationship between the materials used in textiles and the agricultural practices underlying their supply.

The event was particularly relevant to SDG 15: Life on Land because it connected natural fibre production with the protection of soil resources and the long-term health of agricultural landscapes. Its educational focus on cooperatives provided an opportunity to share knowledge relevant to local and national communities on sustainable management of land for agriculture, highlighting how responsible cotton cultivation and livestock practices can support soil fertility, prevent land degradation and sustain the land resources on which rural livelihoods depend.

By connecting cooperative practices with natural fibres, livestock and soil health, the event provided an educational platform for understanding sustainable agricultural land management within the wider textile value chain. It highlighted how cooperation among producers can support the care of agricultural land while helping sustain local production, ecological knowledge and rural livelihoods.





BAU Agricultural Garden: Practical Education and Community Outreach on Sustainable Management of Land for Agriculture

Bahçeşehir University's (BAU) Agricultural Garden provides a practical learning environment that connects gastronomy education with sustainable management of land for agriculture. Throughout their four-year undergraduate education, gastronomy students engage with growing practices through coursework and practical activities in the garden.

Learning activities address soil sustainability, soil fertility, seasonal cultivation and the efficient use of growing spaces. The garden incorporates greenhouses, small soil plots and soilless cultivation, introducing different approaches to producing food within limited urban space. Food waste is also used to produce fertilizer, connecting the recovery of organic materials with the nourishment of growing plants. Together, these practices help students explore how agricultural resources can be used responsibly while maintaining the productive capacity of the soil. Caring for plants and participating in harvesting also builds awareness of the time and resources required to produce food, encouraging greater care in its preparation and use.

Beyond student learning, the garden supports educational outreach for local communities on sustainable management of land for agriculture. School groups, sector representatives, producers and agricultural practitioners visit in connection with educational activities and events, providing opportunities to learn about the garden's cultivation practices. These visits connect university-based knowledge with audiences outside BAU's enrolled student population and offer a setting for discussing seasonal production, soil care and the responsible use of agricultural resources.

By combining practical gastronomy education with knowledge sharing for external visitors, BAU uses its Agricultural Garden to make sustainable agricultural land management accessible through direct observation and experience. The initiative connects soil health, resource

recovery and food production with everyday decisions made by future culinary professionals and wider community participants. Its contribution lies in demonstrating why caring for agricultural land is essential to sustaining food production and encouraging responsible relationships with the natural resources on which food systems depend.

The two photographs below show BAU's Agricultural Garden.





Community Education on Sustainable Agricultural Land Management in Giresun with United Nations Food and Agriculture Organization (FAO) Türkiye

Bahçeşehir University (BAU), in collaboration with the United Nations Institute for Training and Research (UNITAR) and Food and Agriculture Organization of the United Nations Türkiye (FAO), organised an educational programme for local communities on the sustainable management of land for agriculture in Giresun, Türkiye. The programme targeted local farmers, agricultural producers, and cooperatives, providing knowledge to support environmentally conscious agricultural practices and the responsible management of the land on which their livelihoods depend.

The training focused on the relationship between soil health, agricultural productivity, and the protection of local ecosystems. Participants explored sustainable agricultural practices that help maintain soil fertility, prevent land degradation, and support the long-term productive capacity of agricultural land. The programme emphasised that sustaining agricultural production requires care for the soil and the ecological processes that underpin healthy and resilient farming systems.

A central theme was how to carry out agricultural activities while protecting local flora and fauna. The training addressed the importance of reducing environmental disturbance and recognising the contribution of biodiversity to agricultural production. It encouraged participants to consider cultivated land alongside surrounding vegetation and habitats, strengthening understanding of how agricultural land management decisions affect the wider ecosystem.

Soil sustainability and the sustainable use of agricultural land were also explored as a dedicated theme. Participants examined what it means to maintain healthy, productive soil over time and how everyday farming decisions can help protect its long-term fertility. This theme highlighted the importance of preserving soil structure and organic matter, preventing erosion, maintaining soil moisture, and supporting the organisms that contribute to nutrient cycling. By connecting soil conservation with sustainable agricultural land management, the training encouraged farmers and cooperatives to view soil as a living resource whose continued health is essential to agricultural production and local livelihoods.

Designed for producers working across different agricultural activities, the programme connected sustainable land management principles with the everyday responsibilities of farmers and cooperatives. It promoted an approach to agricultural productivity that considers both current production needs and the preservation of soil quality, biodiversity, and natural resources for future use. Cooperatives were also an important audience for this community outreach, given their potential to share knowledge and encourage sustainable practices across local producer networks.

Through this collaboration, BAU extended sustainability education beyond the university to local agricultural communities, supporting their understanding of environmentally responsible land use. The programme directly addressed sustainable management of land for agriculture by linking community education with soil conservation, biodiversity protection, and the long-term sustainability of agricultural livelihoods.

The two images below show photographs from the training programme in Giresun.





Agroecology as a Solution: Knowledge Sharing on Sustainable Management of Land for Agriculture

In 2025 academic year, held at Bahçeşehir University (BAU) through collaboration between Buğday Association for Supporting Ecological Living, BAU, CIFAL Istanbul and UNITAR, the "Agroecology as a Solution" meeting brought together the local community, subject experts

and business representatives to examine how agroecological approaches can support a more sustainable food system. The event provided an educational platform for sharing knowledge relevant to local and national communities on sustainable management of land for agriculture, addressing the ecological, economic and social conditions that shape agricultural practices. Discussions connected the environmental pressures associated with intensive production and climate change with the need to protect soil resources, restore degraded agricultural land and maintain the natural systems on which food production depends.

Soil restoration, soil organic matter and long-term agricultural productivity were central themes. Discussions explored how declining organic matter weakens soil fertility and why rebuilding it through agroecological production methods is essential to maintaining the land's productive capacity. Agroecology was presented as an approach that works with ecological processes, reduces reliance on external inputs and supports diversity within agricultural production. These principles were connected to the protection of biodiversity, the reduction of damage to natural habitats and the need to address the environmental consequences of agricultural chemical use. By explaining the relationship between healthy soils, ecological functions and continued food production, the meeting strengthened understanding of sustainable management of land for agriculture as an ongoing responsibility requiring both productive use and environmental care.

Through this educational exchange, BAU and its partners contributed to community-oriented outreach on sustainable management of land for agriculture, connecting soil conservation, biodiversity protection, responsible production and support for farming communities within a shared approach to long-term agricultural sustainability.

The images below show the promotional poster and a photograph from the "Agroecology as a Solution" meeting.



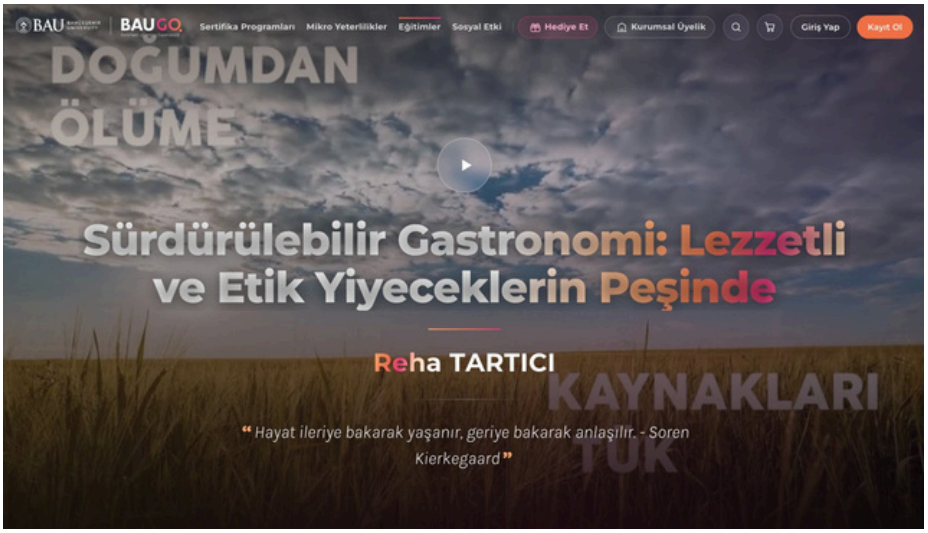


BAUGO Sustainable Gastronomy Training: Community Education on Sustainable Management of Land for Agriculture

Bahçeşehir University (BAU) extends sustainability education beyond campus through BAUGO's online course "Sustainable Gastronomy: In Pursuit of Delicious and Ethical Food," delivered by Reha Tartıcı. Available to members of the public through enrolment on the BAUGO platform, the course provides an opportunity for local and national communities to learn about the environmental, social and economic dimensions of food systems. Its online format supports access to educational content beyond BAU's enrolled student population.

The course includes the modules "From Farm to Table: Sustainable Gastronomy" and "Understanding the Principles of Sustainable Gastronomy." These address sustainable management of land for agriculture, connecting responsible food production with the protection of the natural resources on which agriculture depends. This educational focus helps learners understand the importance of maintaining soil health and fertility, safeguarding agricultural ecosystems and considering the long-term productive capacity of land when evaluating the sustainability of food.

By linking agricultural production with gastronomy and everyday food choices, the training places responsible land use within a wider understanding of sustainable food systems. Its coverage of local and regional food systems, food waste reduction and sustainable practices complements this perspective. Through publicly available online learning, BAU supports educational outreach for local and national communities on sustainable management of land for agriculture, encouraging awareness of the relationship between healthy agricultural land and sustainable food production.



Future AI Summit: Public Outreach on AI Applications in Sustainable Management of Land for Agriculture

Hosted by Bahçeşehir University (BAU) at BAU Future Campus, Future AI Summit brought together international organisations, researchers, entrepreneurs and industry experts to explore the applications of artificial intelligence across different sectors. Organised in collaboration with the Food and Agriculture Organization of the United Nations (FAO) Türkiye, the session "Artificial Intelligence in Smart Agriculture: Productivity and Sustainability" provided a publicly accessible educational panel, extending knowledge sharing beyond the university to local and national communities. Open to all interested participants, the session offered an opportunity to understand how AI practices can support sustainable management of land for agriculture.

The Food and Agriculture Organization of the United Nations (FAO) Türkiye, represented by Dr. Ayşegül Selışık, Deputy Representative, contributed expertise on sustainable agriculture and food systems. FAO's participation helped connect AI applications with agricultural priorities, strengthening the panel's educational focus on resource efficiency, soil health and sustainable management of land for agriculture.

A central educational theme was the use of AI-powered precision agriculture, data-driven decision-making and early warning systems to improve agricultural productivity while reducing unnecessary resource consumption. Discussions examined how these approaches can help farmers respond to environmental conditions, use agricultural inputs more precisely and make informed decisions about soil and water management. The connection to sustainable management of land for agriculture lay in using information about growing conditions to maintain productive land while limiting avoidable pressures on soil and surrounding ecosystems.

The session also connected smart agriculture with soil health, climate adaptation and the long-term resilience of agricultural landscapes. The discussion highlighted the importance of understanding the environmental conditions that sustain production. AI applications were presented as tools that can inform responsible cultivation and resource allocation, helping producers consider both current yields and the continued productive capacity of their land.

Through this open community learning opportunity, BAU and FAO Türkiye supported educational outreach on the relationship between technological innovation and responsible agricultural land use. By making expert knowledge accessible to audiences beyond enrolled students, the panel strengthened public understanding of how AI practices can contribute to sustainable management of land for agriculture, linking resource efficiency and agricultural resilience with the protection of terrestrial ecosystems.



Educational Outreach for Local Tourism Stakeholders: Sustainable Rural Tourism and Nature Conservation in the Eastern Black Sea Highlands

On 12 May 2025, Bahçeşehir University (BAU) brought together local tourism stakeholders at BAU Zifin Hotel in Kulakkaya, Giresun, for the educational event "Sustainable Rural Tourism and Nature Conservation," with the subtitle "Responsible Tourism Planning in the Eastern Black Sea Highlands." Delivered by Prof. Dr. Çisil Sohodol, the event extended university expertise beyond the campus through educational outreach to local tourism professionals. Local tourism operators, hoteliers, architects, and engineers were invited to explore how responsible tourism planning can support the sustainable management of land for tourism, while protecting the highlands' natural landscapes and local biodiversity.

The training addressed principles, practical approaches, and methods for conducting tourism activities while conserving natural areas and the species and habitats they support. Case studies from Türkiye and other countries provided examples for discussing the relationship between tourism development, landscape conservation, and responsible land use. These discussions encouraged participants to consider how tourism facilities and activities can respect their surrounding environment, connecting sustainable tourism land management with the protection of the natural characteristics that make rural destinations valuable to residents and visitors.

Through this locally focused educational outreach, BAU supported learning and knowledge exchange on managing land sustainably for tourism while safeguarding natural areas and local biodiversity. Bringing tourism professionals and built-environment practitioners into a shared discussion reinforced the importance of considering conservation in tourism-related planning and business practices. The event supported the educational aims of SDG 15: Life on Land by strengthening awareness of ecosystem protection and encouraging a shared sense of responsibility for the landscapes and natural resources that sustain rural life and tourism in the Eastern Black Sea highlands.

The images below show the training announcement poster and a photograph from the educational session.





Community Education and Youth Outreach for Sustainable Tourism: BAU's Contribution to the SENTRUM Project

Bahçeşehir University (BAU) contributed to community-oriented sustainability education in Birgi, İzmir, through the SENTRUM Sustainable Energy-Based Tourism Application Centre project. Bahçeşehir University academician Prof. Dr. Çisil Sohodol, Director of BAU CIFAL Istanbul and Advisory Board Member of Enerjisa's "A Better Future" Platform, represented BAU, CIFAL Istanbul and UNITAR at the opening of the Application Centre, contributed to educational activities for young volunteers from across Türkiye, and supported field activities.

SENTRUM's work in Birgi connects sustainable tourism with environmental protection, cultural heritage and local livelihoods. Its Application Centre provides a local setting for training, stakeholder meetings and activities addressing energy efficiency, climate awareness, women's and young people's participation, and the preservation of local heritage. These activities bring residents and tourism businesses into the destination's sustainable development process, recognising their role in caring for the places used by both communities and visitors.

Within this framework, BAU's contribution included engagement with young volunteers through the "Centrum with Youth" programme organised by Enerjisa Enerji. Workshops, tree planting and hands-on sustainability activities connected learning with practical care for Birgi's environment. Prof. Sohodol's educational contribution and participation in field activities brought university expertise into this community setting, supporting young people's understanding of environmental responsibility in a tourism destination.

The programme's connection with sustainable management of land for tourism centred on caring for the natural and cultural landscape that supports Birgi's visitor appeal and community life. Tree planting provided a practical opportunity to contribute to local green spaces, while the wider educational setting connected environmental care with the preservation of the destination's character. Together, these activities linked tourism with responsibility for the land, vegetation and shared spaces on which the destination depends.

Across the wider SENTRUM project, 21 training programmes reached 1,000 participants, including tourism business representatives, women, young people and children. These figures describe the project's overall educational reach. BAU's contribution formed part of this broader effort through Prof. Sohodol's educational input, youth engagement and support for field activities.

Through its involvement, BAU supported community learning and practical participation relevant to the sustainable management of tourism landscapes. The initiative connected the protection of local environmental and cultural resources with Birgi's transition towards a sustainable tourism model aligned with Global Sustainable Tourism Council (GSTC) criteria, demonstrating how university expertise can contribute to learning and environmental stewardship beyond the campus.

The images below show Prof. Dr. Çisil Sohodol's participation in the SENTRUM project.





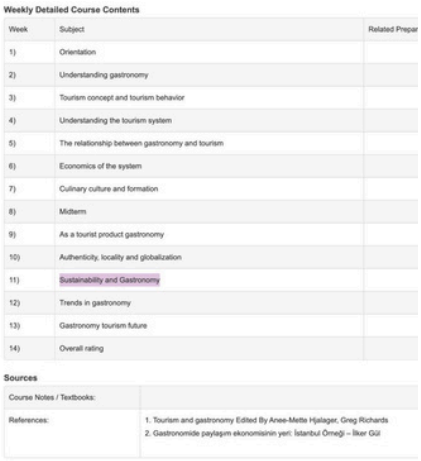
CUL3403 Gastronomy Tourism Course: Sustainable Land Management Education and Local Stakeholder Engagement

Bahçeşehir University (BAU) offers CUL3403 Gastronomy Tourism within its Department of Gastronomy and Culinary Arts, combining academic learning with field-based engagement relevant to the sustainable management of land for tourism. The curriculum includes "Sustainability and Gastronomy" alongside the relationship between gastronomy and tourism, authenticity and locality, and the future of gastronomy tourism. Within this framework, students learn how land supporting gastronomy tourism can be managed through environmentally responsible approaches that respect natural areas and the resources on which food production and tourism depend.

The course addresses how gastronomy tourism can develop in harmony with its surrounding environment, connecting sustainable land use, nature conservation, and responsible tourism practices. Students consider how tourism-related uses of agricultural and rural areas can respect the ecological characteristics of these places. This educational approach links the quality and long-term viability of gastronomic destinations with the protection of the land and natural resources that sustain local food cultures and livelihoods.

Field visits extend learning beyond the classroom, bringing students into contact with local producers, tourism operators, and other local stakeholders. These encounters create opportunities to connect academic perspectives on sustainable land management with the experiences of people working in food production and tourism. Through dialogue with local stakeholders, students explore the practical context of responsible land use, while the course establishes a community engagement dimension through university–community interaction.

By combining sustainability education with field visits and local stakeholder dialogue, CUL3403 complements BAU's wider educational outreach on sustainable management of land for gastronomy tourism. The course supports understanding of the relationship between tourism, productive landscapes, and environmental responsibility, contributing to the educational objectives of SDG 15: Life on Land through its emphasis on protecting the natural foundations of rural livelihoods and tourism.

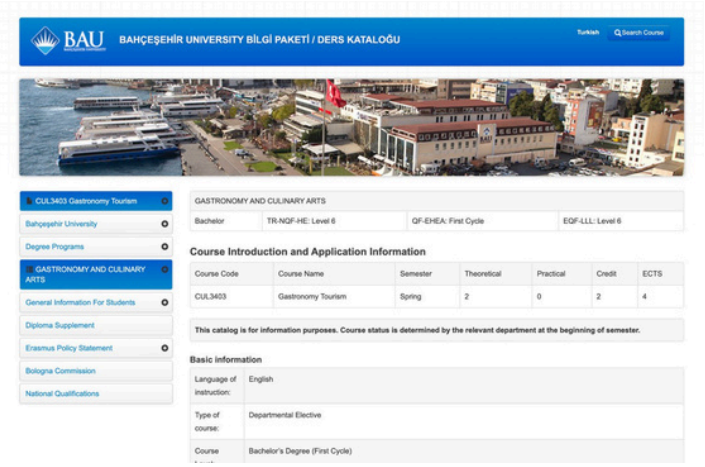


Weekly Detailed Course Contents

Week	Subject	Related Prepar
1)	Orientation	
2)	Understanding gastronomy	
3)	Tourism concept and tourism behavior	
4)	Understanding the tourism system	
5)	The relationship between gastronomy and tourism	
6)	Economics of the system	
7)	Culinary culture and formation	
8)	Midterm	
9)	As a tourist product gastronomy	
10)	Authenticity, locality and globalization	
11)	Sustainability and Gastronomy	
12)	Trends in gastronomy	
13)	Gastronomy tourism future	
14)	Overall rating	

Sources

Course Notes / Textbooks:	
References:	1. Tourism and gastronomy Edited By Anee-Mette Hjalager, Greg Richards 2. Gastronomide paylaşım ekonomisinin yeri: İstanbul Örneği – İlker Gül



BAU BAHÇEŞEHİR UNIVERSITY BİLGİ PAKETİ / DERS KATALOĞU

Turkish Search Course

CUL3403 Gastronomy Tourism
Bahçeşehir University
Degree Programs
GASTRONOMY AND CULINARY ARTS
General Information For Students
Diploma Supplement
Erasmus Policy Statement
Bologna Commission
National Qualifications

GASTRONOMY AND CULINARY ARTS

Bachelor	TR-NQF-HE: Level 6	QF-EHEA: First Cycle	EQF-LLL: Level 6

Course Introduction and Application Information

Course Code	Course Name	Semester	Theoretical	Practical	Credit	ECTS
CUL3403	Gastronomy Tourism	Spring	2	0	2	4

This catalog is for information purposes. Course status is determined by the relevant department at the beginning of semester.

Basic information

Language of instruction:	English
Type of course:	Departmental Elective
Course	Bachelor's Degree (First Cycle)

Biodiversity-Sensitive Campus Planning and Preservation of Existing Tree Cover at BAU Future Campus

Bahçeşehir University (BAU) demonstrates its commitment to integrating local biodiversity into institutional planning and development through the design and spatial organization of BAU Future Campus, where the preservation of existing trees and natural vegetation was a central consideration in the campus development process.

Preserving Existing Trees Through Strategic Building Placement

During the planning and development of the campus, particular attention was given to protecting the site's established tree cover and minimizing disturbance to its existing green landscape.

Campus buildings were strategically positioned within suitable spaces between existing trees and vegetation, preserving densely wooded areas and minimizing vegetation clearance during construction. Areas characterized by higher concentrations of mature trees were deliberately excluded from intensive construction, allowing substantial portions of the original green landscape to remain undisturbed.

Existing trees were retained and protected as part of the development approach, with the campus layout designed to accommodate the natural characteristics of the land while minimizing vegetation removal.

As part of the campus planning and development process, particular attention was given to the preservation of a historic olive tree located on the site. The tree was placed under protection and retained in its original location, with the surrounding development planned to safeguard its continued existence. This initiative demonstrates BAU's commitment to protecting mature trees of ecological and cultural significance and integrating the conservation of existing natural assets into campus development decisions (see the picture of it below).

This approach demonstrates how the conservation of existing vegetation directly influenced land-use decisions, building locations and the overall spatial organization of the campus.

Protecting Green Spaces and Supporting Ecological Continuity

The preservation of established trees and densely vegetated areas also contributes to maintaining the ecological character of the campus environment.

Existing tree cover and vegetation provide important environmental functions, including habitat opportunities for birds, insects and other local wildlife, as well as soil protection, shade and the continuity of green spaces.

By concentrating built development in selected areas while retaining substantial vegetated spaces, BAU Future Campus seeks to reduce the fragmentation of existing green areas and maintain their relationship with the surrounding landscape.

Importantly, the campus's green environment is not solely the result of landscaping introduced after construction. The protection and retention of pre-existing trees formed part of the original planning and development decisions, demonstrating an approach in which biodiversity considerations informed the physical development of the site.

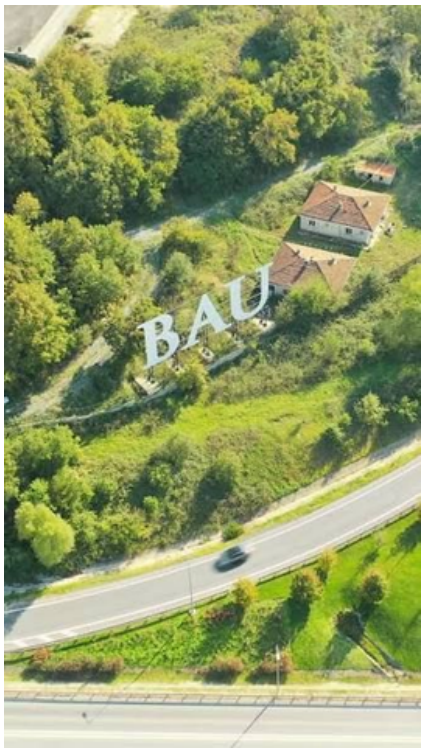
Integrating Biodiversity into University Infrastructure Development

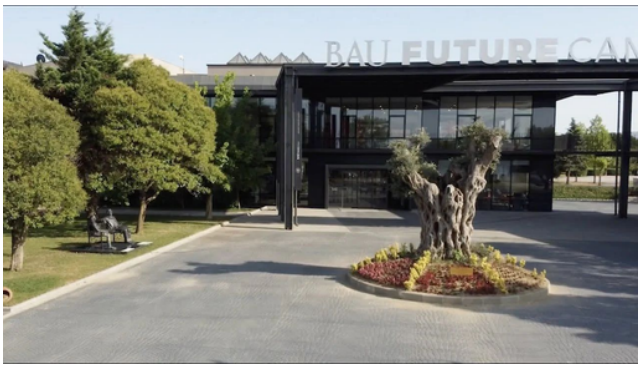
BAU Future Campus illustrates how university infrastructure can be developed while prioritizing the preservation of existing natural features.

The campus development approach incorporates interconnected environmental considerations: avoiding unnecessary tree removal, protecting densely wooded areas, adapting building locations to the existing vegetation and retaining substantial green spaces within the overall site layout.

These decisions reflect an understand
ing that responsible campus development involves not only the construction of educational facilities but also the conservation of the ecological characteristics of the land on which they are established.

Through this approach, Bahçeşehir University demonstrates the practical integration of local biodiversity considerations into campus planning and development, supporting SDG 15: Life on Land and the sustainable management of terrestrial environments.


BAU


BAU FUTURE CAM


İGA:
İstanbul Havalimanı
10 dk
BAU Beşiktaş
Güney Kampüsü
20 dk
Metro Durağı
5 dk
BAU FUTURE CAMPUS

Integrating Local Biodiversity into Planning and Development: BAU Farm, Giresun

Bahçeşehir University's BAU Farm, located in Giresun in Türkiye's Black Sea region, demonstrates how local biodiversity conservation can be integrated into land-use planning, architectural design, landscape management and the development of educational and agricultural facilities.

Developed as a multidisciplinary environment for sustainable agriculture, experiential learning and environmental education, BAU Farm reflects an approach to development that respects the ecological characteristics of its surrounding landscape. The project's planning philosophy prioritizes adapting buildings, facilities and outdoor spaces to the existing landscape, with an emphasis on preserving its vegetation, agricultural character and ecological continuity.

Biodiversity-Conscious Site Planning and Preservation of Existing Vegetation

A central consideration in the planning and development of BAU Farm was the protection of the site's existing natural and agricultural landscape.

The positioning of buildings, outdoor facilities and recreational spaces was determined with particular attention to avoiding the removal of existing trees, preserving established hazelnut orchards and minimizing disturbance to naturally occurring vegetation.

These considerations directly influenced decisions concerning the location, scale and spatial arrangement of built structures. The development approach sought to accommodate existing vegetation and maintain the relationship between cultivated land, green spaces and the surrounding natural environment, minimizing vegetation clearance during construction.

By incorporating the preservation of trees, agricultural vegetation and natural landscape features into site planning, BAU Farm demonstrates how local biodiversity considerations can inform development decisions from the outset.

Nature-Sensitive Architecture: Tiny Houses and Wooden Outdoor Facilities

The architectural design of BAU Farm further reflects its commitment to environmentally sensitive development through small-scale tiny house structures, wooden architectural elements and minimalist outdoor facilities.

The tiny houses are designed to maintain a modest physical and visual presence within the landscape. Their small scale and wooden construction complement the rural character of the site, supporting an architectural approach that respects the surrounding vegetation and natural setting.

The same design philosophy extends to the farm's outdoor communal areas, where wooden benches and seating arrangements provide spaces for learning, interaction and recreation while maintaining visual harmony with the natural environment.

These modest facilities allow educational and social activities to take place within the existing green landscape, maintaining the site's natural character and limiting the need for extensive built recreational spaces.

Together, the tiny houses, wooden seating areas and carefully positioned outdoor facilities illustrate how architectural scale, material selection and spatial planning can support the integration of human activities into a biodiverse rural environment.

Respecting Local Flora, Natural Habitats and Ecological Continuity

The planning and development of BAU Farm also reflect a commitment to respecting the distinctive flora and ecological characteristics of Giresun's Black Sea landscape.

The region is characterized by a combination of hazelnut orchards, native trees, woodland shrubs and understory vegetation. Characteristic regional flora includes rhododendrons, cherry laurel, ferns and other naturally occurring plant communities that contribute to the ecological diversity of the Black Sea environment.

At BAU Farm, particular attention was given to preserving existing trees and established hazelnut orchards, retaining naturally occurring vegetation and minimizing unnecessary disturbance to the surrounding landscape.

The development approach emphasizes the continuity of established plant cover and the preservation of the site's natural character, prioritizing existing vegetation in landscape planning and management.

Particular attention was also given to the preservation of cherry laurel (Prunus laurocerasus), locally known as taflan, a native species characteristic of the Black Sea region. Existing taflan trees and shrubs on the BAU Farm site were retained and protected during development, with building placement and landscape arrangements designed to respect their natural locations. By conserving these established native plants alongside existing trees and hazelnut orchards, BAU Farm demonstrates how the protection of local flora was incorporated into land-use planning and development decisions, helping maintain the site's ecological character and natural vegetation.

This approach recognizes that biodiversity conservation extends beyond individual trees to the ecological relationships among vegetation, soil, insects, birds and other wildlife. Maintaining existing green spaces and limiting vegetation clearance helps preserve the habitat conditions upon which local biodiversity depends.

By respecting the natural composition of the landscape, BAU Farm incorporates ecological considerations into decisions concerning building placement, outdoor space development and land management.

Preservation of Hazelnut Orchards and Regional Agricultural Biodiversity

The preservation of existing hazelnut orchards represents another important component of BAU Farm's biodiversity-conscious development approach.

Hazelnut cultivation is deeply connected to Giresun's regional identity, agricultural heritage and landscape character. Established orchards represent not only productive agricultural areas but also longstanding elements of the region's cultivated environment.

BAU Farm's development approach prioritizes the preservation of existing hazelnut orchards and their integration into the overall site layout alongside new structures.

This decision supports the continuity of existing agricultural land use while maintaining vegetated areas that contribute to the site's ecological character.

The farm's educational and sustainable agricultural activities further promote awareness of responsible land management, soil health, agricultural biodiversity and the relationship between productive landscapes and environmental conservation.

Through this approach, BAU Farm connects the preservation of regional agricultural heritage with broader principles of sustainable land use and biodiversity protection.

Integrating Biodiversity into Institutional Planning and Development

BAU Farm provides a practical example of how environmental considerations can influence decisions concerning institutional facilities, land use and landscape development.

The project's planning approach incorporates several interconnected priorities: preserving existing trees and hazelnut orchards, minimizing disturbance to natural vegetation, positioning buildings in accordance with existing landscape features, adopting small-scale wooden structures and maintaining outdoor communal spaces that complement the surrounding environment.

Importantly, biodiversity conservation is considered from the planning and design stages and integrated throughout the development process.

This approach demonstrates how educational and agricultural infrastructure can be developed while respecting the ecological characteristics of the site and maintaining the continuity of existing natural and cultivated landscapes.

BAU Farm therefore provides supporting evidence of Bahçeşehir University's commitment to incorporating local biodiversity into planning and development processes, contributing directly to SDG 15: Life on Land, particularly the conservation and sustainable use of terrestrial ecosystems.











Integrating Local Biodiversity into Tourism Facility Development: Bahçeşehir University's Zifin Hotel

Bahçeşehir University's (BAU) Zifin Hotel, located on the Kulakkaya Plateau, provides an example of incorporating local vegetation and landscape characteristics into the development and management of a University tourism facility. Situated in the forested highlands of Türkiye's Eastern Black Sea region, the hotel's development approach prioritizes retaining the surrounding vegetation and accommodating tourism facilities within the existing natural setting.

Preserving Existing Vegetation in Site Development

The preservation of existing vegetation formed a consideration in the positioning of accommodation units and the arrangement of outdoor spaces. Development decisions sought to limit vegetation clearance and retain green areas around the facilities, maintaining the relationship between built spaces and the surrounding highland landscape.

This approach connected site planning with the protection of the vegetation and habitat conditions supporting local biodiversity. Retaining existing plant cover helped avoid unnecessary alteration of the site's ecological character while accommodating hospitality activities within the landscape.

Building Placement and Architectural Scale

Small-scale accommodation structures, including tiny houses, were incorporated into the site with attention to the surrounding terrain and vegetation. Building placement and the arrangement of outdoor areas sought to reduce unnecessary disturbance and preserve the continuity of existing green spaces.

Wooden architectural elements and a design drawing on regional building traditions complemented this planning approach. Their contribution lies in supporting landscape compatibility; the principal biodiversity consideration remains the retention of existing vegetation and the limitation of disturbance associated with development.

Respecting Local Flora and Highland Habitats

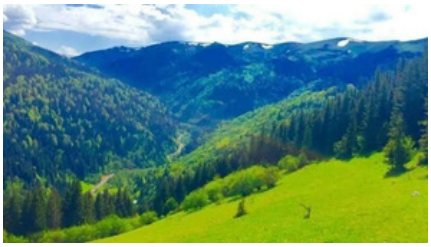
The hotel takes its name from the zifin flower, reflecting its connection with the botanical heritage of the Eastern Black Sea highlands. The surrounding forests and highland vegetation provide the ecological setting within which the facility operates.

The development approach emphasized preserving natural vegetation around the property. Green spaces around the hotel also continue to accommodate grazing animals, reflecting the site's relationship with traditional highland land use. This continuity of use complements the landscape approach, while the protection of local biodiversity depends on maintaining vegetation and avoiding unnecessary habitat disturbance.

Zifin Hotel's wider environmental approach includes replacing coal-based heating with a biomass pellet system and promoting regional gastronomy and locally sourced products. These operational measures complement the facility's landscape-sensitive development approach.

The hotel has also hosted University sustainability activities, including the Kulakkaya Green Growth and Sustainable Development Summit and the Kulakkaya Climate Summit, with contributions from CIFAL Istanbul and UNITAR. These events provide opportunities to connect the management of a tourism facility with academic and stakeholder discussions on environmental responsibility and regional development.

Through Zifin Hotel, BAU extends biodiversity considerations to its hospitality facilities by linking site development with the retention of existing vegetation, the positioning of small-scale structures and the care of surrounding green spaces. The example illustrates how local environmental characteristics can inform planning and development decisions within a highland tourism setting.









Strengthening Institutional Water Management Awareness through Collaboration with Istanbul Water and Sewerage Administration: Urban Water Management and Infrastructure Course

Bahçeşehir University (BAU), in collaboration with the **Istanbul Water and Sewerage Administration (İSKİ)**, offered the *Urban Water Management and Infrastructure* course during the 2024–2025 academic year as part of its CO-OP branded course programme. This longstanding collaboration brings together academic expertise and the public authority responsible for Istanbul's water and wastewater infrastructure, strengthening institutional engagement with sustainable water management and environmental protection.

Jointly developed by BAU's Faculty of Engineering and Natural Sciences and İSKİ experts, the 14-week course addressed water treatment, wastewater management, urban flood control, environmental monitoring and integrated watershed management. Lectures delivered by İSKİ professionals and senior managers were complemented by technical field visits to water and wastewater treatment facilities, including the İkitelli and Ataköy facilities.

Of particular relevance to **water discharge quality and ecosystem protection**, the course introduced students to the technical and environmental considerations underlying wastewater treatment, water quality monitoring and the protection of urban water resources. Direct engagement with İSKİ professionals provided practical insight into the infrastructure and management processes through which public authorities seek to prevent water pollution and safeguard environmental and public health.

Beyond its educational objectives, the collaboration demonstrates BAU's engagement with the public institution responsible for regulating and managing Istanbul's water and wastewater systems. It complements the University's **Policy on Water Discharge Quality Standards and Environmental Protection** by promoting technical knowledge, environmental awareness and cooperation with relevant water management authorities.

Through this initiative, BAU contributes to developing future professionals equipped to address wastewater management challenges, protect aquatic ecosystems and support sustainable urban water infrastructure.



Bahçeşehir University Promoting Reusable Alternatives to Single-Use Plastics and a Shared Culture of Sustainability

As part of its sustainability education initiatives, Bahçeşehir University (BAU), in collaboration with CIFAL Istanbul, the United Nations Institute for Training and Research (UNITAR), and institutional partners, promotes the reduction of single-use plastic consumption by providing students participating in sustainability-focused educational programmes with **reusable water bottles and cloth tote bags**.

These items offer practical alternatives to commonly used disposable plastic products. Reusable water bottles encourage students to refill their drinking water rather than rely on single-use plastic bottles, while cloth tote bags provide a durable alternative to disposable plastic shopping bags. By integrating reusable products into its educational programmes, BAU connects sustainability learning with everyday choices that can help prevent plastic waste at its source.

Beyond their practical function, the reusable items carry the message **"Daha İyi Bir Gelecek" ("A Better Future")**, alongside the logos of BAU, CIFAL Istanbul and UNITAR. This shared visual identity reinforces the connection between students and the broader sustainability mission of the institutions involved.This shared visual identity reinforces the connection between participating students and the institutions' sustainability commitments, fostering a sense of belonging, shared responsibility and active engagement in environmentally responsible practices.

By carrying and using these items in everyday campus life, students can make sustainable choices more visible within the University community. The initiative therefore combines waste prevention with awareness, student engagement and the promotion of a shared culture in which environmentally responsible behaviour becomes part of campus identity.

This practice provides supporting evidence for BAU's **Policy on the Reduction of Plastic Waste on Campus**, particularly its provisions concerning the reduction of single-use plastics, promotion of reusable alternatives, environmental awareness and student participation. It also contributes to **SDG 12: Responsible Consumption and Production** by encouraging resource-efficient consumption and waste prevention.

Through the combination of sustainability education, practical reusable alternatives and a shared institutional message, Bahçeşehir University seeks to strengthen students' connection to sustainability while encouraging everyday habits that reduce dependence on disposable plastics.





Bahçeşehir University's Research Contributions to SDG 15: Life on Land

Between 2021 and 2025, Bahçeşehir University contributed to research relevant to SDG 15: Life on Land, addressing topics including ecosystem dynamics, sustainable agricultural practices, biological pest control and environmental remediation. Publications classified under this goal in Scopus/SciVal explore predator–prey relationships, plant nutrient composition, microbial alternatives to chemical fertilizers and the potential of plants to remove environmental pollutants.

These studies combine mathematical modelling, biological research and environmental assessment to advance understanding of ecological interactions and approaches to more sustainable resource use. They provide scientific knowledge relevant to protecting ecosystems, reducing agricultural pressures on the environment and understanding the effects of pollution.

The figure below presents Bahçeşehir University's publications classified under SDG 15 for the 2021–2025 period, including publication titles, authors, years and sources.

SDG 15: Life on Land
BAU Publications (2021–2025)

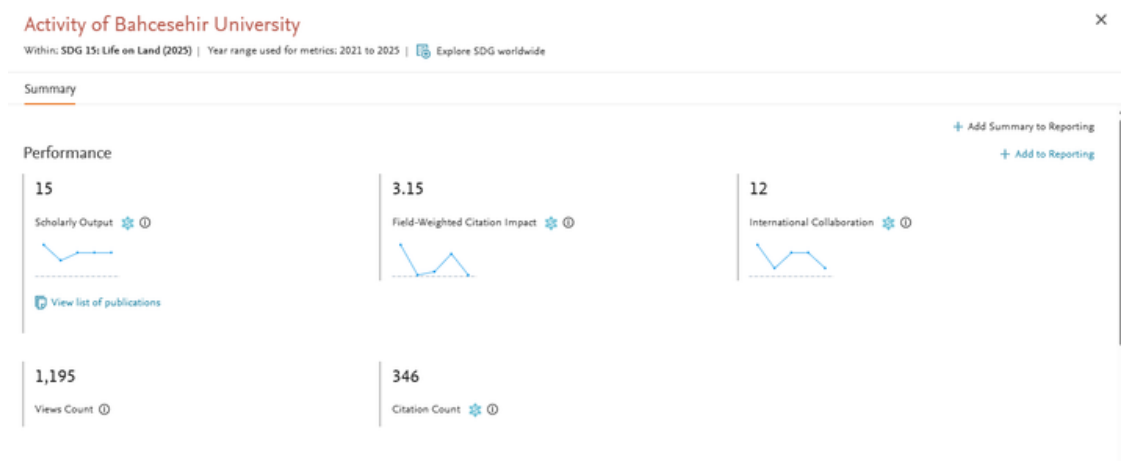
Source: Scopus / SciVal | 15 records | Data updated: 25 October 2026

No.	Year	Publication Title	Authors	Journal / Publication Source
1	2021	Dynamical behavior of two predators–one prey model with generalized functional response and time-fractional derivative	Djilali, S.; Ghanbari, B.	Advances in Difference Equations
2	2021	Impact of predation in the spread of an infectious disease with time fractional derivative and social behavior	Bentout, S.; Ghanbari, B.; Djilali, S.; Guin, L.N.	International Journal of Modeling, Simulation, and Scientific Computing
3	2021	MINERAL NUTRIENT COMPOSITIONS OF FIELD-GROWN WEED AND MAIZE (Zea mays L.) PLANTS IN TERMS OF COMPETITION	Ozyigit, I.I.; Dogan, I.; Karadeniz, S.; Severoglu, Z.; Demir, G.; Yalcin, I.E.; Yarci, C.	Pakistan Journal of Agricultural Sciences
4	2021	The influence of an infectious disease on a prey-predator model equipped with a fractional-order derivative	Djilali, S.; Ghanbari, B.	Advances in Difference Equations
5	2022	HOPF BIFURCATION ANALYSIS OF A FRACTIONAL-ORDER HOLLING-TANNER PREDATOR-PREY MODEL WITH TIME DELAY	Celik, C.; Degerli, K.	ANZIAM Journal
6	2022	On novel application of piece-wise fractional operators for a predator–prey model [Retracted]	Nonlaopon, K.; Günay, B.; Rezapour, S.; Aldhabani, M.S.; Alotaibi, A.M.; Elagan, S.K.	Results in Physics
7	2023	Eco-friendly biopesticides derived from CO2-Fixing cyanobacteria	Akmukhanova, N.R.; Leong, Y.K.; Seiilbek, S.N.; Konysbay, A.; Zayadan, B.K.; Sadvakasova, A.K.; Sarsekeyeva, F.K.; Bauenova, M.O.; Bolatkhan, K.; Alharby, H.F.; Chang, J.-S.; Allakhverdiev, S.I.	Environmental Research
8	2023	Prospecting the biofuel potential of new microalgae isolates	Balouch, H.; Zayadan, B.K.; Sadvakasova, A.K.; Kossalbayev, B.D.; Bolatkhan, K.; Gencer, D.; Civelek, D.; Demirbag, Z.; Alharby, H.F.; Allakhverdiev, S.I.	International Journal of Hydrogen Energy
9	2023	Synthetic algocyanobacterial consortium as an alternative to chemical fertilizers	Sadvakasova, A.K.; Bauenova, M.O.; Kossalbayev, B.D.; Zayadan, B.K.; Huang, Z.; Wang, J.; Balouch, H.; Alharby, H.F.; Chang, J.-S.; Allakhverdiev, S.I.	Environmental Research
10	2024	A study on fractional predator-prey-pathogen model with Mittag-Leffler kernel-based operators	Ghanbari, B.; Kumar, S.	Numerical Methods for Partial Differential Equations
11	2024	Photosynthesis and hydrogen energy for sustainability: harnessing the sun for a greener future	Kossalbayev, B.D.; Yilmaz, G.; Ozcan, H.G.; Soykan, G.; Yalcin, S.; Allakhverdiev, S.I.	Photosynthetica
12	2024	Retraction notice to "On novel application of piece-wise fractional operators for a predator-prey model" [Results Phys. 39 (2022) 105683] (S2211379722003722), (10.1016/j.rinp.2022.105683)	Nonlaopon, K.; Günay, B.; Rezapour, S.; Aldhabani, M.S.; Alotaibi, A.M.; Elagan, S.K.	Results in Physics
13	2025	Design, Performance, and Experimental Analysis of a Solar Still under Tangier Climate Conditions	Chorak, A.; Jebari, C.; Palenzuela, P.; Bahraoui, F.	IOP Conference Series: Earth and Environmental Science
14	2025	Phytoremediation potential and ecophysiological features of water hyacinth Eichornia crassipes: a case study from Orontes River, Türkiye	Yalcin, I.E.; Altay, V.; Ozturk, M.	Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering
15	2025	Qualitative Analysis and Hopf Bifurcation for a Fractional-Order Ratio-Dependent Prey-Predator Model	Celik, C.; Degerli, K.	Springer Proceedings in Mathematics and Statistics

According to SciVal data, Bahçeşehir University recorded 15 publications classified under SDG 15: Life on Land during the 2021–2025 period. These publications achieved a Field-Weighted Citation Impact (FWCI) of 3.15, indicating citation performance 215% above the global average for comparable publications, adjusted for subject field, publication year and publication type.

The research output received 346 citations and recorded 1,195 views, reflecting its visibility within the academic community. These indicators highlight BAU's contribution to the scientific knowledge base relevant to terrestrial ecosystems, biodiversity and sustainable land use, providing resources for further investigation and informed discussion of environmental challenges.

The figure below presents SciVal's overview of Bahçeşehir University's research performance under SDG 15 for the 2021–2025 period, including scholarly output, citation impact, international collaboration and publication views.





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