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TRANSFORMATION OF HEIs FOR SUSTAINABLE DEVELOPMENT

The transformation of higher education institutions is an important prerequisite for achieving the Sustainable Development Goals and responding to contemporary social, environmental, and technological challenges. Universities are increasingly acting as agents of sustainable change through their educational, research, and societal activities, as well as through innovation and partnership engagement. The aim of the study is to substantiate the key directions of transformation of higher education institutions in the context of implementing the Sustainable Development Goals. The research is based on the analysis and synthesis of contemporary international scholarly works devoted to sustainable development strategies, university transformation, and governance. A conceptual model is proposed that identifies educational, research, and partnership transformations as interconnected components of sustainable university development. The results can be used to improve the strategic management of higher education institutions and strengthen their contribution to achieving the SDGs.

Keywords: sustainable development; SDGs; university transformation; strategic management.

Problem statement. The adoption of the United Nations Sustainable Development Goals has significantly transformed the role of higher education institutions worldwide. Universities are no longer viewed solely as providers of education and research but are increasingly recognized as key actors in promoting sustainable development, fostering innovation, supporting regional resilience, and addressing global societal challenges. Through their educational, scientific, and societal missions, HEIs contribute to achieving the SDGs by developing human capital, generating knowledge, and facilitating sustainable transformation.

The growing importance of sustainability has led universities to integrate environmental, social, and governance (ESG) principles into their strategies, governance systems, and operational activities. At the same time, higher education institutions face numerous challenges related to digitalization, demographic change, climate risks, geopolitical instability, and increasing societal expectations. These challenges require universities to reconsider traditional management approaches and adopt new models of institutional development based on sustainability principles.

Analysis of recent research and publications. The concept of university transformation has therefore become a central topic in contemporary higher education research. Recent studies emphasize that sustainable transformation should encompass all core university missions, including education, research, and societal engagement. Universities are expected not only to incorporate sustainability into curricula and research agendas but also to actively participate in solving societal and environmental problems through partnerships with governments, businesses, and civil society organizations.

Karo et al. argue that universities can become transformative change agents when sustainability objectives are embedded into institutional strategies and supported by appropriate governance mechanisms [1]. Similarly, Lehmann et al. highlight the importance of transformative learning processes that foster sustainability-oriented values and competencies among students and academic staff [2]. Research by Bui et al. demonstrates that institutional capacity, organizational culture, and strategic commitment are critical factors influencing successful SDG implementation in higher education institutions [1-3].

Universities are increasingly recognized as key actors in achieving the Sustainable Development Goals through education, research, innovation, and stakeholder engagement [4].

Recent studies demonstrate that sustainability-oriented transformation requires systemic changes in governance, institutional culture, and strategic planning [5].

The growing use of sustainability rankings has strengthened the role of performance measurement and benchmarking in higher education. Among the most influential international assessment frameworks, THE Impact Rankings provide universities with an opportunity to evaluate and compare their contributions to the Sustainable Development Goals [6].

Despite significant progress in this field, existing studies often focus on individual aspects of university transformation, such as sustainability reporting, curriculum development, stakeholder engagement, or performance assessment. Less attention has been devoted to developing comprehensive frameworks that enable systematic interpretation of institutional transformation and its relationship to universities' educational, research, and societal missions.

Selection of previously unresolved parts of the general problem.

Against this background, there is a need to conceptualize the transformation of higher education institutions as a multidimensional process that integrates sustainability principles into all areas of university activity. Such an approach can support strategic decision-making and enhance universities' capacity to contribute effectively to sustainable development.

The purpose of this study is to investigate the transformation of higher education institutions in the context of sustainable development and to identify the key dimensions of institutional transformation related to the implementation of the Sustainable Development Goals. Attention is devoted to educational, academic, and collaborative transformations as interconnected components of sustainable university development.

Presentation of the main material. The review of contemporary studies demonstrates that higher education institutions are increasingly expected to act as transformative agents supporting sustainable development. Universities contribute to achieving the Sustainable Development Goals by integrating sustainability principles into education, research, and societal engagement. However, the transformation process differs significantly among institutions depending on their strategic priorities, organizational capacity, stakeholder engagement, and governance mechanisms.

The analysis of recent literature identifies three interrelated dimensions of higher education transformation: educational, academic, and collaborative (Table 1). Together, these dimensions create a framework for universities to strengthen their contributions to sustainable development.

Table 1

Dimensions of higher education transformation for sustainable development

Dimension	Focus	Expected outcomes
Educational transformation	Integration of SDGs into curricula	Sustainable human capital, green and digital skills
Academic transformation	SDG-oriented research, interdisciplinarity	Innovation, evidence-based solutions
Collaborative transformation	Partnerships with government, business, and civil society	Social impact, regional development, policy support

Note: Compiled by the authors

Educational transformation plays a crucial role in developing sustainability competencies and fostering a culture of sustainable development among students and academic staff. Educational transformation is closely related to the principles of Education for Sustainable Development, which emphasize the development of competencies, values, and behaviors necessary for achieving sustainability objectives [7].

The identified dimensions are consistent with previous studies emphasizing the multidimensional nature of sustainability transformation in higher education institutions [8; 9].

The findings indicate that educational transformation plays a crucial role in preparing graduates to address sustainability challenges. Universities increasingly incorporate sustainability topics into educational programmes and promote interdisciplinary learning approaches. This contributes to the development of competencies necessary for green and digital transitions. Educational transformation supports the development of sustainability competencies and lifelong learning approaches, which are considered essential for sustainable societies [2; 10].

Recent studies demonstrate that sustainability-oriented teaching contributes not only to learning outcomes but also to broader institutional transformation processes [8].

Academic transformation is reflected in the growing alignment of research activities with sustainability priorities. Universities are expanding interdisciplinary research initiatives and strengthening participation in international research networks, thereby increasing their contribution to solving environmental, economic, and societal problems. Research-oriented

transformation enhances universities' capacity to generate knowledge and support innovation-driven sustainable development [1; 3].

Sustainable transformation of higher education institutions is a complex and multidimensional process shaped by strategic, organizational, technological, and societal factors. The effectiveness of this process depends on the university's ability to align its missions, governance structures, and stakeholder interactions with sustainability objectives. The main strategic drivers identified in the literature that facilitate sustainable university transformation are presented in Table 2.

Table 2

Strategic drivers of sustainable university transformation

Driver	Strategic significance
SDG integration	Aligns activities with global sustainability priorities
Institutional leadership	Supports long-term transformation processes
Stakeholder engagement	Enhances societal relevance and impact
International cooperation	Facilitates knowledge exchange and innovation
Digital transformation	Improves accessibility, and data-driven management
Green transition	Promotes environmental responsibility and efficiency

Note: Compiled by the authors

Collaborative transformation represents the university's capacity to create value beyond traditional academic functions. Strong stakeholder engagement and regional partnerships significantly increase universities' societal impact and strengthen their contribution to sustainable transitions (Hinterleitner et al., 2026). Partnerships with public institutions, businesses, and civil society organizations enable universities to contribute directly to regional development and sustainability initiatives.

The analysis of recent research suggests that universities contribute to sustainable development through the simultaneous transformation of their core missions. Sustainable university development requires the integration of educational innovation, sustainability-oriented research, and active collaboration with external stakeholders. To systematize these relationships,

a conceptual framework of higher education transformation for sustainable development is proposed (Figure 1).

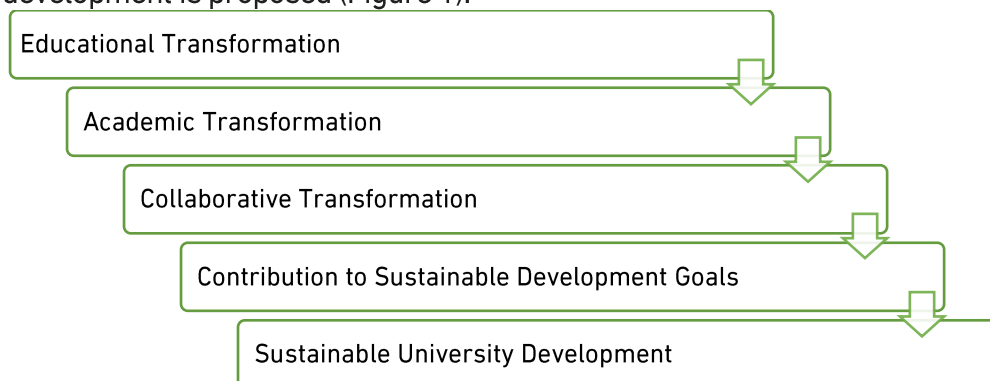


Figure 1. Conceptual framework of higher education transformation for sustainable development

Note: Compiled by the authors

The proposed framework is consistent with earlier studies highlighting that sustainability transformation should encompass all major university functions, including education, research, governance, and societal engagement [9].

The results support previous findings emphasizing that universities can become effective agents of sustainable change when institutional strategies, governance systems, and stakeholder engagement mechanisms are aligned with sustainability objectives. Consequently, the transformation of higher education institutions should be regarded as a key prerequisite for achieving the Sustainable Development Goals at local, national, and international levels.

Conclusions. The transformation of higher education institutions has become a key prerequisite for achieving the Sustainable Development Goals and addressing contemporary social, environmental, and technological challenges. The analysis of recent scientific literature demonstrates that universities increasingly act as agents of sustainable change by integrating sustainability principles into their educational, research, and societal missions.

The study identified three interconnected dimensions of higher education transformation: educational, academic, and collaborative. Educational transformation contributes to the development of sustainability-related competencies and human capital, academic transformation strengthens the contribution of research and innovation to sustainable

development, while collaborative transformation enhances partnerships and societal impact.

The proposed conceptual framework highlights the importance of integrating sustainability objectives into institutional strategies, governance systems, and stakeholder engagement mechanisms. Sustainable university development should therefore be considered a continuous strategic process rather than a collection of isolated initiatives.

Prospects for further research. The findings confirm that higher education institutions can significantly contribute to sustainable development when their core missions align with sustainability principles and are supported by effective strategic management. Further research may focus on developing practical assessment tools and indicators for measuring the transformation and sustainability performance of universities.

These findings support recent international discussions emphasizing the strategic role of universities in advancing sustainability transitions and implementing the SDGs [4; 11].

The proposed conceptual framework may serve as a foundation for developing strategic management tools, performance indicators, and assessment systems supporting sustainable transformation in higher education institutions.

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ТРАНСФОРМАЦІЯ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ ДЛЯ СТАЛОГО РОЗВИТКУ

Трансформація ЗВО є важливою передумовою досягнення Цілей сталого розвитку та реагування на сучасні соціальні, екологічні, економічні й технологічні виклики. Від університетів дедалі більше очікується внесок не лише через підготовку висококваліфікованих фахівців і досягнення результатів наукових досліджень, а й через активну взаємодію із суспільством, формування інноваційного середовища, розвиток партнерств і підтримку процесів сталого розвитку на регіональному, національному та міжнародному рівнях. У сучасних умовах університети виступають важливими агентами суспільних змін, забезпечуючи формування людського капіталу, поширення знань і впровадження інновацій, необхідних для зеленої та цифрової трансформації економіки. Незважаючи на значну кількість наукових досліджень, присвячених інтеграції Цілей сталого розвитку у систему вищої освіти, досі існує потреба у комплексному концептуальному підході, який би пояснював рівні, напрями та типи інституційної трансформації ЗВО.

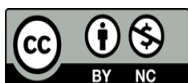
Метою дослідження є аналіз трансформації ЗВО в контексті сталого розвитку та визначення ключових напрямів інституційних змін, пов'язаних із реалізацією Цілей сталого розвитку. Методологічною основою дослідження є аналіз, узагальнення та систематизація сучасних

міжнародних наукових праць, присвячених стратегіям сталого розвитку, організаційній трансформації, університетському врядуванню та інтеграції ЦСР у діяльність університетів. Особливу увагу приділено освітній, науковій та партнерській складовим трансформації, які визначають здатність університетів адаптуватися до сучасних викликів і забезпечувати довгостроковий сталий розвиток.

Результати дослідження свідчать, що ефективна трансформація ЗВО потребує інтеграції принципів сталого розвитку в основні місії університетів, узгодження інституційних стратегій із Цілями сталого розвитку, розвитку міждисциплінарних досліджень, зміцнення партнерства із зовнішніми стейкхолдерами та посилення суспільної взаємодії. Запропоновано концептуальну модель, яка виокремлює освітню, наукову та партнерську трансформації як взаємопов'язані складові сталого розвитку університетів. Запропонований підхід сприяє поглибленню теоретичних засад дослідження трансформаційних процесів у системі вищої освіти та може бути використаний для вдосконалення стратегічного управління ЗВО, підвищення їхньої конкурентоспроможності й посилення внеску у досягнення Цілей сталого розвитку та реалізацію зеленого і цифрового переходів.

Ключові слова: сталий розвиток; ЦСР; трансформація університетів; стратегічне управління.

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