http://doi.org/10.23925/2179-3565.2026v17i1p01-08

RISUS - Journal on Innovation and Sustainability
volume 17, número 1 - 2026
ISSN: 2179-3565
Editor Científico: Arnoldo José de Hoyos Guevara
Editor Assistente: Vitória Catarina Dib
Avaliação: Melhores práticas editoriais da ANPAD

Editorial – *Arnoldo José de Hoyos Guevara*

This time we organize the 21 papers for the Editorial and Index considering their purpose on 4 main topics: Education (1), Sustainability (10), Economics (1) and Global Systems (9).

Education

The first paper coming from Vietnam and shows how education and training play a foundational role in the formation of high-quality human resources, thereby determining the effectiveness of sustainable science and technology development in the context of globalization and the Fourth Industrial Revolution. In Vietnam, enhancing the role of education and training in the development of science and technology is not only a strategic requirement of the country's industrialization and modernization process but also a key condition for achieving sustainable development goals. This article analyzes the role of education and training in promoting the sustainable development of science and technology in Vietnam through a case study of Ho Chi Minh City. Based on qualitative research methods, combined with policy analysis and the synthesis of empirical data, the article clarifies the achievements attained, existing limitations, and emerging issues in linking education and training with science and technology development in Ho Chi Minh City. The research findings indicate that education and training have made significant contributions to improving the quality of human resources, fostering innovation, and strengthening the application of science and technology in the city's socio-economic development. However, this process still reveals several shortcomings, including a lack of policy coherence, ineffective coordination mechanisms among stakeholders, and an insufficient alignment between training activities and the practical demands of sustainable science and technology development. On this basis, the article proposes several policy-oriented recommendations aimed at further enhancing the role of education and training, thereby promoting the sustainable development of science and technology in Vietnam in the current period.

Sustainability

We start this topic with another paper from Vietnam that focus the context of Vietnam's transition into a new development era that requires a shift toward a more sustainable growth model, green economic development has emerged as a strategic orientation at both national and local levels. As the largest economic center of the country and a key growth engine of the Southern Key Economic Region, Ho Chi Minh City has set the goal of becoming an "international megacity" based on the principles of smart, green, and innovative urban development. The study highlights major achievements while also identifying existing limitations and challenges in implementation. On this basis, the paper proposes several key solutions to promote green economic development, thereby contributing to the realization of Ho Chi Minh City's goal of becoming a smart, rapidly developing, and sustainable urban center in the coming period.

The next paper also from Vietnam analyzes the relationship between economic growth, natural resource rent, industrial activity, and greenhouse gas emissions during the period 1986–2021. Annual time-series data were collected from the World Development Indicators, where CO_2-equivalent emissions were used to assess environmental quality, GDP per capita was used to measure economic growth, natural resource rent (% of GDP) was used to measure resource dependence, and the share of industrial value added in GDP was used to measure the level of industrialization. The study applies a nonlinear autoregressive distributed lag (NARDL) model to simultaneously examine short-term and long-term effects, as well as asymmetry among the variables. The results show that long-run cointegration exists in the model. Economic growth has a positive and statistically significant impact on emissions in both the short and long run, while natural resource rent has a negative effect in the long run. Furthermore, negative shocks to industrial activity have a more pronounced impact on emissions than positive shocks. These results imply the need to improve the quality of economic growth and promote industrial restructuring toward sustainability.

The next paper examines the development and implementation of social management in Slovakia, with a comparative focus on Germany and the Scandinavian countries. Social management, understood as an integrative approach combining economic, social, ethical, and environmental dimensions of organizational governance, has become a critical component of sustainable development in both corporate and non-profit sectors. The research aims to analyses how social management is

conceptualized and applied by Slovak companies and non-governmental organizations, identify key differences compared with selected Western European models, and explore the barriers and opportunities influencing its further development in the Slovak context. The study employs a qualitative comparative research design, drawing on document analysis, content analysis of CSR and sustainability reports, and selected case studies of companies and non-profit organizations. The analytical framework is grounded in key theoretical concepts, including corporate social responsibility (CSR), stakeholder theory, the triple bottom line, and the ESG (Environmental, Social, Governance) reporting framework. These approaches are complemented by references to broader sustainability agendas, particularly the United Nations Sustainable Development Goals (SDGs). The findings indicate that social management in Slovak companies is applied in a fragmented and less systematic manner compared to Germany and Scandinavia, where it is more deeply embedded in organizational strategies and supported by long-standing institutional and cultural traditions. Slovak firms tend to focus on philanthropic and reputational activities, while environmental and governance dimensions are less consistently integrated into core decision-making processes. In contrast, non-profit organizations in Slovakia naturally incorporate social management into their missions and daily practices. Yet, their effectiveness is constrained by limited financial resources, project-based funding, and dependence on external donors. The comparative analysis highlights the significant role of historical experience, institutional trust, legislative frameworks, and societal expectations in shaping national approaches to social management. The study concludes with practical recommendations for companies, non-profit organizations, and policymakers to strengthen the strategic integration of social management, enhance transparency and stakeholder engagement, and support sustainable development in Slovakia. Overall, the research contributes to both academic debate and practical discourse by contextualizing social management within a post-transition economy and a broader European sustainability framework.

The next paper is from Ukraine and makes we think in modern climate challenges, growing energy consumption, and how the need to reduce dependence on fossil resources make the use of renewable energy sources (further – RES) a key area of sustainable development. In Ukraine, the relevance of this problem is exacerbated by a combination of military threats, economic instability, and environmental risks. The purpose of the study is to identify the role of RES in green manufacturing and characterize their impact on environmental safety and energy efficiency, along with barriers and prospects for implementation. The methodological basis is an interdisciplinary approach that combines the analysis of international reports, scientific publications, statistical data, and scenario modeling. The results show that solar and wind energy are the most effective in rapidly reducing emissions, bioenergy contributes to the development of a circular economy, while hydro and geothermal energy ensure long-term stability of energy supply. It has been established that the introduction of RES in the agricultural sector can compensate for yield losses, reduce energy costs, and increase the adaptive capacity of production systems. In the industrial sector, the use of hybrid models with a combination of traditional and RES contributes to the modernization of energy-intensive industries and the reduction of greenhouse gas emissions. The practical significance of the study lies in the possibility of applying the results to the formation of state strategies for sustainable development, the creation of local energy clusters and support for energy independence. The identified legal, economic, and technological barriers point to the need for integrated approaches that combine innovative solutions, international cooperation, and educational initiatives. The findings confirm the novelty of the study in terms of a comprehensive assessment of the impact of RES on green production and emphasize the need for further interdisciplinary research based on analytical reports of international organizations and the integration of innovative solutions into national sustainable development strategies.

From Slovakia the next one shows that sustainability has emerged as a defining challenge for contemporary societies, requiring not only technological innovation and policy reform but also profound changes in everyday behaviors, organizational routines, and social norms. The primary objective of the paper is to develop and justify a conceptual framework that embeds social marketing within sustainability strategies. Drawing on an integrative systematic literature review and conceptual synthesis across social marketing, behavior change science, and sustainability transitions, the paper proposes a three-dimensional framework comprising: (1) behavioral diagnosis and audience segmentation, (2) value co-creation and stakeholder engagement, and (3) feedback and systemic reinforcement. The framework is designed to explain how pro-sustainable behaviors can be adopted, maintained, and scaled in ways that support longer-term socio-technical transitions. The results synthesis evidence showing that sustainability-oriented interventions are most effective when they move beyond generic awareness-raising and instead address heterogeneous behavioral barriers, involve stakeholders in co-design processes, and create reinforcing feedback loops aligned with infrastructures, institutions, and social norms. Behavioral diagnosis enables targeted intervention design by recognizing differences in motivation, capability, opportunity, and social context. Value co-creation enhances relevance, legitimacy, and equity by engaging employees, communities, and cross-sector partners in shaping solutions. Feedback and systemic reinforcement support long-term maintenance by making outcomes visible, leveraging social influence, and embedding behaviors within supportive policy and service environments. The paper contributes theoretically by linking micro-level behavior change mechanisms with meso- and macro-level sustainability transition dynamics. Practically, it offers organizations and policy actors a structured blueprint for operationalizing sustainability goals through social marketing as a strategic capability rather than a communication tool. The article concludes

by outlining directions for future empirical research to test the framework across industries, cultural contexts, and sustainability domains, with particular attention to scalability, ethics, and long-term impact.

The Brazilian paper that comes next discusses how the commitment to sustainability has intensified in recent years, prompting banks to reassess their business strategies and adopt practices more in line with sustainable principles. In this context, the 17 Sustainable Development Goals (SDGs) serve as global benchmarks for sustainable development. This study conducted a longitudinal analysis of the sustainability adherence of Santander Brazil and Argentina, based on official sustainability reports published between 2014 and 2023. The researchers observed that both subsidiaries showed improvements in sustainability indicators, indicating a commitment to achieving the SDGs, with the main convergence in achieving SDGs 4, 8, 10, and 13. However, the researchers observed divergences in results and actions, which may indicate distinct corporate strategies among the subsidiaries.

The next one examines the impact of corporate governance mechanisms on sustainable firm performance in China and Pakistan, using the Generalized Method of Moments (GMM) estimator. The study will use data from more than 300 firms listed on the Pakistan and China stock exchanges, covering the period 2011 to 2023, to reflect real phenomena. The findings reveal a stronger, more statistically robust relationship between governance and performance in China than in Pakistan. The results underscore the significance of institutional and cultural context in shaping the effectiveness of corporate governance practices. In China, CEO Duality and board independence separation are significant drivers of firm value and efficiency, while in Pakistan, the effects of governance variables are weaker and less consistent. Recommendations valued for Pakistan to enhance the implementation of governance codes and for China to maintain investors' trust continue to ensure the efficacy of governance and encourage corporate openness and regulatory compliance.

The relevance of the next paper received from Ukraine stems from the imperative to discern the most investment-attractive green innovations in light of the global climate crisis, to ensure sustainable development, and to establish a systemically integrated international investment and environmental circuit. The purpose of this study is the objective identification and analytical structuring of priority green innovations with the highest investment potential, particularly in terms of attracting international capital and optimizing the functionality of global financial and environmental instruments. The research methods employed include the typology of green innovations, the computation of investment and environmental metrics, the formulation of the Green Innovation Investment Attractiveness Index (GIIAI), the evaluation of investment efficiency and conversion, a comprehensive assessment of international environmental interactions. Among the 15 green innovations analyzed, the top five (Photovoltaic Megaparks, Green Building Materials, ESG Scoring Platforms, MRV Systems, Smart Grid Energy Networks) were identified, achieving a GIIAI range of 0.85–0.92, investment mobilization of 77–85%, and ROI conversion rates of 0.77–0.83, with a Performance Index (PI) of 0.83–0.87. These innovations have facilitated comprehensive international environmental integration through Foreign Direct Investment (FDI), ESG Bonds, the UNFCCC, the Asian Infrastructure Investment Bank (AIIB), and Climate Fintech Funds, thereby confirming the strategic relevance and pivotal role of key drivers within global investment and environmental markets. Scientific novelty of this study lies in the development of a comprehensive indicator, the Green Innovation Investment Attractiveness Index (GIIAI), predicated on entropy weighting and normalized investment and environmental metrics, which substantiates the systemic allure of green innovations within the framework of international financial and environmental integration.

The next one is from Chine and the study integrates ESG performance, new quality productivity, and enterprise green innovation efficiency into a cohesive framework, with the objective of examining the impact and mechanisms through which ESG performance influences enterprise green innovation efficiency. This study empirically investigates the relationship between ESG performance, new quality productivity, and the green innovation efficiency of A-share listed enterprises on the Shanghai and Shenzhen stock exchanges from 2013 to 2023. The analysis employs the system GMM model alongside the mechanism effect model. The research findings indicate that ESG performance can significantly improve the efficiency of green innovation within enterprises, a conclusion that remains valid following extensive robustness tests. Mechanism analysis demonstrates that ESG performance enhances the green innovation efficiency of enterprises by fostering the development of new quality productivity. Furthermore, heterogeneity analysis reveals that ESG performance exerts a more pronounced effect on the green innovation efficiency of enterprises located in the eastern region, as well as among non-state-owned enterprises, small enterprises, high-tech enterprises, and those operating in competitive industries. In light of this, it is proposed that innovative measures be adopted, including the enhancement of enterprises' ESG performance capabilities, the improvement of their mechanisms for developing new quality productivity, and the implementation of a "differentiated" green development strategy. These initiatives aim to comprehensively enhance the green innovation efficiency of enterprises.

Economics

The relevance of the study that comes from Kyrgyzstan in Central Asia is underscored by the growing need to align economic systems with the requirements of sustainable development and the mitigation of climate change. In this light, green investments emerge as a pivotal mechanism for business transformation and the facilitation of environmentally sustainable

economic growth, particularly against the backdrop of China's rapid economic advancement. The objective of this study was to scrutinize both the theoretical and practical dimensions of utilizing financial instruments in China to bolster green innovation. To address this objective, a set of practical methodologies was employed, in particular econometric analysis, indicator monitoring, system-logical modeling, comparative analysis, and the computation of the Investment Efficiency Index (IEI). It was found that China achieved remarkable progress in the evolution of a green financial framework and the implementation of sustainable energy technologies in recent years. China is vigorously implementing sustainable development strategies that encompass investments in renewable energy sources, green finance, and clean Technologies. Keywords: low-carbon energy, sustainable development, energy strategies, ecological transformation, investments in the green sector, green technologies.

Global systems

The globe is today sustainability hungry, is what says the study from Gujarat in India. There is a huge potential to work common and collective in the sustainability transition and drive multi-decade long development cycles. The challenges and opportunities in the new approaches needed for sustainability is large and the associated risks and to take up responsibility are larger. Regulating the growing interests and aspirations to support sustainable development and align in line with sustainability in the transformative outcomes are huge and are varying unimaginably in the needs and wants of growth and development phases. This paper tries to focus on systems thinking for sustainability science where the advancement in the value based sustainable outlook has to happen recognizing the multiple layer and interconnectedness bringing in shared identity and reasonable belongingness, in developing many new understanding and purposes for the common and collective actions of states, markets and business environment to build, extending the base line of economic development and growth to be placed in the triple bottom line in the layered understanding and nested reality. Layered understanding, reflection and reformulation in the value chains are needed for the very specific sustainable and contributory business environment activity chains for people and planet leading towards common prosperity. This paper addresses qualitatively from the point of view of the key interests in sustainable development themes like distribution, fairness, welfare, wellbeing, equity and justice along with the twin questions of attaining sustainability and leading towards sustainable development goals in the futuristic growth and development pathway as support structures leading a transition having an intergenerational effect.

Another study examines the resilience of Ukrainian society under the conditions of prolonged war, conceptualizing it as a dynamic system of interaction between institutional structures and grassroots civic practices. Social resilience is defined as the ability of society to adapt to traumatic, crisis, or stress-inducing events while preserving cohesion, mutual support, and the capacity for recovery and development. The study demonstrates that despite large-scale destruction, mass migration, and resource depletion, Ukrainian society has exhibited significant adaptability and mobilization potential, which has transformed the consequences of war into a resource for collective survival and innovation. Drawing on empirical data from sociological monitoring and previous research on national solidarity, the study argues that Ukrainian resilience is not a fixed characteristic but an adaptive mechanism combining economic stabilization, social cohesion, and psychological endurance. Expert survey results reveal strong positive indicators, including high adaptability, stress resilience, and social cohesion, as well as mass volunteering, which functions as a crucial mechanism of solidarity and an alternative channel of trust. The analysis reveals a paradoxical configuration in which strong horizontal solidarity – expressed through volunteering, mutual aid, and community mobilization –coexists with a persistent deficit of institutional trust towards state authorities. This asymmetry suggests that resilience in Ukraine is primarily driven by bottom-up initiatives rather than by coordinated governmental action. Economic indicators, such as wage growth and recovery of household incomes, further demonstrate that material stabilization is closely mediated by emotional and symbolic expectations, making subjective perception an integral component of resilience. The study concludes that Ukrainian social resilience should be understood as a hybrid adaptive model in which civic self-organization compensates for institutional weaknesses. Future research should focus on mechanisms of institutionalization of civic solidarity, the longitudinal restoration of trust, and the transformation of collective trauma into developmental potential. The findings contribute to broader debates on resilience governance in societies exposed to protracted existential threats.

Then comes an article from Slovenia that deals with a study showing how artificial intelligence (AI) increasingly reshapes work and social organization, public debates often priorities efficiency and innovation while overlooking questions of identity, meaning, and social belonging. This study examines how ordinary citizens in Slovenia perceive the impact of AI on work, professional identity, and broader societal change, positioning lay reflections as a valuable source of insight into early-stage sociotechnical transitions. Using an exploratory mixed-methods survey (n = 26), the study combines descriptive statistical analysis with thematic analysis of open-ended responses to capture both evaluative judgments and experiential perspectives. The findings reveal three central patterns. First, AI is predominantly perceived as a future-oriented and symbolic force rather than as a materially experienced workplace reality. Second, willingness to adapt through retraining is widespread but largely conditional, shaped by external triggers such as perceived necessity and institutional support rather than proactive individual initiative. Third, concerns related to AI are primarily identity-based, focusing on potential loss of meaning, human

value, and social relevance rather than immediate economic insecurity or job loss. This suggests that adaptation to AI is not perceived merely as a matter of skills acquisition, but fundamentally as a question of meaning, social recognition, and human relevance. To interpret these dynamics, the article introduces the AI–Identity–Readiness Triangle, an original heuristic framework that situates public perceptions of AI at the intersection of actual exposure, identity-related vulnerability, and system-level enabling conditions. The study contributes a humanities-informed perspective on AI adoption, highlighting the importance of cultural context, ethical reflection, and social meaning in shaping public responses to technological change.

Then comes an article from Russia that focus the rapid expansion of artificial intelligence (AI) as a driver of technological innovation has intensified challenges related to governance, sustainability, and controllability within socio-technical systems. The relevance of this study lies in the growing mismatch between the increasing complexity of AI systems and the traditional regulatory and management frameworks applied to them. The purpose of the article is to substantiate a complexity-based interpretation of AI as a complex adaptive system and to identify management principles that support sustainable and responsible development. The study is based on qualitative literature analysis and philosophical synthesis of interdisciplinary research on artificial intelligence, complexity theory, and governance of socio-technical systems. The methodological framework relies on the concepts of complex adaptive systems, diachronic emergence, and Ashby's law of requisite variety, which are applied to analyze nonlinearity, self-organization, and adaptability in modern AI technologies. The results show that rigid, rule-based models of regulation and control are insufficient for governing AI systems characterized by emergent behavior and dynamic evolution. Effective governance requires management mechanisms comparable in complexity to the systems being governed while preserving meaningful human oversight and institutional accountability. It frames adaptive governance as essential for aligning technological autonomy with sustainability and long-term societal safety objectives globally.

The next article is study from Vietnam investigates the relationship between e-government development, institutional quality, and good governance at the subnational level in Vietnam. While the advancement of ICT infrastructure is central to administrative modernization, its standalone impact on governance dimensions such as political participation, transparency, and decentralization remains limited. The findings highlight that technology-driven reforms, in the absence of complementary institutional improvements, are insufficient to produce meaningful governance outcomes. In contrast, institutional quality, measured through the Provincial Competitiveness Index (PCI), demonstrates more robust associations with governance indicators. Notably, reforms focused on enhancing economic efficiency, such as reducing market entry barriers, may undermine participatory practices and rule of law, raising concerns about the democratic inclusiveness of current reform trajectories. The analysis also reveals a decline in governance performance between 2019 and 2022, likely reflecting the disruptive impact of the COVID-19 pandemic on public administration and civic engagement. These findings underscore the necessity of fostering resilient governance systems that integrate digital innovation with institutional accountability and citizen-centered approaches.

Then comes one by researchers from Malaysia and Nigeria showing how the Traditional Ecological Knowledge (TEK) represents community-rooted ecological wisdom and insight developed over centuries through repeated, long-term engagement with the surrounding environment. Drawing on publications from 1990–2024, this review assesses the ways how TEK support and reinforce biodiversity conservation and it interface with formal scientific practice and knowledge systems. Through a review of narrative methodology, the research delineates four dominant themes: convergence and divergence between TEK and scientific conservation, actionable integration pathways, structural and epistemic constraints, and the factors and conditions that can strengthen support for successful cross-knowledge collaboration. Findings show that TEK plays a vital role in strengthening environmental assessment, ecosystem restoration, climate-adaptive practices, and sustainable resource governance; however, structural barriers remain such as unequal power dynamics, constrained legal protection, and insufficient acknowledgement of indigenous people's rights. In parallel, evidence from case studies demonstrates that robust TEK integration materializes in contexts and ambience where trust partners cultivate trust, engage in participatory decision-making and adhere to Free, Prior and Informed Consent arrangements. Based on the above, the study concluded that respecting TEK holders' sovereignty and ensuring ethically grounded collaboration are essential for more just, culturally grounded and resilient conservation futures.

The next one consists on a Brazilian study considering how human resources practices must encourage employee engagement so that the workforce can contribute to organizational performance. The objective of this research was to analyze the level of impact of the engagement of project coordinators and managers who work in a projectized matrix. The methodology used was quantitative, descriptive and explanatory research that focused on a global leader in the production and distribution of lightweight and sustainable materials for construction and industry A survey showed in its results that the adoption of Human Resource Management practices is effective in increasing the level of engagement of employees who work in a designed matrix.

Then comes a paper from Russia dealing with the applicability of blockchain technologies, smart contracts, and artificial intelligence in the modernization of sports management in Russia, with a focus on both traditional sports and eSports. The main objective is to propose and validate the SportContour digital hub, an integrated model designed to reduce transaction

costs, increase process transparency, and optimize the allocation of public and private resources. The study combines an international comparative analysis of seven governance models with the empirical validation of 48 simulated cases using the SportContour platform. The results demonstrate that the proposed model reduces project approval times to four days, achieves a transparency index of 0.93, and delivers a return on investment (ROI) of 1.5, with an audience engagement rate of 70%.

And finally, a Brazilian article shows the climate changes our planet is undergoing are causing various negative environmental and social effects, and today's actions will determine how nature responds to increasing climate risks. Therefore, swift actions are needed to adapt to these changes, aiming to contain cascading effects that are difficult to manage. This requires a global effort in mitigation and adaptation measures, demanding strong commitment from all stakeholders—governments, businesses, consumers, and civil society organizations. Thus, this article aims to identify and discuss the actions developed based on the ESG best practices of organizations downstream of the agricultural production chain, which work with raw materials from agriculture, livestock, and forestry; and seeks to understand how governance structures are organized and engaged with sustainability issues, offering insights into how these practices bring economic, social, and environmental benefits to companies and Society.

Index

Economics

Global systems