Sustainability Report

2024-25

Integral University Lucknow

Sustainability Report 2024-25

Contents

1. Introduction

Integral University, Lucknow, is committed to advancing sustainable development through responsible governance, environmentally sound campus operations, socially inclusive education, and community engagement. Sustainability principles are embedded across institutional policies, academic programs, infrastructure planning, research activities, and outreach initiatives. The University seeks to create a resilient campus ecosystem that balances academic growth with environmental stewardship and societal well-being, aligned with national priorities and global sustainability agendas.

Integral University is a multidisciplinary higher education institution located in Lucknow, Uttar Pradesh, offering a broad spectrum of undergraduate, postgraduate, doctoral, and professional programs. The University integrates teaching, research, healthcare, and community service to address regional and national development needs. With modern infrastructure and a diverse academic community, the institution promotes innovation, ethical values, and sustainable practices.

Aerial view of Integral University Campus

Vision, Mission and Sustainability Commitment

Vision for sustainability:

To develop a sustainable, environmentally responsible, and socially inclusive university campus that promotes efficient resource use, protects natural ecosystems, and contributes to sustainable development at local, national, and global levels.

Mission for sustainability:

- Integrate sustainability principles into education, research, and campus operations
- Reduce environmental impacts through efficient resource management
- Promote renewable energy and climate-responsible practices
- Encourage sustainability awareness among students and staff
- Collaborate with communities, industries, and government to support sustainable development

1.1 Purpose and Scope of the Sustainability Report

This report presents a comprehensive overview of the University's sustainability initiatives, performance, and future plans. It covers environmental management, social responsibility, institutional governance, and community engagement. The report aims to enhance transparency, demonstrate accountability, and provide stakeholders with evidence of the University's contribution to sustainable development.

The report is based on systematic data collection from institutional records, environmental audits, administrative departments, and academic units. Information has been compiled using recognized sustainability reporting practices for higher education institutions, ensuring reliability, consistency, and comparability. The reporting period covers the academic year 2024–2025.

1.2 Alignment with National and Global Sustainability Goals (SDGs)

The University's initiatives contribute to both national policies and global frameworks that promote environmental protection, social well-being, and economic development. By following these guidelines, universities contribute to broader efforts aimed at achieving sustainable development at local, national, and international levels.

Integral University contributes to the UN-SDG's covered in three pillars namely:

- Environmental
- Social
- Economic

Indian Prime Minister Shri Narendra Modi, moto "***Sabka Sath, Sabka Vikas, Sabka Vishwas***" is in perfect synchronization with sustainability pillars

Sabka Saath (Together with Everyone) → **Social Sustainability**
Sabka Vikas (Development for All) → **Economic Sustainability**
Sabka Vishwas (Trust of All) → **Environmental & Governance Sustainability**

1.3 University Sustainability Framework

To ensure effective implementation of sustainability initiatives, the university has a structured sustainability governance framework.

- University Level Sustainability Committee: which is responsible for
    - Development of annual sustainability action plans in consonance with IQAC
    - Regular monitoring of sustainability indicators
    - Preparation of annual sustainability reports
    - Conduct of energy, water, and environmental audits
- SDG wise coordinators
- Policies for Sustainability and Green Initiative
- Sustainability Research Centre
- Eco Clubs

Regular review of sustainability action by higher authorities helps improve institutional sustainability performance and ensure continuous improvement

2. Campus Profile

Integral University, Lucknow, is a multidisciplinary residential institution developed to support sustainable education, research, healthcare, and community engagement. The campus integrates modern infrastructure with extensive green spaces, promoting environmental responsibility, inclusivity, and well-being in alignment with global sustainability goals.

Located in Lucknow, Uttar Pradesh, the campus is well connected by road, rail, and air. Spread over a large area, it includes academic buildings, healthcare facilities, residential zones, agricultural land, sports complexes, and significant green cover. Planned land use supports biodiversity conservation, climate resilience, and sustainable campus operations.

2.1 Key Statistics

- Location : Lucknow, Uttar Pradesh, India. Lat. 26.957461^0 Long 91.000196^0
- Total Land bank :180.91 Acres
- **Total Campus Area :124.57 Acres**
- Green Covered Area :44.34 Acres
- Total Gound Floor Area :56523 Sq.m
- Total **Built-up Area** :279599 Sq.m
- Area designated for Sports :12.70 Acre
- Pedestrian & No Vehicle Zone:51.20 Acre
- Campus Population
  - Faculty & Staff :2150
  - Students UG-PG-PhD :13750
  - Hostel Capacity :3200

3. Energy Generation and Consumption

Energy management at the University emphasizes efficiency, reliability, and gradual transition toward low-carbon energy sources. Systematic monitoring, conservation practices, and renewable energy integration help reduce operational costs and greenhouse gas emissions while ensuring uninterrupted academic and residential activities.

3.1 Electricity Statistics

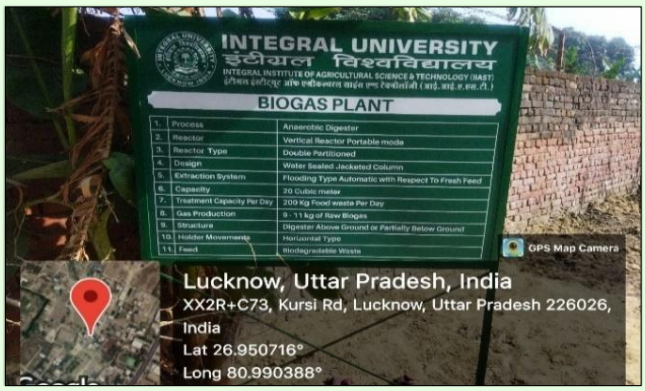
- Total Electricity Consumption :8,170,136 kWh.
- Renewable Sources generation :2,510,471 kWh
- RE share of Electricity Consumption :30.7%.
- RE Capacity :1,450,000 kWp.
- Energy Intensity :2.71 kWh per sq. ft.

3.2 Sources of Energy

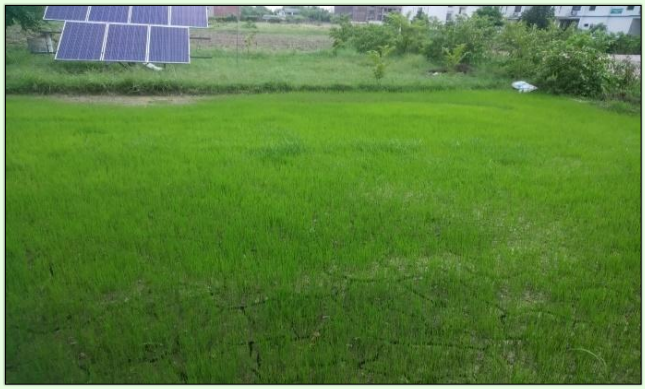
Campus energy needs are met through grid electricity with partial generation from renewable sources.

- Solar PV Plant :1.25 MW Capacity
- Biogas : 20 m^3 Capacity
- Solar Heating :500 LPD
- Solar Pump and Solar Street Light

1.25 MW Solar PV Power Plant



Biogas Plant of 20 m^3 Capacity

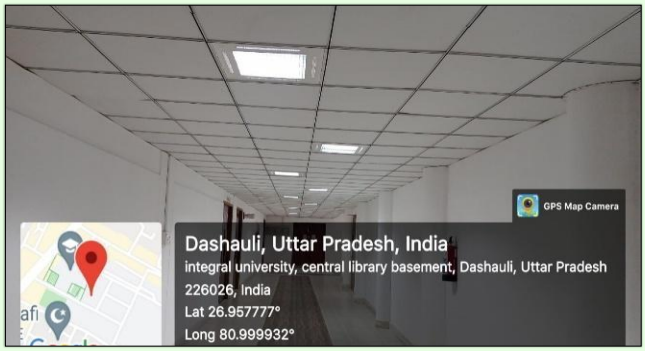


Solar Powered Irrigation System

3.3 Energy Conservation Initiatives

- Energy Efficient Building Design
- Used of LEDs
- Sensor based Lighting
- Solar Powered Sensor based Street Light
- Energy Efficient Equipment's

Sensor Light



LED Lighting

Sensor tank overflow

4. Water Management

Water stewardship is essential for sustainable campus operations. The University implements conservation, recharge, recycling, and quality monitoring measures to ensure efficient utilization of water resources and long-term availability.

4.1 Water Statistics

Water usage data was systematically collected and monitored at multiple points across the university, including academic buildings, hostels, canteens, and landscape zones. Flow meters, storage tanks, and recycling units were inspected and recorded to assess total inflow, usage, and discharge volumes. Data collection was coordinated with maintenance and environmental teams to ensure accurate readings and consistency. Water samples were analyzed to evaluate quality and reuse potential, leading to detailed insights into consumption efficiency and areas for improvement.

- Total Water Consumption :347.3 ML
- Capacity of Rainwater Harvesting :243.6 ML
- Rainwater Harvesting (RWH) Area :51240 m^2
- Average Rainfall :744.3 mm
- Estimated Ground Water recharge :213.5 ML
- Estimated Ground water recharge in open space :36.2 ML
- Water treated :103.5 ML
- Water reused for Agriculture etc. :98.3 ML
- Total Taps :1780 (1588 are low flow).

Water supply is obtained from groundwater, municipal sources, and treated water through STP, ensuring reliability through diversified sourcing.

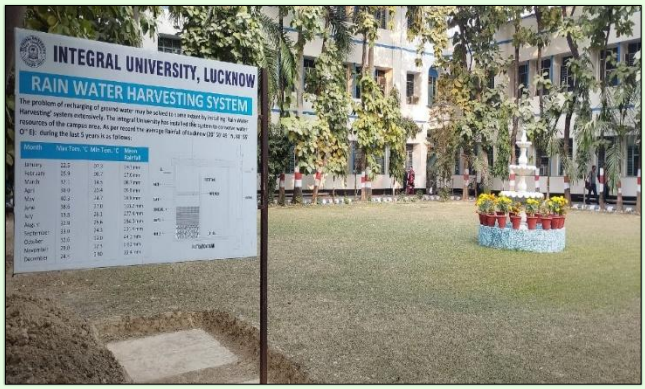
4.2 Waste water Treatment Plant

Integral university has 1 MLD Sewage Treatment Plant (STP). Treated wastewater is reused for irrigation, flushing, and other non-potable applications, thereby conserving freshwater resources.

1.0 MLD STP

4.3 Groundwater Recharge / Rainwater Harvesting Systems

Rainwater harvesting structures collect and channel rainwater for groundwater recharge, reducing dependence on external supply and mitigating urban flooding risks.



Rainwater Harvesting

4.4 Waterbodies, bunds and Pools

Wastewater generated from hostels, hospitals, and academic buildings is treated through dedicated treatment facilities to meet environmental standards.


Water bodies, pool and bunds

4.5 Water Conservation initiatives

- Leak detection systems, Regular maintenance
- Low-flow fixtures
- Pressmatic Taps
- Sprinkler irrigation systems
- Treated water use for Agriculture, Gardening
- Rainwater Harvesting
- Open spaces for Rainwater absorption
- Save Water Awareness Campaign

5. Waste Management

The University follows an integrated waste management approach based on the principles of reduction, reuse, recycling, and safe disposal. Effective segregation and treatment minimize environmental impact and promote circular resource use.

5.1 Waste data

Waste Type	Waste (MT)	Recycled (MT)	Detail
Organic Waste			
Leaf etc.	15.000	14.520	Vermicompost
Paper	10.200	1.990	
Food Waste: Campus	57.341	34.800	Biogas Generation
Inorganic Waste			
Soft Plastic	0.800		
Hard Plastic	1.900		
Other Inorganic	1.600		
Toxic Waste			
E-Waste Generated	1.005		
Chemicals etc.	0.710		
Solid Waste			
Other Solid Waste	230.445		
Food Waste: Hostel Mess and Events (Vendor served)	74.100	70.200	Vendor Treated
Total Waste generated in Campus & Hostel	**456.457**	**121.510**	

5.2 Waste Management

Waste is segregated at source into biodegradable, recyclable, and hazardous categories using designated collection systems. University has MoUs with companies & use Nagar Nigam Services for responsible disposal of waste.

5.3 Waste Recycling and Circular Practices

Recyclable materials such as paper, plastics, metals, and glass are recovered and sent for recycling, supporting resource conservation.

- Food waste used for Biogas Generation
- Organic Waste like leaf etc is used for Composting
- Paper is used for both side printing and used paper is utilized for draft printing
- “Best out of Waste” for waste reuse in developing products, decoration etc.

Best Out of Waste Initiative

5.4 Waste Reduction & Awareness Programs

- Digital initiative to increase efficiency & reduce waste
- Both side paper use
- The self-service system and availability of food directly on tables to reduce food wastage.
- Offering packaged and fast food in varying portion sizes allows individuals to select appropriate quantities, to reducing leftover food.
- Awareness Programs for responsible consumption, and environmental concerns.
- Posters & Quotes in Mess, Canteen etc, emphasizing "respect for food" resulting in food waste reduction.

6. Green Coverage

The campus promotes ecological sustainability through preservation and enhancement of green spaces, contributing to improved environmental quality and biodiversity conservation.

6.1 Green Coverage Statistics

- Green-covered Area :44.34 Acres.
- Mature Trees :3138
- Saplings planted during the year :1452
- Flowering, Ornamental, Herbal Potted Plants :4250
- Number of eco-friendly transportation facilities :42
- Total capacity of eco-friendly transportation :2532
- Maximum AQI :160
- Minimum AQI :48

6.2 Total Green Area and Plantation Coverage

Large areas of the campus are maintained as landscaped gardens, lawns, and tree cover, improving air quality and thermal comfort.

Integral University Landscape

The campus supports diverse plant species and provides habitat for birds and small wildlife, enhancing ecological balance. Regular plantation programs increase green cover, support carbon sequestration, and promote environmental awareness.

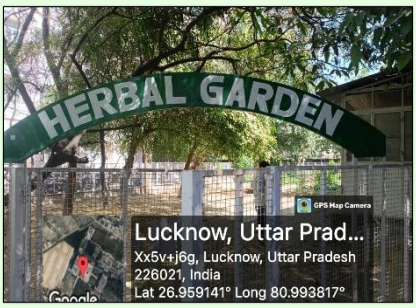
Name	Count	Name	Count
Amaltas	53	Gulmohar	141
Amrakh	1	Indian Almonds	172
Anar	43	Jack Fruit	5
Aonla	31	Japanese Pagoda Tree	2
Areca Palm	38	Jungle Jalebi	1
Arjun	1	Kachnar	2
Arocaria	14	Kadam	146
Ashok	148	Kaner	40
Bael	13	Karonda	4

Bakain	51	Lasoda	1
Balmkheera	1	Litchi	1
Banyan Tree	1	Mango	202
Ber	10	Michelia [Champa]	7
Blackberry	45	Mulberry	8
Blackboard Tree	35	Neem	65
Bottle Brush	2	Paakar	11
Bottle Palm	150	Papaya	12
Buttonwood	450	Peelicasia	221
Champak	42	Peepal	2
Chandni	2	Phalsa	11
Chilbil	26	Rubber Plant	4
Citrus	45	Sahjan	2
Curry Tree	1	Samal	4
Custard Apple	2	Saptaparni	9
Eucalyptus	3	Sharifa	2
Fig	7	Sheesham	3
Fishtail	1	Siris	48
Guava	317	Teak	137
Gular	13	Weeping Fig	329

Total Number of Trees 3138

Botanical and Medicinal Gardens

Specialized gardens preserve plant diversity and serve as educational resources for students and researchers.

6.3 Green Coverage Practices

- Landscaping
- Vertical Gardens
- Flowering, Ornamental, Herbal Potted Plants
- Tree Plantation Drives

7. Climate Action and Carbon Footprint

Climate action is integrated into institutional planning to reduce emissions and enhance resilience to climate variability.

7.1 Carbon Footprint

The Carbon Emission data assesses greenhouse gas (GHG) emissions generated across Integral University's campus and operational units and provides a formal assessment of carbon emissions from fuel consumption, energy use, and related activities. Objectives of carbon footprint assessment to analyse emission patterns from vehicles, generators, and infrastructure energy use, Identify key emission sources and high-impact mitigation opportunities which support planning for carbon reduction, monitoring, and reporting systems.

Scope	Source	Units Consumed/ Generated	CO_2 Factor	tCO_2e Emitted	Total tCO_2e Emitted
Scope 1					

Vehicles (Diesel)	21762	L	2.6	kg/L	56.581	252.9
Vehicles (Petrol)	17806	L	2.3	kg/L	40.954	
Vehicles (CNG)	47000	KG	2.7	kg/KG	126.900	
Generator (Diesel)	10950	L	2.6	kg/L	28.47	
Scope 2						
Grid Electricity Consumption	8170136	kWh	0.75	kg/KWh	6127.602	6321. 2
Solar generation	2477172	kWh	0.075	kg/KWh	185.788	
Biogas	23531	kWh	0.3	kg/KWh	7.059	
Solar Heating	9768	kWh	0.075	kg/KWh	0.733	
Scope1 & Scope 2 Emissions						**6574.1**
Scope 3 (Estimated)	**1.2 Kg CO_2/person/day**				**4961.8**	**4961.8**

Scope1 & 2 CO_2 per m^2 (built-up)	0.024	tCO_2e /year
Scope1 & 2 per capita	0.410	tCO_2e /year

7.2 Climate Action practices

- Use of Cycles and Battery powered Vehicles
- Low Emission vehicles
- Pedestrian friendly pathways
- No vehicle Zone
- Disable Friendly Infrastructure; Tactile Path, Ramps, Lifts, Wheelchairs, Disabled friendly Washrooms
- Weather monitoring using Automatic Weather Station

Environment Friendly Transport

Pedestrian pathways & Vehicle Restricted Zones



Pedestrian Path, Ramps & Tactile paths



Food outlets/ Ban on Single Use Plastics


Automatic Weather Station

7.3 Carbon Reduction Strategies

- Renewable energy expansion,
- Energy Conservation through use of Energy Efficient Devices
- Awareness campaign to avoid overuse and misuse of electricity
- Greenery and Tree Plantation & Preservation
- Environment friendly Transport
- Workshops, campaigns, and academic activities promote climate literacy and sustainable practices

8. Health and Well-being

The University prioritizes physical health, mental wellness, safety, and overall well-being as essential components of academic success and institutional sustainability. Comprehensive support systems ensure a secure and healthy campus environment.

8.1 Key Statistics

- No of persons participating Yoga initiative :6450
- Number of Sustainable Initiative :22
- No Events/ Seminar : :

8.2 Health Facilities/ Mental Health Support

On-campus healthcare services provide primary medical care, preventive services, and emergency support for students, faculty, and staff. Medical facilities are equipped to handle routine health needs and coordinate referrals when required.

Health Care Facility: Integral Hospital

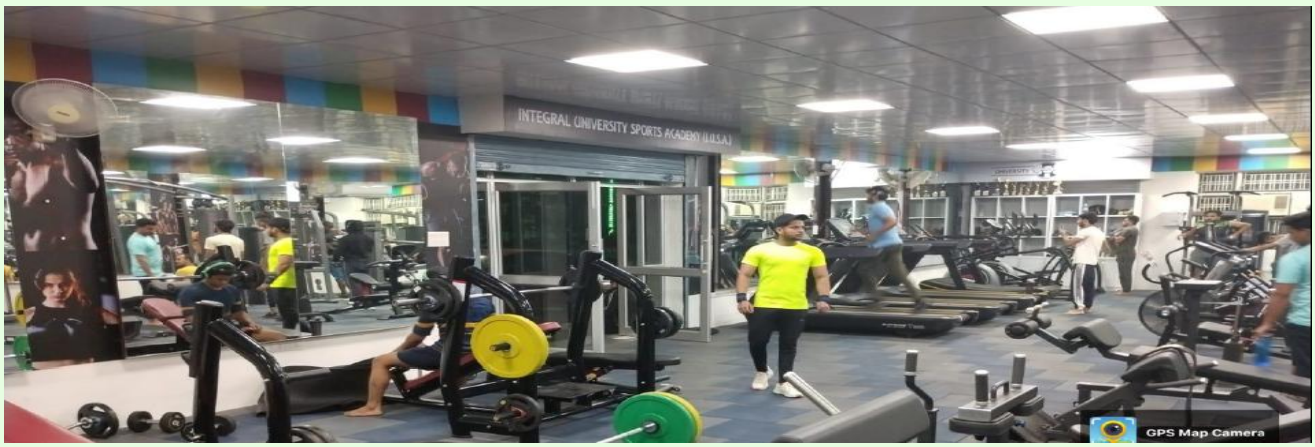
Student Counselling facility

8.3 Sports, Fitness Infrastructure and Recreational Facilities

Sports complexes, playgrounds, indoor facilities, and fitness centres encourage physical activity, teamwork, and healthy lifestyles.

Yoga facility

Sports facility



Gymnasium

8.4 Health and Wellbeing Practices

- Regular yoga sessions
- wellness workshops
- Sports Facility
- Gymnasium
- Mental Health Counselling
- Health awareness initiatives

9. Inclusive & Equitable Education with inclusion of Sustainability

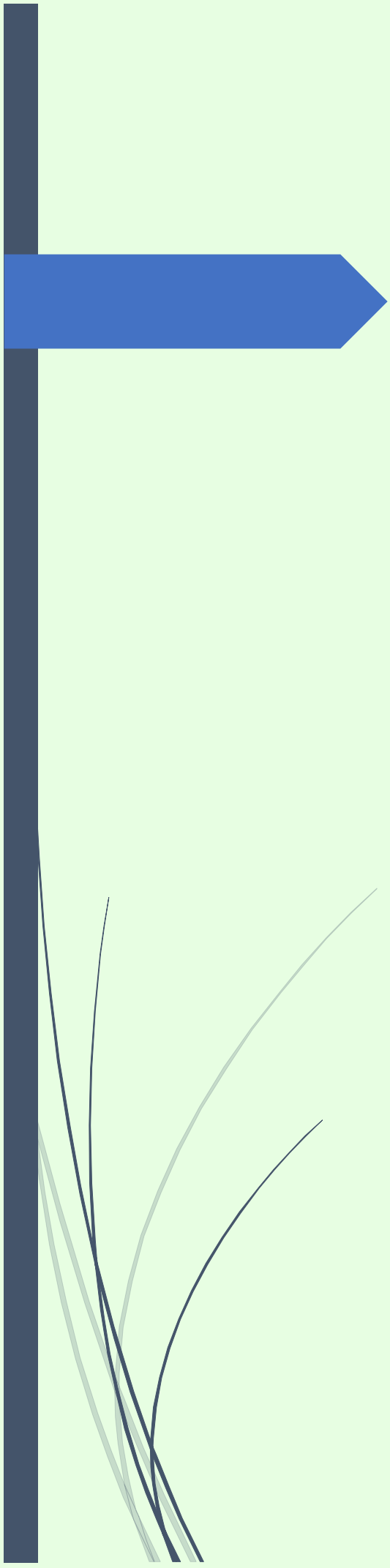
Integral University focus on Inclusive and equitable education ensures that all learners regardless of gender, socio-economic background, disability, nationality, or cultural identity have equal access to quality education and opportunities for holistic development. The learning environments of university promote diversity, fairness, and social justice while equipping students with the knowledge and values required for sustainable development. Integrating sustainability into inclusive education strengthens the capacity of students to understand environmental, social, and economic challenges and encourages responsible citizenship.

By embedding sustainability principles in teaching, research, and campus life, universities contribute to the goals of the United Nations Sustainable Development Goals, particularly. Inclusive and equitable education with sustainability focus ensures that students develop critical thinking, ethical responsibility, and the skills required to address global sustainability challenges.

Key Approaches and Initiatives

- *Equal Access to Education*
  - Provide scholarships, financial aid, and fee concessions for economically disadvantaged students. In session University provided Full tuition fee waiver to 1312 students and scholarship to 4853 students amounting 5 Cr+.
  - Encourage enrolment of students from diverse social, cultural, and international backgrounds.
- *Gender Equity and Safe Learning Environment*
  - Promote gender equality through inclusive policies, awareness programs, and grievance redressal mechanisms displayed by around 50%girl students and 40 % female faculty.
  - Ensure safe campus environments with anti-discrimination and anti-harassment policies.
- *Support for Differently Abled Learners:* Provide accessible infrastructure such as ramps, elevators, and assistive technologies.
- *Integration of Sustainability in Curriculum*
  - Incorporated sustainability concepts across disciplines and academic programs through curriculum, and co-curricular activities.
  - Incorporated interdisciplinary courses addressing environmental protection, social justice, and sustainable development in curriculum.
- *Experiential and Community-Based Learning*
  - Promote student participation in sustainability projects, community engagement, and environmental awareness programs.
  - Encourage service-learning activities that address local sustainability challenges.
  - Inculcate Sustainability through Outreach and Extension activities. In the session 7874 with students participated in outside campus activities, 6900 in plantation initiatives. The list of Initiatives are
    - Integrated Farming
    - Cyber awareness
    - Women empowerment
    - Mulya pravah
    - Public health awareness
    - save water
    - Road safety awareness
    - Environmental awareness
    - No to Plastic
    - Natural Farming
    - Climate Smart Agriculture
    - Krishi Mulyavardhan

        - Herbal & Medicinal Agriculture
        - smart agriculture
        - Legal aid camp
        - Skill development
        - Daan Utsav
        - Nasha mukti
        - Digital saksharta
        - Educational awareness drive
        - Women Heath & Hygiene
        - Ek Ped Maa Ke Naam
- Digital and Open Learning Opportunities
    - Use digital platforms and open educational resources to expand access to education.
    - Support blended and online learning through Learning Management System (named as Integral learning Initiative ILI) to reach diverse learner groups. Around 15000 users' access around 3000 courses in various roles.
- Student Participation and Leadership: Establish student-led sustainability clubs (named as ECO clubs) and awareness campaigns.
- Capacity Building and Awareness: Frequent workshops, seminars, and training programs on sustainability and social inclusion.



Integral University Lucknow