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கொழும்புப் பல்கலைக்கழகம்
UNIVERSITY OF COLOMBO

Sustainability Report 2024



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1. Introduction

1.1. Setting and Infrastructure of the University of Colombo

University of Colombo, situated in the heart of Sri Lanka's bustling commercial capital, stands as one of the country's oldest and most prestigious institutions of higher education. Its roots trace back to the establishment of the Ceylon Medical College in 1870 and the Ceylon University College in 1921, carrying forward a rich legacy of academic excellence and intellectual leadership. Guided by its motto, "Buddhi Sarvathra Bhrajate", which means "Wisdom Enlightens", the University continues to nurture knowledge, innovation, and social responsibility across diverse disciplines. Today, the University comprises ten faculties, one campus, one school, and six institutes, bringing together 77 academic departments along with numerous centers and units dedicated to teaching, research, and community engagement.

The University offers a vibrant academic environment with a wide range of undergraduate and postgraduate programmes in Medicine, Arts, Science, Law, Management and Finance, Education, Technology, Nursing, Information Technology, Aesthetic Studies, Molecular Biology, and many other emerging fields. Beyond academics, the University is equally committed to student development and well-being through extensive library facilities, career guidance services, staff development programmes, advanced IT services, and dedicated support services for differently abled students. Blending heritage with progress, the University of Colombo continues to serve as a leading centre of learning and research, contributing meaningfully to national development and global scholarship. It operates through 20 main sites located across different parts of the country. These sites include faculties, institutes, research centers, and regional academic establishments that collectively support the university's teaching, training, research, administration and community engagement activities. These sites are listed below.

- Site 01 - College House
- Site 02 - Faculty of Science
- Site 03 - Faculty of Law
- Site 04 - Faculty of Arts
- Site 05 - Faculty of Management & Finance
- Site 06 - Faculty of Education
- Site 07 - Faculty of Graduate Studies
- Site 08 - Faculty of Medicine
- Site 09 - Faculty of Nursing
- Site 10 - Faculty of Indigenous Medicine
- Site 11 - Faculty of Technology
- Site 12 - Sri Palee Campus
- Site 13 - University of Colombo School of Computing (UCSC)
- Site 14 - Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB)
- Site 15 - Institute of Human Resource Advancement (IHRA)
- Site 16 - University of Colombo Institute for Agro-Technology & Rural Science (UCIARS)
- Site 17 - Postgraduate Institute of Medicine (PGIM)
- Site 18 - Postgraduate Institute of Indigenous Medicine (PGIIM)
- Site 19 - National Institute of Library and Information Science (NILIS)
- Site 20 - Rural Health Research Center (RHRC)

2. Sustainability and the Sustainable Development Goals (SDGs)

Sustainability means meeting our own needs today without compromising the ability of future generations to meet theirs. It is about finding a balance between the environment, the economy, and society so that humanity and nature can thrive together over the long term. Sustainability is often visualized as a three-legged stool. If one leg is weak, the whole structure collapses.

- **Environmental Protection:** Safeguarding ecosystems, reducing carbon footprints, conserving natural resources (like water and forests), and protecting biodiversity.
- **Social Development:** Ensuring human well-being, equity, and social justice. This includes access to clean water, education, healthcare, fair labor practices, and gender equality.
- **Economic Viability:** Promoting economic growth that generates wealth and jobs without destroying the environment or exploiting communities.

2.1. The Sustainable Development Goals (SDGs)

In 2015, the United Nations adopted the 2030 Agenda for Sustainable Development, which introduced the 17 Sustainable Development Goals (SDGs). These goals represent an urgent call for action by all countries to tackle global challenges by 2030.

1. Social and Basic Human Needs

- Ending Poverty (SDG1) -
- Zero Hunger (SDG 2)
- Good Health (SDG 3)
- Quality Education (SDG 4)
- Gender Equality (SDG 5)

5. Governance and Collaboration

- Peace, Justice and Strong Institutions (SDG 16)
- Partnerships to achieve the Goals (SDG 17)

2. Resource and Infrastructure

- Clean Water and Sanitation (SDG 6)
- Affordable and Clean Energy (SDG 7)
- Decent work and Economic Growth (SDG 8)
- Industry, innovation, and Infrastructure (SDG 9)
- Reduced Inequalities (SDG 10)

4. Environmental and Planetary Health

- Climate Action (SDG 13)
- Life Below Water (SDG 14)
- Life on Land (SDG 15)

3. Sustainable Communities

- Sustainable Cities and Communities (SDG 11)
- Responsible Consumption and Production (SDG 12)



2.2. The Importance of Pursuing Sustainability

1. Planetary Survival and Climate Resilience

We are consuming Earth's resources faster than they can regenerate. Adopting sustainable practices, such as transitioning to renewable energy and practicing climate-smart resource management, is the only way to mitigate severe climate change, prevent ecological collapse, and protect biodiversity.

2. Social Justice and Human Equity

The impacts of environmental degradation, pollution, and climate change are not distributed equally. They disproportionately affect vulnerable, lower-income communities. The SDGs place a heavy emphasis on equity, aiming to lift communities out of poverty, reduce systemic inequalities, and ensure that basic human rights like clean water and education are universal.

3. Long-Term Economic Stability

Traditional economic models often rely on linear depletion (take, make, waste). Sustainability encourages a transition to a circular economy, where waste is minimized and resources are continuously recycled. This protects supply chains from resource scarcity and fosters green innovation, creating resilient industries and new employment sectors.

4. A Clear Road-map for Collective Action

The SDGs provide a shared, universal language and framework for governments, academic institutions, businesses, and grassroots organizations. Instead of working in isolation, it allows global entities to align their policies, research, and initiatives toward measurable, shared targets.

3. Sustainability Goals in the University of Colombo

3.1 Strategic Infrastructure & Policy Alignment

3.1.1. Settings and Infrastructure

SDG 3: Good Health & Well-being

The university prioritizes the physical and mental well-being of its community by maintaining safe, supportive, and dignity-preserving environments. This includes structural campus upgrades such as non-slip washrooms, accessible ramps, and dedicated maternity spaces for staff and students. To prepare for emergencies and minimize workplace or classroom injuries, the university provides immediate medical response units, safety showers in high-risk zones, and robust physical and psychiatric safeguards during crises.

SDG 4: Quality Education

Quality education is achieved by actively fostering both academic accessibility and physical safety. The university systematically removes structural and digital barriers to learning through its comprehensive audiobook databases, assistive technology loan services, and specialized resource centers. Furthermore, a secure and distraction-free learning environment is maintained through student-led safety groups and mandatory safety training protocols for specialized environments like chemistry laboratories.

SDG 10: Reduced Inequalities

To drive institutional equity, the university works to ensure democratic and fair access to higher education for all. This commitment involves bridging gaps in physical campus resources and technological infrastructure, ensuring that marginalized, lower-income, or differently-abled individuals have the exact same opportunities to participate in high-level research and academic life as their peers.

SDG 11: Sustainable Cities & Communities

Sustainable campus communities rely on infrastructure that is both inclusive and highly resilient. By utilizing universal design principles, the university develops accessible urban spaces that serve the entire community equitably. This urban design is backed by advanced disaster resilience measures, including automated emergency alert networks and professional firefighting partnerships designed to guarantee a rapid emergency response time of under ten minutes.

Table 01: Alignment of Institutional Infrastructure for the SDGs

UN Sustainable Development Goal	Institutional Infrastructure & Programmatic Alignment
SDG 1: No Poverty	The Institute for Agro-Technology and Rural Sciences (IARS) in Hambantota utilizes large tracts of cultivated agricultural land for high-yield food production, sustainable farming models, and regional economic incubation.
SDG 3: Good Health & Well-being	UoC's green campus architecture provides open, clean, and highly biodiverse spaces that directly improve the mental and physical health of students and staff, encouraging active lifestyles, minimizing urban stress, and purifying air quality.
SDG 4: Quality Education	The campus integrates experiential learning within its green zones, utilizing dedicated open-air spaces as outdoor laboratories for Botany and Environmental Science field-based training.
SDG 6: Clean Water & Sanitation	Structural integration of industrial rainwater harvesting systems and advanced sustainable drainage networks across campus infrastructure ensures clean water conservation and mitigates hazardous urban runoff.
SDG 7: Affordable & Clean Energy	Direct enforcement of green building standards, eco-friendly materials, and passive energy-efficient designs in all new constructions and major structural renovations lowers energy overheads and limits greenhouse gas (GHG) emissions.
SDG 8: Decent Work & Economic Growth	Broad industrial and rural enterprise collaborations facilitate skill development, structured internships, and green entrepreneurship programs, preparing graduates for careers in the expanding global green economy.
SDG 9: Industry, Innovation & Infrastructure	Campus development frameworks systematically integrate sustainable engineering, climate-resilient architecture, and smart digitalized infrastructure into all multi-faculty building expansions.

SDG 10: Reduced Inequalities	The establishment and maintenance of decentralized satellite hubs, such as the Sri Palee Campus (Horana) and IARS (Hambantota) in less urbanized provinces, democratizes access to elite higher education for rural student demographics, directly closing the urban-rural academic disparity.
SDG 11: Sustainable Cities & Communities	Preserving dense green belts, biodiversity corridors, and designated colonial heritage landscapes within metropolitan Colombo enhances the commercial capital's overall environmental quality, illustrating how green infrastructure can successfully coexist with dense urban developments.
SDG 12: Responsible Consumption & Production	Campus-wide execution of waste segregation, formal electronic waste pipelines, and institutionalized green procurement guidelines enforces resource circularity across all corporate and academic supply chains.
SDG 13: Climate Action	Continual tree-planting drives and carbon-offsetting green patches support active carbon sequestration. The university performs routine carbon footprint assessments and drives energy-efficient operations to maximize climate resilience.
SDG 14: Life Below Water	The Faculty of Science and the Department of Zoology run dedicated aquatic biodiversity, water pollution, and coastal ecosystem research. On a localized level, extensive, well-maintained water ponds across multiple faculties sustain functional freshwater micro-ecosystems.
SDG 15: Life on Land	Strict conservation of natural green belts, extensive forest cover and the Little Wings Urban Forest at the Faculty of Science protects indigenous flora and fauna, safeguarding terrestrial ecosystems within university property boundaries.
SDG 16: Peace, Justice & Strong Institutions	The university implements models of good governance, institutional transparency, and absolute inclusivity in environmental policy formulation and campus administrative decision-making processes.
SDG 17: Partnerships for the Goals	Formally collaborates with state ministries, non-governmental organizations (NGOs), and international university networks to co-execute transdisciplinary sustainability research and civic outreach projects.

3.1.2. Institutionalizing Healthcare & National Clinical Services

The University of Colombo actively extends its medical expertise beyond the classroom to drive regional well-being, public safety, and national healthcare equity. Through the Faculty of Medicine, the university seamlessly integrates academic research with vital public service, managing dedicated clinical wards at the National Hospital of Sri Lanka (NHSL) to provide free essential laboratory services to admitted patients. This hands-on medical outreach is balanced by a strong focus on preventative public health and regional safety, ranging from industrial hygiene research that protects workplace environments to extensive maternal, child, and primary healthcare delivery via targeted community clinics and rural health camps. Furthermore, the university fulfills a critical civic responsibility by providing essential forensic and medico-legal services across key provincial police divisions, cementing its role as a foundational pillar of community health, justice, and social well-being in Sri Lanka.

Core Outreach Initiatives & Regional Impacts

- Clinical Support at NHSL - The Faculty of Medicine directly manages two clinical wards (Wards 41 and 48B) at the National Hospital of Sri Lanka, providing free laboratory services to admitted patients.
- Industrial Hygiene & Occupational Safety - The Department of Community Medicine undertakes fundamental clinical and industrial hygiene research focused on environmental monitoring to protect public and industrial workers.
- The University Community Health Project (Kotte) - Managed by the Department of Community Medicine, this initiative provides extensive maternal and child healthcare services to the public, including:
 - Antenatal and family planning clinics.
 - Child welfare programs and nutritional support via Thripasha distribution.
 - Well-women clinics, school health screenings, and dental services.
 - National immunization campaigns and communicable disease control.
- Primary Healthcare Camps - The Department of Family Medicine operates a specialized Family Practice Centre that runs free clinics and community health camps focused on non-communicable disease screening, vision tests, and health education for nearby populations.
- Medico-Legal & Forensic Services - The Department of Forensic Medicine and Toxicology provides critical Judicial Medical Officer (JMO) services to six major police divisions in the Western Province (Welikada, Wellampitiya, Thalangama, Mulleriyawa, Athurigiriya, and Nawagamuwa), supporting vital national forensic investigations.

Table 02: Strategic Medical & Community Alignment for the SDGs

Sustainable Development Goal (SDG)	Strategic Medical & Community Alignment
SDG 3: Good Health & Well-being	Operating the Reid Avenue Health Center, managing clinical wards at the National Hospital, conducting maternal clinics in Kotte, and running the Centre for Exercise Medicine to support both campus and public vitality.
SDG 6: Clean Water & Sanitation	Executing routine environmental sanitation audits, general campus sanitization, and strict food handler screenings to stop the spread of waterborne and carrier-borne infections.
SDG 12: Responsible Consumption & Production	Conducting clinical and industrial hygiene research to monitor chemical and environmental exposures, ensuring safe handling and sustainability within university and regional workspaces.
SDG 17: Partnerships for the Goals	Collaborating with the Medical Research Institute (MRI), the National Hospital, and corporate entities like Commercial Bank PLC to fund and expand public health infrastructure.

3.1.3. Flora & Fauna Conservation Facilities

The university runs several long-term conservation projects and living laboratories that protect Sri Lanka's unique biodiversity while advancing ecological education.

1. The Zoological Museum (Faculty of Science)

Operated by the Department of Zoology and Environment Sciences, this facility houses a comprehensive, preserved specimen collection representing the vast spectrum of Sri Lankan animal diversity. It provides physical baselines for taxonomic, ecological, and anatomical investigations while serving as a public outreach platform for schools and community biodiversity exhibitions.

2. The University Herbarium (Department of Plant Sciences)

Established in 1925 with foundational specimens collected by Sir Nigel Ball, this repository marks over a century of continuous botanical exploration, protecting invaluable botanical genetic resources. It houses over 3,000 carefully preserved plant specimens reflecting diverse ecosystems, including lowland rainforests, dry monsoon forests, alpine montane areas, and coastal vegetation zones. Through the Taxonomic Field Survey course, undergraduate Honours degree students add 50 to 100 authenticated herbarium sheets annually to integrate newly documented taxa.

3. The Field Ornithology Group of Sri Lanka (FOGSL)

Established in 1976 and affiliated with the Department of Zoology and Environment Sciences, FOGSL is a leading national body for avian conservation. It monitors wild bird populations, protects critical habitats (wetlands, forests, coastal zones), maps migratory routes, and safeguards international Ramsar wetland sites through active citizen science.

4. The Plant Sciences Glasshouse & Campus Flora Inventory

A living laboratory managed by the Department of Plant Sciences. It maintains a rich collection of mother plants used for tissue culture, micropropagation, and hydroponic trials to track plant adaptation. It runs an active documentation project that logs all native and introduced species across campus borders to directly guide green space zoning.

5. Automated Greenhouse Networks

- Faculty of Science Utilizes specialized climate-controlled structures to study plant physiology, stress tolerances, and rare-species ecology, effectively bridging the gap between classroom theory and conservation biology.
- Faculty of Technology:Employs modern greenhouse systems featuring automated drip irrigation, climate controls, and integrated renewable energy systems to pioneer climate-smart agricultural models.

Table 03: Strategic Environmental & Ecological Alignment for the SDGs

Sustainable Development Goal (SDG)	Strategic Environmental & Ecological Alignment
SDG 4: Quality Education	Utilizing the 100-year-old Herbarium, the Zoological Museum, and the 2-acre Faculty of Education Botanical Garden as interactive living classrooms.
SDG 12: Responsible Consumption	Developing the banana pseudostem nursery pot to eliminate plastic waste, supporting circular business lines for rural farming communities.
SDG 13: Climate Action	Deploying automated tech greenhouses, urban forest micro-climates, and local inventories to monitor carbon storage and urban heat island mitigation.
SDG 15: Life on Land	Discovering new species (e.g., Pseudophilautus dilmah), protecting migratory bird corridors via FOGSL, and using tissue genomics to shield endangered trees (e.g., Gyrinops walla).

3.1.4. Academic & Library Operations

Beyond physical infrastructure, the University of Colombo Library System serves as a core engine for social and educational sustainability, using its decentralized network to build health literacy, digital equity, and job readiness.

1. Literary Advocacy & Holistic Mental Well-being (SDG 3 & SDG 4)

- Literary and Reading Month - The Main Library organizes annual literacy campaigns that drive inclusive, equitable quality education and encourage lifelong learning opportunities across all student demographics.
- The Bibliotherapy Initiative - Recognizing reading as a clinically supported tool for stress reduction and mental health management, the library has established dedicated Leisure Reading Corners across its specialized Science, Medical, and Nursing branches.

2. Regional Medical Knowledge Syndication (SDG 3 & SDG 17)

The HeLLIS Network - Since 1980, the Medical Library of the University of Colombo has served as the crucial national focal point for the Health Literature Libraries and Information Services (HeLLIS) Network in Sri Lanka. This institutional infrastructure provides vital medical resources, research databases, and literature to healthcare professionals across the entire country and the wider Southeast Asian region.

3. Advanced Decentralized Academic Resources (SDG 4)

The university maintains a balanced mix of centralized and decentralized faculty libraries (including Medicine, Law, and Engineering). Each branch curates deep, highly specialized repositories of journals, books, and international databases, ensuring that researchers have immediate access to high-quality materials required for cutting-edge scientific and social research.

4. Digital Equity & Job-Readiness Skill Labs (SDG 4 & SDG 8)

- Electronic Resource Training: The Main Library conducts systematic, continuous training sessions on electronic databases, indexing tools, and digital research platforms, directly ensuring equitable digital literacy and long-term academic excellence.
- Visual Communication & Canva Digital Training: Hosted at the Science Library's Skill Lab, these specialized interactive training blocks empower students and educators with modern visual communication tools.
- Educational Impact (SDG 4): Enables students to synthesize and demonstrate complex learning via infographics, digital presentations, and research videos, while allowing educators to create highly engaging, custom learning materials.
- Economic Impact (SDG 8): Equips students with highly sought-after, modern digital content creation and marketing skills, expanding their job readiness, supporting future entrepreneurship, and giving them the tools to build professional resumes and portfolios without requiring cost-prohibitive proprietary software.

3.2. Energy Consumption Trends & Efficiency Management

3.2.1. Energy consumption

The annual electricity consumption in kilowatt-hours (KWH) over a two-year period from 2024 to 2025. Overall, the data reveals a significant upward trend in energy usage, which peaked in 2023 before experiencing a minor decline the following year. This was followed by a sharp surge in 2023, where consumption rose dramatically by nearly one million KWH to reach a high of 2,585,045 KWH. Finally, in 2024, the total consumption plateaued slightly, decreasing marginally to 2,555,119 KWH but remaining well above the levels observed in the initial two years.

The Figure 1 provides a detailed monthly breakdown of annual electricity consumption in kilowatt-hours (KWH) in 2023 through 2024. The year 2023 stands out due to a massive surge in energy usage during the late spring and summer months (May through August), peaking as the highest single month on the chart in August at nearly 280,000 KWH. In contrast, the data for 2024 reveals a completely different consumption profile; its highest spikes occurred during the late winter and early spring (January through March), peaking in March at over 260,000 KWH, before dropping sharply to its lowest levels in June.

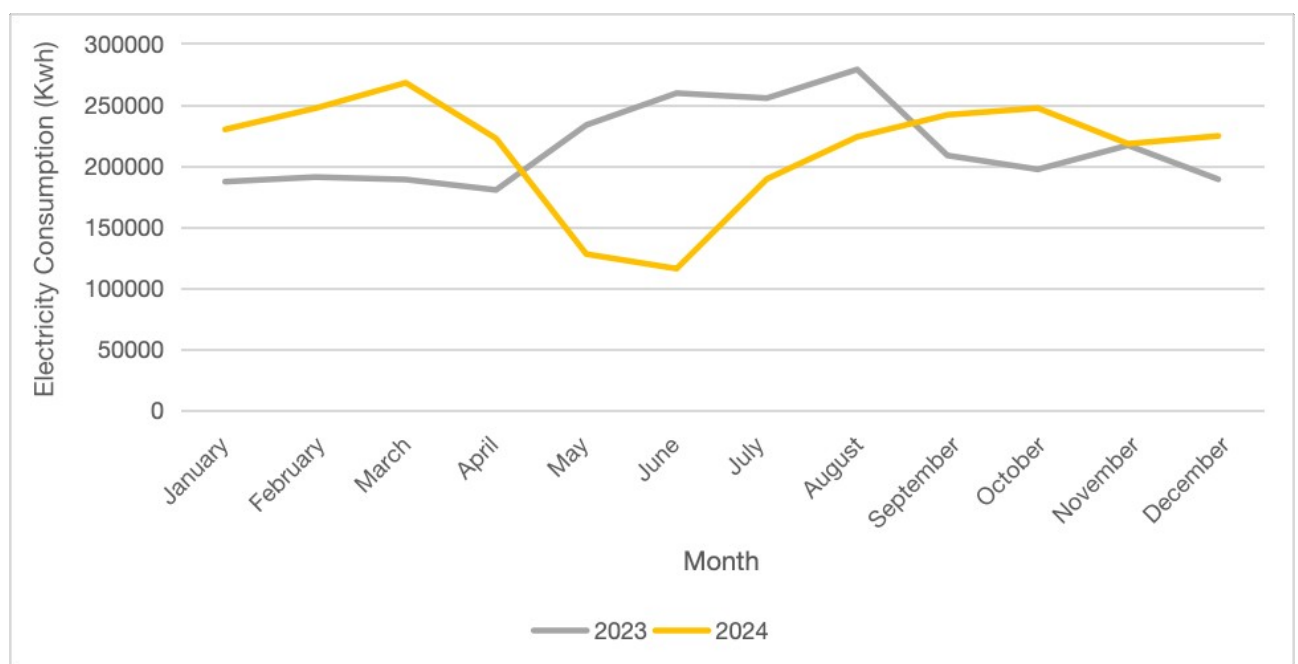


Figure 1: Electricity Consumption Monthly

3.2.2. Energy and Climate Change

SDG 4: Quality Education

- M.Sc. & Postgraduate Diploma in Climate Change and Environmental Management: Pioneered in 2017 by the Department of Zoology and Environment Sciences, providing dual domestic and international training in carbon mitigation, vulnerability mapping, and environmental adaptation.

- Masters in Environment Management (Faculty of Graduate Studies), features advanced, dedicated modules exploring localized climate change adaptations, resource efficiency, and global warming impacts.
- Undergraduate Curricula Integration- The Faculty of Science integrates dedicated climate change modules into both its general and honors Bachelor of Science (B.Sc.) degree paths. Undergraduates utilize these courses to perform practical, faculty-wide carbon footprint calculations as structural training exercises.
- Annual Research Symposium hosted by the Faculty of Graduate Studies under the core theme, "Building a Sustainable Future through Impactful Research," establishing empirical academic benchmarks for complex global sustainability challenges.
- National Biodiversity Strategic Action Plan (NBSAP) Training - A residential consultation workshop equipping youth leaders with technical knowledge to contribute to Sri Lanka's national biodiversity strategy and eco-preservation frameworks.

SDG 7: Affordable and Clean Energy

- Grid Consumption Reductions: Macro electricity consumption data from 2020 to 2024 reveals notable fluctuations in usage, culminating in a marked, systematic reduction in total grid consumption in 2024 compared to all preceding years.
- Organic Waste & Biogas Generation: Specialized biogas units convert campus food waste into renewable energy for daily operational use.
- The JICA Chair Programme Lecture Series: Launched with the Japan International Cooperation Agency and featuring world-class climate experts like Professor Takeo Kikkawa (President, International University of Japan). Its inaugural forum, "Towards a Green Horizon: Japan's Journey to Carbon Neutrality," provides critical macro-energy policy insights and structural blueprints for transitioning toward net-zero thresholds.

SDG 9: Industry, Innovation and Infrastructure

- Passive Architecture & Design Strategies- Campus development prioritizes climate-resilient engineering to lower dependency on mechanical cooling and artificial illumination:
- Faculty of Graduate Studies (FGS) utilizes complete natural ventilation and daylighting across five of its seven floors, drastically cutting mechanical cooling loads.
- Faculty of Medicine Features specialized structural voids that facilitate open interior airflow and light penetration, paired with high-efficiency curtain windows that optimize day-lit spaces while preserving thermal comfort.

The university systematically incorporates green building principles into its campus development to enhance occupant well-being and minimize environmental footprints. In compliance with national criteria, all new infrastructure projects must integrate solar photovoltaic (PV) arrays and industrial rainwater harvesting systems.

SDG 13: Climate Action

Digitalization & Carbon Footprint Mitigation

- **Paperless Academic Frameworks:** Widespread deployment of Learning Management Systems (LMS) ensures soft-copy delivery of lecture notes, manuals, and administrative documentation, minimizing paper procurement.
- **Hybrid Postgraduate Delivery:** Conducting postgraduate modules via online and hybrid configurations minimizes travel frequency, significantly cutting Scope 3 transport emissions for commuters.
- **Research Group on Carbon and Climate Change (RCCC):** Anchored within the Department of Zoology and Environment Sciences (Faculty of Science), the RCCC leads national and regional efforts in climate change mitigation, greenhouse gas (GHG) inventorying, and carbon cycle analysis across South Asia. Partnering with elite international institutions and private conservation entities (such as Dilmah Conservation), it publishes peer-reviewed research in indexed journals.
- **World Environment Day Flagship Program:** Conducted by the CEI under the title, "Navigating Environmental Sustainability for Higher University Rankings," mapping institutional climate performance directly to operational accountability.
- **Empowering Youth Advocates for Climate Justice:** Hosted in Colombo alongside the World Youth for Climate Justice (WYCJ) network, this training platform supports youth-led climate legal actions across Asia.

SDG 16: Peace, Justice and Strong Institutions

- **LL.M. in International Environment and Climate Change Laws:** Conducted by the Faculty of Law, this program offers professional legal training in international climate treaties, carbon trading legal structures, and environmental justice frameworks.
- **International Conference on Environmental Justice (ICEJ):** Administered by the Centre for Environmental Law and Policy (Faculty of Law) alongside global partners, including Jindal Global Law School, Lewis & Clark Law School, and the Commonwealth Legal Education Association, addressing climate equity, human rights, and environmental legislation.

3.3. Waste Management

The University of Colombo (UOC) has operationalized a systemic material recovery framework that handles campus waste streams, minimizes municipal landfill burdens, and converts organic and inorganic waste into localized economic assets.

3.3.1. The Centralized Waste Storage Center

Managed directly by the Center for Environmental Initiatives (CEI), the Centralized Waste Storage Center functions as the operational core of the university's material recovery framework. This infrastructure intercepts varied waste streams from all faculties, academic laboratories, offices, and cafeterias, isolating them at the source before they can mix and contaminate the environment.

- **SDG 12 (Responsible Consumption and Production)**- The facility features specialized, engineered compartments to systematically partition independent materials (including PET plastic, chemical containers, sorted glass, cardboard, metals, and electronic waste). This structural division maximizes the raw recycling potential of secondary commodities and guarantees that hazardous fractions are safely prepared for external industrial co-processing.
- **SDG 11 (Sustainable Cities & Communities)**- By transforming the urban campus footprint into a low-impact zone, it drastically scales down the volume of municipal solid waste transferred to city dump infrastructure, fostering regional environmental safety.
- **SDG 4 (Quality Education)**- Beyond its logistical duties, the physical center acts as a living laboratory. It offers a clear, accessible example of sustainable operations to students, administrative staff, and visiting school groups, demonstrating how policy translates into active environmental stewardship.

3.3.2. The Diploma in Waste Management

The formulation of professional academic programs such as the specialized Diploma in Waste Management serves as a primary engine for regional sustainable development. It bridges corporate practice with academic discipline by equipping industry professionals with specialized technical and strategic planning frameworks.

- By embedding the strict hierarchy of the 3R concept (Reduce, Reuse, Recycle) directly into the regional workforce, this educational program anchors the mechanics of SDG 12. Furthermore, its macro-level impacts cascade directly into adjacent global targets:
- **SDG 13 (Climate Action)**: Enforces advanced solid waste diversion tactics that significantly reduce landfill-generated methane emissions.
- **SDG 6 (Clean Water & Sanitation) & SDG 14 (Life Below Water)**: Imparts critical competencies in chemical lifecycle tracking, protecting urban aquatic channels and public health (SDG 3).
- **SDG 8 (Decent Work & Economic Growth)**: Actively trains an expanding cadre of skilled technicians to fill vital roles in the emerging circular green economy.

3.3.3. SDG 12: Responsible Consumption and Production

Resource Circularity & Waste-to-Energy Systems:

- The Center for Environmental Initiatives (CEI) conducts exhaustive annual waste surveys across all faculties and canteens to map waste generation baselines and enforce source-reduction protocols.
- Central Waste Storage Facility managed directly by the CEI, this infrastructure enables systematic segregation, secure temporary storage, and formal handovers of recyclable streams to state-authorized recyclers.
- A campus-wide behavioral mandate that bans single-use polyethylene and disposable packaging across all food service vendors and campus grounds.
- Biodegradable waste is processed in decentralized composting facilities to produce organic fertilizer for campus landscaping.
- Center for Planetary Health (Faculty of Medicine) addresses cross-cutting environmental challenges, spearheading targeted e-waste reduction campaigns to decouple toxic heavy metals from urban ecosystem soil and water lines.
- Unit for Research and Development of Natural Products (URDNP) anchored under the Faculty of Indigenous Medicine (FIM), this wing focuses on climate-resilient bio-economies, leading the scientific development and commercialization of sustainably sourced natural products rooted in traditional knowledge and local medicinal flora.

3.3.4. SDG 15: Life on Land

- Carbon Sequestration Arrays to offset unavoidable emissions, the university actively develops and maintains specialized urban forest patches (including the Little Wings Urban Forest) and rich medicinal plant gardens. These spaces maximize local carbon storage while functioning as active urban biodiversity reserves.
- Rainwater harvesting networks, multiple managed retention ponds, and an expansive 25-acre water retention tank are integrated into the campus landscape. These assets promote localized groundwater recharge, secure water recycling, and mitigate the urban heat island effect.
- Wastewater Recycling Infrastructure - The campus operates two dedicated sewage treatment plants that treat and recycle graywater and blackwater streams specifically for landscaping and grounds preservation.

3.4. Water Conservation

The University of Colombo employs a mix of autonomous, engineered, and eco-conscious water management systems across its scattered campus networks to optimize conservation, maximize wastewater reclamation, and pioneer purification technologies.

3.4.1. Biopolymer-Based Water Purification Technology

SDG Alignment Impact- This green innovation safely filters out heavy metals and hazardous elements like fluoride, lead, cadmium, and arsenic (SDG 6). By removing these silent killers from drinking sources, the technology directly targets chronic kidney and neurological diseases in vulnerable agricultural regions (SDG 3). Using biodegradable polymers ensures the purification units are manufactured with a minimal environmental footprint (SDG 12), driving local industrial innovation (SDG 9).

3.4.2. Automated Smart Hydroponics at UCIARS

The University of Colombo Institute for Agro-Technology and Rural Sciences (UCIARS) has developed an automated hydroponic system designed for smart, low-maintenance, protected cultivation. Led by academic faculty and undergraduate cohorts, the project has successfully grown high-value crops like lettuce and strawberries with minimal water loss.

Resource Circularity & Water Management : The system optimizes nutrient-water delivery, reducing evaporation and runoff waste compared to traditional open-field farming. Additionally, UCIARS facilities feature an on-site drainage reservoir built specifically to capture and settle tailwater from adjacent paddy fields, preventing unfiltered agricultural runoff from damaging downstream aquatic ecosystems (SDG 14)

Agricultural and Educational Outreach: Under the UNDP-funded Project Lot 1 (Irrigation and Water Management), UCIARS transforms this research into public benefit. The institute conducts structured Training Needs Assessments and public workshops across local, provincial, and national governance levels. These programs train dry-zone farmers in water-secured agriculture, smart irrigation mechanics, and sustainable cultivation practices, anchoring SDG 2, SDG 4, and SDG 12 across Sri Lanka.

3.4.3 Rainwater Harvesting

Rainwater harvesting structures such as the system installed at the Faculty of Graduate Studies collect, channel, and store seasonal rainfall. This non-potable reserve directly offsets freshwater demand for cleaning and plumbing systems. All other faculties follow the Colombo Municipal Council (CMC) guidelines, ensuring wastewater is carefully monitored, diluted, and tested before being discharged into public canals.

Table 04: Tangible Operational & Academic Impact in relations to the SDGs

UN Sustainable Development Goal	Campus Initiative / Program	Tangible Operational & Academic Impact
SDG 2: Zero Hunger	Automated Hydroponic Systems developed by the Institute for Agro-Technology and Rural Sciences (UCIARS).	Proves the viability of resource-efficient food production with minimal water maintenance, advancing protected agriculture and food security.
SDG 3: Good Health & Well-being	On-campus sewage and greywater treatment. Double-layer waterproofing of underground water sumps (e.g., UCSC).	Prevents waterborne diseases and maintains hygienic campus conditions. Eliminates groundwater contamination and protects potable water reserves from external pollution.
SDG 4: Quality Education	Environmental Science Special Degree programs. Hands-on undergraduate training via UCIARS automated greenhouses. UNDP-funded Lot 1 public education projects.	Integrates sustainability principles directly into higher education curricula, providing future scientists and agriculturalists with practical resource-management skills.
SDG 6: Clean Water & Sanitation	Campus Sewage Treatment Plants (STPs). Biopolymer-Based Nanohydroxyapatite Composite technology. Faculty Rainwater Harvesting Projects.	Promotes sustainable wastewater reclamation and safe reuse for landscape irrigation. Eradicates toxic contaminants (fluoride, lead, cadmium, arsenic) from water supplies.

SDG 9: Industry & Innovation	Development of eco-friendly biopolymer filtration matrices and automated soil-less farming systems.	Drives green technological innovation by replacing industrial, pollutant-heavy materials with sustainable engineering alternatives.
SDG 11: Sustainable Cities	Decentralized wastewater management and rainwater harvesting networks across campus faculties.	Models an environmentally responsible urban institution that reduces strain on Colombo's municipal utility infrastructure.
SDG 12: Responsible Consumption	Utilization of treated greywater for landscape irrigation and facility cleaning. Online conscious water consumption awareness drives.	Lowers the university's reliance on external freshwater grids, fostering a circular resource loop and shrinking the campus water footprint.
SDG 13: Climate Action	Rainwater collection and storage infrastructure (e.g., Faculty of Graduate Studies).	Builds institutional climate resilience against regional dry-zone water scarcity and adapts campus infrastructure to shifting monsoonal rainfall patterns.
SDG 14: Life Below Water	River water quality, pollution control, and aquatic biodiversity research by the Dept. of Zoology. Drainage reservoirs at UCIARS.	Provides actionable field data to guide freshwater and marine ecosystem conservation. Traps and filters runoff from paddy fields before it exits the agricultural ecosystem.

3.5. Education and Research (ED)

Annual research symposium of 2024 was held at the Faculty of Graduate Studies Auditorium, was organized around the theme, “Building a Sustainable Future through Impactful Research.” This theme underscores the university’s commitment to addressing pressing global challenges and advancing sustainable development through research. SDG Alignment: SDG 9 (Industry, Innovation, & Infrastructure), SDG 17 (Partnerships for the Goals).



3.5.1. Academic & Research Initiatives

a) Annual research Symposium 2024

b) International Conference on Business Sustainability

Target Objective was aligning corporate strategies, economic models, and industrial operations with resource-efficiency and circular economies. SDG 8 (Decent Work & Economic Growth), SDG 12 (Responsible Consumption & Production) were SDG alignment.



c). International Conference on Environmental Justice 2024 (ICEJ'24)

Collaborators were Faculty of Law (UoC) with Jindal Global Law School (India), Commonwealth Legal Education Association, NAPSIPAG Disaster Research Group (University of Catania, Italy), and Lewis & Clark Law School (USA). Addressing global climate inequalities, environmental legislation, and cross-border environmental legal protections was the objective and SDG Alignment were SDG 16 (Peace, Justice, & Strong Institutions), SDG 17 (Partnerships).



d). Two-day residential training and consultation workshop on Sri Lanka's National Biodiversity Strategic Action Plan (NBSAP)

The workshop was successfully conducted, offering participants valuable hands-on training and interactive discussions designed to strengthen their leadership skills and enhance their capacity as future environmental leaders. It also served as a platform for youth to share their perspectives and contribute to a national consultation process aimed at shaping future biodiversity actions. Moreover, the event fostered meaningful networking among young leaders and stakeholders committed to advancing biodiversity conservation efforts across the country.



"Heal the Planet, Wellbeing for All"

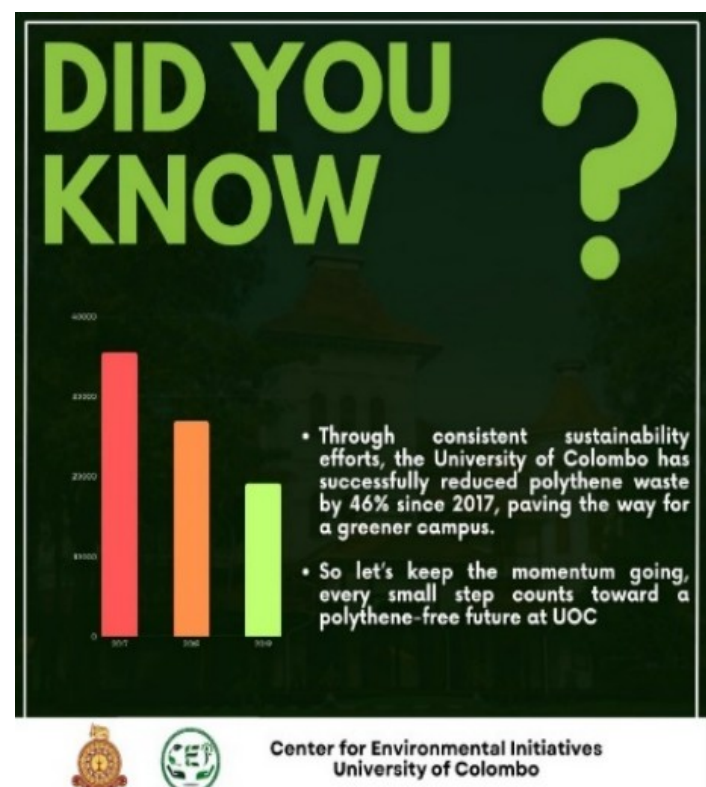
DIGITAL ETOX RIVE

Organised by the Center for Planetary Health at the Faculty of Medicine, University of Colombo

Join us in creating a cleaner, greener and healthier future by responsibly disposing of your electronic waste

Responsible disposal and recycling e-waste prevent toxic substances like lead and mercury from contaminating the environment, keeps hazardous materials out of landfills and protect the health of us and the entire planet

LOCATION	WHAT WE ACCEPT	WHEN
Upper Basement Car Park, Faculty of Medicine, University of Colombo	Old computers and laptops Mobile phones and tablets Printers and scanners Cables and chargers Game consoles Any other electronic devices!	7-10 APRIL 2025



- E-waste collection programme organized by the Center for Planetary Health, Faculty of

- A post series on environmental awareness for university students by the Center for Environmental

e). Lunchtime Talk under the theme of Gender Equality and Women Empowerment



The Career Guidance Unit of the Faculty of Indigenous Medicine, University of Colombo, successfully organized a Lunchtime Talk under the theme of Gender Equality and Women Empowerment (SDG 05) on 23rd July 2024, titled “Breaking Barriers: A Culinary Journey Towards Women Empowerment.” The event, held from 12.15 p.m. to 1.15 p.m. at the Mini Auditorium, featured Chef Renuka Rathnayake, Sri Lanka’s first female Executive Chef, as the guest speaker.

f). The exhibition - “Age-friendly environments”



g). The University of Colombo launched its JICA Chair Programme

The University of Colombo launched its JICA Chair Programme Lecture Series with a special lecture by Professor Takeo Kikkawa, President of the International University of Japan, on September 18, 2024. The lecture, titled Towards a Green Horizon: Japan’s Journey to Carbon Neutrality, focused on Japan’s energy policy and its goal of becoming carbon neutral.



h). A workshop on Strengthen faculty capacity in applied ethics research, collaboration, and publication.

The participants gained insights into ethics embedding institutional policies, research practices, and educational frameworks, thereby fostering a culture of integrity and excellence. The collaboration between the University of Colombo and Globethics Academy marks a significant milestone in promoting ethics and values in higher education, reaffirming the university's commitment to advancing value-based education.



i). The Center for Environmental Initiatives (CEI) conducted the World Environment Day 2024 awareness programme, titled “Navigating-Environmental Sustainability for Higher University Rankings” with the participation of both staff and students. SDG 4 (Quality Education), SDG 13 (Climate Action).



j). International Knowledge Exchange Seminars

- The International Seminar on Language Teaching, Research, and Policy: Lessons Learnt and the Way Forward: <https://cmb.ac.lk/international-seminar-on-language-teaching>



k). GKS Alumni Reunion 2024 – Study in Korea Seminar

This was organized by the GKS alumni Association Sri Lanka in Collaboration with the Embassy of the Republic of Korea. **GKS Alumni Reunion 2024 (Study in Korea Seminar)**, Hosted with the Embassy of the Republic of Korea to foster bilateral intellectual mobility, funding pathways, and regional academic exchanges (SDG 17).



Table 05: Sustainability in Action: Campus Events

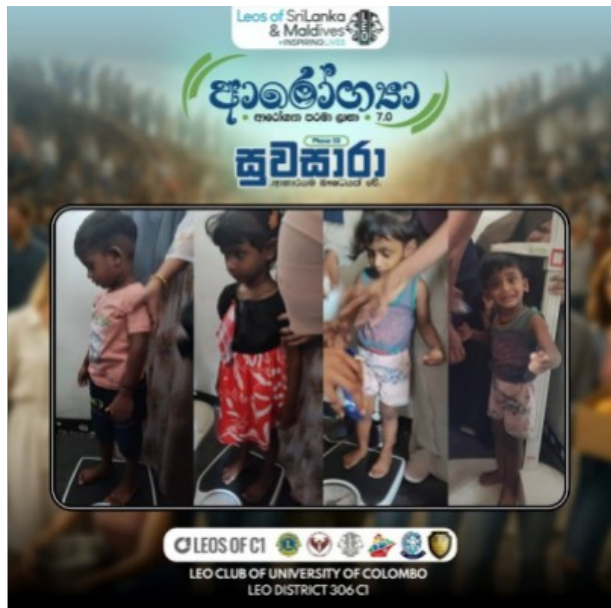
Event / Initiative	Core Action & Focus Area	Covered SDG
National Biodiversity Strategic Action Plan (NBSAP) Training	Two-day youth leadership workshop and stakeholder consultation directly contributing to shaping Sri Lanka's national biodiversity policies.	SDG 15: Life on Land • Ecosystem preservation • Youth policymaking
E-Waste Collection Programme (Center for Planetary Health)	Targeted extraction and safe recycling of hazardous electronics from university and medical laboratory streams to prevent heavy metal soil pollution.	SDG 12: Responsible Consumption • Hazardous waste management • Circular economy practices
Age-Friendly Environments Exhibition	Multidimensional display (using sets, drama, and posters) across 8 dimensions (housing, cities, public space, agriculture, etc.) supporting elder well-being.	SDG 3: Good Health & Well-being • Reducing geriatric disability risks • Inclusive urban infrastructure (SDG 11)

“Breaking Barriers” Lunchtime Talk (Faculty of Indigenous Medicine)	Guest lecture featuring Sri Lanka’s first female Executive Chef, addressing professional barriers and vocational empowerment.	SDG 5: Gender Equality • Women’s structural empowerment • Dismantling workforce barriers
Tree Planting Ceremony (Asia Laboratory Animal Day 2024)	Direct urban reforestation and canopy restoration within university grounds to support inner-city biodiversity.	SDG 15: Life on Land • Terrestrial biodiversity restoration
JICA Chair Programme Lecture Series (IUJ Collaboration)	Institutional masterclass on "Towards a Green Horizon: Japan’s Journey to Carbon Neutrality" analyzing energy policy shifts.	SDG 7: Affordable & Clean Energy • Carbon-neutral system strategies • Climate Action (SDG 13)
Globethics Academy Capacity Workshop	Strengthening institutional faculty research capabilities through systemic values, ethical leadership, and anti-corruption academic principles.	SDG 16: Peace, Justice & Strong Inst. • Values-based educational policies • Academic integrity frameworks

3.5.2. Activities organized by student organizations related to the sustainability

1. Project AROGYA & KRUTHAGUNA (Leo Club)

A community health campaign dedicated to providing healthcare advice and support specifically tailored for mothers. In addition, the initiative offers accessible pharmaceutical and medication guidance to help the general public safely navigate their health needs.



2. Emergency First-Aid Awareness Camp (BOTSOC)

Organized in partnership with the Sri Lanka Red Cross Society, this hands-on camp trains university students and society members in critical emergency response and first-aid techniques. The program focuses heavily on maximizing physical safety and medical preparedness across the campus.

3. Leader In You Seminars (AIESEC)

A leadership development initiative designed to inspire and challenge school students. Through interactive workshops led by industry professionals alongside experiential outbound training, participants build essential soft skills like teamwork, effective communication, and personal resilience.



4. LDS 13.0 Seminars (AIESEC)

A dynamic leadership training seminar that encourages undergraduates to step out of their comfort zones. Styled with an energetic 90s theme, the program utilizes team-building activities, outbound challenges, and peer networking to spark inner motivation and build collaborative skills.



5. Future Challenge 2024 (Rotaract Club)

A career readiness program tailored to help undergraduates successfully transition into the workforce. It features professional development workshops, corporate mentorship pairings, and guidance counselor sessions focused on enhancing student employability.



6. GCE O/L Seminar Series (FOE Media Unit)

A multi-day educational outreach project organized by Bachelor of Education students. The team traveled to Mattakotuwa Kanishta Vidyalaya in Nattandiya to conduct intensive academic workshops and seminars aimed at preparing school children for their upcoming national examinations.

7. “Breaking Barriers: A Culinary Journey” (Career Guidance Unit)

An inspiring career empowerment session featuring Sri Lanka’s first female Executive Chef. The talk aimed to dismantle deep-rooted professional biases and encourage young women to confidently pursue leadership roles in historically male-dominated industries.



8. Sustainable Transportation Session (Faculties of Medicine, Arts, & Computing)

An interactive educational forum organized in collaboration with BYD Auto Lanka. Panelists and students explored the future of public transit, focusing on the mechanics of electric mobility, green technology, and carbon-neutral transportation networks.



9. Project Araksha (Leo Club)

A public safety awareness campaign that creates clear, reliable safety guidelines for daily commuters. The project focuses on educating the community on how to safely navigate public transit systems.

10. “Rescue Mission: Planet Earth” Hackathon (Center for Planetary Health)

An innovation sprint that tasks student teams with developing creative solutions to urgent regional environmental problems. Participants design and pitch actionable digital tools, tech hardware, and biomedical prototypes.

11. Celebration of Environment-Related Days (Campus-wide)

A continuous calendar of standardized campus events designed to honor international environmental milestones. The program keeps students informed and active in global ecological conversations throughout the academic year

12. Biodiversity Conservation Education (Beez Society)

A peer-to-peer education program focused on local ecology. Zoology and environmental science students run targeted modules to teach others how to identify and protect highly vulnerable local micro-fauna and their fragile habitats.

13. Digital Awareness Campaigns (BOTSOC)

An ongoing public education effort leveraging social media. Through distinct series like *"Plantifacts," "AgriFocus,"* and *"Biotech Bulletin,"* students regularly publish verified insights regarding botany, biotechnology, and sustainable agricultural trends.

14. Greenish 2.0 & Leo Tree Planting (SABIT, Faculty of Technology)

A rigorous, hands-on land preservation effort executed right on campus grounds. Students and faculty members physically treated, fortified, and fertilized 480 plants across the faculty’s 7-hectare premises to actively improve local soil health and green canopy.



15. Project Natura & Hope to Future 2024 (Rotaract & Campus Radio)

A massive environmental clean-up drive staged at Panadura Beach. Student volunteers gather to collect marine debris and plastic waste, directly preventing coastal degradation and supporting local coastal communities.

16. Project “Pura Sobha” (Faculty of Medicine & Colombo Municipal Council)

A collaborative civic forestry project focused on urban renewal. Students transformed neglected, barren parcels of land located near the faculty borders into functional, green community spaces for city residents.

17. Project WISADAMU (Leo Club & Centre for the Study of Human Rights)

A mobile legal-aid initiative deployed to the Nuwara Eliya District. The camp provides free, accessible legal counsel to estate laborers who are actively facing wage disputes, exploitation, or unfair labor practices.

18. Project Thirasara & Project Sevana (Rotaract / Leo Club)

A dual-focused community support initiative. It provides immediate relief by distributing dry rations to low-income rural villages, while simultaneously offering continuous emotional care and educational tutoring for children at the Sevana Children's Home.



19. PRANASARA Blood Donation Camp (Student Organizers)

An annual health drive that mobilizes the student body to donate blood. The collected units are directly used to restock regional blood banks and support urgent clinical procedures in local hospitals.



20. “Food Fit” Nutrition Initiative (University-wide)

An educational health campaign focused on the benefits of conscious eating. The program promotes plant-based nutrition and local food sourcing to help university students lower their dietary environmental impact while preventing chronic lifestyle diseases.

21. World Malaria Day Awareness (Faculty of Indigenous Medicine)

An educational forum blending modern public health with traditional knowledge. Undergraduates and locals are trained on how to prepare all-natural herbal mosquito repellents and utilize *Dhooma* (medicinal smoke) to control disease-carrying insects.

Table 07: Sustainability in Action : Students' Societies

Event / Project Name	Organizing Body	SDGs Covered	Summary of Scope
Project AROGYA & KRUTHAGUNA	Leo Club	SDG 3: Good Health & Well-being	Healthcare and medication advice campaigns focused on maternal care for communities.
Emergency First-Aid Awareness Camp	BOTSOC & Sri Lanka Red Cross Society	SDG 3: Good Health & Well-being	Essential training in emergency response, safety, and campus medical preparedness.
Leader In You & LDS 13.0 Seminars	AIESEC	SDG 4: Quality Education	Leadership development, workshops, and outbound training to build resilience and teamwork in youth.
Future Challenge 2024	Rotaract Club	SDG 4: Quality Education	Career guidance, professional development, and corporate mentorship to improve undergraduate employability.

Sustainable Transportation Session	Faculties of Medicine, Arts, and Computing (with BYD Auto Lanka)	SDG 11: Sustainable Cities & Communities	Panel exploring electric mobility, alternative tech, and carbon-neutral transit options.
Project Araksha	Leo Club	SDG 11: Sustainable Cities & Communities	Public safety awareness initiative promoting secure and reliable usage standards for public transit commuters.
“Rescue Mission: Planet Earth” Hackathon	Center for Planetary Health, Faculty of Medicine	SDG 13: Climate Action	Innovation sprint where students pitch digital, technological, and biomedical solutions to regional environmental issues.
Celebration of Environment-Related Days	Campus-wide	SDG 13: Climate Action	Annual programming dedicated to tracking and highlighting international climate actions.
Biodiversity Conservation Education	Beez Society, Dept. of Zoology & Environmental Sciences	SDG 15: Life on Land	Specialized peer-to-peer training modules targeted at identifying and protecting vulnerable micro-fauna.
“Plantifacts,” “AgriFocus,” &	BOTSOC	SDG 15: Life on Land	Public digital campaigns sharing insights into sustainable

Sustainable Transportation Session	Faculties of Medicine, Arts, and Computing (with BYD Auto Lanka)	SDG 11: Sustainable Cities & Communities	Panel exploring electric mobility, alternative tech, and carbon-neutral transit options.
“Biotech Bulletin”			agriculture, botany, and biotechnology.
Greenish 2.0 & Leo Tree Planting	SABIT, Faculty of Technology	SDG 15: Life on Land	Land preservation campaign where students manually treated and fertilized 480 plants across faculty grounds.

Project “Pura Sobha”	Faculty of Medicine & Colombo Municipal Council	SDG 11: Sustainable Cities & Communities / SDG 15: Life on Land	Civic urban forestry program transforming barren metropolitan land into functional community green spaces.
Project WISADAMU	Leo Club & Centre for the Study of Human Rights	SDG 10: Reduced Inequalities	Free mobile legal-aid camp providing legal counsel to estate laborers in Nuwara Eliya facing exploitation.
Project Akura 2024 & SABIT Supply Donation	Student Organizations	SDG 4: Quality Education	Structural restoration of classrooms at Sri Jinaratana Primary School and supply distribution in Polonnaruwa.
Project Thirasara & Project Sevana	Rotaract / Leo Club	SDG 1: No Poverty SDG 2: Zero Hunger	Direct food-security distributions of dry rations to impoverished villages and support at the Sevana Children's Home.
PRANASARA Blood Donation Camp	Student Organizers	SDG 3: Good Health & Well-being	Annual health drive mobilizing student donors to restock regional blood banks.
“Food Fit” Nutrition Initiative	University-wide	SDG 3: Good Health & Well-being SDG 12: Responsible Consumption	Promoting plant-based diets and local sourcing to minimize non-communicable diseases and reduce carbon footprints.
World Malaria Day Awareness	Faculty of Indigenous Medicine	SDG 3: Good Health & Well-being	Educational forum training people to prepare natural herbal mosquito repellents and medicinal smoke vector controls.

3.6. Environmental Governance & Research Centers

1. Center for Environmental Initiatives (CEI)

The university's central governing environmental office, managed by an Environmental Officer and a multi-faculty committee. The CEI oversees institutional solid waste management systems, protects campus green spaces, and runs environmental education programs for both the university community and regional schools.

2. The ENTrust (Environmental Training and Research Unit for Sustainability)

An expert ecological branch operating out of the Department of Zoology and Environmental Sciences. This unit provides professional field consulting, wildlife risk mitigation strategies, and rigorous biodiversity tracking data to support conservation efforts.

3. Indo-Lanka Environmental Law Week

A university-led regional forum designed to foster international environmental cooperation across South Asia. The event brings stakeholders together to advance climate diplomacy and harmonize cross-border legal frameworks protecting the environment.

4. Center for Environmental Law and Policy (CELP)

Based within the Faculty of Law, this center bridges the gap between science, economics, and law. It unifies multidisciplinary research to actively advise state policies and foster a legally conscious, ecologically minded society.

5. The University SDG Platform

An executive tracking hub created through a strategic partnership between the Centre for Quality Assurance (CQA) and the International Office (IO). This office maps and evaluates the university's holistic operational performance to align it with international sustainable university criteria.

6. Sri Palee Campus SDG Committee

A decentralized, faculty-level governing board. This dedicated committee ensures that the localized, day-to-day operations at the Sri Palee campus strictly align with the university's overarching green development blueprints.

3.7. Social Equity & Inclusion Initiatives

1. Center for Gender Equity and Equality (CGEE)

The primary institutional body responsible for implementing structural safeguards and anti-discrimination policies on campus. It works continuously to secure fair professional mobility and an equitable environment for women and minority demographics.

2. The Human Library Project

An innovative, dialogue-driven initiative where users can "borrow" real people as "Human Books." These individuals come from marginalized or stigmatized communities, and the project uses restorative personal conversations to break cultural biases and promote understanding.

3. Student Infrastructure

Student Service Centre (Canteen, Labs, Auditorium, & Study Area)

A comprehensive student hub designed to support both academic excellence and daily well-being. It provides modern laboratories and quiet study areas for high-quality research, alongside a central canteen that provides nutritious, affordable meals to the campus community.

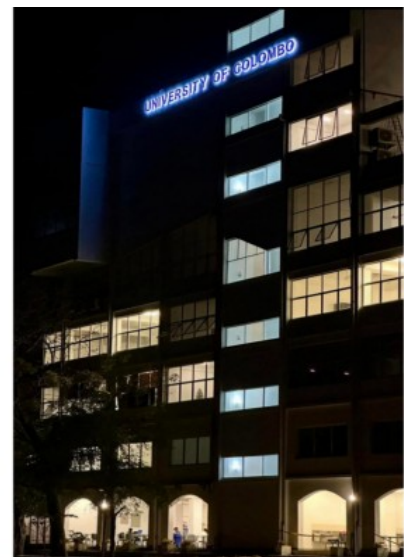


Table 08: Sustainability on Projects / Centers

Project / Center Name	SDGs Covered	Summary of Scope
Career Guidance Unit (CGU) & Unit for Research and Development of Natural Products (URDNP)	SDG 9: Industry, Innovation, and Infrastructure	Focuses on student career pathways and leads research to commercialize natural products derived from local traditional knowledge, medicinal plants, and minerals.
Souvenir Shop - University of Colombo	SDG 12: Responsible Consumption and Production	A physical retail incubator on campus that promotes green consumption by supplying eco-friendly alternatives like reusable tote bags and plastic-free lunch boxes.
Center for Environmental Initiatives (CEI)	SDG 13: Climate Action SDG 15: Life on Land	The university's central environmental governance office; coordinates solid waste management, green space protection, and eco-awareness programs.

Project / Center Name	SDGs Covered	Summary of Scope
The ENTrust (Environmental Training and Research Unit for Sustainability)	SDG 13: Climate Action SDG 15: Life on Land	Based in the Department of Zoology and Environmental Sciences; provides ecological field consulting, wildlife risk mitigation, and biodiversity research tracking.
Indo-Lanka Environmental Law Week	SDG 13: Climate Action SDG 15: Life on Land	A university-led initiative to spearhead regional environmental cooperation, climate diplomacy, and legal strategy harmonization across South Asia.
Center for Environmental Law and Policy (CELP)	SDG 16: Peace, Justice, and Strong Institutions	Operating out of the Faculty of Law; unifies scientific, economic, and legislative research to shape state policies and build a legally conscious eco-society.
The University SDG Platform	SDG 16: Peace, Justice, and Strong Institutions	A strategic partnership between the CQA and International Office that tracks, maps, and aligns university performance metrics against international sustainable ranking criteria.
Sri Palee Campus SDG Committee	SDG 16: Peace, Justice, and Strong Institutions	A decentralized faculty board ensuring local operational adherence to structural green development blueprints.
Center for Gender Equity and Equality (CGEE)	SDG 5: Gender Equality SDG 10: Reduced Inequalities	Implements structural safeguards and anti-discrimination policies to secure fair professional mobility for women and minority demographics.
The Human Library Project	SDG 5: Gender Equality SDG 10: Reduced Inequalities	Allows users to "borrow" Human Books (individuals from marginalized communities) to break down cultural biases and foster non-violence through personal dialogue.
Student Service Centre (Canteen, Labs, Auditorium, & Study Area)	SDG 3: Good Health and Well-being SDG 4: Quality Education	Supports high-quality learning and research via modern labs/study spaces, while promoting well-being by offering nutritious, affordable food options in the canteen.

3.8 The Impact of Integrated Education and Research Programs on Supporting the SDGs

3.8.1. Global Recognition of Scientific Impact

Elsevier has released its updated dataset, "Updated science-wide author databases of standardised citation indicators," a globally recognized assessment of scientific impact led by Professor John P.A. Ioannidis and his team at Stanford University, USA.

This large-scale bibliometric analysis evaluates scientists worldwide using a harmonized set of citation indicators to measure both career-long and recent-year research impact. The 2024 update assesses scientists' productivity and influence across 22 scientific fields and 174 subfields, according to the Science-Metrix classification system.

Researchers qualified for inclusion if they ranked:

- Within the top 100,000 scientists by composite citation score (c-score), OR
- Within the top 2% of their respective subfield, based on Scopus citation data.

Both self-citation-adjusted and unadjusted metrics were considered to ensure a fair and comprehensive evaluation.

3.8.2. Recognition of Sri Lankan Scientists

In this latest edition, 63 Sri Lankan scientists were recognized for their outstanding research contributions. Notably, 10 researchers from the University of Colombo (UoC) were listed among the Top Scientists for the year 2024, reflecting the university's growing global research impact and excellence in scientific scholarship.

University of Colombo Scientists Included in the 2024 List

- Emeritus Professor Kamini Mendis
- Emeritus Professor Saroj Jayasinghe
- Professor Senaka Rajapakse
- Professor Nadira D. Karunaweera
- Professor Priyanga Ranasinghe
- Professor Deepika Fernando
- Professor Ranil Jayawardena
- Professor Dakshitha Wickramasinghe
- Dr. Meran Keshawa Ediriweera
- Dr. Umesh Jayarajah

This achievement highlights the University of Colombo's strong research culture, global visibility, and academic leadership in medical, biomedical, and health sciences, as well as interdisciplinary research domains. This recognition directly reinforces UoC's alignment with SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure) by fostering world-class research and innovation.

3.9. Alignment with the 17 United Nations Sustainable Development Goals (SDGs)

The following matrix outlines how the University of Colombo's integrated academic ecosystem combining classroom learning, institutional policy, and field-leading research systematically contributes to achieving each of the 17 SDGs.

3.9.1. Social & Economic Dimensions (SDGs 1 - 5)

- **SDG 1: No Poverty**

UoC drives upward social mobility by offering scholarships, bursaries, and financial assistance programs for economically disadvantaged students, while social science faculty study poverty dynamics, livelihood sustainability, and economic empowerment to inform national poverty reduction policies.

- **SDG 2: Zero Hunger**

The Faculty of Science and Faculty of Medicine actively integrate nutrition, food security, and sustainable agriculture modules into their curricula while simultaneously conducting applied research on food safety, urban farming, and ecosystem-based management to combat malnutrition.

- **SDG 3: Good Health and Well-being**

The Faculty of Medicine pairs rigorous professional training for future healthcare workers with advanced research in epidemiology, mental health, and disease control, translating classroom expertise directly into national health policy reforms and clinical improvements.

- **SDG 4: Quality Education**

UoC delivers diverse undergraduate, postgraduate, and teacher training initiatives that embed sustainability and ethics across disciplines, supported by institutional research evaluating learning methodologies, inclusive models, and Education for Sustainable Development (ESD).

- **SDG 5: Gender Equality**

Institutional equal admission policies ensure absolute gender parity across all faculties, which is reinforced academically by specialized gender studies modules, awareness campaigns, and research tracking workplace equality and socio-cultural barriers to women's empowerment.

3.9.2 Environmental & Infrastructure Resources (SDGs 6 – 11)

- **SDG 6: Clean Water and Sanitation**

Environmental science and chemistry academic tracks combine student training in water quality assessment with active research on water pollution, river ecosystem health, and community water management to supply data for sustainable clean water access.

- **SDG 7: Affordable and Clean Energy**

Courses in physics, engineering, and environmental science introduce students to renewable energy technologies and energy efficiency principles, running alongside active laboratory research into solar energy, bioenergy, and low-carbon development alternatives.

- **SDG 8: Decent Work and Economic Growth**

UoC nurtures graduate innovation and job readiness through targeted entrepreneurship, economics, and management curricula, backed by economic research that guides national development planning and labor market reforms.

- **SDG 9: Industry, Innovation, and Infrastructure**

The university fosters an entrepreneurial mindset through business incubators and collaborative university-industry student pathways, supported by ongoing technical research in environmental engineering, infrastructure sustainability, and industrial innovation.

- **SDG 10: Reduced Inequalities**

UoC enforces inclusive institutional admission policies that provide access for students from rural and underprivileged backgrounds, aligning with social science policy research that explores inequality, inclusion, and social justice to shape equitable national frameworks.

- **SDG 11: Sustainable Cities and Communities**

Urban planning, geography, and environmental management courses introduce sustainable urban development principles, which are visually and practically demonstrated on campus through projects tracking urban biodiversity, air quality, and waste segregation.

3.9.3. Planet, Peace, & Partnerships (SDGs 12 - 17)

- **SDG 12: Responsible Consumption and Production**

Students are trained in waste minimization and recycling through direct curriculum integration and campus awareness programs, supported by the Centre for Environmental Initiatives (CEI), which conducts waste audits and manages university solid waste sustainably.

- **SDG 13: Climate Action**

Environmental science and geography tracks emphasize the causes and impacts of climate change, while academic research groups study greenhouse gas emissions, mangrove carbon storage, and climate resilience to formulate national adaptation strategies.

- **SDG 14: Life Below Water**

Marine biology and environmental science curricula provide foundational learning in ocean conservation and blue carbon ecosystems, alongside field research on coastal habitats, mangroves, and marine pollution to support sustainable fisheries.

- SDG 15: Life on Land

Students engage in field courses focused on terrestrial biodiversity, working hand-in-hand with active ecological monitoring, habitat restoration initiatives, and ongoing academic studies of local forest patches and snail diversity.

- SDG 16: Peace, Justice, and Strong Institutions

Law and political science programs promote justice, human rights, and governance education while building a foundation for policy and institutional research that shapes transparent public frameworks and community-based conflict resolution.

- SDG 17: Partnerships for the Goals

UoC collaborates with government agencies, international universities, and NGOs to deliver joint educational and training initiatives, while scaling its impact through global research projects with organizations like GEF-SGP and UNEP to monitor SDG implementation.

The holistic integration of the Sustainable Development Goals (SDGs) within the University of Colombo highlights the institution's premier role in sustainable regional development. Through the dedicated governance of bodies like the Center for Environmental Initiatives (CEI), alongside active faculty and student organizations, the university successfully bridges high-impact academic research with practical, civic outreach.

The evidence presented throughout this report marks a clear trajectory of progressive growth across UoC's environmental conservation, social justice, and economic innovation metrics. As the university continues to strengthen its institutional safeguards, lower its carbon footprint, and align its operational frameworks with international sustainable university criteria, it solidifies its standing as a benchmark of higher education excellence. The University of Colombo enters its next chapter prepared to meet emerging global challenges with innovative, data-driven, and sustainable solutions.