



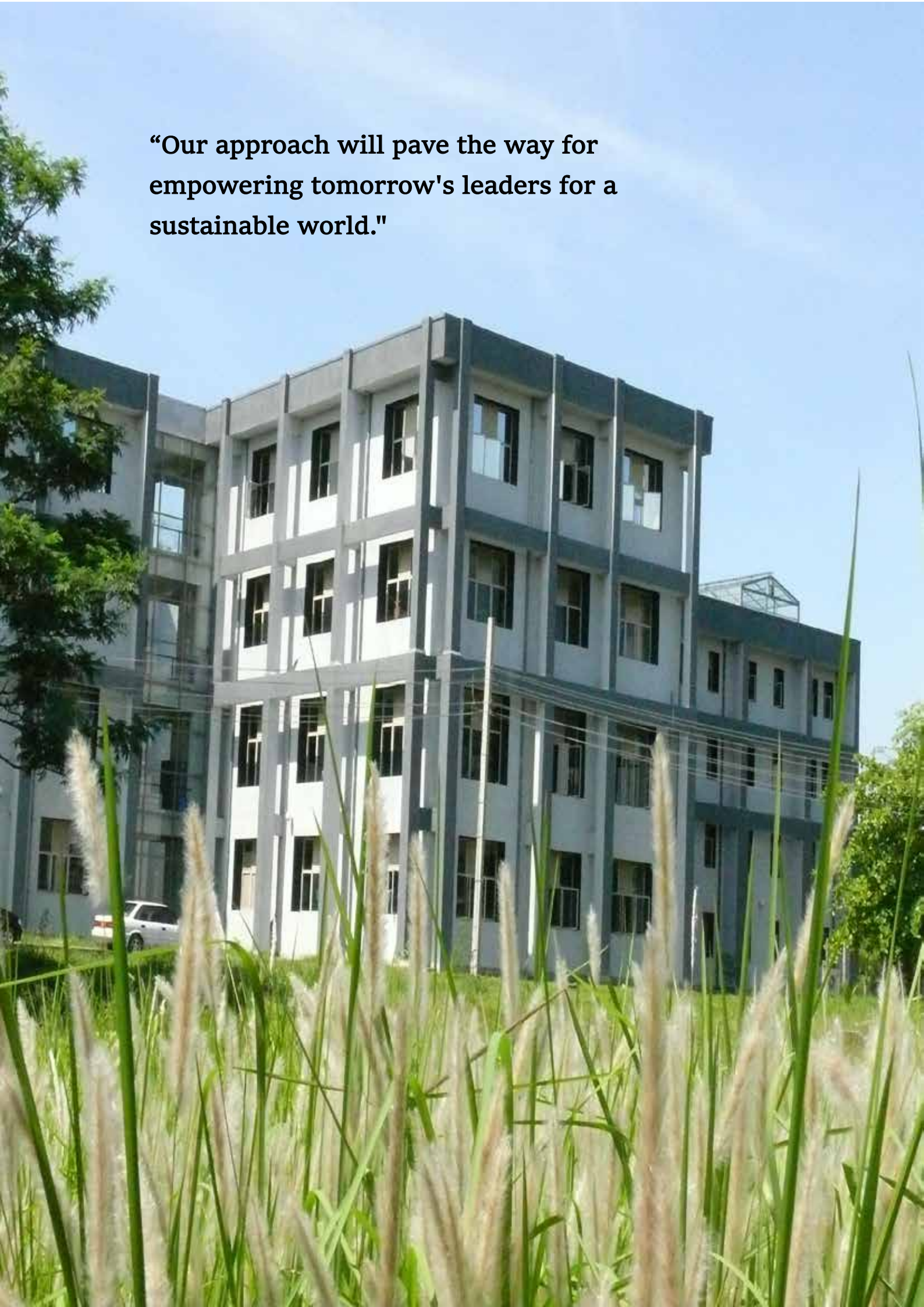
The Open University of Sri Lanka

Annual Sustainability Report

2022/2023



“Our approach will pave the way for empowering tomorrow's leaders for a sustainable world.”



Sustainable Development Goals (SDGs) & The Open University of Sri Lanka (OUSL)

The world has been facing a spectrum of sustainability challenges, and as The Open University of Sri Lanka (OUSL), we have been ambitiously committed to establishing and implementing diversified sustainable activities within the university premises to support the United Nations’ Sustainable Development Goals (SDGs).

As one of Sri Lanka’s broadly distributed universities, with over 48,000 students and 4000 colleagues, we have identified that our work can have a remarkable impact on all communities around us.

Being responsible socially and environmentally, we are taking strong, innovative, and challenging steps to embed the culture of sustainability amongst not only internal communities but also external communities as well.

So, such measures will reinforce our goal of “empowering tomorrow's leaders for a sustainable world.”



Sustainable Development

The OUSL has made substantial efforts to integrate sustainability into its operations and education, recognizing the critical role that higher education institutions play in addressing global sustainability challenges.

How are we doing?

Curriculum Integration

We incorporate sustainability principles into academic programs and courses across various disciplines to educate students about environmental, social, and economic challenges.



We encourage research projects that address sustainability issues.

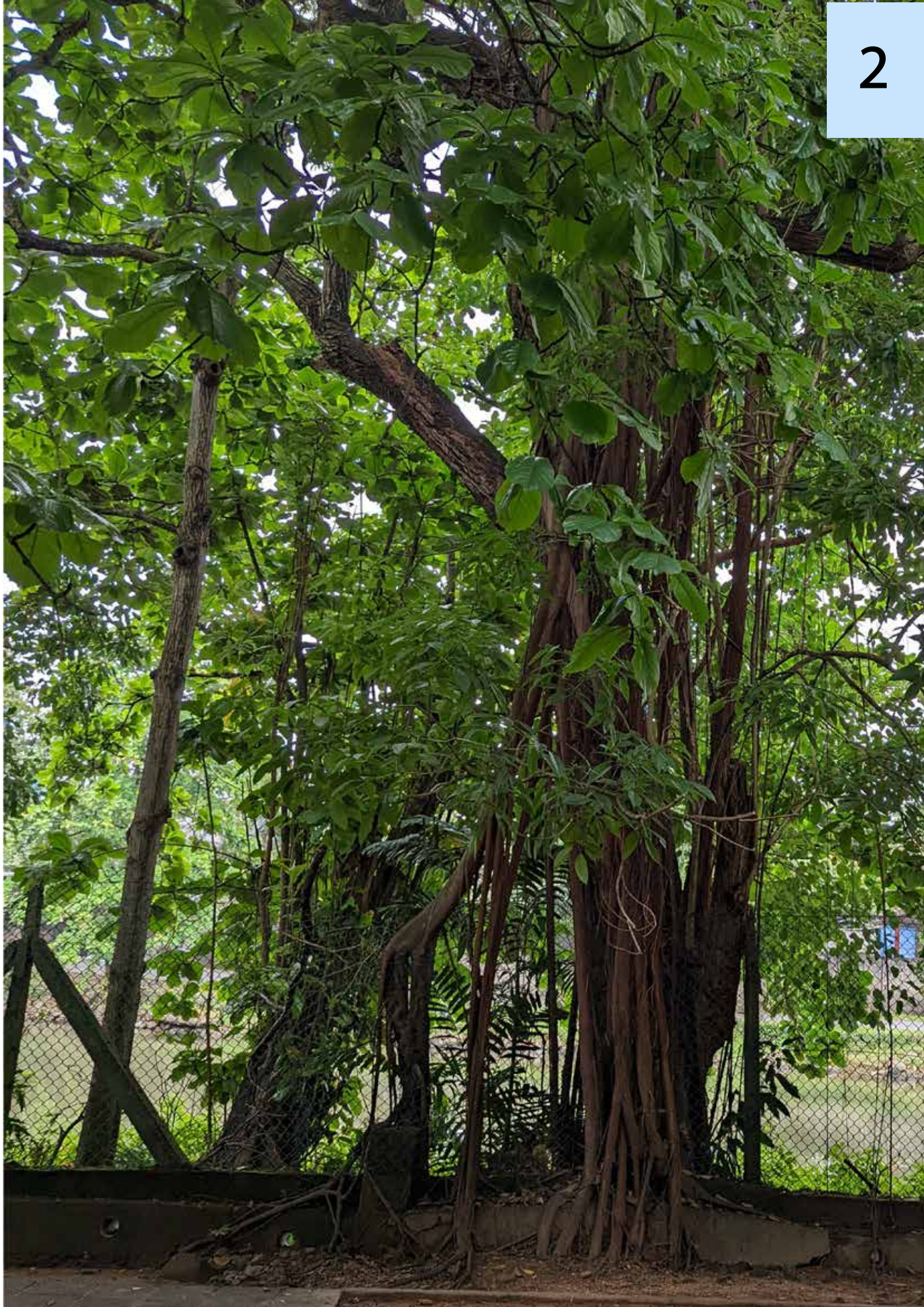
Campus Operations

We have already taken steps to reduce the environmental footprint through water conservation, waste reduction, sustainable construction, and sustainable transportation.



Our sustainability team works closely with OUSL inter-faculties to enable and embed the culture of sustainability amongst our students and colleagues.

This annual report highlights how OUSL worked to implement SDGs across our education and operations in 2022–2023.



Awards and Recognition

The OUSL continuously introduces, practices, and enhances sustainable solutions at the local and community levels. These measures and initiatives will play a vital role in supporting the global effort to achieve the SDGs by 2030.



In 2020, OUSL was listed in the UI Green Metric World University Rankings.

Ranking Year	Overall Ranking	Ranking by Region (Asia)	Ranking by Country (Sri Lanka)	Total Score
2021	725	373	6	4200
2022	560	297	6	5600



The Open University of Sri Lanka is one of 4 universities included in U-Multirank for Sri Lanka.



Catering



In line with our Sustainable Food and Drink Policy, OUSL offer delicious, healthy, ethical, and budget-friendly meals. Our diverse menu includes healthy, seasonal, locally-sourced options, with a special focus on vegetarian, vegan, cultural dishes, and meat options align with animal welfare. OUSL doesn't only cater to the current generation; we're educating the next to ensure future food security and sustainable practices.

How are we doing?



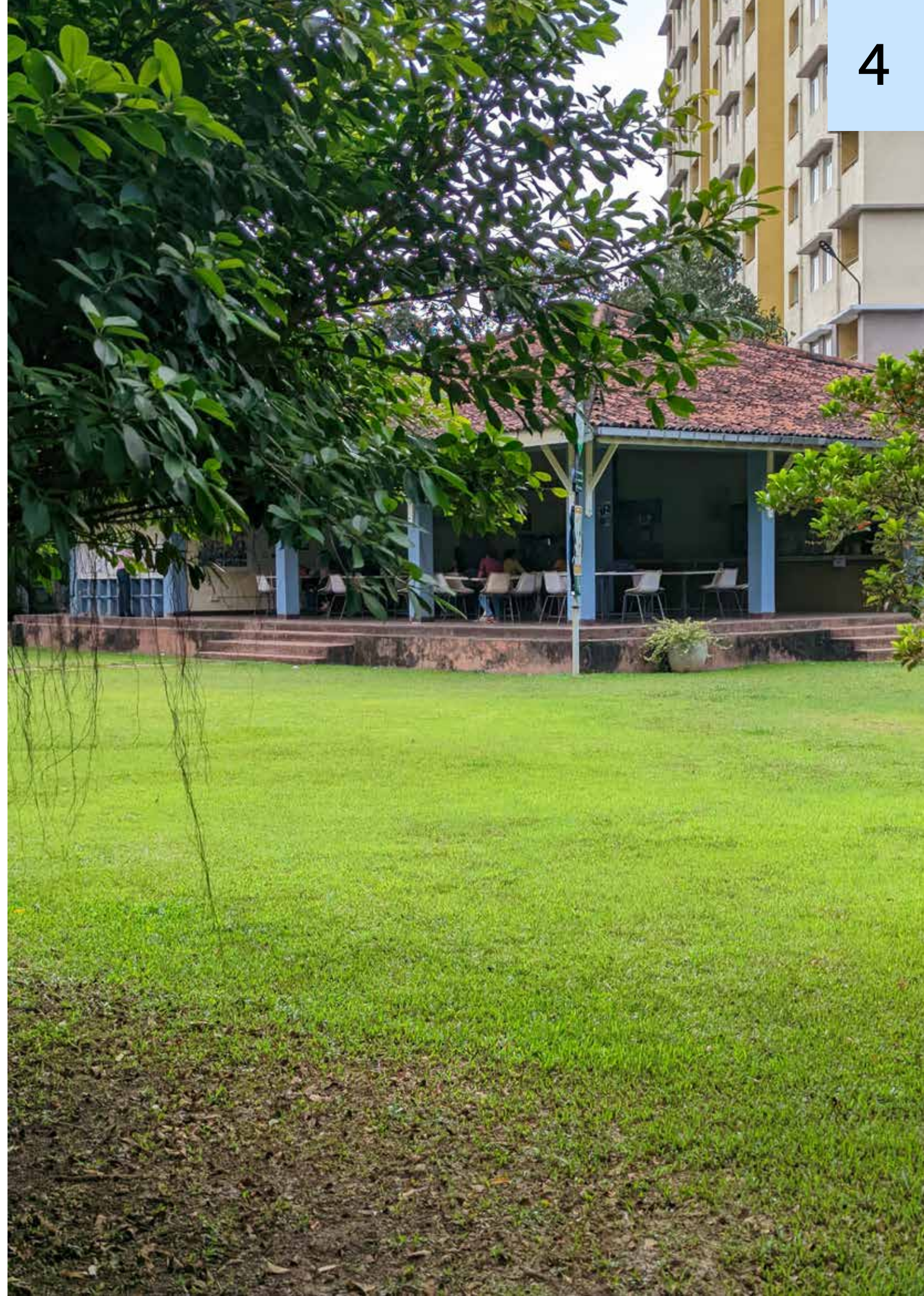
OUSL has initiated the 'Plastic-Free OUSL' program, successfully replacing all plastic glasses and cups with glassware in all canteen.



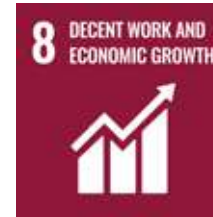
To instill the concept of sustainable food use and food security in future generations, the Eco-Smart program was initiated and is ongoing



Canteen waste management is efficiently organized, featuring designated bins for distinct waste categories. Organic waste is repurposed for pig farming and biogas production, the latter being utilized in cooking within the canteen. Furthermore, a supplementary revenue stream is generated through the management of non-organic waste of canteen.



Sustainable Procurement



As a broad institute located throughout Sri Lanka, OUSL has recognized that our procurement of goods and services can have a significant impact on the environment. Therefore, we highly prioritize environmentally friendly, ethically sourced, and fair-trade products in university purchasing and supply chain management.

Furthermore, we unwaveringly work to reduce single-use plastics and promote sustainable food options in campus dining facilities.



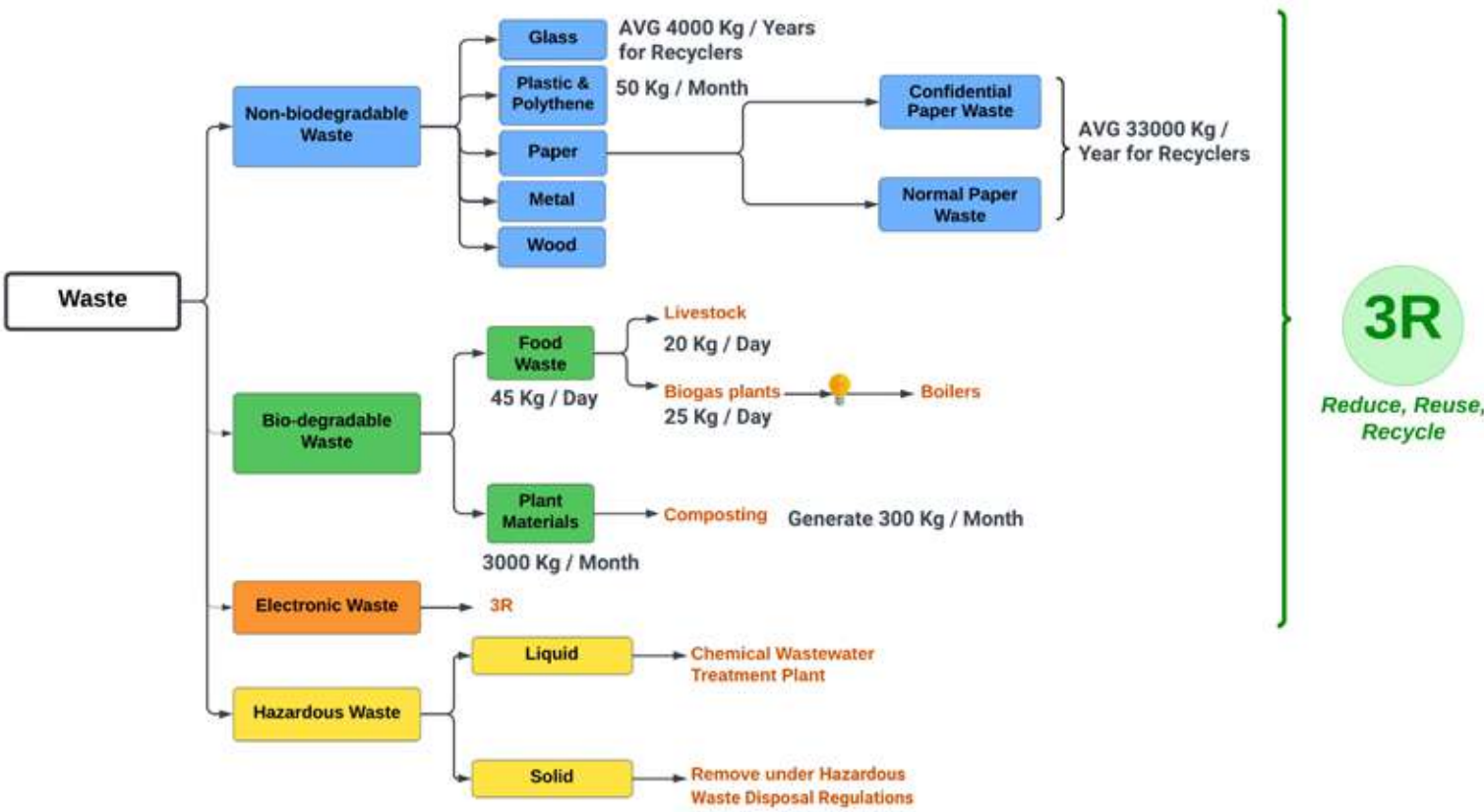
Waste



The Open University has placed recycling bins across all regional centers on its premises, emphasizing the importance of sustainable waste management.

We have significantly enhanced our waste management mechanisms within the university for all waste categories, emphasizing collection methods, disposal procedures, and the application of the 3R concept (Reduce, Reuse, Recycle).

Our initiative includes educating the university community about each waste category, teaching them how to collect, dispose, and apply the principles of Reduce, Reuse, Recycle (3R).



Wastewater

Revolutionizing Wastewater Management: The Open University of Sri Lanka's Green Oasis

At The Open University of Sri Lanka, a groundbreaking wastewater management system has emerged, fusing technology and nature to address the challenges posed by the CRC building's wastewater. Central to this innovative solution is the Anaerobic Baffled Reactor (ABR), a sophisticated septic tank upgrade designed to target and reduce contaminants such as COD, TSS, and BOD while generating minimal sludge.

Complementing the ABR, a natural wetland ecosystem thrives. Here, plants, microorganisms, and substrates work in unison to filter and purify the wastewater, breaking down pollutants and nutrients. Canna plants and Biochar enhance the process by targeting specific contaminants.

Taking this initiative to the next level, Floating Treatment Wetlands (FTWs) in the Colombo regional center's canal have been introduced. These platforms, donated by the Sri Lanka Land Development Corporation, provide a habitat for aquatic emergent plants, whose roots act as nutrient and pollutant absorbers.

This report delves into the remarkable synergy between science and nature, offering a glimpse of a sustainable and eco-conscious future. Welcome to a world where innovation and sustainability unite in perfect harmony.



Carbon and Energy

Carbon and energy reduction are crucial for mitigating climate change and demonstrating leadership in sustainability. Our institute has taken various measures to reduce OUSL's carbon emissions and energy consumption.

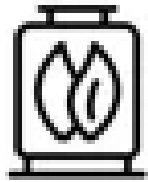
How are we doing?

Transportation alternatives



Incorporating bike racks into the university's sustainability plan is a practical and eco-friendly solution to promote sustainable transportation and reduce the environmental footprint of the campus. Also, we promote walking, carpooling, and public transportation to encourage sustainable transportation within OUSL communities.

Biogas unit



Utilizing biogas in the university's canteen kitchen is an excellent sustainable initiative that can help reduce the environmental impact of food preparation and cooking. This does not only reduce the carbon footprint but also demonstrates the university's commitment to sustainable practices.

The organic farming and food security program



"Organic farming" was first initiated at the OUSL's main campus located in Colombo; that concept was then circulated throughout regional centres around Sri Lanka. Our aim was to embed the culture of growing food crops not only within OUSL's premises but also within external communities.

Tree Planting Program



The "tree planting program" has been conducted since 2017 at OUSL's main campus located in Colombo. We have identified many plant families with species richness and dominance inside the premises. Our findings were documented, and several articles were published to aware communities for further research purposes.



Biodiversity



All regional centres of OUSL, located around Sri Lanka, cover over hectares of land. These lands are valuable assets to the university, local communities, and the natural world as they are highly diversified in nature, and that's why we're working hard to conserve and promote the biodiversity of our places and spaces.

Enhancing biodiversity in and around university premises is a meaningful contribution to the United Nations Sustainable Development Goals (SDGs), particularly Goal 15: Life on Land, which aims to protect, restore, and promote sustainable use of terrestrial ecosystems.

How are we doing?

- Protecting natural habitats on campus, such as wetlands, forests, grasslands, and water bodies.
- Maintaining green spaces that support local wildlife and pollinators.
- Installing birdhouses and other wildlife shelters to provide nesting opportunities for native species.
- Implementing water conservation measures to maintain healthy aquatic ecosystems. Avoid chemical runoff into water bodies through wastewater treatment.
- Eco-friendly campus facilities by incorporating more indoor green spaces, natural lights, and more glass windows.
- Promote green infrastructure, such as green walls.
- Conducting biodiversity assessment through understanding the current state of flora and fauna on and around the campus and identifying local and potentially threatened species.
- Replace non-native and invasive species with native plants in landscaping to support local biodiversity.

The Centre for Environmental Studies and Sustainable Development (CESSD), along with the Botanical Society of the Open University, has conducted a project on invasive plants. In the first stage of the project, invasive plants were identified in three regional centers of the Open University. Further, a public awareness campaign has been conducted to increase knowledge of the threats posed by invasive plants and to promote prevention efforts. This project has led to the successful identification and removal of many invasive plants, marking a significant milestone in our ongoing commitment to preserving our natural ecosystems.

Biodiversity

- Designate certain areas as protected zones or nature reserves where human activity is limited to preserving biodiversity.
- Raise awareness about biodiversity through educational programs and events.

The International Virtual Conference on Mangroves for Ecological and Economic Sustainability is a significant event that aims to highlight the critical role of mangroves in achieving sustainable development goals. The conference covered various aspects of mangrove ecosystems and their potential benefits for ecological and economic sustainability, including mangroves for climate change mitigation, mangroves to sustain coastal environments and biodiversity, mangroves for economic development, mangrove conservation, rehabilitation, and enrichment, and mangroves and ecotourism.

- Engage students and the campus community in conservation and habitat restoration efforts.
- Promote the use of sustainable transportation options, which can reduce air and noise pollution, making the campus more attractive to wildlife.

“Enhancing biodiversity provides a living laboratory for education and research, fostering a sense of stewardship among students and the campus community.”





Sustainable Construction



Our aim involves designing, constructing, and managing buildings and infrastructure in an environmentally responsible and resource-efficient manner. It can reduce the environmental impact of construction projects while promoting energy efficiency, resource conservation, and healthy indoor environments.



How are we doing?

- Incorporate green space and preserve existing natural habitats.
- Utilizing renewable energy sources like solar panels.
- Utilizing energy-efficient lighting like LED bulbs.
- Optimize natural lighting and provide proper ventilation.
- Design green roofs or living walls to improve insulation, reduce heat islands, and support biodiversity.
- Install water-efficient fixtures to reduce water consumption.
- Implement rainwater harvesting.
- Use construction projects as opportunities for students and faculty to engage in research and education on sustainable construction practices.



The CESSD has organized a guest lecture series on green buildings for 2019, and the first lecture was conducted by Prof. Ranjith Dissanayake, the director of the Green Building Council of Sri Lanka.



Sustainable Farming

The Open University of Sri Lanka has taken a proactive approach in promoting sustainable farming practices and the efficient utilization of resources. The university has initiated a preliminary plan to introduce sustainable cultivation methods for food crop production within its Regional Educational Network centers. This step aims to enhance food security by implementing eco-friendly agricultural techniques.

What is this Plan?

The people of Sri Lanka as a whole are facing the worst economic crisis in recent history. Due to the shortage of foreign exchange for food imports as well as agricultural inputs and some controversial decisions in the food production sector, all of us people have reached a level of distrust in food security.

At this critical juncture, the Open University of Sri Lanka, which serves one of the largest student communities in Sri Lanka, has embarked on the task of food production with its civic participation as a national responsibility, with the aim of cultivating the University's productive farm area.

The regional educational network, which owns a large area within the university, has a huge responsibility to achieve the above food production. Not to be forgotten is its network of centers, which is decentralized in 24 districts of the country, and its vast community strength to achieve the relevant goals. This report is a model for developing a national food security framework that will guide and determine how this regional network can be calibrated by sustainably adopting food production.



Travel

Our sustainable travel practices reduce the environmental impact of commuting and transportation while fostering a culture of environmental responsibility among students, faculty, and staff.

How are we doing?



Bike-friendly campus

- With dedicated bike lanes, racks, and secure storage facilities.
- Bike-sharing programs for students and staff.
- Promote cycling safety and provide resources for bike maintenance.



Walking paths

- Designed and maintained pedestrian-friendly pathways and sidewalks to encourage walking as a sustainable mode of transportation.
- Design and maintain walking maps and signage for wayfinding on campus.



Carpool and Rideshare Programs

- Establish carpooling and ride-sharing programs to reduce the number of single-occupancy vehicles on campus.



Pedestrian Safety

- Prioritize pedestrian safety with crosswalks, speed limits, and well-maintained sidewalks.



Green Transportation Events

- Organize green transportation events like Bike to Campus Day or Carpooling Month to encourage participation and raise awareness.



Engagement and Raising Awareness

Raising awareness and fostering engagement on the SDGs in OUSL is not only about education but also about empowering students to be active agents of positive change. It aligns with the core mission of higher education to address pressing global challenges and promote sustainability.

How are we doing?

- Integrate the SDGs into academic programs and courses across various disciplines.
- Organize lectures, seminars, and workshops featuring experts and practitioners who can discuss the SDGs, their importance, and real-world applications.
- Encourage students to conduct research and projects that address SDG-related challenges. Provide support and funding for student initiatives.
- Offer specialized courses and certificates that focus on the SDGs, allowing students to gain in-depth knowledge and skills in sustainability.
- Promote interdisciplinary and collaborative learning experiences where students work together on projects related to the SDGs.
- SDG-focused societies such as Greens-OUSL, Zoonet, and BotSoc raise awareness and initiate projects for specific SDGs or sustainability in general.
- Invite guest speakers and experts to campus to discuss the SDGs, share success stories, and engage in panel discussions.
- Showcase and involve students in sustainability initiatives on campus that directly contribute to the SDGs, such as waste reduction, renewable energy, or green building practices.
- Launch awareness campaigns using various communication channels, including social media, posters, and campus events. These campaigns can highlight specific SDGs and their importance.
- Encourage artistic expression and creative projects related to the SDGs, such as art exhibitions, photography contests, or music performances.



Engagement and Raising Awareness

The CESSD of the Open University of Sri Lanka organized an island-wide art and photography exhibition in July 2023 regarding the celebration of University Day along with University Green Day in collaboration with the Young Zoologist Association and the Central Environmental Authority. The exhibition was held in Colombo and other regional centres, open to the public under two categories as school children and open. Themes of the exhibition were wildlife, environmental sustainability, and climate change.

Organize sustainability challenges or competitions where students can pro-

Less plastic movement, Phase 1

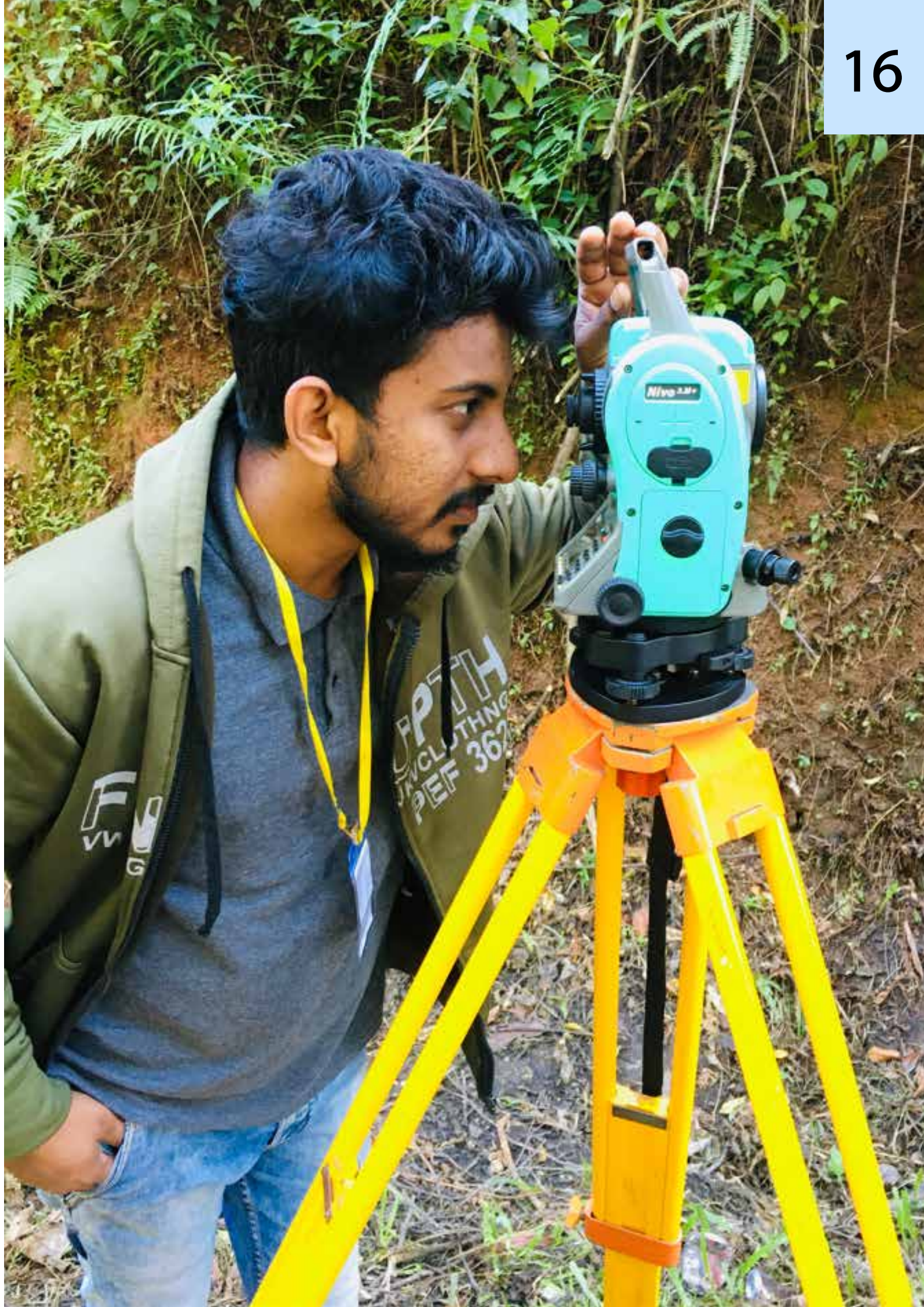
- Connect the university with local communities, NGOs, and government agencies to work together on SDG-related projects. Build partnerships and demonstrate the university's commitment to local sustainability.
- Organize student-led conferences and symposia where students can present research and projects related to the SDGs.
- Celebrate and participate in international days related to the SDGs, such as World Environment Day, Earth Day, or Global Goals Week.
- Create innovation hubs that support students and faculty in developing and implementing solutions for SDG-related challenges.



Education for Sustainable Development

Through Education for Sustainable Development (ESD), our aim is to equip students with the knowledge, skills, and attitudes necessary to address global sustainability challenges and contribute to a more sustainable future. So, we have integrated sustainability principles, practices, and values into the academic curriculum, campus operations, and the overall university culture.

- Infuse sustainability into the curriculum across various disciplines. Develop courses and programs that focus on sustainability, environmental stewardship, and social responsibility.
- Promote interdisciplinary learning and research to address complex sustainability issues. Encourage collaboration between different academic departments.
- Incorporate hands-on learning experiences, fieldwork, internships, and community-engaged projects that enable students to apply sustainability concepts in real-world contexts.
- Foster sustainability literacy among students, ensuring they understand the interconnections between environmental, economic, and social dimensions of sustainability.
- Support faculty and student research on sustainability topics. Provide research grants and resources for sustainability-focused projects.
- Establish dedicated centers or institutes focused on sustainability, which can serve as hubs for research, education, and community engagement.
- Implement sustainable practices in campus operations, such as energy-efficient buildings, waste reduction, green transportation, and responsible procurement.
- Organize awareness campaigns, workshops, seminars, and sustainability-themed events to educate the campus community about sustainability issues.



Education for Sustainable Development

I am eco-smart

Going beyond teaching and research, higher education institutions are expected to play a more active role in developing human resources that can contribute to the achievement of the SDGs. Children are the center of sustainable development, as they have a right to live in a sustainable society while developing themselves to their full potential. Investment in children lays a good foundation and is paramount to the social and economic development of a successful society. The Centre for Environmental Studies and Sustainable Development of the Open University of Sri Lanka organized a one-day activity-based program on sustainable development during the April school holidays for children whose parents (academic or non-academic) work at the OUSL.

Solar Remote Lab

Development of the Solar Remote Laboratory for the Department of Mechanical Engineering, OUSL, was initiated under the EUSL energy program funded by the European Union in 2020. A solar remote laboratory is intended to carry out experiments based on control and real environmental conditions to cater to different learning outcomes. The solar remote laboratory is a setup that could perform experiments and gather data for research purposes remotely controlled by the experiment setup.



Education for Sustainable Development

Fernery

Fernery is in front of the botany laboratory, which houses many fern species collected from different places. Studying ferns is an important component of the course Diversity of Plants (BYU 3500), and the idea of maintaining a fernery is important for students who are offering the course Horticulture (BYU 5609). Further, this fernery has been developed for the conservation of fern species and to create awareness about their ecological role.

The Medicinal Garden

The medicinal garden is in the vicinity of the Science and Technology building. Medicinal plants are an important component of the third-year course, "Plants and Man" (BYU5303). Identification of the types of metabolites and active compounds present in medicinal plants is part of the course Advanced Plant Physiology and Biochemistry (BYU6307). In addition, identification of medicinal plants is important in day-to-day life since medicinal plants contain a variety of active compounds that can be used for medicinal purposes.





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