

From pledges to practice: How India's universities are powering the sustainability transition

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Indian institutions have been increasingly benchmarking their performance on sustainability in global ranking systems. | Photo: iStock/ Getty Images

With the conclusion of the 30th Conference of the Parties (COP30) to the United Nations Framework Convention on Climate Change (UNFCCC) in Brazil last month, there is a marked shift in global focus, from pledges to implementation. Meanwhile, India's higher education ecosystem is transforming not only the next generation of climate-aware citizens but also preparing the workforce needed for a low-carbon economy. Over the past three years, a convergence of policy pressure, global benchmarking, industry demand and campus innovation has quietly transformed

sustainability education across the country. Sustainability education is moving from a niche concern to a central academic and institutional priority.

Delhi's air pollution crisis attracts public attention

The urgency of sustainability is not driven solely by policy. The most visible environmental crisis, the severe winter air pollution in Delhi, has pushed climate concerns into mainstream public consciousness. Year after year, the Air Quality Index in the National Capital Region (NCR) plunges to hazardous levels, forcing school closures, construction bans, widespread disruptions to normal life and medical advisories going up to hospitalisation due to respiratory diseases.

For millions of people, sustainability is no longer an idealistic idea, but a lived experience of smog, masks and curtailed outdoor activity. This has created enhanced expectations of sustainability in higher education. Students now arrive on campuses, demanding cleaner environments, sustainability-focused curricula and visible green initiatives. The Delhi experience has become a national wake-up call, forcing Higher Educational Institutions (HEIs) to treat sustainability as an urgent public-health imperative

Policy momentum meets campus reality

India's National Education Policy (NEP) 2020 established the foundation for sustainability education by mandating the integration of environmental awareness, climate literacy and sustainable development concepts across disciplines. Building on this, the University Grants Commission (UGC), in 2023, issued "Guidelines and Curriculum Framework for Environment Education," making a credit-based environmental studies and climate change course compulsory for all undergraduate students. This course framework encourages universities to link classroom learning with fieldwork, local environmental problem-solving, and community engagement. Complementing this is Mission LiFE (Lifestyle for Environment), a nationwide behavioural movement that encourages universities to adopt "pro-planet" choices in mobility, waste, energy and water management.

Rising representation of Indian HEIs in global sustainability rankings

Indian institutions have been increasingly benchmarking their performance on sustainability in global ranking systems. The number of participating institutions from

India in the QS World University Rankings for sustainability moved up from 15 in 2023 to 78 in 2025, one of the fastest growth rates globally.

In the Times Higher Education (THE) Impact Rankings, which evaluate performance against the UN Sustainable Development Goals (SDGs), the entries from India more than doubled from 64 in 2022 to 135 in 2025. This expanded participation reflects not only growing institutional interest but also the pressure to document and improve sustainability performance on aspects like conservation of energy and water, waste recycling, governance and community outreach.

NIRF 2025 introduced the first national sustainability ranking

The National Institutional Ranking Framework (NIRF) 2025 introduced a new “SDGs” category. Of the 14,163 applications received across all categories, 791 were specifically for the SDGs category, a huge number, considering that it is the first time the category was introduced. Though only 50 institutions are listed in the published ranking, the large number of submissions signals the efforts of hundreds of campuses, beginning to establish systems, policies and governance structures for sustainability documentation and reporting.

Sustainable campus initiatives leading the way

Across the country, HEIs have been developing sustainability campus initiatives that go beyond compliance and engage the students directly in climate and environmental action. Green and climate-resilient buildings are being designed, incorporating natural ventilation, solar façades and green infrastructure. Some institutions are going through clean energy transitions through large-scale solar installations and IoT-based energy monitoring, while some have implemented zero-waste systems, including biogas plants, composting units, plastic-free drives and student-led waste audits.

Water resilience strategies adopted include rainwater harvesting, aquifer recharge and wetland restoration. Sustainable mobility initiatives like e-buses, bicycles and pedestrian-first redesigns are being implemented in the campuses. Student-led sustainability labs involve biodiversity mapping, carbon audits and rural community climate projects. These changes are not only reducing carbon footprints but also imparting the students, hands-on experience on climate solutions.

Industry driving demand for green skills

India's renewable-energy sector, Environmental, Social, and Governance (ESG) driven industries, climate finance and circular-economy businesses are creating strong demand for graduates with sustainability competencies. Universities are responding with specialised micro-credentials as electives, climate-finance modules, joint curriculum design with industry partners and internships with green companies.

Industry partnerships with the HEIs now increasingly include academics and research. Curriculum is being redesigned to include courses in climate finance, carbon markets, waste management and energy transition. Research collaborations cover areas like green hydrogen, electric mobility, carbon capture and climate-resilient agriculture.

Opportunities and challenges

Despite the substantial progress, challenges for implementation persist, including constraints on faculty capacity for interdisciplinary sustainability teaching and research. There are also equity and inclusivity concerns, with the urban and well-funded universities advancing faster than the rural and State-government-funded institutions.

Way forward: from rankings to transformation

The real challenge is to shift from reporting-focused participation to effective grassroots implementation, in terms of redesigning curricula, investing in faculty development, strengthening governance, and making campuses models of low-carbon, climate-resilient futures.

The global and national benchmarks on sustainability need to be used not just as scorecards, but as tools for internal reforms like strengthening governance and redesigning curricula. There is also an imperative to incentivise interdisciplinary research to address societal problems like air quality in places like Delhi and arrive at sustainable solutions. These steps will not only contribute significantly to India's climate commitments to the world but also will make our earth a better place to live, for us as well as the generations to come.

(Prof. O.R.S. Rao is the Chancellor of the ICFAI university, Sikkim. Views are personal.)

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