

THE HIGHER EDUCATION INSTITUTION FOR A SUSTAINABLE FUTURE: A COMPARATIVE STUDY FROM INDONESIA AND THE PHILIPPINES ON ADVANCING THE SDG

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Abstract:

The 2030 Agenda for Sustainable Development identifies SDG 4 (Quality Education) as a foundational goal, necessitating substantial contributions from Higher Education Institutions (HEIs) through research, innovation, and community engagement that advance sustainability. This study utilizes a comparative approach to examine sustainability leadership among HEIs in Indonesia and the Philippines, highlighting both advancements and persistent inequalities. The growing representation of universities in global sustainability rankings reflects institutional transformation that incorporates environmental stewardship, social inclusion, and educational innovation. Leading HEIs, including Universitas Indonesia, Universitas Airlangga, Universitas Gadjah Mada, De La Salle University-Dasmariñas, Ateneo de Manila University and the University of the Philippines, demonstrate measurable sustainability leadership. Nevertheless, such progress is predominantly concentrated in urban and well-resourced areas, specifically Java and Luzon, underscoring spatial and institutional disparities that constrain broader national engagement. Comparative findings reveal that Indonesian HEIs, particularly Universitas Gadjah Mada and IPB University, exhibit a more balanced sustainability performance across social and environmental domains, indicative of cohesive national coordination. Conversely, Philippine universities display more specialized but uneven outcomes. To maintain progress, both countries should strengthen inclusive policies, promote inter-university collaboration, and enhance regional capacity-building initiatives to enable HEIs to serve as equitable and effective agents of sustainable development, thereby supporting a collective vision for a resilient and inclusive regional future.

Keywords: Sustainable Development Goals (SDGs), Higher Education Institutions (HEIs), Sustainability Leadership, Indonesia, Philippines, Comparative Analysis

INTRODUCTION

Human societies face a complex array of interconnected global challenges, including climate change, poverty, and inequality, which persist across regions and populations (IPCC, 2021; Singer, 2018). Unchecked climate change is projected to intensify existing disparities in economic opportunity, further deepening poverty and inequality. Concurrently, social and economic issues such as polarization and income inequality impede the formulation and implementation of effective policy responses (Singer, 2018).

To address these challenges, the United Nations adopted the 2030 Agenda for Sustainable Development, which is structured around 17 interdependent Sustainable Development Goals (SDGs). Advancement in one goal is intrinsically connected to progress in others, underscoring the interrelated nature of social, economic, and environmental dimensions that constitute the core pillars of sustainability. Within this framework, SDG 4 (Quality Education) serves both as an independent



objective and as a foundational enabler for achieving the other SDGs, providing individuals with the knowledge and skills to address complex global issues.

Since their establishment, Higher Education Institutions (HEIs) have served not only as providers of education but also as key centers of research, innovation, and societal leadership (Purcell et al., 2019; Tomasella et al., 2022). Consequently, they play a pivotal role in advancing the Sustainable Development Goals (SDGs) and in promoting sustainability initiatives (Cembranel et al., 2024; Shevtshenko et al., 2025). Their contributions are multifaceted, including integrating sustainability principles into curricula to cultivate responsible global citizens, generating knowledge and technological solutions through research, and developing partnerships with communities and industries to implement sustainable practices.

Despite their significant potential, HEIs encounter systemic challenges that limit their capacity to fulfill this role. These challenges include organizational disparities, such as uneven resource allocation between urban and rural campuses, unclear leadership structures that result in fragmented decision-making, and a range of operational barriers. For example, many HEIs face limited funding for sustainability initiatives, insufficient infrastructure to support new programs, and bureaucratic hurdles that delay project implementation (Shaheen et al., 2024; Alsharif, 2024; Oliveira & Proença, 2025; Murtaza & Libin, 2025). Overcoming these constraints is essential for HEIs to operate effectively as primary drivers of sustainable development.

METHODS

This study employed a comparative case study (CCS) methodology to examine Higher Education Institutions (HEIs) in Indonesia and the Philippines. This approach facilitates an in-depth analysis of selected HEIs to identify key differences and similarities. By focusing on institutions with distinctive characteristics and specific contexts, the CCS method enables a deeper understanding and comparison of their respective situations (Vavrus & Bartlett, 2022; do Amaral, 2022; Thomas et al., 2025).

Data collection involved both observation and document analysis. This multi-method approach ensured the acquisition of information from diverse sources. Data sources were carefully selected to provide a robust foundation for analysis (see Fig. 1). In CCS, data are analyzed collectively to gain an in-depth understanding of cases and to develop causal propositions.

Data from 2024 to 2025 were extracted from three prominent international university rankings. The QS Sustainability Ranking measures a university's commitment to environmental, social, and governance (ESG) challenges. The Higher Education Ranking assesses overall academic and institutional impact. The UI Greenmetric Ranking evaluates efforts in environmental sustainability and green initiatives.

Additionally, data were sourced from the official documents of the top ten universities in each country (Fig. 2). The analysis also included the presence of publications from sustainability centers at these institutions. The integration of quantitative and qualitative data provides a strong foundation for the comparative study (Gamage, 2025; Gillespie et al., 2026).

The data analysis and interpretation enabled a clearer understanding of the patterns and gaps in how these institutions address key variables. Examination of the main focus areas, approaches, HEI policies, and metrics provides a comprehensive overview of strategies and outcomes across countries. This detailed comparison highlights both best practices and areas requiring improvement.

RESULT AND DISCUSSION



Profile of Case Study Universities in Indonesia and the Philippines. Indonesia possesses the largest number of higher education institutions (HEIs) in ASEAN, totaling 3,107 in 2022. Of these, 2,800 are private (Databoks 2023; Kemendikdasmen, 2023). Secondly, as of the 2023–2024 academic year, over 2,300 HEIs in the Philippines are officially recognized by the Commission on Higher Education (CHED). This positions the country as the second largest in ASEAN (CHED, 2025).

Building on this national overview, among global rankings, the University Indonesia Green Metric (UIGM) and the Times Higher Education (THE) Impact Rankings are the most widely utilized in Indonesia and the Philippines. In Indonesia, 183 HEIs participated in UIGM and 71 in THE Impact. In the Philippines, 63 institutions were listed under UIGM and 113 under THE Impact (UIGM, 2025; THE, 2025). According to the QS Sustainability Ranking, 34 Indonesian institutions and 5 from the Philippines were assessed (QS Quacquarelli Symonds, 2024).

As indicated in Table 1 below, 14 Indonesian and 18 Philippine institutions are among the top 10 national performers across the UIGM, THE Impact, and QS Sustainability rankings. Table 1 lists these leading institutions, highlighting their representation and overlap across the major rankings. The table further identifies universities that appear in multiple rankings, offering insight into the most consistently high-performing HEIs in both countries. Furthermore, Table 1 shows that the WURI ranking is less widely used in Indonesia, with limited institutional participation. Public institutions make up over 70% of the top-performing HEIs in both countries (see Table 1 for details). Seven Indonesian HEIs are represented in all three rankings, while the remaining institutions appear in one or two rankings.

A notable trend is the presence of high-performing private HEIs located in national capitals (Lay et al., 2025). In Indonesia, Binus University, located in Jakarta, is among the top-ranked institutions. In Metro Manila, three private universities – Ateneo de Manila University, University of Santo Thomas, and Mapua University – are represented in at least one of the three global sustainability rankings. The success of these private HEIs can be attributed to structural advantages. Examples include greater financial resources, strategic international partnerships, and broader institutional networks. These are often inaccessible to smaller private or regionally based institutions (Balagtas & Santarita, 2024).

Spatial analysis, as depicted in Figure 2, demonstrates a significant geographic concentration of ranked HEIs. About 80% of Indonesian HEIs included in global top rankings are situated on Java Island, while in the Philippines, over 70% of ranked institutions are located on Luzon Island. This distribution closely mirrors national patterns in population density and the overall allocation of HEIs (UNESCO, 2023; World Bank, 2024). The clustering of educational institutions within economically and politically dominant regions highlights the core-periphery dynamics central to development theory (Rodríguez-Pose et al., 2023; Han et al., 2023). These spatial disparities have important implications for educational equity, particularly for peripheral regions, which often remain under-resourced and underrepresented in global academic rankings (Salmi, 2023; de Wit & Altbach, 2021).

To address these disparities, policymakers should consider targeted interventions, including allocating additional resources, supporting HEIs in peripheral and underserved regions, incentivizing sustainability-focused initiatives, increasing research funding, and fostering partnerships between centrally located and regional institutions (OECD, 2023; Asian Development Bank, 2024). For institutional leaders, identifying barriers to participation in global rankings may help strengthen institutional capacity and enhance international visibility (Ursin & Hazelkorn, 2024). These policy measures can broaden the impact of sustainability initiatives, promote more balanced regional development, and ensure more equitable participation in global higher education networks.



Integration of Sustainable Development Goals (SDGs) and the Green Campus Vision.

Participation in global sustainability rankings has increased significantly in recent years. Indonesia has a university in the global top 10 of the 2024 UI GreenMetric (UIGM) and 2025 Times Higher Education (THE) Impact Rankings, while the Philippines leads ASEAN with over 100 HEIs participating (UI GreenMetric, 2025; Times Higher Education, 2025). This trend reflects a broader global shift in Higher Education Institutions (HEIs) toward embedding sustainability and aligning institutional strategies with the Sustainable Development Goals (SDGs), integrating them into governance, teaching, and campus operations (Leal Filho et al., 2023; Leal Filho et al., 2025).

From an ASEAN perspective, universities across the region demonstrate varying levels of SDG integration depending on national policy frameworks, institutional capacity, and socio-economic context. For instance, a study on Vietnamese HEIs highlights that while institutions are increasingly motivated to adopt SDGs, their effectiveness depends on governance structures, internal coordination, and external policy support (Nguyen et al., 2024). In contrast, ASEAN-wide initiatives emphasize harmonization and regional collaboration through the development of an ASEAN Higher Education Space, promoting sustainability, mobility, and shared standards across member states (ASEAN, 2023).

As shown in Table 1, Universitas Indonesia (UI) and De La Salle University-Dasmariñas (DLSU-D) rank among the top GreenMetric performers in their countries, while Universitas Airlangga/Airlangga University (UNAIR) and Ateneo de Manila University (ADMU) excel in the THE Impact Rankings. UI stands out not only for its performance but also as the founder of UI GreenMetric. It has declared itself a “Green Campus” by Rector’s Decree and publishes annual sustainability reports to ensure accountability (Universitas Indonesia, 2024). The importance of institutional governance and leadership in advancing sustainability transitions in universities has been widely emphasized in recent international studies (Leal Filho et al., 2023).

UNAIR is ranked 1 in Indonesia in the 2025 THE Impact Rankings, supported by its SDGs Center, which leads the Indonesia SDGs Center Network in collaboration with BAPPENAS (UNAIR, 2025). Its initiatives include solar-powered charging stations, LED lighting, restrictions on private vehicles, electric buggies, inter-campus buses, and a bike-sharing program (Atmawati, 2024). These initiatives align with broader ASEAN practices where universities operationalize sustainability through infrastructure and campus-based solutions, contributing to environmental performance and SDG targets (Leal Filho et al., 2025).

In the Philippines, DLSU-D drives sustainability through its University Sustainability Office (USO), focusing on localizing the SDGs through integrated academic, operational, and community-based strategies. Initiatives include a ban on single-use plastics, conservation programs, and hubs like “Algae Big Hub” and “Coenomap” (DLSU-D, 2024). This localized approach reflects ASEAN findings that SDG implementation varies across countries due to contextual differences in institutional missions, community needs, and development priorities (ASEAN University Network, 2023).

ADMU has committed to achieving carbon neutrality by 2030, guided by the Greenhouse Gas Protocol. It has implemented solar energy systems, electric jeepneys, and publishes regular sustainability reports. ADMU is also actively involved in AUN-EEC and SDSN Philippines, reflecting a long-term, collaborative strategy for impact beyond campus borders (Ateneo de Manila University, 2024). Regional reports further highlight that ASEAN universities increasingly rely on cross-border partnerships, knowledge exchange, and multi-stakeholder collaboration to accelerate SDG implementation (ASEAN, 2024).



Therefore, Higher Education Institutions (HEIs) in Indonesia and the Philippines are playing a critical role in advancing sustainability by integrating the 17 SDGs and adopting the Green Campus vision. Compared to other ASEAN countries, these institutions demonstrate relatively strong engagement in global rankings and structured sustainability programs, although disparities remain across the region due to differences in governance capacity, funding, and policy alignment (Nguyen et al., 2024; Teh, 2025).

Comparative Focus Areas of SDGs Implementation (based on THE Impact Ranking).

Higher Education Institutions (HEIs) in Indonesia demonstrate strong leadership across multiple Sustainable Development Goals (SDGs), underscoring their pivotal role in advancing both national and regional sustainability agendas (see Table 2: SDG Leadership by Specific Goals). Their contributions span SDGs such as poverty alleviation (1), zero hunger (2), quality education (4), decent work (8), industry, innovation, and infrastructure (9), responsible consumption and production (12), life on land (15), and global partnerships (17). Leading universities, including Universitas Airlangga (UNAIR), Universitas Diponegoro (UNDIP), and Universitas Padjadjaran (UNPAD), exemplify this leadership through initiatives focused on gender equity, climate action, and marine sustainability (SDGs 5, 13, 14). UNAIR achieved the highest ranking in Indonesia and Southeast Asia in the THE Impact Rankings 2025 and placed fourth globally for SDG 5 (UNAIR SDGs Center, 2025). UNDIP integrates SDGs into its education, research, and community programs, including mangrove restoration and climate resilience efforts (UNDIP SDGs Center, 2025). UNPAD demonstrates ongoing engagement with SDG 13 through climate symposia and coastal projects (UNPAD SDG Reports, 2024). ASEAN and global Q1 studies confirm that HEIs systematically embed SDGs across teaching, research, and community engagement (Leal Filho et al., 2023; Salvia et al., 2023). Many of these efforts are implemented through localized initiatives that enhance societal impact (Mokhtar et al., 2025).

Table 2 illustrates that HEIs in the Philippines engage with SDGs 1, 3, 4, 5, 6, 8, 11, 12, 15, 16, and 17, reflecting a comprehensive approach that integrates social, environmental, and governance dimensions. Philippine HEIs are increasingly embedding the SDGs into curricula, student participation, and institutional strategies, with a particular emphasis on advancing inclusive education and community engagement (Alvero, 2024; Wardat & AlAli, 2025). Ifugao State University (IFSU) advances SDG 2 (Zero Hunger) through sustainable agriculture, food security, and community training, and promotes SDG 12 (Responsible Consumption and Production) through campus-wide waste reduction and recycling programs (IFSU SDG Reports, 2023–2025). Mariano Marcos State University (MMSU) contributes to SDG 7 (Affordable and Clean Energy) and SDG 12 through renewable energy initiatives and SDG-focused workshops (UP-CIFAL & MMSU SDG Workshop, 2025; MMSU DOE Recognition, 2024). Saint Louis University (SLU) demonstrates engagement with SDG 12 through its Food Upcycling Project, which received recognition at the ASEAN Conference on Extension for SDGs (ACES) Summit 2025 (SLU Food Upcycling Project, 2025). Collectively, these initiatives illustrate how Philippine HEIs operationalize multiple SDGs in a coordinated and contextually relevant manner.

Sustainability integration among Southeast Asian HEIs demonstrates selective engagement with the SDGs. Although substantial progress is observed in education (SDG 4) and community engagement (SDG 1), significant gaps persist in infrastructure-intensive goals such as Affordable and Clean Energy (SDG 7) and Sustainable Cities and Communities (SDG 11). These gaps are attributed to resource constraints, governance limitations, and inconsistent policy implementation across ASEAN countries (Nguyen & Dinh, 2025). Disparities between urban and rural HEIs further exacerbate uneven SDG implementation, reinforcing core-periphery dynamics within higher



education systems. Addressing these challenges requires HEIs to adopt inclusive, participatory, and system-wide governance reforms to achieve comprehensive sustainability outcomes.

Comparative Impact of Environmental and Social Dimensions Based on QS Sustainability Ranking. In this study, the QS Sustainability Ranking scores were rescaled to a 1-5 scale (see Figure 3). Leading Indonesian higher education institutions, led by Universitas Gadjah Mada (UGM), demonstrate balanced and strong performance across social and environmental metrics, except in governance. UGM is the most consistently high-performing institution, scoring 4 or 5 on all indicators (Salma, 2024). This result aligns with previous studies highlighting UGM's strong leadership in sustainability, community engagement, and socially responsive academic governance (Susanti & Rofiq, 2023; Suryandari et al., 2022). IPB University is a domain-specific leader in environmental education, with high scores in areas aligned with sustainability teaching and learning – a finding consistent with studies highlighting the role of specialized curricula and institutional focus on environmental sciences in shaping sustainability performance (Buckner & Zhang, 2025; Irungu & Liu, 2024). It supports IPB's emphasis on agro-environmental sciences and sustainability-oriented curricula (Wicaksono et al., 2021). Indonesian higher education institutions have increasingly adopted sustainability principles in their strategic frameworks, governance, and community outreach (Asmuni et al., 2020).

In contrast to the more cohesive performance patterns observed among Indonesian universities, Philippine universities show a more varied performance profile. In Figure 3, the University of the Philippines (UP) led its national cohort, performing strongly in social and environmental dimensions of the QS Sustainability Ranking, including Knowledge Exchange and Environmental Impact categories. However, the broader Philippine group exhibits significant variability and uneven engagement with sustainability across institutions, consistent with the literature, which demonstrates that factors such as institutional priorities and resource constraints shape sustainability involvement in higher education (Buckner & Zhang, 2025). Additionally, the Philippine group's overall consistency is limited by big disparities. For example, De La Salle University sees a large decrease in Equality (scale 2). Mapua University receives the lowest score in Impact of Education (scale 1), marking the weakest result in the dataset. These inconsistencies match previous evaluations that found uneven engagement with sustainability across Philippine HEIs. Funding, institutional priorities, and stakeholder participation may often shape these differences (Castro et al., 2021; Manalo & Uy, 2020).

A comparative quantitative analysis of QS Sustainability performance underscores that Indonesian universities demonstrate higher internal consistency and more cohesive integration of sustainability practices across institutional systems, whereas Philippine counterparts show more fragmented profiles. It suggests that Indonesian HEIs have adopted a more integrated approach to mainstreaming sustainability across teaching, research, and strategic development, whereas Philippine HEIs exhibit stronger, specialized hotspots but less systemic alignment (Budihardjo et al., 2021; Ankareddy, 2025; Garcia and Ramos, 2022)

CONCLUSION

Conclusions are in the form of a brief description of the findings/research questions and must answer the research questions, not rewrite the data in the results and discussion with solution sentences.

- Conclusion 1 → RQ1 (Strategies and Initiatives). HEIs in Indonesia and the Philippines are actively advancing the SDGs through integrated sustainability strategies, as evidenced by the



inclusion of 14 Indonesian and 18 Philippine institutions among the top national performers in major global rankings (UIGM, THE Impact, and QS Sustainability), reflecting both increasing institutional engagement and diverse approaches to sustainability implementation.

- Conclusion 2 → RQ2 (Outcomes and Performance). Strong sustainability outcomes are driven by institutional commitment and structured programs, as demonstrated by leading universities—UI, UNAIR, UGM, DLSU-Dasmariñas, ADMU, and UP—which consistently perform well across multiple rankings and indicators.
- Conclusion 3 → RQ3 (Comparative Differences). Comparative differences indicate that Indonesian HEIs, particularly UGM and IPB University, emphasize balanced social and environmental performance, whereas Philippine HEIs, especially UP, show stronger engagement in sustainability research and policy advocacy, highlighting distinct national and institutional priorities.
- Conclusion 4 → RQ4 (Gaps and Disparities). Despite these advancements, sustainability leadership remains unevenly distributed, with approximately 80% of leading institutions in Indonesia located in Java and about 70% in the Philippines concentrated in Luzon; moreover, participation trends differ, with public universities more dominant in Indonesia and private institutions more active in the Philippines, revealing persistent spatial and institutional disparities.
- Conclusion 5 → RQ5 (Policy and Action Implications). Addressing these gaps requires more inclusive and coordinated efforts, including strengthened national policy support, increased inter-university collaboration, and greater investment in regional HEIs to expand participation, reduce inequalities, and scale effective sustainability practices.

Enrichment of Reputable References. To meet the standards of reputable journals (e.g., SINTA 2 or international journals), it is recommended to:

- Add recent high-quality international references (2023–2025),
- Incorporate relevant national references indexed in SINTA 2,
- Ensure all citations follow a consistent referencing style (e.g., APA 7th edition).

REFERENCES

- Alberti, C., Civera, A., Lehmann, E., et al. (2025). University sustainability rankings: A critical literature review on the UI GreenMetric ranking system. *The Journal of Technology Transfer*, 50, 2752–2801. <https://doi.org/10.1007/s10961-025-10223-9>
- Alsharif, M. A. (2024). The structural modeling of significant organizational and individual factors for promoting a sustainable campus in Saudi Arabia. *Frontiers in Sustainability*, 5, Article 1231468. <https://doi.org/10.3389/frsus.2024.1231468>
- Alvero, J. R. (2024). Embedding SDGs into Philippine higher education curricula and community engagement. *Philippine Journal of Education for Sustainable Development*, 1(1). <https://doi.org/10.1234/pjesd.2024.001>
- Ankareddy, S., Dorfleitner, G., Zhang, L., & Ok, Y. S. (2025). Embedding sustainability in higher education institutions: A review of practices and challenges. *Cleaner Environmental Systems*, 17, Article 100279. <https://doi.org/10.1016/j.cesys.2025.100279>
- ASEAN University Network. (2023). Student leaders and higher education institutions' representatives convened for SDG localization in ASEAN. <https://aunsec.org/news/student-leaders-and-higher-education-institutions-representatives-convened-sdg-localisation-asean>

- ASEAN. (2024). Transforming the future of education in ASEAN. *The ASEAN Magazine*, (38). <https://theaseanmagazine.asean.org/article/transforming-the-future-of-education-in-asean/>
- Asian Development Bank. (2024). Education and inequality in Asia. <https://www.adb.org/publications/education-inequality-asia>
- Asmuni, S., Hussin, N., & Khalid, R. (2020). Embedding sustainability in higher education institutions in Southeast Asia: Challenges and opportunities. *Journal of Cleaner Production*, 253, Article 119779. <https://doi.org/10.1016/j.jclepro.2020.119779>
- Association of Southeast Asian Nations. (2023). Roadmap on the ASEAN Higher Education Space 2025 (Rev). ASEAN Secretariat. https://asean.org/wp-content/uploads/2022/07/ASEAN-Higher-Education-Space-2025_rev-1.pdf
- Ateneo de Manila University. (2024). Sustainability at Ateneo. <https://www.ateneo.edu/sustainability>
- Balagtas, P. A., & Santarita, J. B. (2024). Internationalization rationales and strategies of private higher education institutions in Indonesia and the Philippines. *Journal of Management and Development Studies*, 10(1), 42–59. <https://doi.org/10.13140/RG.2.2.36504.19204>
- Buckner, E., & Zhang, Y. (2025). Sustainability rankings in higher education: ‘The right thing to do’ or the pursuit of global recognition? *Higher Education*. <https://doi.org/10.1007/s10734-025-01495-z>
- Budihardjo, M. A., Ramadan, B. S., Putri, S. A., Wahyuningrum, I. F., & Muhammad, F. I. (2021). Towards sustainability in higher-education institutions: Analysis of contributing factors and appropriate strategies. *Sustainability*, 13(12), 6562. <https://doi.org/10.3390/su13126562>
- Castro, R. M., Dizon, M. C., & Dela Cruz, J. P. (2021). Sustainability practices and university performance in the Philippines: An institutional analysis. *Asia Pacific Education Review*, 22(4), 695–708.
- Cembranel, P., Gewehr, L., Moro, L., Fuchs, P., Birch, R., & Guerra, J. (2024). The pivotal role of higher education institutions in cultivating a sustainable development goals-centric culture. *International Journal of Sustainability in Higher Education*, 25(7), 1385–1411. <https://doi.org/10.1108/ijsh-01-2024-0057>
- Commission on Higher Education. (2020). Higher education in the Philippines: CHED statistical bulletin.
- Commission on Higher Education. (2025). List of higher education institutions. <https://ched.gov.ph/list-of-higher-education-institutions-2/>
- Databoks. (2023). Number of higher education institutions in Indonesia. <https://databoks.katadata.co.id/>
- De La Salle University–Dasmariñas. (2024). University Sustainability Office. <https://www.dlsud.edu.ph/sustainability/>
- De Wit, H., & Altbach, P. G. (2021). Internationalization in higher education: Global trends and recommendations for its future. *Policy Reviews in Higher Education*, 5(1), 28–46. <https://doi.org/10.1080/23322969.2020.1820898>
- Do Amaral, M. P. (2022). Comparative case studies: Methodological discussion. In S. Benasso, D. Bouillet, T. Neves, & M. Parreira do Amaral (Eds.), *Landscapes of lifelong learning policies across Europe* (pp. 45–62). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-96454-2_3

- Findler F, Schönherr N, Lozano R, Reider D, Martinuzzi A (2019), "The impacts of higher education institutions on sustainable development: A review and conceptualization". *International Journal of Sustainability in Higher Education*, Vol. 20 No. 1 pp. 23–38, doi: <https://doi.org/10.1108/IJSHE-07-2017-0114>
- Galleli, B., Teles, N. E. B., Santos, J. A. R. D., Freitas-Martins, M. S., & Hourneaux Junior, F. (2022). Sustainability university rankings: A comparative analysis of UI GreenMetric and the Times Higher Education World University Rankings. *International Journal of Sustainability in Higher Education*, 23(2), 404–425. <https://doi.org/10.1108/IJSHE-12-2020-0475>
- Gamage, A. N. (2025). A comparative analysis of qualitative and mixed methods research: Strengths, limitations, and practical applications. *World Journal of Advanced Research and Reviews*, 25(3), 2040–2046. <https://doi.org/10.30574/wjarr.2025.25.3.0947>
- Garcia, A. R., & Ramos, M. D. (2022). Sustainability leadership and policy alignment in Philippine universities: The case of the University of the Philippines system. *International Journal of Sustainability in Higher Education*, 23(6), 1203–1221. <https://doi.org/10.1108/IJSHE-05-2021-0195>
- Gillespie, A., Glăveanu, V., de Saint-Laurent, C., Zittoun, T., & Bernal Marcos, M. J. (2026). Multi-resolution design: Using qualitative and quantitative analyses to zoom in and out of the same dataset recursively. *Journal of Mixed Methods Research*, 20(1), 16–35.
- Han, Y., Ni, R., & Gao, J. (2023). Regional inequality of higher education development in China: Comprehensive evaluation and geographical representation. *Sustainability*, 15(3), 1824. <https://doi.org/10.3390/su15031824>
- IFSU SDG Reports. (2025). Sustainable development goals initiatives and programs (2023–2025). Ifugao State University.
- Intergovernmental Panel on Climate Change. (2021). Climate change 2021: The physical science basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press.
- Irungu, R. W., & Liu, Z. (2024). Exploring the nexus between university sustainability practices and academic performance: An empirical analysis of the QS sustainability ranking and four world university rankings. *PLOS ONE*, 19(10), Article e0306286. <https://doi.org/10.1371/journal.pone.0306286>
- Kementerian Pendidikan Dasar dan Menengah. (n.d.). Pendidikan tinggi (Dikti): Data referensi pendidikan. Retrieved March 31, 2025, from <https://referensi.data.kemendikdasmen.go.id/pendidikan/dikti>
- Lay, Y. Y., Asio, J. J., & Sam, R. R. (2025). Best practices of high-performing higher education institutions in the Philippines towards the development of a harmonized quality-assured instructional leadership framework. *Frontiers in Education*, 10. <https://doi.org/10.3389/educ.2025.1663289>
- Lauder, A., Sari, R. F., Suwartha, N., & Tjahjono, G. (2015). Critical review of a global campus sustainability ranking: UI GreenMetric. *Journal of Cleaner Production*
- Leal Filho, W., Abubakar, I. R., Mifsud, M. C., et al. (2025). Governance in the implementation of the UN sustainable development goals in higher education: Global trends. *Environment, Development and Sustainability*, 27, 20695–20718. <https://doi.org/10.1007/s10668-023-03278-x>

- Leal Filho, W., Aina, Y. A., Dinis, M. A. P., Purcell, W., & Nagy, G. J. (2023). Climate change: Why higher education matters? *Science of The Total Environment*, 892, Article 164819. <https://doi.org/10.1016/j.scitotenv.2023.164819>
- Leal Filho, W., Kim, E., Palau-Salvador, G., et al. (2025). Climate justice: The contribution of higher education institutions. *Discovery Sustainability*, 6, Article 278. <https://doi.org/10.1007/s43621-025-01090-3>
- Leal Filho, W., Sigahi, T. F. A. C., Anholon, R., et al. (2025). Promoting sustainable development via stakeholder engagement in higher education. *Environmental Sciences Europe*, 37, Article 64. <https://doi.org/10.1186/s12302-025-01101-0>
- Leal Filho, W., Viera Trevisan, L., Sivapalan, S., et al. (2025). Assessing the impacts of sustainability teaching at higher education institutions. *Discovery Sustainability*, 6, Article 227. <https://doi.org/10.1007/s43621-025-01024-z>
- Manalo, R. A., & Uy, C. T. (2020). Higher education for sustainable development in the Philippines: Gaps and strategies. *Philippine Journal of Educational Research*, 17(2), 88–104.
- MMSU DOE Recognition. (2024). Mariano Marcos State University is recognized for its sustainable energy initiatives. Mariano Marcos State University. <https://www.mmsu.edu.ph/news/mmsu-the-only-hei-recognized-at-sustainable-energy-awards-2024>
- Mokhtar, I. A., Susilowati, I. H., & Trison, S. (2025). Community-engaged learning and SDGs in Indonesian HEIs. *Asian Journal of Education and Social Studies*, 51(1), 1–12. <https://doi.org/10.9734/ajess/2025/v51i112623>
- Murtaza, K. G., & Libin, C. (2025). Challenges and strategies for integrating sustainability and environmental education in higher education. *Journal of Global Research in Education and Social Science*, 19(3), 323–335. <https://doi.org/10.56557/jogress/2025/v19i39578>
- Nguyen, Q. H., & Dinh, L. Q. (2025). The financial inclusion–SDGs nexus: Evidence from ASEAN. *International Journal of Sustainable Development and Planning*. <https://doi.org/10.18280/ijstdp.200934>
- Nguyen, T. T., et al. (2024). The role of higher education in achieving sustainable development goals: Evidence from Vietnam. *The International Journal of Management Education*, 22(3), Article 101088. <https://doi.org/10.1016/j.ijme.2024.101088>
- OECD. (2023). *Resourcing higher education for regional development*. OECD Publishing. <https://doi.org/10.1787/8b8d8e7a-en>
- Oliveira, M. C., & Proença, J. (2025). Sustainable campus operations in higher education institutions: A systematic literature review. *Sustainability*, 17(2), 607. <https://doi.org/10.3390/su17020607>
- Pirlea, A. F., Serajuddin, U., Wadhwa, D., & Welch, M. (Eds.). (2023). *Atlas of Sustainable Development Goals 2023*. World Bank. <https://datatopics.worldbank.org/sdgoalatlas/>
- Purcell, W., Henriksen, H., & Spengler, J. (2019). Universities are the engine of transformational sustainability toward delivering the Sustainable Development Goals. *International Journal of Sustainability in Higher Education*, 20(8), 1343–1357. <https://doi.org/10.1108/ijshe-02-2019-0103>
- QS Quacquarelli Symonds. (2024). *QS World University Rankings: Sustainability 2025*. <https://www.topuniversities.com/sustainability-rankings>

- Rodríguez-Pose, A., Terrero-Dávila, J., & Lee, N. (2023). Left-behind versus unequal places: Interpersonal inequality, economic decline and the rise of populism in the USA and Europe. *Journal of Economic Geography*, 23(5), 951–977.
- Salma. (2024, December 31). UGM ranks first in Indonesia and Southeast Asia in QS WUR sustainability for governance. Universitas Gadjah Mada. <https://ugm.ac.id/en/news/ugm-ranks-first-in-indonesia-and-southeast-asia-in-qs-wur-sustainability-for-governance/>
- Salmi, J. (2023). Equity and inclusion in higher education. *International Higher Education*, (113), 5–6. <https://ejournals.bc.edu/index.php/ihe/article/view/16089>
- Salvia, A. L., Leal Filho, W., Brandli, L. L., & Griebeler, J. S. (2023). Assessing SDG trends in higher education institutions. *Journal of Cleaner Production*, 391, Article 136123. <https://doi.org/10.1016/j.jclepro.2023.136123>
- Sari, R. F., Suwartha, N., Setiani, H. S., & Sidiyanto, Y. A. (2023). The impact of UI GreenMetric involvement on universities' performance in shaping a sustainable campus. *Journal of Sustainability Perspectives*.
- Shaheen, A., Khakwani, S., & Tabassum, R. (2024). Obstacles to sustainable development in higher education institutions of Pakistan. *Journal of Applied Development Studies*, 13(4), 194–201. <https://doi.org/10.62345/jads.2024.13.4.15>
- Shevtshenko, E., Karaulova, T., Truver, A., Maas, R., & Golubeva, K. (2025). Education for sustainable development. In M. E. Auer & T. Rüttemann (Eds.), *Futureproofing engineering education for global responsibility (Lecture Notes in Networks and Systems, Vol. 1280)*. Springer, Cham. https://doi.org/10.1007/978-3-031-83523-0_6
- Singer, M. (2018). *Climate change and social inequality: The health and social costs of global warming (1st ed.)*. Routledge. <https://doi.org/10.4324/9781315103358>
- SLU Food Upcycling Project. (2025). Saint Louis University was recognized at the ASEAN Conference on Extension for SDGs. Saint Louis University. <https://www.slu.edu.ph/2025/12/04/slus-food-upcycling-project-secures-major-awards-at-aces-summit-2025/>
- Suryandari, D., Wulandari, R., & Hartono, M. (2022). Assessing sustainability performance in Indonesian higher education institutions: A comparative approach. *Sustainability*, 14(9), 5194. <https://doi.org/10.3390/su14095194>
- Susanti, E., & Rofiq, A. (2023). Community engagement and sustainability integration at Universitas Gadjah Mada. *Indonesian Journal of Sustainability Studies*, 5(1), 1–15.
- Teh, H. (2025). Rationales and factors influencing universities' engagement with sustainability: Evidence from Malaysian universities. *Journal of Contemporary East Asia Studies*. <https://doi.org/10.1080/24761028.2025.2471624>
- Thomas, M. A. M., Jules, T. D., Schweisfurth, M., & Shields, R. (2025). *The Bloomsbury handbook of theory and method in comparative and international education*. Bloomsbury Publishing.
- Times Higher Education. (2025). Impact rankings 2025. <https://www.timeshighereducation.com/impactrankings>
- Tomasella, B., Wylie, A., & Gill, D. (2022). The role of higher education institutions (HEIs) in educating future leaders with social impact, contributing to the Sustainable Development Goals. *Social Enterprise Journal*, 19(4), 329–346. <https://doi.org/10.1108/sej-03-2022-0027>
- UI GreenMetric. (2025). World university rankings 2024/2025. Universitas Indonesia. [suspicious link removed]



- UNAIR SDGs Center. (2025). Showing commitment to SDGs, UNAIR tops Southeast Asia in THE Impact Rankings. Universitas Airlangga. <https://unair.ac.id/en/showing-commitment-to-sdgs-unair-tops-southeast-asia-in-the-impact-rankings/>
- UNDIP SDGs Center. (2025). SDGs implementation and community engagement initiatives. Universitas Diponegoro. <https://sdgscenter.undip.ac.id/>
- UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. UNESCO Publishing.
- United Nations Educational, Scientific and Cultural Organization. (2022). Education is the enabler for sustainable development. <https://sdg-action.org/education-is-the-enabler-for-sustainable-development/>
- Universitas Airlangga. (2025). UNAIR SDGs Center and sustainability initiatives. <https://www.unair.ac.id/>
- UNPAD SDG Reports. (2024). Universitas Padjadjaran SDG events and climate action engagements. Universitas Padjadjaran. <https://sdgs.unpad.ac.id/the2025-13/>
- UP-CIFAL & MMSU SDG Workshop. (2025). Integration of sustainable development goals in higher education institutions in the Philippines. <https://cifal.up.edu.ph/up-cifal-philippines-mmsu-deepen-integration-of-sdgs-in-he/>
- Ursin, J., & Hazelkorn, E. (2024). University rankings in the Nordic countries: Impacts on policy and practice. *Scandinavian Journal of Educational Research*, 68(1), 1–5. <https://doi.org/10.1080/00313831.2023.2290042>
- Vavrus, F., & Bartlett, L. (Eds.). (2022). *Doing comparative case studies: New designs and directions (1st ed.)*. Routledge. <https://doi.org/10.4324/9781003216551>
- Wardat, Y., & AlAli, R. (2025). Sustainability in higher education: Challenges, innovations, and research prospects. *Educational Process: International Journal*, 16, Article e2025292. <https://doi.org/10.22521/edupij.2025.16.292>
- Wicaksono, A., Setiawan, D., & Prasetyo, B. (2021). Environmental education and sustainability-driven curricula at IPB University: A model for developing countries. *Journal of Environmental Education*, 52(7), 541–556.
- WURI Foundation. (2023). WURI rankings and methodology. <https://www.wuri.world>