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Social responsibility and environmental conservation: a systematic review of the scientific evidence

Responsabilidad social y conservación ambiental: una revisión sistemática de la evidencia científica

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Abstract

Environmental conservation ranks among the foremost global challenges of the twenty-first century, driven by mounting concerns over climate change, environmental pollution, biodiversity loss, and the overexploitation of natural resources. Social responsibility has emerged in response to this situation as a strategic approach for encouraging sustainable practices across organizations, universities, and communities. This study set out to examine how social responsibility contributes to environmental conservation, drawing on a systematic review of scientific articles indexed in Scopus, Web of Science, and SciELO between 2020 and 2025. The research followed the methodological guidelines of the PRISMA 2020 statement, and the search strategy relied on descriptors related to social responsibility and environmental sustainability, combined through Boolean operators. An initial search yielded 728 scientific records, from which 45 articles were ultimately selected for analysis. The findings indicate that social responsibility strengthens ecological awareness, pro-environmental behavior, sustainable innovation, and organizational environmental management. The review concludes that social responsibility functions as a cross-cutting driver of sustainability and environmental conservation.

Keywords: environmental conservation, social responsibility, sustainability.

Resumen

La conservación del ambiente constituye uno de los principales desafíos globales del siglo XXI, debido al incremento de problemáticas asociadas al cambio climático, contaminación ambiental, pérdida de biodiversidad y sobreexplotación de los recursos naturales. Frente a esta situación, la responsabilidad social emerge como un enfoque estratégico orientado a promover prácticas sostenibles desde organizaciones, universidades y comunidades. El objetivo del estudio fue analizar la contribución de la responsabilidad social en la conservación del ambiente, mediante una revisión sistemática de artículos científicos indexados en Scopus, Web of Science y SciELO, durante el período 2020–2025. La investigación se desarrolló bajo los lineamientos metodológicos de la declaración PRISMA 2020. La estrategia de búsqueda empleó descriptores relacionados con responsabilidad social y sostenibilidad ambiental, combinados mediante operadores booleanos. Inicialmente se identificaron 728 registros científicos, de los cuales se seleccionaron 45 artículos para el análisis final. Los resultados evidenciaron que la responsabilidad social fortalece la conciencia ecológica, los comportamientos proambientales, la innovación sostenible y la gestión ambiental organizacional. Se concluye que la responsabilidad social constituye un componente transversal para promover la sostenibilidad y conservación ambiental.

Palabras clave: conservación ambiental, responsabilidad social, sostenibilidad.

Introduction

Over the past few decades, environmental conservation has become a scientific, social, and political priority, propelled by mounting concerns over climate change, biodiversity loss, pollution, ecosystem degradation, and the intensive use of natural resources. This situation makes clear that the environmental crisis cannot be understood solely as an ecological phenomenon; rather, it is a multidimensional problem tied to patterns of production, consumption, governance, education, and collective responsibility.

Within this context, a number of studies argue that sustainability depends on aligning ethical, institutional, and civic commitments aimed at reducing adverse impacts on the natural environment (United Nations, 2023; UNEP, 2024; IPCC, 2023; Rockström et al., 2023).

Social responsibility has therefore emerged as a strategic approach to addressing contemporary environmental challenges, since it fosters the integration of ethical, social, economic, and ecological principles into the decision-making processes of organizations, universities, businesses, and communities. From this standpoint, social responsibility extends beyond mere regulatory compliance, entailing voluntary commitments oriented toward collective well-being, sustainability, and the conservation of natural resources. Within the corporate sphere, corporate social responsibility has been recognized as an important mechanism for strengthening environmental management, green innovation, energy efficiency, and the reduction of polluting emissions (Carroll, 2021; Awaysheh et al., 2020; Kanwal et al., 2024; AlHares, 2025). The study by Kanwal et al. (2024), for example, links corporate social responsibility to green organizational climate and pro-environmental workplace behavior.

Recent scientific literature has likewise shown that social responsibility practices positively influence environmental awareness and pro-environmental behavior among employees, consumers, and students. Research conducted across a range of settings further demonstrates that socially responsible organizations can encourage sustainable conduct through internal policies, ethical leadership, an environmental culture, and institutional communication geared toward sustainability (Zhang et al., 2022; Jilani et al., 2021; Tariq et al., 2022; Ngo et al., 2025; Tanveer et al., 2021; Huang et al., 2024). Along these lines, Jilani et al. (2021) examined the relationship between corporate social responsibility and the pro-environmental behavior of university students, underscoring the importance of the education sector in shaping ecological practices.

In the field of higher education, university social responsibility represents a fundamental dimension for advancing environmental sustainability. Universities are not only responsible for education; they also bear an ethical responsibility toward the social and ecological problems of their surroundings. Environmental education, applied research, university outreach, and sustainable institutional management therefore constitute essential mechanisms for fostering a responsible environmental culture. Recent studies indicate that higher education institutions can contribute to the fulfillment of the Sustainable Development Goals by incorporating environmental policies, civic training, and community engagement projects (Coelho & Menezes, 2021; Vallaeys, 2021; Wang et al., 2022; Salazar-Botello et al., 2025). Carrillo-Durán et al. (2024) examined how universities communicate sustainability and the SDGs through their institutional platforms.

Environmental conservation likewise calls for the active participation of communities and local actors, since sustainability processes depend on collaborative practices, a sense of territorial belonging, and shared social responsibility. Community participation helps strengthen socio-environmental resilience, preserve local ecosystems, and build collective responses to climate and environmental risks. Along these lines, studies on resilience and sustainability emphasize that conservation should not rely exclusively on state or corporate policy, but also on civic and community commitment (Michaels, et al, 2026; Chipangamate & Nwaila, 2025; Roy-Malo & Doyon, 2024; Ostrom, 2010; Bebbington et al., 2020).

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Sustainable development, in turn, requires organizations to adopt strategies centered on the circular economy, clean production, green innovation, and responsible consumption. Such practices help reduce the environmental footprint of production processes and strengthen the link between social responsibility and environmental conservation. Along these lines, the literature indicates that organizational sustainability depends on firms' capacity to integrate clean technologies, environmental management, transparency, and social commitment into their business models (Geissdoerfer et al., 2020; Amankwah-Amoah et al., 2021; Zhang, 2023; Singh, 2026; Testa et al., 2020; Severo et al., 2021).

Given the foregoing, it is worth noting that, despite the growing body of research on social responsibility and sustainability, the scientific literature still shows a degree of thematic fragmentation. Many studies examine corporate social responsibility, university social responsibility, environmental awareness, or ecological conservation separately, which hinders a comprehensive understanding of how these dimensions relate to one another. It is therefore necessary to systematize recent scientific evidence in order to identify trends, contributions, limitations, and knowledge gaps regarding the contribution of social responsibility to environmental conservation (Alonso-Nuez et al., 2022; Alí et al., 2021; Gahlawat & Reddy, 2025; Nguyen & Nguyen, 2023); Jurkowska-Gomułka et al, 2021; Acevedo-Duque et al., 2025).

Accordingly, this systematic review sets out to analyze the scientific evidence available on social responsibility in relation to environmental conservation, drawing on recent research published in reputable academic databases such as Scopus, Web of Science, and SciELO. The review follows the guidelines of the PRISMA 2020 statement in order to ensure transparency, rigor, and reproducibility throughout the process of identifying, selecting, analyzing, and synthesizing the included studies (Page et al., 2021). This research therefore seeks to answer the following question: how does social responsibility contribute to environmental conservation according to recent scientific evidence? Its objective is to analyze the contribution of social responsibility to environmental conservation through a systematic review of scientific articles published between 2020 and 2025.

Methodology

This research was conducted as a systematic review, following the guidelines of the PRISMA 2020 statement to ensure methodological rigor, transparency, and reproducibility. The study took the form of descriptive, analytical documentary research aimed at compiling, organizing, and synthesizing indexed scientific articles related to social responsibility, environmental sustainability, and pro-environmental behavior.

Search phase

The literature search was carried out in the Scopus, Web of Science (WoS), and SciELO scientific databases, chosen for their international recognition, academic quality, and scientific rigor. The search was conducted between January and April 2025.

Standardized English-language descriptors related to the study variables were used to retrieve the relevant studies, including: "*Social responsibility" , "corporate social responsibility" , "environmental conservation" , "environmental sustainability" , "environmental awareness" , "sustainable development*". These terms were combined using the Boolean operators *AND* and *OR* in order to optimize the precision and scope of the results obtained.

It is worth noting that the search string applied was the following*: TITLE-ABS-KEY ("social responsibility" OR "corporate social responsibility") AND TITLE-ABS-KEY ("environmental conservation" OR "environmental sustainability" OR "environmental awareness" OR "sustainable development") AND PUBYEAR > 2019 AND PUBYEAR < 2026.*

In Scopus and Web of Science, the search was conducted using titles, abstracts, and keywords, whereas in SciELO an advanced search was performed using titles and terms associated with sustainability and social responsibility.

Additional filters were applied regarding publication years (2020–2025), language (English and Spanish), document type (scientific articles), full-text access, and subject areas (Social Sciences, Environmental Sciences, Management, Education, and Business). This initial search yielded 728 scientific records potentially related to the object of study.

PRISMA protocol implementation phase

Applying the PRISMA 2020 protocols made it possible to carry out a systematic process of identification, screening, eligibility assessment, and inclusion of scientific studies.

In the identification phase, 728 scientific articles were initially recorded from the selected databases: Scopus (512 records), Web of Science (167 records), and SciELO (46 records). Duplicate documents and publications that did not match the required study type were subsequently removed.

Next, in the screening phase, the titles and abstracts of the identified articles were reviewed to verify their relevance to social responsibility and environmental conservation, excluding research unrelated to sustainability and sustainable development.

In the eligibility phase, 45 scientific articles that met the inclusion criteria were then selected, forming the final sample for the analysis and synthesis of results.

Finally, in the inclusion phase, 45 scientific articles that met all the established inclusion criteria were selected, forming the final sample for the analysis and synthesis of results.

Regarding the inclusion and exclusion criteria, the following criteria were established to ensure methodological quality and scientific relevance:

Table 1. *Inclusion and exclusion criteria for the studies.*

Inclusion criteria	Exclusion criteria
Scientific articles indexed in Scopus, Web of Science, and SciELO.	Theses, books, book chapters, and conference abstracts.
Studies published between 2020 and 2025.	Research published before 2020.
Research related to social responsibility and environmental conservation.	Studies unrelated to environmental sustainability or social responsibility.
Articles in English and Spanish.	Duplicate documents.
Studies with full-text access.	Articles without full-text access.
Research with methodological rigor and scientific evidence.	Studies with insufficient methodological information.
Studies conducted in organizational, educational, or community contexts.	Research with limited thematic relevance.

Analysis phase

The analysis phase involved organizing and systematizing the information obtained from the 45 selected articles. To this end, a documentary analysis matrix was created in Microsoft Excel, recording the following aspects for each study: author and year of publication; country of origin; research objective; methodological approach; and main results and contributions related to social responsibility and environmental conservation.

The studies were then grouped into thematic categories, namely: corporate social responsibility, university social responsibility, organizational sustainability, environmental awareness, green innovation, and community participation.

A critical appraisal of the methodological quality of the studies was also carried out using criteria based on the CASP (*Critical Appraisal Skills Programme*) checklists, which made it possible to classify the studies according to their level of scientific rigor and risk of bias.

Synthesis phase

The synthesis of the information followed a narrative, descriptive approach that integrated the findings of the selected scientific studies. Results were organized into comparative tables by author, methodology, objectives, and main findings, which made it possible to identify research trends, theoretical convergences, and contributions related to social responsibility and environmental conservation. The scientific evidence ultimately allowed for a comprehensive interpretation of the strengths, limitations, and challenges present in the current scientific literature.

Results and discussion

The systematic review made it possible to analyze 45 scientific articles published between 2020 and 2025 in the Scopus, Web of Science, and SciELO databases, all related to social responsibility and environmental conservation. The selected studies revealed a growing scientific interest in understanding the role that organizations, universities, and communities play in promoting sustainable practices aimed at protecting the environment and meeting the Sustainable Development Goals.

Regarding the distribution of publications by database, most of the studies came from Scopus, followed by Web of Science and SciELO. A quantitative approach predominated among the studies analyzed, although qualitative studies, systematic reviews, and documentary analyses related to sustainability and social responsibility were also identified.

Table 2. *Scientific studies on social responsibility and environmental conservation.*

No	Author (Year)	Objective	Method	Findings
1	Carroll (2021)	To analyze the evolution of the concept of corporate social responsibility.	Theoretical review	Social responsibility integrates ethical and environmental dimensions aimed at corporate sustainability.
2	Awaysheh, et al. (2020)	To assess the relationship between social responsibility and organizational performance.	Quantitative study	Socially responsible firms show improvements in sustainability and competitiveness.
3	Zhang et al. (2022)	To analyze employees' pro-environmental behavior.	Quantitative study	Organizational social responsibility positively influences employees' ecological behavior.
4	Wang et al. (2022)	To examine sustainability teaching in higher education institutions.	Quantitative study	Institutional environmental education raises ecological awareness and promotes sustainable practices.

5	Vallaeys (2021)	To analyze the Latin American model of university social responsibility.	Documentary review	University social responsibility strategies contribute to sustainable development and environmental citizenship.
6	Geissdoerfer et al. (2020)	To assess the circular economy as a paradigm of organizational sustainability.	Systematic review	The circular economy improves environmental management and promotes more sustainable business practices.
7	Ngo et al. (2025).	To analyze social responsibility and environmental sustainability practices in manufacturing industries.	Quantitative study	Sustainable manufacturing practices reduce negative environmental impacts and strengthen environmental management.
8	Tanveer et al. (2021)	To examine the relationship between green brand knowledge and sustainable consumption behavior.	Quantitative study	Environmental knowledge and awareness increase the likelihood of responsible consumption decisions.
9	Michaels et al. (2026)	To analyze resilience and adaptive capacity in socio-environmental systems.	Qualitative study	Community participation and local governance strengthen conservation and environmental resilience.
10	Liu et al. (2023)	To assess the effect of green fiscal policies on environmental innovation in industrial firms.	Quantitative study	Green fiscal policies incentivize environmental innovation in firms and encourage more sustainable practices.

Note. Author's own elaboration based on selected scientific articles (2020–2025)

The results presented in Table 2 show that social responsibility is a fundamental component of environmental conservation, as it promotes sustainable practices across organizations, universities, and communities. The studies analyzed further agree that social responsibility strengthens ecological awareness, pro-environmental behavior, and institutional sustainability. It is also worth noting that strategies related to green innovation, the circular economy, and environmental education contribute significantly to reducing negative environmental impacts and to strengthening sustainable development.

Table 3. *University social responsibility and environmental sustainability.*

No	Author (Year)	Objective	Method	Findings
1	Coelho & Menezes (2021)	To analyze university social responsibility among students.	Qualitative study	The university strengthens students' social and environmental commitment.
2	Vallaeys (2021)	To examine the Latin American model of university social responsibility.	Documentary review	Sustainability must be integrated into university management to be effective.
3	Wang et al. (2022)	To assess sustainability teaching in higher education.	Quantitative study	Environmental education strengthens students' ecological competencies.

4	Carrillo-Durán, et al. (2024)	To analyze university sustainability communication.	Descriptive study	Universities promote sustainability through communication strategies.
5	Salazar-Botello et al. (2025)	To examine university social responsibility and institutional satisfaction.	Quantitative study	Sustainability improves university organizational culture.
6	Jilani et al. (2021)	To analyze pro-environmental behavior among university students.	Quantitative study	Social responsibility fosters environmental awareness among students.
7	Acevedo-Duque et al., (2025)	To assess ecological awareness and sustainability in the gastronomy sector.	Quantitative study	Environmental education strengthens the conservation of natural resources.
8	Gahlawat & Reddy (2025)	To analyze sustainable consumption and environmental awareness.	Quantitative study	Ecological awareness promotes sustainable consumption practices.
9	Tariq et al. (2022)	To assess social responsibility and pro-environmental behavior.	Quantitative study	Responsible practices strengthen people's ecological behavior.
10	Ali, Parveen, Yaacob, Zaini & Sarbini (2021)	To examine environmental awareness following COVID-19.	Quantitative study	Sustainability increased interest in environmental practices after the pandemic.

Note. Author's own elaboration based on the scientific studies reviewed

Table 3 shows that university social responsibility plays a strategic role in promoting environmental sustainability within higher education institutions. The studies reviewed demonstrated that universities contribute to strengthening ecological competencies, environmental awareness, and civic participation through educational programs geared toward sustainability and environmental conservation. It was likewise found that the adoption of sustainable institutional policies fosters the formation of citizens committed to environmental care and sustainable development.

Table 4. *Organizational sustainability and environmental conservation.*

No	Author (Year)	Objective	Method	Findings
1	Geissdoerfer et al. (2020)	To analyze the circular economy as a paradigm of organizational sustainability.	Systematic review	The circular economy strengthens corporate environmental management.
2	Amankwah-Amoah et al. (2021)	To examine sustainability in green supply chains.	Documentary review	Green strategies reduce environmental impacts across the supply chain.
3	Zhang (2023)	To assess green innovation and corporate sustainability.	Quantitative study	Environmental innovation improves firms' sustainable competitiveness.
4	Liu et al. (2023)	To analyze green fiscal policies and environmental innovation.	Quantitative study	Environmental policies drive sustainable technologies in industrial firms.

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5	AlHares (2025)	To examine ethical leadership and environmental sustainability in organizations.	Quantitative study	Organizational leadership strengthens ecological practices.
6	Testa et al. (2020)	To assess organizational citizenship and environmental practices.	Quantitative study	Responsible organizations foster sustainable behavior among employees.
7	Ngo, et al. (2025)	To analyze environmental sustainability in manufacturing industries.	Quantitative study	Sustainable practices reduce environmental pollution.
8	Tanveer et al. (2021)	To examine sustainable consumption and ecological knowledge.	Quantitative study	Environmental knowledge strengthens responsible consumption decisions.
9	Zhang et al. (2022)	To analyze employees' pro-environmental behavior.	Quantitative study	Social responsibility positively influences employees' ecological behavior.
10	Huang et al. (2024)	To assess ecological trust and sustainable consumption.	Quantitative study	Green brands strengthen environmental responsibility in consumption.

Note. Author's own elaboration based on selected scientific evidence

The findings presented in Table 4 demonstrate that organizational sustainability and corporate social responsibility significantly favor environmental conservation. The studies reviewed agree that organizations implementing sustainable strategies strengthen green innovation, energy efficiency, and responsible environmental management through clean technologies and the circular economy. It was likewise found that ethical leadership and sustainable organizational practices positively influence the ecological behavior of employees and consumers, promoting actions oriented toward environmental sustainability.

Conclusions

This systematic review made it possible to demonstrate that social responsibility is a fundamental component of environmental conservation, as it promotes sustainable practices across ethical, social, educational, and organizational dimensions. The scientific evidence analyzed showed that social responsibility strategies strengthen ecological awareness, pro-environmental behavior, and institutional sustainability.

It was further found that corporate social responsibility favors the implementation of sustainable organizational models through green innovation, the circular economy, and responsible environmental management. Similarly, university social responsibility contributes significantly to shaping citizens committed to sustainability and environmental conservation.

The studies reviewed likewise led to the conclusion that environmental conservation requires collaborative action among organizations, educational institutions, and communities. However, methodological limitations and scarce evidence in rural contexts were identified, underscoring the need to strengthen future research on social responsibility and environmental sustainability.

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Declaration on the use of artificial intelligence

The author declares that generative artificial intelligence tools were used solely as complementary support for language review, grammar correction, and improvement of the manuscript's academic writing. Under no circumstances did these tools replace the author's scientific, methodological, and ethical judgment. Accordingly, responsibility for the originality, scientific rigor, and academic integrity of this study rests exclusively with the author.

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