

Sustainability in Higher Education in Pakistan: Progress, Barriers, and Strategic Pathways

Muhammad Kalim Ullah Khan

Head of Department, The Department of Islamic Thought and Civilization (ITC)
University of Management and Technology (UMT), Sialkot

Email: kalim.ullah@skt.umt.edu.pk

Muhammad Adil Iqbal

Assistant Professor, Department of International Business & Marketing
NUST Business School (NBS), National University of Sciences and Technology
(NUST), Islamabad, Pakistan

Email: m.adiliqbal@nbs.nust.edu.pk

Abstract

This study looks at the state of sustainability in Pakistani higher education institutions (HEIs), with a focus on how it is conceptualized, operationalized, and institutionalized. Using a qualitative case study approach with five public and private institutions, the study combines institutional theory, the Triple Bottom Line (TBL), and the frameworks of Education for Sustainable Development (ESD). The results show that there is a lack of administration commitment, a lack of strategic direction, active but unsupported student involvement, faculty-driven curriculum initiatives, and an uneven and fragmented environment. Despite some operational initiatives and increased awareness, sustainability remains sidelined within key institutional frameworks. The research lists several major obstacles, including out-of-date curricula, inadequate governance structures, a lack of national policy directions, and financial constraints. Strategic recommendations for national policy development, cross-sector cooperation, and institutional reform are included in the conclusion. The study highlights the transformative potential of higher education in solving Pakistan's environmental and socioeconomic concerns and adds to the growing conversation on sustainability transitions in emerging nations.

Keywords: Pakistan, High Education, Sustainability, Development, Higher Education Institutions

Introduction

The idea of sustainability has drawn more and more attention in recent years in international debates about the future of ecosystems, economies, and society. Through their research, instruction, and public involvement, higher education institutions (HEIs) are regularly acknowledged as important contributors to the growth of sustainability. They influence social norms and policies in addition to generating information and forming future experts. It is unclear, nevertheless, how well these organizations have incorporated sustainability into their daily operations, especially in developing nations like Pakistan. Academic institutions all across the world have begun incorporating sustainability into their operations and curricula. This approach, sometimes referred to as Education for Sustainable Development (ESD), develops educational settings that promote ethical reasoning, critical thinking, and problem-solving in relation to social and environmental concerns. The incorporation of sustainability into higher education has resulted in significant changes to research agendas, course offerings, and campus management in nations with robust institutional capability and political support. However, in environments where educational systems are beset by financial limitations and governance issues, these reforms have not been consistent.

Even though it is still unexplored, the importance of HEIs in sustainability discourse and practice is growing in Pakistan. Some universities have started energy conservation, awareness campaigns, and green campus initiatives, but these projects frequently lack institutional coordination, strategic direction, and alignment with larger sustainability frameworks like the Sustainable Development Goals (SDGs) of the UN. Furthermore, most Pakistani universities do not yet consider sustainability to be a cross-cutting institutional value or goal. There are two reasons why Pakistan must investigate this matter. First, the nation faces severe social and environmental issues, such as air pollution, water scarcity, socioeconomic inequality, and climatic vulnerability. These factors necessitate educational solutions that equip graduates with the technical know-

Published:
January 07, 2026

how as well as the ability to comprehend and handle complex environmental issues. Second, Pakistan's growing student body and diverse institutions show how quickly the country's higher education market is growing. There is a rare chance to shape the sector's objectives and trajectory, including its dedication to sustainability, during this period of expansion.

This study aims to investigate how some HEIs in Pakistan are putting the concept and practice of sustainability into practice. It looks into how successfully sustainability is incorporated into corporate operations, educational strategies, student activities, and institutional policies. It also examines the barriers and challenges that impede more in-depth engagement and identifies areas that require further improvement. By doing this, the study contributes to the very tiny body of knowledge regarding sustainability in higher education in the Global South and offers helpful data for academics, decision-makers, and institutional leaders. By employing a qualitative case study methodology, this study provides a voice to academics, administrators, and students who are actively engaged in developing sustainable practices on college campuses. Understanding the limitations and potential of revolutionary change requires an understanding of their perspectives, experiences, and initiatives. In addition to documenting current efforts, the study's findings seek to offer recommendations for a more comprehensive, inclusive, and strategic approach to sustainability in Pakistan's higher education system.

Theoretical Framework and Literature Review

It takes a multifaceted framework that encompasses its institutional, operational, and educational Understanding sustainability in higher education requires a comprehensive framework that takes into account its institutional, operational, and instructional components. This study examines how sustainability is conceptualized and implemented at Pakistani HEIs using three primary theoretical pillars: Institutional Theory, Education for Sustainable Development (ESD), and the Triple Bottom Line (TBL) framework.

Education for Sustainable Development (ESD)

UNESCO created the ESD framework, which highlights how education can change the world and advance sustainability. It demands that educational settings promote cooperative problem-solving strategies, critical thinking, interdisciplinary comprehension, and systems thinking. By empowering students to engage in responsible activities for the environment, society, and future generations, ESD diverts attention from the traditional curriculum delivery method. ESD in higher education refers to curriculum integration, student engagement, teacher training, and institutional alignment with long-term objectives. Active citizenship and lifelong learning are also emphasized. Although ESD is widely used in North America, Europe, and certain areas of Asia, structural problems including out-of-date curricula and inadequate faculty training have hindered its implementation in developing nations like Pakistan.

Triple Bottom Line (TBL) Framework

Environmental, social, and economic sustainability are the three interconnected pillars that make up the TBL paradigm, which was put forth by John Elkington. This entails HEIs implementing procedures that are:

- Conscientious of the environment (e.g., lowering emissions, conserving energy, green buildings)
- Socially fair (e.g., community involvement, diversity, and educational access)
- Viable economically (e.g., long-term budgeting, economical sustainability investments)

By using the TBL framework in higher education, researchers can assess how well-rounded and integrated an institution's efforts are across the three dimensions, in addition to determining whether or not it is pursuing sustainability.

In Pakistan, discussions regarding campus sustainability usually focus on environmental concerns, with social and economic aspects receiving less attention. By using the TBL lens, this imbalance can be identified and a more thorough perspective is promoted.

Institutional Theory

Examining how organizations embrace (or reject) new methods is made easier by institutional theory, especially when confronted with outside influences. It draws attention to many factors, such as normative pressures from professional societies, mimetic pressures from peer institutions, and coercive demands from governments or certifying bodies. Universities may engage in symbolic compliance, or the acceptance of sustainability terminology without implementing significant changes, in addition to being compelled by these factors to embrace sustainability-related policies and practices. Given the influence of internationalization objectives, ranking pressures, and centralized state organizations on higher education, institutional theory is especially pertinent in Pakistan. Because of institutional inertia or a lack of regulatory incentives, certain institutions may use sustainability as a branding strategy while others may not. This method contributes to the explanation of why.

Global and Regional Perspectives on Sustainability in HE

Globally, sustainability in higher education has evolved from environmental education toward a more integrated and institutionalized agenda. Initiatives like the **Talloires Declaration**, **UNESCO's Decade of Education for Sustainable Development**, and the **Sustainable Development Goals (SDGs)** have provided frameworks and commitments for HEIs. Many universities have developed sustainability offices, green building standards, interdisciplinary programs, and partnerships with local communities. In countries like Sweden, Germany, and the Netherlands, sustainability is embedded across governance, curriculum, and operations. In the Global South, however, the progress is mixed. Countries like South Africa and Malaysia have shown leadership in embedding sustainability in national higher education policy, but others struggle with implementation due to funding constraints, capacity gaps, and lack of political will. In South Asia, particularly in Pakistan, the literature on sustainability in higher education remains limited. Most available research focuses on environmental initiatives or technical

Published:
January 07, 2026

education rather than institutional change. There is little analysis of how sustainability is understood by different stakeholders, how it is embedded (or not) in governance structures, or what barriers prevent deeper integration.

Gaps in the Literature

While there is growing global scholarship on ESD and sustainability in higher education, Pakistan remains underrepresented in this body of knowledge. Existing studies often focus on single aspects, such as environmental audits, green architecture, or awareness programs. What is missing is a holistic, institutional analysis that captures how sustainability is (or isn't) integrated into policies, curricula, operations, and culture. This study addresses this gap by conducting an in-depth, multi-site qualitative exploration of sustainability practices in five diverse Pakistani universities. It seeks to understand not only what initiatives exist, but how they are conceptualized, implemented, and perceived by key stakeholders.

Research Methodology

This study adopts a **qualitative case study approach** to explore how sustainability is being interpreted and integrated within higher education institutions (HEIs) in Pakistan. Given the complexity and context-specific nature of sustainability, a qualitative methodology allows for a deeper, more nuanced understanding of institutional behaviors, practices, and perceptions. The goal was not to measure sustainability through quantitative indicators, but to explore it as a lived, evolving institutional process shaped by actors, policies, and resources.

Research Design

The study was designed as a **multi-site case study** involving five universities located in different regions of Pakistan, selected to reflect variation in geography, institutional type (public vs. private), and disciplinary focus. This diversity allowed for the identification of common patterns and context-specific differences in how sustainability is approached.

Published:
January 07, 2026

The five universities—referred to here as University A through University E—include both well-established and emerging institutions. Selection criteria included:

- Evidence of stated sustainability goals or activities
- Availability of faculty or staff willing to participate in interviews
- Institutional variation in terms of governance and size

Data Collection Methods

Data were collected through **semi-structured interviews**, **document analysis**, and **field observations**. This triangulation helped ensure reliability and depth in the findings.

Interviews. A total of **25 interviews** were conducted with university administrators (e.g., deans, directors), faculty members across various departments, and student society leaders. Interviews were held in-person and virtually, depending on accessibility and availability. Each interview lasted between 30 to 60 minutes and was recorded with consent.

The interview protocol included questions on:

- Definitions and perceptions of sustainability
- Examples of sustainability initiatives (if any)
- Institutional barriers and opportunities
- Curriculum design and pedagogy
- Student engagement in sustainability
- Role of national policy and international frameworks

Document Analysis

Institutional documents—such as mission statements, strategic plans, curriculum outlines, and sustainability reports (where available)—were analyzed to assess the formal commitment to sustainability. These documents were coded to identify the presence (or absence) of sustainability-related language and alignment with the SDGs or ESD principles.

Field Observations

Where possible, on-site visits were conducted to observe campus infrastructure, green initiatives, and sustainability-related signage or activities. Observations provided a

Published:
January 07, 2026

tangible understanding of whether sustainability was embedded in the physical and cultural environment of the institutions.

Data Analysis

All interviews were transcribed and analyzed using **thematic coding**. A hybrid approach was employed: pre-determined codes were based on the theoretical framework (e.g., curriculum, governance, operations), while open coding allowed new themes to emerge inductively from the data. NVivo software was used to organize and code the data. Codes were then grouped into broader themes to explore relationships and differences across institutions. Patterns were identified by comparing practices across universities, stakeholder groups (faculty, students, administrators), and institutional types.

Ethical Considerations

All participants were informed of the study's purpose and their right to confidentiality and withdrawal. Institutions and individuals have been anonymized in reporting findings. The study adhered to ethical guidelines for research involving human subjects and received approval from the university's ethical review committee.

Limitations

Because of its small sample size and qualitative character, the study's reach is constrained. Its goal is to offer comprehensive insights that could guide future study and wider discussions, not to extrapolate conclusions to all Pakistani HEIs. Furthermore, there were differences in participant access and institutional data availability, which might have affected the comprehensiveness of the data gathered from each university. Notwithstanding these drawbacks, the cross-institutional comparison and multi-method approach enhance the study's validity and offer a strong basis for comprehending how sustainability is viewed and applied in various Pakistani university contexts.

Findings and Analysis

Published:
January 07, 2026

The data from the five universities was analyzed, and the results showed that the situation of sustainability in higher education is complicated and inconsistent. There was minimal indication of thorough or institution-wide integration of sustainability principles, despite the identification of isolated initiatives. The findings are arranged according to six main themes: student participation, campus operations, curriculum and pedagogy, institutional governance, sustainability conceptualization, and policy environment.

Conceptual Diversity and Fragmentation

One of the most noteworthy findings was that various stakeholders had varying opinions about sustainability. While some academics and administrators regarded it from a broader perspective that considered social justice and economics, others connected it to environmental preservation (e.g., reducing plastic use or planting trees). Many participants acknowledged that their institution had no shared or strategic definition of sustainability. This conceptual fragmentation has led to inconsistent and piecemeal approaches, where sustainability is treated as an “optional” concern rather than an embedded institutional value.

“Everyone defines sustainability in their own way here. For some, it’s just about saving electricity; for others, it’s a much deeper issue about education and ethics.”

— Faculty Member, University B

Curriculum and Pedagogy

All five universities showed minimal integration of sustainability into their formal curriculum. Where sustainability topics were present, they were typically confined to elective courses in environmental science or civil engineering departments. There was little evidence of interdisciplinary sustainability education or the inclusion of ESD principles such as systems thinking, participatory learning, or problem-based projects. Faculty who attempted to incorporate sustainability into their teaching did so on a voluntary basis and often lacked institutional support or training. Several interviewees pointed to outdated curricula and bureaucratic hurdles that made innovation difficult.

Published:
January 07, 2026

“I try to include sustainability examples in my economics class, but the syllabus is so rigid, and there's no incentive to go beyond the textbook.”

— Lecturer, University

Institutional Governance and Commitment

None of the five institutions had a dedicated office, committee, or coordinator for sustainability. Strategic planning documents, where available, made only passing references to environmental goals, and no university had a formal sustainability policy or reporting framework. Sustainability efforts, where they existed, were typically initiated by individual faculty members or student groups, rather than being led by senior management. Budget allocations for sustainability projects were either non-existent or ad hoc.

“We have some good things happening here and there, but they're all informal.

There's no structured program or office that oversees sustainability.”

— Administrator, University A

Campus Operations

Several operational initiatives were observed across the universities, such as tree-planting drives, awareness weeks, and energy-saving campaigns. A few institutions had installed solar panels or digitized administrative processes to reduce paper use. However, these activities were not part of a broader campus sustainability strategy. None of the universities conducted regular sustainability audits, tracked their carbon footprint, or had green procurement policies. Moreover, waste management practices were inconsistent, with limited recycling or composting efforts.

“We do these events—like ‘Green Week’—but they're more symbolic than systematic.

There's no follow-up.”

— Student Leader, University D

Student Engagement

Students were found to be among the most active stakeholders in sustainability. At each university, student societies had organized events, run campaigns, or proposed ideas to the administration. Many students expressed a strong interest in sustainability and saw it

Published:
January 07, 2026

as linked to their future and values. However, student efforts were often unsupported or short-lived. In the absence of formal recognition, funding, or mentorship, student initiatives struggled to sustain momentum. Few institutions provided platforms for student representation in decision-making processes related to sustainability.

“We organized a recycling drive last year, but we didn’t get much help from the university. It was hard to keep it going.”
— Student Volunteer, University E

Policy Vacuum and External Pressures

The absence of national guidelines or incentives for sustainability in higher education was a recurrent theme in interviews. Participants noted that while global discourses like the SDGs were recognized in theory, there was little guidance from the Higher Education Commission (HEC) on how to operationalize them. Unlike countries where rankings, accreditation, or funding are linked to sustainability performance, Pakistani universities operate in a policy vacuum. This weakens institutional motivation and allows sustainability to remain peripheral.

“If the HEC gave us a framework or even a checklist, we would have something to work toward. Right now, it’s just ad hoc.”
— Senior Faculty, University C

Comparative Insights

Although the difficulties faced by the five institutions were comparable, there were several significant differences:

- Although they lacked scale and sustained dedication, private colleges tended to be more adaptable when implementing creative programs.
- Although they were limited in their autonomy and subject to bureaucratic restrictions, public universities enjoyed more student participation.
- While rural colleges faced physical and resource limitations, urban institutions had greater access to collaborations and green technologies.

Summary

The results point to a significant discrepancy between sustainability as a global necessity and how it is being implemented in Pakistani higher education. Sustainability is marginalized and pushed more by personal enthusiasm than by institutional vision in the absence of defined institutional structures, curriculum integration, and national policy backing.

Discussion

The findings of this study suggest that while sustainability is gradually gaining visibility in Pakistani higher education institutions (HEIs), it remains poorly institutionalized and inconsistently implemented. The discussion below reflects on the key findings in light of the theoretical frameworks adopted—namely, Education for Sustainable Development (ESD), the Triple Bottom Line (TBL), and Institutional Theory—while situating them within the broader global and regional discourse on sustainability in higher education.

Interpreting Sustainability: Lack of Shared Understanding

One of the most significant challenges identified was the absence of a shared institutional understanding of sustainability. Across the five universities, stakeholders used varied and often limited definitions of sustainability, focusing primarily on environmental dimensions and neglecting its social and economic components. This fragmented understanding aligns with literature from the Global South, where sustainability is often equated with environmental conservation rather than as a comprehensive developmental framework. The TBL model underscores the importance of balancing environmental, social, and economic goals. However, the narrow conceptualization of sustainability in Pakistani HEIs results in actions that are disjointed and largely symbolic. Without a coherent and shared vision, sustainability efforts fail to gain institutional traction or long-term support.

Curriculum Reform and Faculty Agency

ESD emphasizes transformative learning, interdisciplinary teaching, and systems thinking. Yet, the study found little evidence of such pedagogical approaches in the participating universities. Curricula remain rigid and discipline-specific, with limited flexibility for faculty to incorporate sustainability topics. Faculty members who attempted to innovate often did so in isolation and without formal incentives or professional development. This gap suggests that ESD principles are not being operationalized in a meaningful way. For sustainability to take root in HEIs, curriculum design must become more flexible, interdisciplinary, and outcome-oriented. Faculty development programs focusing on ESD methodologies could play a crucial role in catalyzing this change.

Institutional Inertia and Governance Barriers

Institutional Theory explains that change is often shaped by external and internal pressures. In the absence of coercive or normative pressure from national bodies like the HEC, Pakistani HEIs face little incentive to integrate sustainability into governance structures. This leads to what DiMaggio and Powell (1983) describe as “decoupling”—where institutions adopt the language of sustainability without altering core practices. None of the five universities studied had dedicated sustainability offices or formal strategies. Most initiatives were informal and reliant on individual champions. This absence of structure reflects a lack of top-down commitment, which is essential for institutionalizing change. Without clear governance mechanisms, sustainability remains a marginal concern, disconnected from institutional planning, budgeting, or performance evaluations.

Students as Catalysts—but Largely Unsupported

Students demonstrated strong interest in sustainability, often initiating events and campaigns independently. Their role as active agents of change aligns with the ESD model, which promotes learner-centered approaches and civic responsibility. However,

Published:
January 07, 2026

institutional structures failed to support student leadership in a sustained way. This disconnect signals a missed opportunity. Universities could formalize student participation through sustainability councils, credit-bearing projects, and participatory governance mechanisms. Doing so would not only strengthen sustainability efforts but also help develop the critical and collaborative skills central to a well-rounded education.

Operational Practices: Symbolic but Not Strategic

While some operational initiatives—like tree plantations and digitalization—were observed, they lacked strategic planning or measurable impact. The absence of energy audits, carbon accounting, or sustainability reporting indicates that environmental efforts are often reactive rather than proactive. From the TBL perspective, operations are a key component of institutional sustainability. Without operational data and clear metrics, it becomes difficult to track progress or justify investments. Integrating sustainability into facilities management and procurement systems is a critical next step for HEIs.

The Role of National Policy and External Incentives

Lastly, a significant barrier was the absence of policy recommendations from the HEC or other national bodies. Legal frameworks and financial incentives have been crucial in nations where sustainability in higher education has progressed. On the other hand, Pakistani institutions are left to handle sustainability on their own, leading to disorganized and haphazard attempts. Establishing accountability and generating momentum within the sector may be facilitated by policy alignment with the Sustainable Development Goals (SDGs) and ESD principles. Funding for green innovation, accreditation standards, and sustainability rankings are a few examples of tools that could be helpful levers for institutional transformation.

Opportunities for Institutional Transformation

Notwithstanding the difficulties, the study also produced positive findings. Even in resource-constrained areas, educators and students are already experimenting with sustainable practices. These grassroots initiatives have the potential to grow into more

Published:
January 07, 2026

substantial institutional advancements if they are backed by cooperation, leadership, and policy. Sustainability must be ingrained in universities' fundamental identities and purposes rather than being an afterthought. Cross-sector cooperation, capacity building, a culture of shared accountability, and a strategic vision are all necessary for this shift.

Conclusion and Recommendations

The purpose of this study was to investigate how Pakistani HEIs are putting the concept and practice of sustainability into practice. Using data from five different institutions, it investigated institutional knowledge, implementation, challenges, and potential through the lenses of Institutional Theory, Education for Sustainable Development (ESD), and the Triple Bottom Line (TBL).

Conclusion

The study reveals a basic discrepancy between Pakistani HEIs' meager, frequently symbolic efforts and the increased emphasis on sustainability around the world. Institutions differ in their understanding and implementation of sustainability. The majority of initiatives continue to be dispersed, unofficial, and unrelated to institutional strategy or governance. There has been little success in systematically integrating sustainability into teaching, research, campus operations, or student life, despite the existence of some environmentally focused programs, such as tree plantations and digitization. Despite sometimes operating without institutional support, faculty, students, and a few administrators have shown dedication and inventiveness. However, many initiatives are unable to reach significant scale or long-lasting influence due to the lack of institutional organizations, strategic direction, or national-level policy frameworks. Furthermore, the concept of sustainability is still too narrowly defined, frequently excluding broader considerations of social justice, equity, and economic accountability in favor of environmental factors. In summary, the results indicate a sector in transition—conscious of sustainability, eager to participate, but limited by institutional inertia and structural obstacles.

Recommendations

To move toward more meaningful engagement with sustainability in Pakistani HEIs, the following recommendations are offered:

1. Create a Framework for National Sustainability

The creation of national norms for sustainability in higher education should be spearheaded by Pakistan's Higher Education Commission (HEC). While keeping in mind local conditions, this framework need to be in line with the Sustainable Development Goals (SDGs), ESD principles, and international best practices.

2. Make Sustainability Governance an Institution

Universities ought to set up task groups, committees, or offices dedicated to sustainability with well-defined goals and strong leadership. To guarantee accountability and alignment with more general objectives, sustainability should be incorporated into institutional mission statements, strategy plans, and yearly reporting frameworks.

3. Incorporate Sustainability Through out the Curriculum

Higher education institutions should update their curricula to incorporate sustainability-related material from a variety of subject areas. ESD principles might be incorporated into already-existing curricula, or specialized courses or multidisciplinary modules could accomplish this. Incentives and programs for faculty development are essential to facilitating this curriculum change.

4. Encourage and Encourage Student Involvement

Through financial support, coaching, and official participation in governance frameworks, educational institutions ought to acknowledge and encourage student-led sustainability efforts. Co-curricular certifications, student grants, and sustainability fellowships might all be established to increase student involvement and responsibility.

5. Strengthen Sustainability Practices on Campus

To evaluate their environmental impact and pinpoint opportunities for development, universities must to carry out sustainability audits. Green procurement, sustainable transportation, waste reduction, and energy efficiency are examples of operational adjustments that can drastically lower ecological footprints and act as real-world learning examples.

6. Encourage Collaborations and Information Exchange

Universities, NGOs, corporations, and international organizations working together can boost innovation and give access to capital and technical know-how. Consortia and regional sustainability networks can foster peer learning and increase institutional change momentum.

7. Invest in Research and Innovation

Research with a sustainability focus should be given top priority at universities, and it should be connected to policy effect and community development. Funding for applied

Published:
January 07, 2026

and multidisciplinary sustainability research can produce answers that are pertinent to the socio-environmental problems facing Pakistan.

Final Reflection

Higher education's path to sustainability is complex and difficult, particularly in developing countries like Pakistan where institutions face structural, monetary, and cultural obstacles. The findings of this study have strengthened the notion that, despite their ability to serve as lights of sustainable development, universities frequently fail to fulfill this promise because of a lack of policy support, inconsistent application, and fragmented knowledge. Reducing carbon footprints and greening campuses are only two aspects of sustainability in higher education. Fundamentally, it involves changing the educational ethos, including its objectives, subject matter, approaches, and results. It aims to prepare people who are not only highly skilled in their fields but also comprehend how global systems are interconnected, are driven to contribute to the solution, and acknowledge the seriousness of ecological and social challenges. Although Education for Sustainable Development (ESD) outlines this vision, its implementation in Pakistan is still in its infancy.

Reimagining the Purpose of Universities

Universities have historically been thought of as centers for the creation of knowledge and the development of human capital. However, in today's world, this function needs to broaden to encompass sustainable stewardship. Universities are in a unique position to use research, education, and community involvement to affect social change. However, the dominant culture at many HEIs in Pakistan places more emphasis on rankings, employability, and disciplinary silos than it does on more general issues of justice, ethics, and environmental stewardship. According to this report, a large number of HEIs do not have a clear vision for sustainability. Sustainability cannot be effectively pursued if it is not institutionally defined or strategically planned. Higher education needs to be rethought as a transformative force for sustainable development rather than as a conveyor

Published:
January 07, 2026

belt for degrees. Universities must embrace sustainability as a guiding concept that influences operations, outreach, curriculum, and governance in order to accomplish this.

Leadership and Strategic Vision

It is hard to implement institutional reform without leadership. One of the key findings of the research is the almost total absence of strategic leadership on sustainability. Initiatives are often led by passionate individuals or small student groups rather than being driven by institutional strategy. Without clear accountability structures and high administrator support, sustainability remains auxiliary and unsustainable. Department heads, professors, student leaders, administrative personnel, and deans or vice-chancellors of universities are all considered leaders in this context. All stakeholders must be involved in cultivating a culture that values long-term impacts over short-term gains. This necessitates instruction, dialogue, and the creation of incentives that encourage creativity in the sustainable space. A strategic vision must be backed by clear objectives, measurable indicators, and dedicated resources. While following global frameworks like the SDGs, it must take local factors into account. Academic institutions must refrain from using sustainability as a branding tool. Greenwashing and false promises do more harm than good because they sabotage real attempts and breed distrust.

Empowering Students as Drivers of Change

Students were among the most ardent supporters of sustainability throughout the survey. Their efforts show a great readiness to take action, whether they take the shape of community projects, green groups, or awareness campaigns. However, a lack of funds, institutional support, or ongoing mentoring frequently hinders these attempts. Empowering students goes beyond supporting extracurricular initiatives. It means creating formal pathways for student participation in decision-making, curriculum design, and research. When students are treated as partners in institutional sustainability, they develop a deeper sense of responsibility and belonging. Moreover, they gain skills in leadership, teamwork, and problem-solving that are critical for their professional and

Published:
January 07, 2026

civic lives. Some universities around the world have successfully implemented sustainability fellowship programs, student-led innovation labs, and campus-wide competitions that incentivize creative solutions to environmental and social issues. Such models could be adapted in Pakistan, tailored to local constraints and opportunities.

Curriculum and Pedagogy for Sustainability

Sustainability must be embedded not only in institutional policies but also in what and how students learn. The current state of curricula in Pakistani HEIs, as found in this study, is outdated, rigid, and largely disconnected from real-world challenges. Few programs offer interdisciplinary courses or experiential learning opportunities focused on sustainability. Even where sustainability is included, it is often limited to environmental science programs, excluding students from other disciplines. Curriculum reform across all faculties—business, engineering, humanities, health sciences, and more—is necessary for true integration. Every field may contribute to the advancement of sustainability, and students need to be able to think critically, assess intricate systems, and make moral choices. Methods of instruction must also change. In order to promote critical thinking and civic duty, interactive, reflective, and project-based learning must replace passive lecture-based training. In this sense, faculty professional development activities are crucial. Although they lack the skills or confidence to do so, many instructors are willing to include sustainability into their lessons. Peer learning groups, training sessions, and access to global networks may all aid in closing this gap.

Operational Sustainability: Practice What You Teach

The values that universities teach must also be modeled by them. This entails implementing sustainable practices in all aspects of campus operations, including trash management, food services, transportation, energy use, and procurement. It also entails developing safe, welcoming, and fair learning environments that promote the wellbeing of all employees and students. Annual tree plantings or awareness days are examples of symbolic actions that can be beneficial but fall short in the absence of structural change.

Published:
January 07, 2026

Green certifications, sustainability reporting, and sustainability audits ought to be commonplace procedures. Universities should set an example by proving that living sustainably is not only important but also practical and advantageous. Cost and infrastructure constraints are real in Pakistan. Yet, a lot of sustainability projects, like making the transition to energy-efficient lighting, cutting back on paper, or composting food waste, can save money over time with little outlay of funds. Additionally, involving students in the planning and execution of these initiatives improves learning while cutting expenses.

Policy Alignment and Institutional Incentives

One of the most persistent challenges our study identified is the lack of support from national policy. Pakistan's Higher Education Commission (HEC) has yet to offer a comprehensive framework or incentive system for integrating sustainability into higher education. Without government guidance, universities are left to develop their own plans, sometimes without the necessary funding and expertise. Aligning policies is essential. To create a national strategy for sustainability in higher education, the government should collaborate with academic institutions, civil society, and foreign partners. Mandatory sustainability reporting, pilot initiatives, performance-based rankings, and training program funding are a few examples of this. Certifying agencies could integrate sustainability into institutional accountability frameworks by integrating it into their quality assurance standards. Furthermore, Pakistani institutions can benefit from partnerships with global networks like the Global University Network for Innovation (GUNI), the Association for the Advancement of Sustainability in Higher Education (AASHE), or UNESCO's ESD programs.

The Role of Research and Community Engagement

In addition to operations and teaching, universities also support sustainability through research and public service. Unfortunately, research on sustainability is currently lacking in Pakistan and is typically unrelated to societal demands or policy. Universities may become more socially relevant and influential by promoting interdisciplinary research that tackles regional issues including water management, climate adaptation, renewable energy, and urban resilience. Participation in the community is equally vital. Building bridges with local people requires universities to form long-term collaborations rather than one-time initiatives. Universities may co-create solutions, foster trust, and guarantee that academic knowledge serves the public interest when they collaborate with communities rather than for them. This strategy upholds the social contract between society and universities and is highly compatible with the SDGs.

A Vision for the Future

How might a Pakistani university be sustainable? It would be an organization where sustainability is ingrained in its principles and mission, demonstrated in its research and curriculum, and apparent in its everyday operations and physical infrastructure. Students would learn how to live and lead responsibly there in addition to learning about sustainability. It would be both locally anchored and globally connected, inclusive, and thoughtful. It is difficult, but not impossible, to realize this idea. It calls for bravery, creativity, and perseverance. It calls for cross-sector cooperation, ongoing education, and a readiness to question established ideas. Above all, though, it necessitates faith—in the ability of education to transform individuals, organizations, and communities.

Final Words

The transformational power of higher education is reaffirmed in this reflection, which is influenced by the perspectives and experiences acquired during the research. In HEIs, sustainability is a continuous, group-based, and urgent journey rather than a goal. Universities in Pakistan are at a turning point. The nation's destiny as well as the future of

Published:
January 07, 2026

higher education will be shaped by the decisions taken today. Let this study be a call to action as well as a reflection. Now is the moment to take action, and we are all accountable.

References

1. Aftab, S., & Shah, A. (2017). *Environmental sustainability in higher education institutions in Pakistan*. *Journal of Cleaner Production*, 142, 2322–2333.
2. DiMaggio, P. J., & Powell, W. W. (1983). *The iron cage revisited: Institutional isomorphism and collective rationality*. *American Sociological Review*, 48(2), 147–160.
3. Elkington, J. (1998). *Cannibals with forks: The triple bottom line of 21st century business*. New Society Publishers.
4. HEC Pakistan. (2020). *Higher Education Vision 2025*. Higher Education Commission of Pakistan.
5. Leal Filho, W., Shiel, C., & Paço, A. (2015). *Integrative approaches to environmental sustainability at universities: An overview of challenges and priorities*. *Journal of Integrative Environmental Sciences*, 12(1), 1–14.
6. Lozano, R., Ceulemans, K., & Seatter, C. S. (2015). *Teaching organizational change management for sustainability: Designing and delivering a course at the University of Leeds to better prepare future sustainability change agents*. *Journal of Cleaner Production*, 106, 205–215.
7. Tilbury, D. (2011). *Education for Sustainable Development: An expert review of processes and learning*. UNESCO.
8. UNESCO. (2014). *Shaping the Future We Want: UN Decade of Education for Sustainable Development (2005–2014)*. Final Report.
9. UNESCO. (2017). *Education for Sustainable Development Goals: Learning Objectives*. UNESCO Publishing.
10. Wals, A. E. J. (2010). *Mirroring, Gestaltswitching and transformative social learning: Stepping stones for developing sustainability competence*. *International Journal of Sustainability in Higher Education*, 11(4), 380–390.
11. Wals, A. E. J., & Corcoran, P. B. (2012). *Learning for sustainability in times of accelerating change*. Wageningen Academic Publishers.