



Environmental Ethics in Socio-Humanities Research: A Hybrid Systematic Literature Review and Bibliometric Analysis

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ABSTRACT

This research combines two approaches, namely Systematic Literature Review (SLR) and bibliometric analysis, to see examine research on environmental ethics throughout the world. Data is taken from basic data Scopus, who initially discovered 17,684 publications from year to year 1969 to 2025. After the screening and eligibility checking process 2,173 articles were selected for analysis (completed on 7 November 2025). Data visualization is done using VOSviewer The results show that the topic of environmental ethics is increasingly attracting the attention of researchers in various countries, especially in the United States, United Kingdom, and Canada which is the most productive country in this field. Some of the main themes that emerged in these studies include global justice, sustainability discourse, ecological citizenship, and philosophical foundations of environmental ethics. Based on these findings, this study proposes an integrated conceptual framework that connects cultural values, ethical principles, and social participation (as input) with ethical reflection and ecological engagement (as a process) to achieve comprehensive sustainability (as output). Overall, this study provides a comprehensive overview of global patterns, theme clusters, and conceptual directions in environmental ethics studies. Researchers also suggest that future studies expand data sources, for example by adding basic data Web of Science, and involve areas that have been underrepresented so that research results are more inclusive and culturally diverse. The broader implication of this research is the importance of integrating environmental ethics into sustainability policies, education, and social practices in society, in order to improve ethical awareness and ecological responsibility.

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1. Introduction

Environmental ethics has attracted growing scholarly attention, not only as a theoretical framework but also as a moral foundation for addressing contemporary environmental challenges such as climate change, biodiversity loss, and ecosystem degradation (Florit, 2019; Gardiner, 2011; Giraud et al., 2018). At its core, environmental ethics emphasizes values of care, responsibility, and moral consideration toward the natural world. These values provide ethical

guidance for individual behavior as well as public policy aimed at sustainability and social justice (Dobson, 2003; White Jr., 1967).

Over time, diverse approaches to environmental ethics have emerged, including virtue-based, deontological, and ecocentric perspectives. Despite their theoretical differences, these approaches commonly stress the importance of moral awareness, civic engagement, and ethical responsibility in human–environment relations (Gurbanova, 2024; Helli, 2024; Ivleva et al., 2019). As a result, environmental ethics has increasingly moved beyond abstract moral reasoning to become closely linked with issues of social justice, collective responsibility, and human interconnectedness (Imran, 2024; Urzúa & Gaete, 2018).

The field continues to develop through interdisciplinary dialogue involving sustainability science, philosophy, social theory, and policy studies. This cross-disciplinary engagement has expanded the application of environmental ethics into areas such as education, governance, and cultural transformation (Salisu Barau et al., 2016; Zheng & Dai, 2012). However, existing research remains fragmented and lacks a synthesized global analytical framework that integrates publication trends, thematic developments, and conceptual directions in environmental ethics research.

Accordingly, there is a need for a systematic and comprehensive analysis that synthesizes global research trends, dominant themes, and conceptual developments in environmental ethics. Such an approach is necessary to clarify the intellectual structure of the field and to identify underexplored areas. Addressing this gap, the present study employs a hybrid methodological approach that combines a Systematic Literature Review (SLR) with bibliometric analysis to map existing knowledge, identify research gaps, and highlight emerging directions in the field.

Based on this objective, the study is guided by the following research questions. These questions are designed to capture both the structural and thematic dimensions of environmental ethics research. The research questions are as follows:

RQ 1: What are the publication trends and intellectual structures of Environmental ethics research?

RQ 2: Which theoretical and contextual domains dominate this field?

RQ 3: What are the future directions for developing a holistic Environmental ethics framework?

To answer these questions, this study integrates SLR and bibliometric analysis as complementary methods. The SLR synthesizes and critically interprets previous studies, allowing for a structured understanding of existing knowledge and research gaps. Meanwhile, bibliometric analysis reveals publication patterns, thematic clusters, and collaborative networks within the literature using the Scopus database and visualization tools from VOSviewer, covering publications up to 7 November 2025.

2. Literature review

Environmental ethics examines the moral relationship between humans and the natural environment and seeks to clarify ethical responsibilities toward nature. Scholars argue that environmental ethics provides a normative framework for understanding how humans should act responsibly in order to achieve balance and justice for all living beings (Boustani, 2025; Gardiner, 2011; Giraud et al., 2018). Initially rooted in moral philosophy, this field focused on evaluating the ethical implications of human actions that contribute to environmental degradation.

Early thinkers such as Dobson (2003) and White Jr. (1967) emphasized that environmental degradation should not be understood merely as a technical or managerial problem, but as a profound moral crisis. They argued that ecological damage stems from anthropocentric worldviews that separate humans from nature and promote exploitative attitudes. Consequently, environmental ethics highlights values such as humility, respect, and awareness of interdependence between humans and the natural world as essential moral principles.

Building on these foundations, the concept of global justice emerged as a central theme in environmental ethics. This perspective emphasizes that environmental issues must be addressed through principles of fairness and moral responsibility across nations and generations (Florit, 2019; Gardiner, 2011). From this standpoint, natural resources should be managed equitably and protected to ensure that future generations can also benefit from a healthy environment. Moreover, environmental harm disproportionately affects vulnerable populations, such as poor and marginalized communities, reinforcing the idea that environmental protection is a collective moral responsibility rather than an individual obligation alone (Dobson, 2003; Imran, 2024).

Closely related to global justice is the discourse on sustainability, which extends beyond environmental protection to include social well-being and ethical responsibility. Sustainability is understood as a moral commitment to conserving biodiversity, strengthening ecological resilience, and encouraging active community participation in environmental stewardship (Helli, 2024). In this sense, sustainability represents both a moral and practical effort to enable human prosperity without compromising the integrity of natural systems or the rights of future generations.

Another key development within environmental ethics is the notion of ecological citizenship, which expands ethical responsibility from individual moral awareness to collective civic engagement. This concept encourages individuals and communities to actively participate in environmental protection through cooperation, empathy, and involvement in democratic and social processes (Dobson, 2003; Lecaros Urzúa, 2013). Ecological citizenship thus frames environmental care as a shared social responsibility that requires ongoing public participation and ethical commitment.

From a broader philosophical perspective, environmental ethics challenges traditional anthropocentric assumptions by emphasizing the intrinsic value of nature. Philosophers such as Jonas, Florit, and Gardiner argue that humans must adopt attitudes of care, responsibility, and

humility toward the natural world (Florit, 2019; Gardiner, 2011; Gurbanova, 2024). They promote an ecocentric perspective that recognizes all forms of life as interconnected and morally significant, positioning environmental ethics as a crucial framework for achieving balance, sustainability, and justice for both humans and non-human beings.

Table 1. Key Conceptual Foundations of Environmental ethics

Conceptual Category	Core Defining Elements of Environmental ethics	Representative Sources
Global Justice	<p>From a philosophical standpoint, environmental ethics fundamentally invites us to rethink core values such as responsibility and the intrinsic value of nature itself. Philosophers have emphasized that humans need to act with care and humility toward nature. They clearly rejected the old belief that separated humans from nature and instead embraced an ecocentric view—a perspective that recognizes all forms of life as connected and inherently valuable.</p>	<p>(Dobson, 2003; Florit, 2019; Gardiner, 2011; Giraud et al., 2018; Imran, 2024; White Jr., 1967)</p>
Sustainability Discourse	<p>The current sustainability discourse represents the ethical core of environmental stewardship. It calls for the integration of three essential components: protecting biodiversity, actively conserving the environment, and strengthening socio-ecological resilience—a task that is as complex as it is urgent. Ultimately, this discourse reframes sustainability as far more than a simple concept; it is both a moral and practical pursuit that intentionally connects rigorous scientific knowledge with our ethical responsibility to those who will inherit the planet.</p>	<p>(Florit, 2019; Gurbanova, 2024; Helli, 2024; Ivleva et al., 2019; Salisu Barau et al., 2016; Zheng & Dai, 2012)</p>
Ecological Citizenship	<p>Ecological citizenship fundamentally expands the moral scope of ethics to include a crucial, dual layer: civic and collective responsibility for environmental care. This concept moves beyond mere theory, actively emphasizing the role of individuals and communities—not merely as inhabitants, but as ecological stewards—who must act with heightened awareness, genuine empathy, and undeniable social responsibility.</p>	<p>(Dobson, 2003; Giraud et al., 2018; Humaida, 2019; Imran, 2024; Lecaros Urzúa, 2013; Urzúa & Gaete, 2018)</p>

Philosophical Aspects

Philosophical aspects form the normative and theoretical foundation of environmental ethics. As an academic field, environmental ethics examines the complex and often fragile moral relationship between humans and the natural world. In essence, scholars argue that this discipline offers a crucial framework for understanding how humans ought to assume responsibility for the environment, a duty that is fundamental to achieving genuine balance and justice for all forms of life.

(Dobson, 2003; Florit, 2019; Gardiner, 2011; Gurbanova, 2024; Helli, 2024; Ivleva et al., 2019; White Jr., 1967; Zheng & Dai, 2012)

2.1 Critical Synthesis

This study employed a mixed-method approach, combining a Systematic Literature Review (SLR) with bibliometric analysis to explore global research trends in environmental ethics. We established clear criteria to ensure the data were relevant and reliable. Only peer-reviewed journal articles in English that mentioned "environmental ethics" in the title, abstract, or keywords were included. Although the literature on environmental ethics has expanded significantly and encompasses diverse conceptual perspectives, several common patterns and tensions can be identified. Across global justice, sustainability discourse, ecological citizenship, and philosophical approaches, scholars consistently emphasize moral responsibility, intergenerational equity, and the intrinsic value of nature. These shared principles indicate a convergence toward an ethical framework that links environmental protection with social justice and collective responsibility.

Nevertheless, important theoretical divergences persist within the field. Philosophical approaches tend to prioritize normative and conceptual foundations, whereas sustainability and ecological citizenship perspectives place greater emphasis on practical engagement, policy relevance, and civic action. This divide has contributed to a disconnect between ethical theory and social practice, limiting the development of integrated frameworks that translate moral reflection into concrete environmental governance and collective action.

Furthermore, existing studies often examine environmental ethics through isolated analytical lenses, such as justice, citizenship, or sustainability, without sufficiently integrating these dimensions into a cohesive conceptual model. Much of the literature is also dominated by perspectives from Western contexts, which restricts the cultural inclusivity and global applicability of environmental ethics scholarship. As a result, a key gap remains in the absence of a synthesized global analytical framework that systematically connects ethical principles, cultural values, and social participation. Addressing this gap provides the theoretical justification for the

present study and highlights the relevance of employing a combined Systematic Literature Review and bibliometric approach.

3. Methodology

This study employs a hybrid methodological approach integrating a Systematic Literature Review (SLR) with bibliometric analysis to examine global research trends in environmental ethics. This combination enables both a systematic synthesis of existing literature and a quantitative mapping of publication patterns, thematic clusters, and intellectual structures within the field.

3.1 Data Source and Search Strategy

This study employs a hybrid methodological approach integrating a Systematic Literature Review (SLR) with bibliometric analysis to examine global research trends in environmental ethics. This combination enables both a systematic synthesis of existing literature and a quantitative mapping of publication patterns, thematic clusters, and intellectual structures within the field.

3.2 Inclusion and Exclusion Criteria

Clear inclusion and exclusion criteria were established to ensure the relevance and reliability of the dataset. Only peer-reviewed journal articles written in English and explicitly addressing environmental ethics were included. Publications such as conference papers, book chapters, editorials, reviews, errata, letters, dissertations, and other non-peer-reviewed documents were excluded. These criteria ensured that the final dataset consisted of original and methodologically robust research articles.

3.3 Screening Procedure (PRISMA)

The screening and selection process followed the PRISMA 2020 guidelines to enhance transparency and methodological rigor (Page et al., 2021). After the initial identification stage, duplicate records and irrelevant documents were removed. During the screening and eligibility stages, 2,402 articles remained for further assessment. Additional exclusions were applied based on language criteria, resulting in the removal of publications written in Portuguese, Polish, Slovenian, Russian, Japanese, Hungarian, German, Turkish, Italian, French, and Chinese.

Following the completion of all PRISMA stages identification, screening, eligibility, and inclusion a total of 2,173 articles were retained for the final analysis. The complete screening process is visually summarized in Table 2, which presents the PRISMA flow diagram detailing each stage of article selection.

3.4 Bibliometric Analysis Procedures

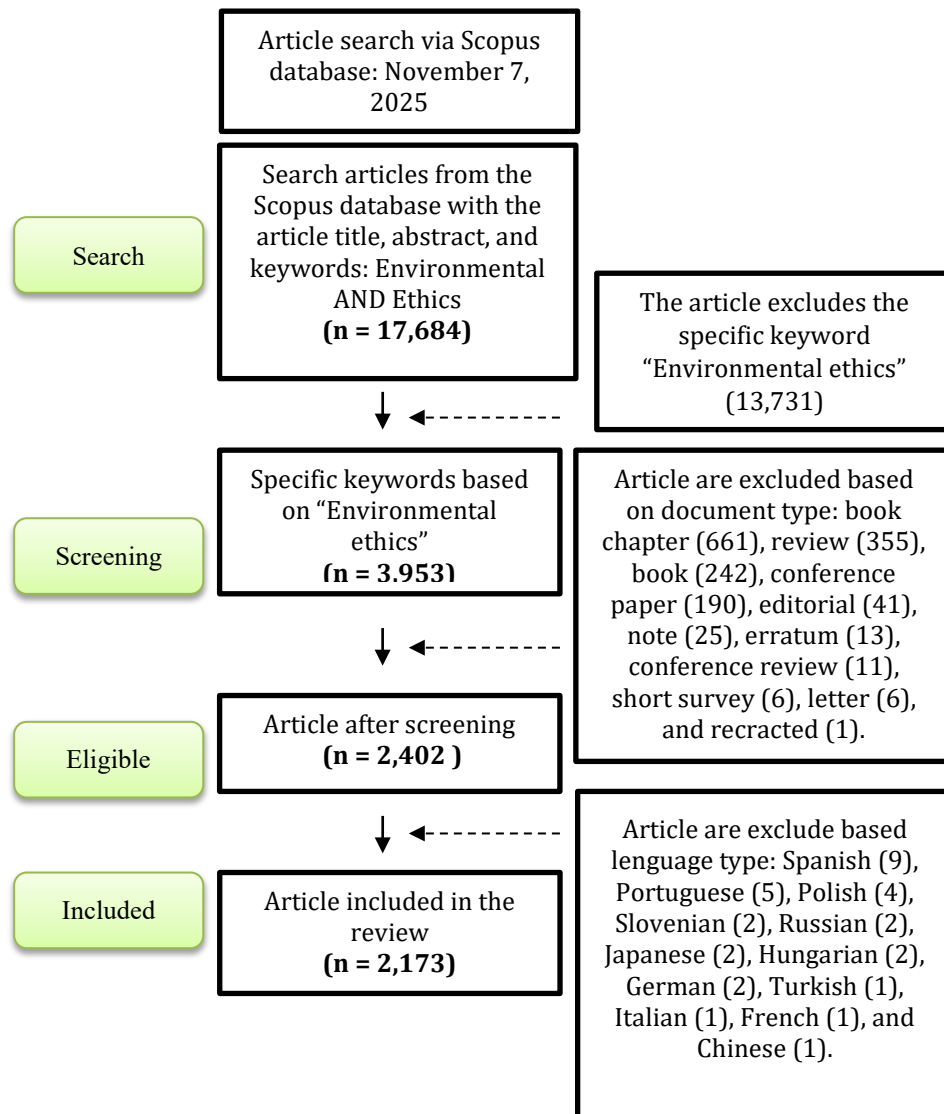
Bibliometric analysis was conducted using VOSviewer software to examine bibliographic coupling, co-citation networks, and keyword co-occurrence patterns. A minimum threshold of five keyword occurrences was applied to ensure that the resulting clusters were analytically meaningful and not driven by marginal or infrequent terms. This procedure enabled the identification of dominant research themes, intellectual structures, and collaboration patterns among authors, institutions, and countries. The results of the bibliometric analysis were subsequently integrated with the SLR findings to synthesize theoretical, empirical, and contextual developments in environmental ethics research.

3.5 Limitations

Despite its methodological rigor, this study has several limitations. First, reliance on a single database (Scopus) may result in the exclusion of relevant studies indexed in other databases such as Web of Science. Second, restricting the analysis to English-language publications may limit the representation of perspectives from non-English-speaking regions. Future research is therefore encouraged to incorporate multiple databases and broader language coverage to enhance inclusivity and reduce potential database bias.

Table 2. Systematic Literature Review information flow using PRISMA

(PRISMA 2020 flow diagram illustrating identification, screening, eligibility, and inclusion stages; final dataset: n = 2,173 articles)



According to the search results retrieved from the Scopus database on November 7, 2025, using the query “Environmental AND Ethics” applied to article titles, abstracts, and keywords, a total of 17,684 documents published between 1969 and 2025 were initially identified. Following the PRISMA 2020 screening procedure, non-relevant and non-eligible document types were excluded. After the screening and eligibility stages, 2,173 peer-reviewed journal articles remained and constituted the final dataset for analysis (see Table 2).

4. Results

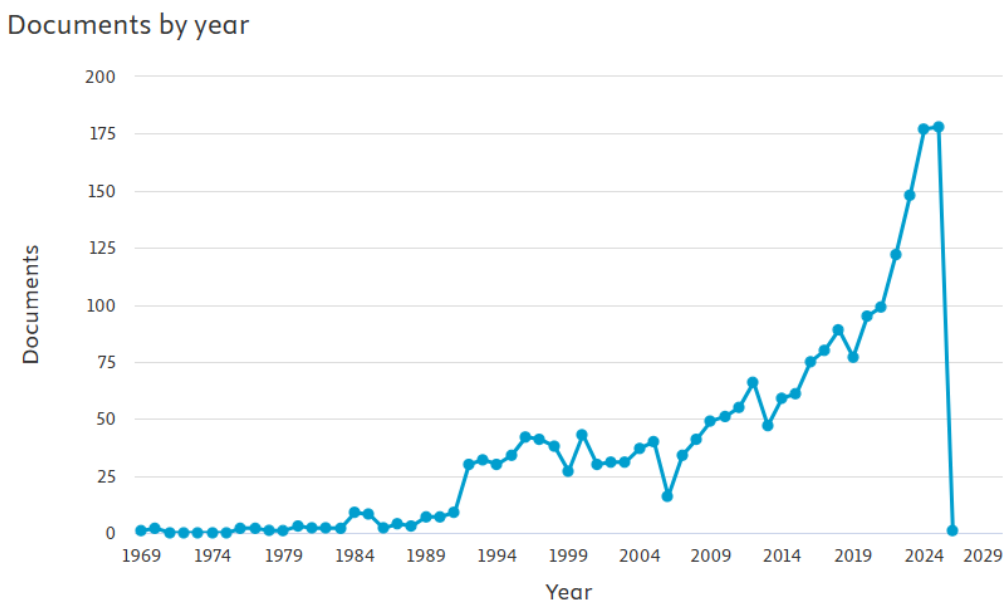
The analysis draws on 2,173 articles from the Scopus database-an impressive body of work that shows just how far the study of environmental ethics has progressed. The data reveal not only

how publication numbers have changed over time but also the patterns behind them: which journals shape the conversation, who the leading scholars are, and how their ideas intersect across institutions and countries.

RQ1: Publication trends and intellectual structure

Based on the Scopus data (Figure 1), the earliest publications on environmental ethics appeared in 1969, though they remained sparse and scattered up to the early 1990s. The trend began to shift in the mid-1990s, as interest slowly took root and started to grow. After 2010, that growth became both steady and unmistakable. And in the last decade, the field truly flourished-reaching its peak in 2024 with around 178 published articles. This surge in scholarship shows how environmental ethics has evolved from a niche philosophical topic into a solid and respected academic field.

Figure 1 Number of Environmental Ethicts Publications



Source: Scopus database

Looking at the development of environmental ethics research, it's interesting to note that it all started from pretty basic ideas in moral philosophy (Ashby, 1976). Initially, most of the studies were quite abstract and theoretical. Researchers then started paying attention to real-world issues, such as environmental conflicts and questions of ecological justice (van Mansvelt et al., 2021). Other work focused on practical areas, including sustainability in businesses and corporate ethics (Rafiq, 2025; Singh et al., 2019). A separate stream of studies focuses on the human-nature relationship, emphasizing intrinsic values or the connections between people and the environment (Stalhammar & Thorén, 2019). More recently, topics like compassion, interdependence, and environmental citizenship have been gaining attention (Campos & Vaz,

2021; Yu et al., 2025). Collectively, this demonstrates that environmental ethics is moving beyond purely philosophical thinking. It now blends philosophy with culture, ecology, and practical ideas about managing sustainability.

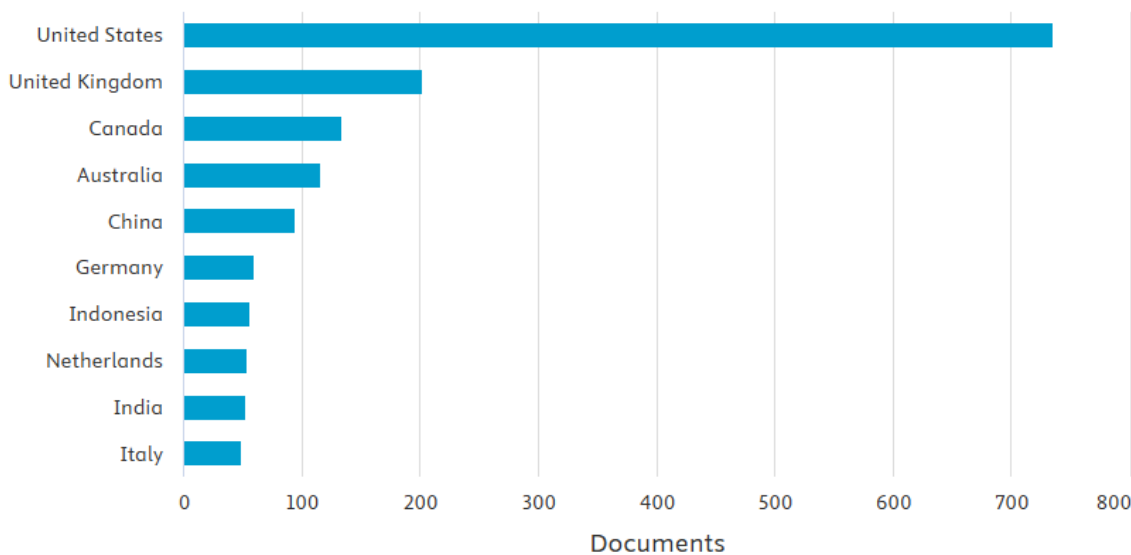
RQ2: Which theoretical and contextual domains dominate the field of Environmental ethics?

For the second research question, we examined who is conducting research in this field and where that research is taking place. To do this, we analyzed all 2,173 articles and organized them by country, region, institution, journal, and author. We focused on the top ten in each category because presenting the full dataset would be overwhelming and difficult to interpret. This approach helps reveal where most research activity is concentrated and provides insight into how the field may continue to grow in the coming years. When we look at countries, the United States stands out as the clear leader, contributing 734 publications. The United Kingdom follows with 201, Canada with 133, and Australia with 115. Other countries including China (93), Germany (58), Indonesia (55), the Netherlands (53), India (51), and Italy (48) produce smaller but still meaningful numbers (see Figure 2). These patterns show that research output is unevenly distributed across the globe, with much of the scholarship concentrated in Western countries, especially within Anglo-American academic contexts.

Figure 2 Number of articles by country or territory (top 10 countries)

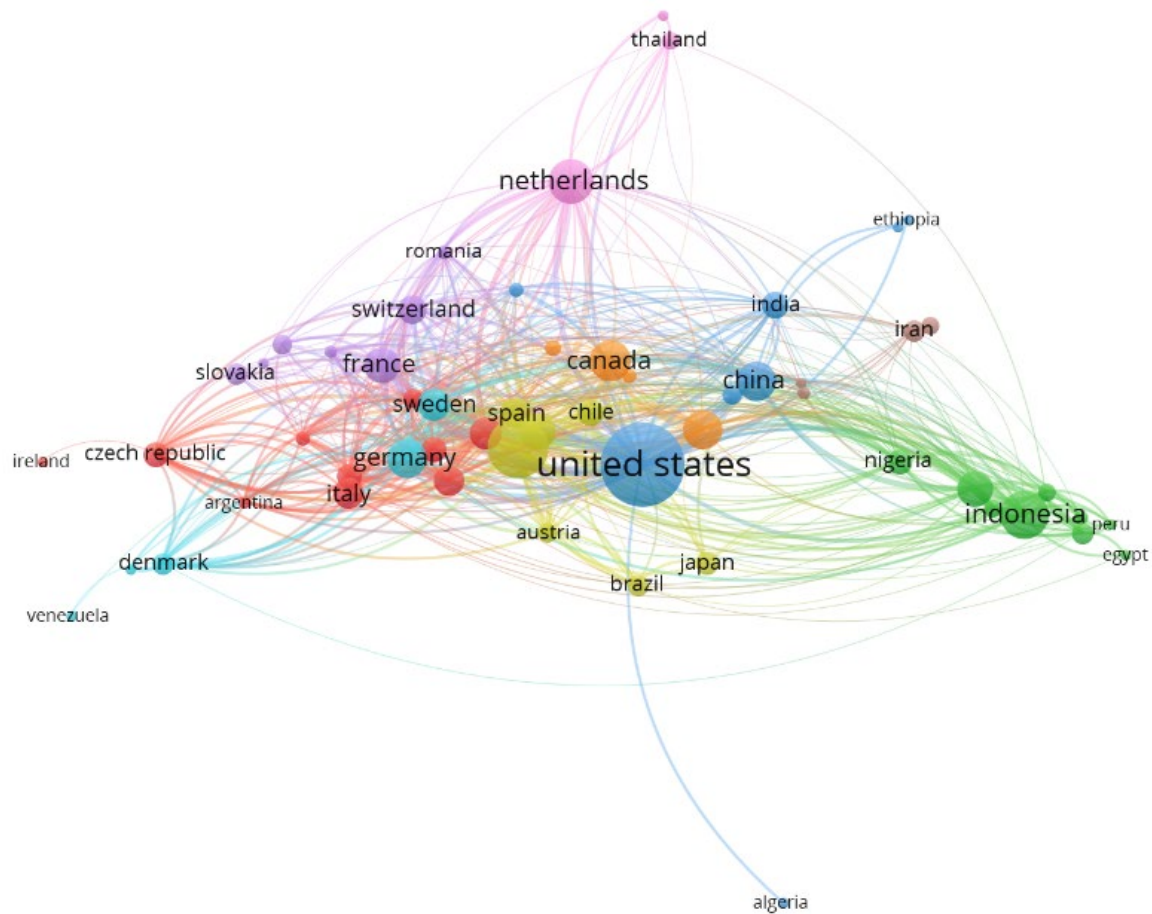
Documents by country or territory

Compare the document counts for up to 15 countries/territories.



Source: Scopus database

Figure 3 Network country visualization



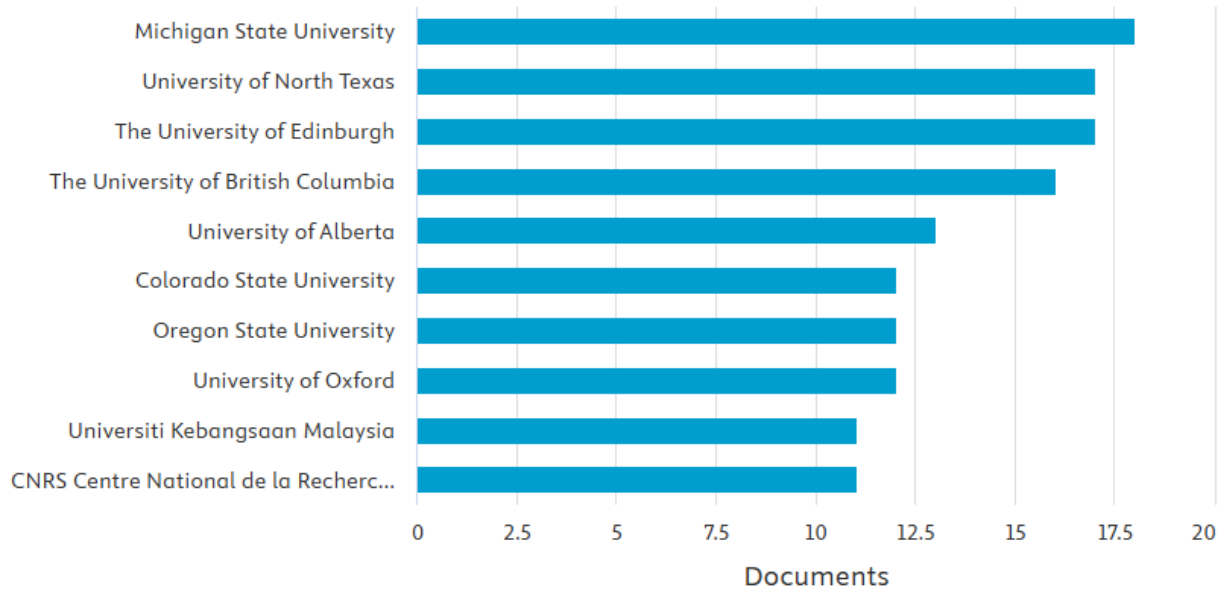
Source: Output VOSviewer software

Increasingly, nations with comparatively smaller publication volumes including Australia, China, Germany, Indonesia, the Netherlands, India, and Italy are contributing to the field. Rather than being defined by a single region or academic tradition, environmental ethics is emerging as a transnational domain of knowledge, where scholars collectively engage in developing conceptual frameworks, debating theoretical issues, and designing policy-relevant strategies to tackle complex socio-environmental challenges in the contemporary world. This pattern underscores that much of the scholarship in environmental ethics remains concentrated in North American and European universities with longstanding expertise in environmental humanities and sustainability studies. At the same time, the increasing output from Asian institutions, such as Universiti Kebangsaan Malaysia, signals the gradual globalization of this discourse, reflecting broader engagement with the ethical, ecological, and cultural dimensions of environmental issues beyond Western academic settings.

Figure 4 Number of articles by affiliation

Documents by affiliation

Compare the document counts for up to 15 affiliations.



Source: Scopus Database

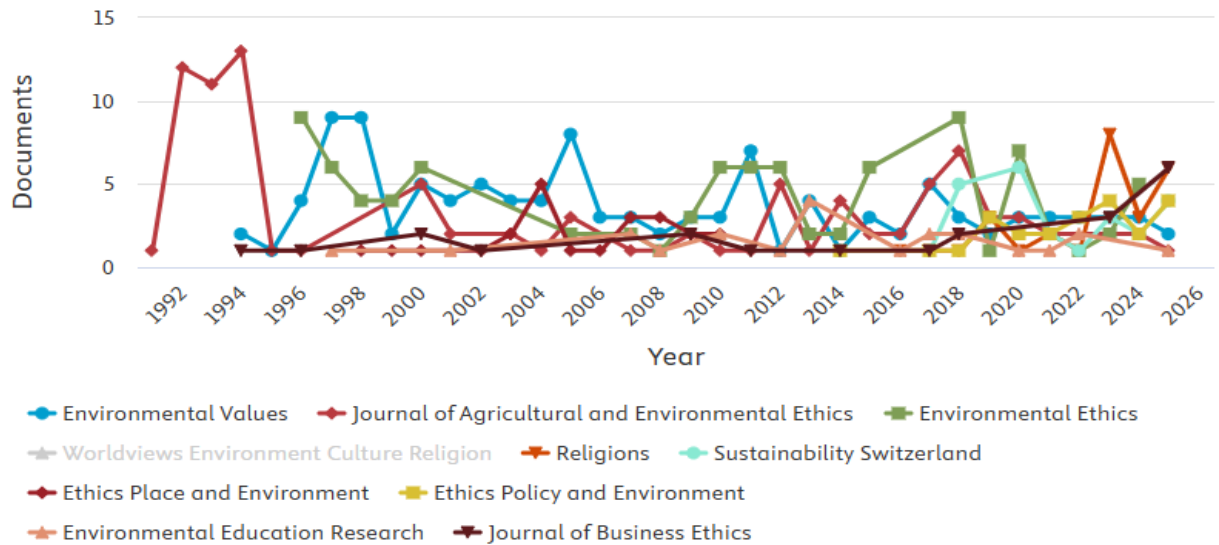
These findings confirm that environmental ethics research is far from being solely concentrated within institutions in the United States. Other journals playing a significant role include *Worldviews: Environment, Culture, Religion* (51), *Religions* (27), *Sustainability (Switzerland)* (24), *Ethics, Place and Environment* (23), *Ethics, Policy and Environment* (23), *Environmental Education Research* (22), and the *Journal of Business Ethics* (21) (see Figure 5). The consistent contributions from these diverse institutional contexts decisively reinforce the global nature of environmental ethics: it is an academic discipline that successfully transcends national boundaries and genuinely evolves through multiple research traditions, policy frameworks, and socio-cultural environments.

Figure 5 Number of articles by sources (top 10 sources)

Documents per year by source

Compare the document counts for up to 10 sources.

[Compare sources and view CiteScore, SJR, and SNIP data](#)



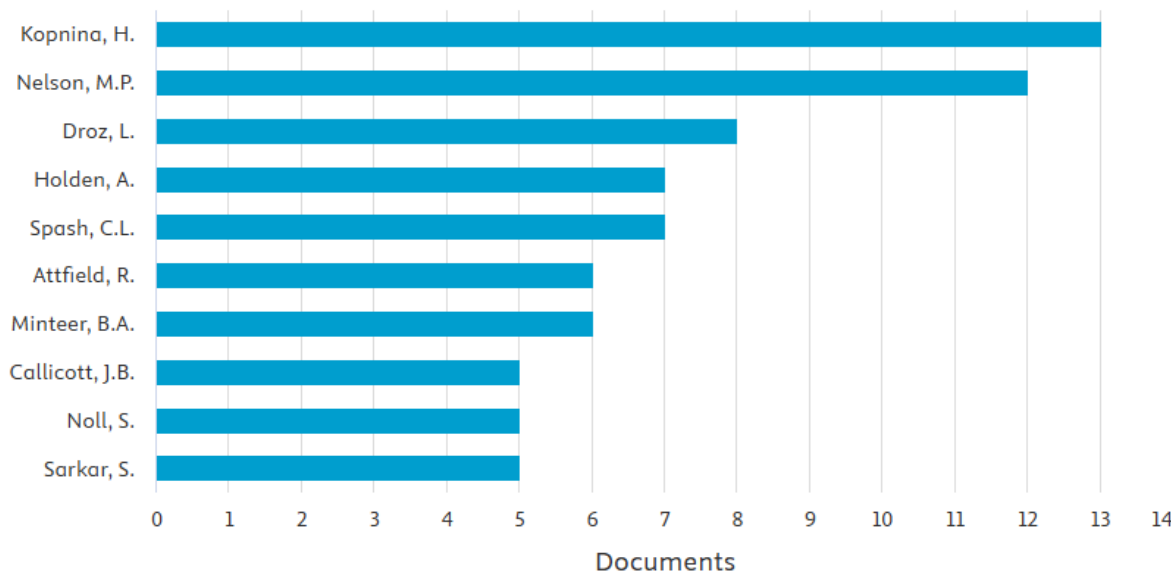
Source: Scopus database

Fourth, the analysis of research distribution by author shows that the field of environmental ethics is shaped largely by a relatively small yet highly productive group of scholars. Among them, Kopnina, H. stands out as the most prolific and influential contributor, followed closely by Nelson, M.P. In addition, several other researchers—including Droz, L., Holden, A., Spash, C.L., Attfield, R., Lerner, Minter, B.A., Callicott, J.B., and Noll, S., have made substantial contributions, collectively driving the intellectual development of the discipline (see Figure 6). This authorship pattern reflects a concentration of expertise within a core network of leading figures whose work has been pivotal in advancing theoretical debates, shaping ethical paradigms, and linking environmental ethics to broader frameworks such as sustainability, ecological philosophy, and global justice.

Figure 6 *Count of publications by authors (top 10 authors)*

Documents by author

Compare the document counts for up to 15 authors.

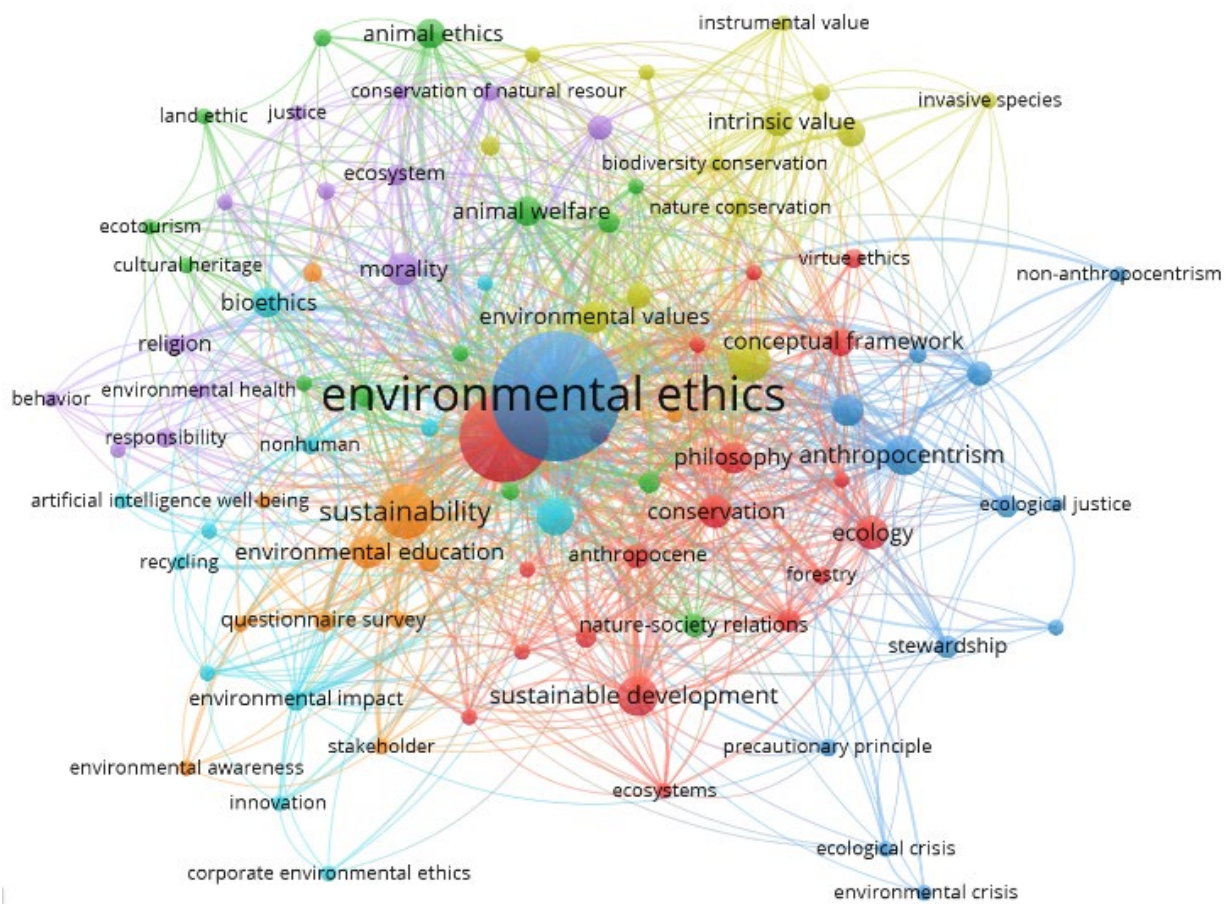


Source: Scopus database

RQ3: *What are the future directions for developing a holistic Environmental ethics framework?*

Figure 7 highlights the most frequently used keywords in environmental ethics research: Environmental Ethics (333), Ethics (161), Sustainability (60), Sustainable Development (33), Anthropocentrism (33), Ecocentrism (21), Environmental Education (23), Intrinsic Value (18), Animal Ethics (18), and Biocentrism (12). These terms reveal more than a list of recurring topics they reflect an ongoing scholarly dialogue about how to balance human interests with the intrinsic value of nature. Environmental ethics is no longer a niche theoretical pursuit; it has evolved into a meeting point for multiple disciplines, connecting philosophy, ecology, education, and sustainability studies to shape collective responsibility in addressing global challenges. Moving forward, developing a truly holistic framework will require expanding beyond Western viewpoints.

Figure 7 Co-occurrence framework and representation of key terms



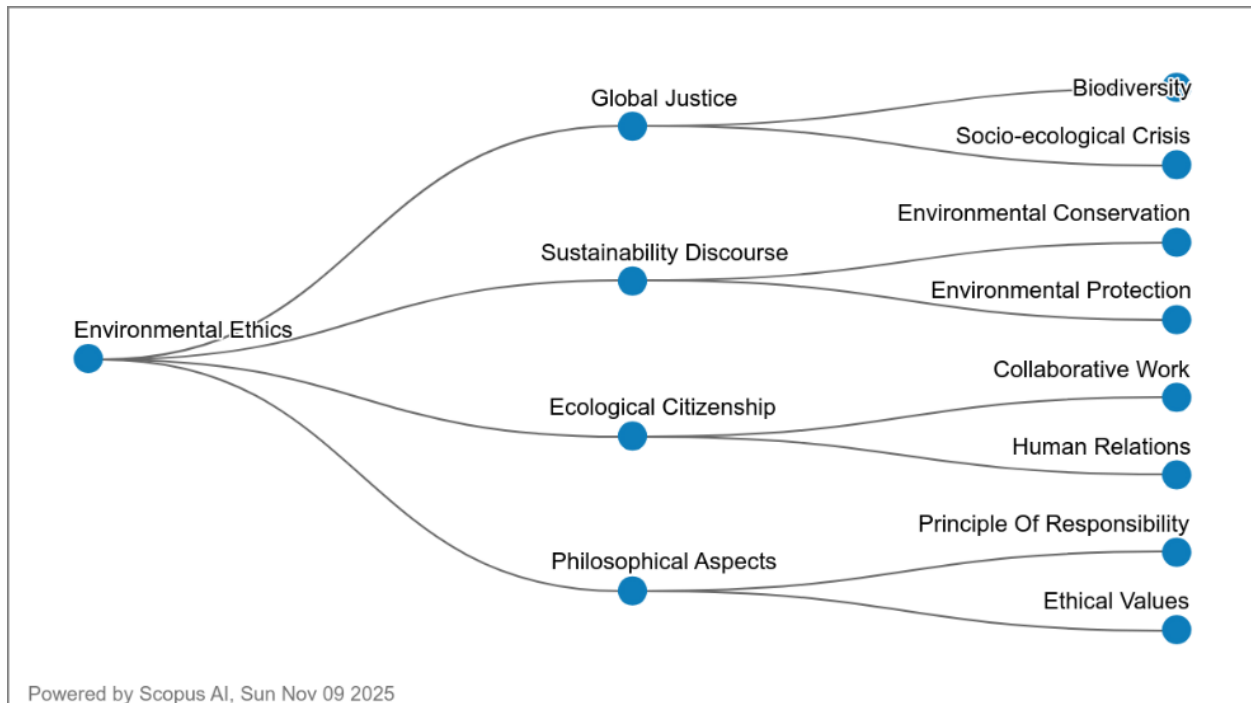
Source: Output VOSviewer software

Table 3. Keyword of Environmental ethics

	Keyword	Total Link Strength
1	Environmental ethics	874
2	Ethics	673
3	Sustainability	199
4	Sustainable Development	145
5	Anthropocentrism	136
6	Ecocentrism	88
7	Environmental Education	85
8	Intrinsic Value	57
9	Animal Ethics	57
10	Biocentrism	56

Countries with comparatively smaller publication outputs including Australia, China, Germany, Indonesia, the Netherlands, India, and Italy are emerging as important contributors, offering perspectives shaped by diverse cultural contexts, social norms, and ecological realities. Integrating these voices enriches the global discourse, allowing environmental ethics to expand beyond a predominantly Western-centered paradigm into a truly transnational and context-sensitive field of study. For example, research from the United States often emphasizes relational values between humans and nature, framing moral responsibility through stewardship, care, and sustainable co-existence (David-Chavez et al., 2024; Lou et al., 2025). Meanwhile, Canadian scholarship frequently integrates spiritual and ecological perspectives, promoting an ethical engagement that is not only rational but also emotionally and spiritually attuned to the natural world (Ferraro & Whitehead, 2025). The philosophical foundations dimension provides the normative and metaphysical underpinning of environmental ethics. By fostering dialogue across disciplines, cultures, and epistemological traditions, environmental ethics can continue evolving into a robust and actionable framework one that enables societies not only to understand the moral dimensions of environmental challenges but also to take ethically grounded action that safeguards both human and non-human life in an increasingly interconnected and fragile world.

Figure 8 *Environmental Ethics Attribute*



Source: Adopted from previous research (Boustani, 2025; Dobson, 2003; Florit, 2019; Gardiner, 2011; Giraud et al., 2018; Gurbanova, 2024; Helli, 2024; Humaida, 2019; Imran, 2024; Ivleva et al., 2019; Lecaros Urzúa, 2013; Salisu Barau et al., 2016; Urzúa & Gaete, 2018; White Jr., 1967; Zheng & Dai, 2012).

These elements should not be understood as independent dimensions, but as interrelated components that collectively shape an integrated ethical framework (Stalhammar & Thorén, 2019). Within this framework, global justice and sustainability function as core normative and practical pillars. Global justice emphasizes the fair distribution of environmental benefits and burdens across communities and generations, ensuring that environmental harm does not disproportionately affect marginalized or future populations (David-Chavez et al., 2024; Florit, 2019). Sustainability, in this context, refers to the responsible use of natural resources in ways that maintain ecological integrity and social well-being over time (Rafiq, 2025).

Complementing these pillars are ecological citizenship and philosophical reflection, which operate as key mediating dimensions. Ecological citizenship highlights the role of individuals and communities as active moral agents who translate ethical principles into everyday practices through participation, cooperation, and shared responsibility (Dobson, 2003; Lecaros Urzúa, 2013). Philosophical reflection, meanwhile, provides the normative grounding for environmental ethics by critically examining underlying values, assumptions, and human–nature relationships (Campos & Vaz, 2021; Helli, 2024). As illustrated in the conceptual model (see Figure 8), these four dimensions justice, sustainability, ecological citizenship, and ethical reflection are mutually reinforcing and together constitute a multidimensional framework that informs ethical engagement with environmental challenges.

5. Discussion

Early studies in environmental ethics laid important conceptual foundations that later developed into a more comprehensive and inclusive body of scholarship (Ashby, 1976; Martin & Beatley, 1993; Rafiq, 2025). Building on this foundation, the present review demonstrates that environmental ethics should not be understood as a collection of isolated moral concepts, but as an integrative field in which ethical, ecological, epistemic, cultural, and spiritual dimensions are systematically interconnected (Florit, 2019; Gardiner, 2011; Stalhammar & Thorén, 2019). This integrative perspective addresses a key limitation of earlier reviews, which often examined these dimensions separately without sufficiently accounting for their interrelationships (Donthu et al., 2021; Singh et al., 2019; Zheng & Dai, 2012).

Previous scholarship emphasizes that values shaping human–nature relationships are relational and socially embedded rather than independent or static (Stalhammar & Thorén, 2019). Within this framework, ethical and ecological dimensions foreground principles of justice, responsibility, and ecosystem integrity (Davidson, 1939; Florit, 2019; Salisu Barau et al., 2016; van Mansvelt et al., 2021). Epistemic and cultural dimensions further contribute by highlighting the roles of environmental literacy, critical awareness, and local knowledge systems in shaping ethical understanding and environmental practice (Gurbanova, 2024; Ivleva et al., 2019; Lou et al., 2025). In addition, the spiritual dimension, grounded in philosophical, religious, and cultural traditions, reinforces moral awareness and ethical motivation by framing environmental responsibility as a value-laden and meaning-oriented concern (Boustani, 2025; Helli, 2024; Humaida, 2019; Imran, 2024; Kramer et al., 2024).

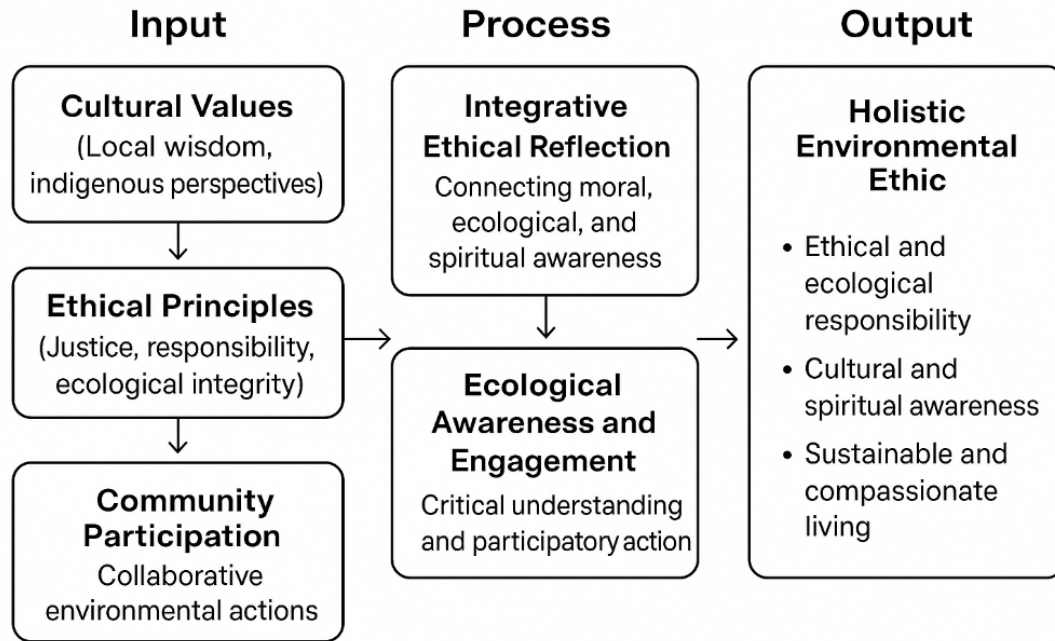
Despite this growing conceptual richness, the literature remains unevenly distributed across regions. Consistent with earlier critiques, research continues to be dominated by Western perspectives, while broader forms of ecological citizenship and global participation remain underrepresented (Dobson, 2003; Lecaros Urzúa, 2013). Although sustainability research frequently prioritizes policy design and conservation strategies, normative discussions concerning ecological citizenship, philosophical inquiry, and global justice receive comparatively less

attention (Campos & Vaz, 2021; Gardiner, 2011; Khizar et al., 2024; Urzúa & Gaete, 2018; Yu et al., 2025). Addressing this imbalance requires greater engagement with non-Western and Indigenous perspectives, which offer context-sensitive ethical insights that can enrich global environmental discourse (David-Chavez et al., 2024; Florit, 2019).

From a policy and practical perspective, integrating these five dimensions provides a coherent framework for advancing environmental ethics in applied contexts. Environmental awareness can be strengthened through participatory and collaborative approaches involving communities, educational institutions, and policymakers (Gurbanova, 2024; Lou et al., 2025; Singh et al., 2019). Incorporating cultural sensitivity into sustainability initiatives is particularly important, as environmentally responsible practices are more effective when aligned with local values and traditions (Imran, 2024; Ivleva et al., 2019). Moreover, the spiritual dimension often marginalized in policy discussions plays a significant role in shaping moral commitment and ethical motivation by linking human well-being with broader value systems concerning nature (Boustani, 2025; Ferraro & Whitehead, 2025; Humaida, 2019).

The conceptual framework proposed in this study synthesizes these insights across three analytical levels. At the input level, cultural values, ethical principles, and community participation provide the normative and social foundations for environmental ethics (David-Chavez et al., 2024; Gurbanova, 2024; Ivleva et al., 2019; Lou et al., 2025). At the process level, these foundations are translated into practice through ethical reflection and ecological engagement, emphasizing the interdependence of moral reasoning and concrete action (Boustani, 2025; Campos & Vaz, 2021; Ferraro & Whitehead, 2025; Helli, 2024; Kramer et al., 2024; Stalhammar & Thorén, 2019). At the output level, this process results in a holistic environmental ethic characterized by responsibility, awareness, and concern for long-term ecological sustainability, integrating moral reasoning, cultural knowledge, and environmental practice into a coherent analytical framework (Ashby, 1976; Dobson, 2003; Ferraro & Whitehead, 2025; Florit, 2019; Humaida, 2019; Lecaros Urzúa, 2013; Martin & Beatley, 1993; Rafiq, 2025; Stalhammar & Thorén, 2019; Yu et al., 2025).

Figure 9 *Conceptual model of Environmental ethics*



Source: Author's elaboration based on Environmental Ethics literature

Figure 9 presents an integrative conceptual model of environmental ethics consisting of input, process, and output dimensions, illustrating how normative foundations are translated into ethical practice and sustainability outcomes.

6. Conclusion

Environmental ethics has developed into a globally significant field that extends beyond its early philosophical foundations. Based on a Systematic Literature Review combined with bibliometric analysis, this study maps the global development of environmental ethics research from 1969 to 2025. The findings indicate that scholarly output is concentrated in Western countries, particularly the United States, the United Kingdom, and Canada, while the dominant thematic areas include global justice, sustainability discourse, ecological citizenship, and philosophical foundations.

This study contributes to the literature by offering an integrated analytical overview of environmental ethics research at a global scale. Methodologically, it demonstrates the value of combining SLR with bibliometric techniques to identify publication trends, intellectual structures, and thematic clusters within a large body of literature. Conceptually, the study proposes a synthesized framework that connects cultural values, ethical principles, and social participation as foundational inputs to ethical reflection and ecological engagement, providing a more holistic understanding of sustainability-oriented environmental ethics.

The findings have important theoretical and practical implications. Theoretically, they support the view that environmental ethics functions as an interdisciplinary field that bridges moral philosophy, sustainability science, and social theory. Practically, the results underscore the importance of integrating ethical considerations into environmental policies, education, and community-based practices to strengthen ecological responsibility and collective action toward sustainability.

Despite these contributions, this study has several limitations. The analysis relies solely on the Scopus database and includes only English-language journal articles, which may limit the representation of research from non-Western contexts. Future research should incorporate additional databases, such as Web of Science, and explicitly engage with Indigenous and non-Western knowledge systems. Expanding the scope of data sources and perspectives would contribute to a more inclusive and globally representative understanding of environmental ethics.

Declarations

Acknowledgements

None.

Competing Interests

None.

Ethical Approval

This study was granted an exemption from requiring ethics approval as it does not involve the collection of sensitive personal data.

Author's Contribution

Author^{1,2}: Conceptualization, Investigation, Software, Data curation, Formal analysis, Visualization, Writing – original draft

Data availability

None.

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